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INTERNATIONAL METEOROLOGY

FOR THE MONTH OF NOVEMBER and December, 1882.

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WASHINGTON, D. C.:
DECEMBER, 1883.

Jan. 1884.
076303

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 1, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.19	766.8	68.0	20.0	78	s.	.....	.....	1	.....	1	.....	.....	0	0	very fair	Malaterre.
Algiers	.....	.....	30.18	766.5	70.2	21.2	46	sw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.24	768.0	67.3	19.6	80	ene.	.....	.....	5	.....	3	.....	.....	inap.	inap.	pretty fair	Foufrède.
Tunis	.....	.....	30.25	768 4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.22	767.7	75.2	24.0	54	w.	.....	.....	2	.....	2	.....	.....	0	0	fair	Pérès.
Tebessa	.....	.....	30.29	769.4	68.7	20.4	36	n.	.....	.....	1	.....	3	.....	.....	0	0	pretty fair	Dognon.
Gerlville	.....	.....	.....	.....	70.2	21.2	6	se.	.....	.....	3	.....	0	.....	.....	0	0	clear	Lonchamp.
Laghouat	.....	.....	30.30	769.7	59.0	15.0	30	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.30	769.5	70.9	21.6	35	nw.	.....	.....	1	.....	4	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	30.22	767.6	30.31	769.9	53.8	12.1	66	ssw.	10	4.5	.....	.....	7	.....	.....	0.01	0.3	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.62	752.4	30.18	76 .5	54.0	12.2	68	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.32	744.8	30,10	764.6	48.4	9 1	66	w.	8.7	3.9	.....	.....	10	.....	.....	0.028	0.7	.....	Dr. Wierzbiski.
Eperies	29.20	741.7	30.09	764.2	49.3	9.6	74	calm	.....	.....	0	.....	9 ks	.....	s.	0.232	5.9	.....	Julius Mikolik.
Gratz	28.88	733.5	30.14	765.5	52.7	11.5	58	s.	.....	.....	2	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.64	727.4	30.10	764.6	45.3	7.4	85	nw.	.....	.....	4	.....	10	.....	.....	0.035	0.9	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.75	730.2	30.11	764.8	46.8	8.2	92	ne.	.....	.....	2	.....	4	.....	.....	0	0	.....	The Staff.
Lemberg	29.02	737.2	30.02	762.5	47.5	8.6	78	nw.	.....	.....	1	.....	9	.....	.....	0.016	0.4	.....	Dr. T. Stanecki.
Pola	30.05	763.3	30.16	766.1	61.2	16.2	56	se.	.....	.....	1	.....	0	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	29.60	751.8	30.06	763.6	52.9	11.6	77	n.	.....	.....	3	.....	4	.....	.....	0.039	1.0	.....	Joseph Midlinszay, S. J.
Szegedin	29.84	758.0	30.12	765.1	55.8	13.2	53	se.	.....	.....	1	.....	3	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.08	764.1	30.19	766.7	61.2	16.2	83	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	Royal Academy.
Vienna	29.43	747.6	30.16	766.0	52.9	11.6	67	e.	.....	.....	1	.....	2	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.37	746.0	29.47	748.5	51.4	10.8	89	sse.	24	10.7	.....	.....	10	.....	.....	0.080	2.0	overcast	W. Boswell
Armagh, Observatory	28.97	735.8	29.21	741.9	53.0	11.7	92	se.	20	8.9	.....	.....	9	.....	.....	.....	.....	raining	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.33	745.0	52.0	11.1	92	ese.	25	11.2	.....	.....	10	.....	.....	.....	.....	raining	John Hartnup.
Bolton, Sharples	28.85	732.8	29.37	746.0	51.8	11.0	86	sse.	6	2.7	.....	.....	10	.....	.....	.....	.....	raining	Thomas Mackereth.
Bradford, Yorkshire	28.99	736.3	29.38	746.2	51.8	11.0	89	sw.	.....	.....	1	.....	9	.....	.....	0.11	2.8	overcast	McLandsborough&Preston
Bridgetown, Barbadoes	29.83	757.7	29.86	758.4	83.0	28.3	78	se.	.....	.....	3	.....	8	.....	.....	.....	.....	overcast	Corpl. J. Surgenor, A. H. C.
Cardington	29.38	740.2	29.50	749.3	57.2	14.0	70	s.	.....	.....	4.0	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E.	29.52	749.8	29.64	752.8	54.6	12.6	83	s.	.....	.....	4	.....	9	.....	.....	blank	blank	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.01	736.8	29.23	742.4	53.7	12.1	86	ssw.	.....	.....	7	.....	10	.....	.....	.....	.....	raining	The Staff.
Fort Napier, Natal	27.79	705.8	30.01	762.2	73.0	22.8	60	ne.	.....	.....	1	.....	6	.....	.....	.....	.....	.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.71	754.6	29.94	760.5	87.0	30.6	55	ne.	.....	.....	1	.....	3	.....	.....	.....	.....	d clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.16	766.1	30.19	766.8	67.0	19.4	74	e.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.16	740.7	29.30	745.7	51.7	10.9	84	e.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.42	747.3	29.59	751.6	55.4	13.0	78	s.	.....	.....	5	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.27	743.4	29.56	750.8	57.0	13.9	69	ssw.	.....	.....	6	.....	5	.....	.....	.....	.....	d. clouds	A. Collenette, F. M. S.
Kew, Observatory	29.55	750 6	29.59	751 6	55.8	13.2	80	s.	25	11.2	.....	.....	10	.....	.....	.....	.....	drizzling	The Staff.
Leicester, Museum	29.22	742.2	29.48*	748.8	54.6	12.6	79	s.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.94	760.5	30.01	762.2	69.2	20.7	96	n.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.01	762 2	30.05	763.3	78.8	26.0	75	ne.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	.....	.....	.....	.....	52.4	11.3	86	se.	.....	.....	7	.....	10	.....	.....	.....	.....	threatening	Warren Middleton.
Oxford, Radcliffe Obs'y	29.28	743.7	29.51	749.5	54.0	12.2	92	sse.	.....	.....	6	.....	10	.....	.....	.....	.....	showery	The Staff.
Plymouth	29.23	742.4	29.30	744 2	54.1	12.3	90	ssw.	.....	.....	8	.....	10	.....	.....	.....	.....	drizzling	John Merrifield.
Sandwick Manse, Orkneys	29.30	744.4	29.40	746.7	49.9	9.9	95	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	drizzling	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.88	758.9	29.94	760.5	59.8	15.4	81	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	misty	W. H. Lyne.
Sheffield	29.15	740.4	29.42	747.3	56.0	13.3	70	s.	.....	.....	2	.....	10	.....	.....	0.10	2.5	overcast	W. F. Cooper.
Silloth Rectory	29.33	745 0	29.36	745.7	53.5	11.9	75	sse.	.....	.....	4	.....	10	.....	.....	0.315	8.0	raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.41	747.0	52.2	11.2	78	se.	17	7.6	.....	.....	10	.....	.....	.....	.....	drizzling	1. New.
Stratfield Turgiss	29.36	745.7	29.58	751.3	55.1	12.8	83	s.	.....	.....	3-4	.....	8	.....	.....	.....	.....	squally	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.34	745.2	29.40	746.7	52	11.1	86	sw.	.....	.....	8	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.35	745.5	29.38	746.2	51.4	10.8	75	wnw.	25	11.2	.....	.....	9	.....	.....	.....	.....	squally	The Met'g'l Office.
Canadian.																			
Bathurst, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.75	755.6	29.80	756.9	56	13.3	94	sw.	10	4.5	.....	.....	10 n	.....	.....	0.110	2.8	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	29.67	753.6	29.73	755.1	56	13.3	93	sw.	8	3.6	.....	5 ck	5 ks	sw.	sw.	0.38	9.7	fair	G. A. Blair.
Father Point, Quebec*	29.67	753 6	29.69	754.1	43	6.1	74	w.	28	12.5	.....	0	5 ks	.....	sw.	0.09	2.3	clearing	J. McWilliams.
Fort Garry, Manitoba*	29.54	750.3	30.46	773.7	8	—13.3	76	n.	6.0	2.7	.....	0	0	.....	w.	0	0	hazy	James Stewart.
Halifax, N. S*	29.81	757.2	29.93	760.2	55	12.8	100	sw-	10	4.5	.....	.....	10 n	.....	.....	0.026	0.7	cloudy	A. Allison.
Kingston, Ontario*	29.78	756.4	30.12	765.0	46	7.8	77	sw.	7	3.1	.....	5 ck	0	w.	.....	0.17	4.3	fair	A. P. Knight, M. A.
Montreal, Quebec*	29.79	756.7	29.99	761.7	44	6.7	78	sw.	16	7.2	.....	0	0	.....	.....	0.29	7.4	clear	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.42	747.3	30.12	765.0	45	7.2	91	w.	24.	10.7	.....	5 cs	0	w.	.....	0	0	fair	Rev. R. Mosley.
Port Dover, Ontario	29.50	749.3	30.22	767.6	40	4.4	100	calm	0	0	.....	0	0	.....	.....	0.06	1.5	clear	H. Morgan.
Port Stanley, Ontario	29.54	750.3	30.22	767.6	34	1.1	89	nw.	1	0.4	.....	2 ck	0	w.	.....	0	0	clear	M. Payne.
Quebec, Quebec*	29.55	750.6	29.87	758.7	44	6.7	74	nw.	.....	.....	5	0	2 s	.....	nw.	0.14	3.6	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.56	750.8	30.02	762.5	43	6.1	53	w.	8	3.6	.....	2 c	0	w.	.....	0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.42	747.3	30.15	765.8	47	8.3	71	nw.	14	6.3	.....	10 cs	0	.....	.....	0	0	cloudy	
St. Andrews, N. B	29.80	756.9	29.85	758.2	55	12.8	96	wsw.	10	4.5	.....	.....	10 n	.....	.....	0.02	0.5	cloudy	
Sydney, C. B*	29.81	757.2	29.87	758.7	56	13.3	93	sw.	18	8.0	.....	.....	10 n	.....	sw.	0	0	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.79	756.7	30.18	766.6	43	6.1	80	sw.	3	1.3	.....	8 ck	2 s	w.	w.	0.03	0.8	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.89	759.2	29.96	761.0	49	9.4	96	sw.	10	4.5	.....	.....	10 k	.....	w.	0.01	.03	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.75	730.2	30.18	766.6	39.0	3.9	91	nw.	.....	.....	2	5 ck	0	wnw.	.....	0	0	fine	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	45	7.2	84	s.	2	0.9	.....	.....	10	.....	.....	0.32	8.1	covered	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.20	767.1	30.23	767.8	64.0	17.8	67	sw.	10.4	4.6	.....	0	1 k	.....	.....	0	0	clear	John Duthie.
Cape Town, O. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. For.e.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (Sub-series).																			
Tchang-kia-tchouang	.....	.....	30.43	772.8	39.0	3.9	54	calm	0.2	0.1	.....	0	8 k	.....	.....	0	0	covered	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.30	769.7	30.33	770.3	52.7	11.5	75	n.	8.3	3.7	.....	.....	10 n	.....	.....	0.610	15.5	raining	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.94	760.4	29.98	761.6	48.7	9.3	75	nw.	.....	.....	2	.....	8	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	29.91	759.7	29.93	760.3	50.4	10.2	94	s.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	Overlooerer Lauridsen.
Godthaab, Greenland	29.59	751.5	29.63	752.6	18.3	— 7.6	89	ene.	.....	.....	2	.....	6	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.54	750.4	29.56	750.9	35.4	1.9	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.68	753.8	29.72	754.9	35.2	1.8	73	e.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	A. O. Thoriacius.
Thorshavn	29.46	748.2	29.49	749.1	47.3	8.5	84	ese.	20	9	.....	.....	10	.....	.....	.....	.....	.....	Overlooerer Bergh.
Vestervig	29.81	757.2	29.91	759.6	47.8	8.8	69	se.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	Loearer Oesterboi.
French.																			
Agen, Normal School	29.47	748.6	30.11	764.8	61.9	16.6	85	calm	.....	.....	0	c; ck	0	.....	.....	0	0	.....	M. Labroue, Director.
Alençon, Normal School	29.30	744.3	29.85	758.3	53.2	11.8	93	s.	.....	.....	2	.....	n	n.	n.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.56	750.9	29.82	757.5	50.0	10.0	97	se.	.....	.....	4	0	8 k; n	.....	.....	0.031	0.8	al. covered	M. Fénéon, Command't.
Avignon, Normal School	30.05	763.3	30.13	765.3	60.8	16	75	se.	.....	.....	1	.....	8	.....	s.	0	0	very cloudy	M. Giraud, Director.
Bar-sur-Seine	29.38	746.3	29.93	760.3	56.8	13.8	66	sse.	.....	.....	2	0	2 k	.....	w.	0	0	slightly cl'dy	M. Saillard, Director.
Beauvais, Normal School	29.59	751.6	29.85	758.3	54.0	12.2	74	ssw.	.....	.....	1	.....	8	.....	.....	0	0	very cloudy	M. Frère Eugène Marie.
Besançon, Normal School	29.06	738.1	29.96	761.0	60.8	16	87	se.	.....	.....	1	c	0	sse.	.....	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.77	756.2	30.03	762.7	62.1	16.7	62	w.	.....	.....	1	.....	8	.....	w.	0	0	very cloudy	M. Rayet, Director.
Bourges, Normal School	29 36	745.7	29.91	759.7	59.0	15	58	s.	.....	.....	1	0	2 k	.....	s.	0	0	slightly cl'dy	M. Malet, Director.
Brest, Naval Observatory	29.50	749.2	29.74	755.4	55.4	13.0	77	ssw.	.....	.....	6	.....	10	.....	ssw.	0.098	2.5	.....	M. de Kermaree, Dir.
Caen, Normal School	29.66	753.4	29.74	755.3	57.6	14.2	77	ssw.	.....	.....	3	.....	5	.....	ssw.	0	0	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.61	752.2	29.93	760.3	54.3	12.4	86	sse.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Jadot, Director.
Charleville, Normal School	29.38	746.3	29.90	759.5	52.9	11.6	76	ese.	.....	.....	1	.....	2	.....	.....	0	0	¼ covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.63	727.3	29.96	761.0	64.0	17.8	43	s.	.....	.....	1	5 c	0	.....	.....	0	0	½ covered	M. Alluard, Director.
Cluny, Normal School	29.17	740.8	30.07	763.8	58.1	14.5	60	s.	.....	.....	1	.....	5	sw.	.....	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.10	739.2	29.98	761.6	57.6	14.2	72	se.	.....	.....	1	.....	8	se.	se.	0	0	very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.61	701.4	30.13	765.4	59.0	15	39	nw.	.....	.....	1	.....	1	.....	w.	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	29.03	737.3	30.14	765 6	62.4	16.9	61	s.	.....	.....	3	.....	3	.....	s.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.30	744.2	30.08	764.0	54.3	12.4	73	nnw.	.....	.....	1	cs	0	.....	.....	0	0	.....	M. Ablard, Director.
Guéret	28.49	723.7	29.97	761.2	57.7	14.3	89	nw.	.....	.....	1	.....	10 n	.....	w.	0	0	overcast	M. Delorme, Dir.
Lamballe, Normal School	29.46	748.2	29.73	755.2	57.9	14.4	74	s.	.....	.....	4	0	5 k	.....	s.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.65	753.2	30.21	767.2	70.0	21.1	27	w.	.....	.....	4	0	1 s	.....	.....	0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.72	754.8	29.82	757.4	58.6	14.8	63	sw.	.....	.....	8	.....	8	w.	sw.	0.110	2.8	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.97	735.8	30.02	762.5	59.9	15.5	42	s.	.....	.....	3	c	0	.....	.....	0	0	.....	M. André, Director.
Mans, Normal School	29.55	750.6	29.84	758.0	56.1	13.4	87	sw.	.....	.....	4	.....	.....	.....	sw.	0	0	.....	M. Piboen, Director.
Marseille, Observatory	29.86	758.4	30.13	765.3	64.8	18.2	71	se.	.....	.....	3	.....	7	.....	s.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.91	632.8	29.76	755.8	43.9	6.6	49	w.	9.4	4.2	.....	.....	0	.....	.....	0	0	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29.95	760.7	30.08	764.0	60.8	16	87	e.	.....	.....	2	.....	5	e.	.....	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	29.16	740.6	29.94	760.4	54.3	12.4	70	ssw.	.....	.....	1	cs	0	w.	.....	0	0	.....	M. Basse, Director
Nantes, Observatory	29 75	755 7	29.91	759.8	60.8	16.0	66	sw.	.....	.....	2-3	2 ck	7 kn; n	.....	sw.	0	0	.....	M. Larocque, Director.
Perpignan, Observatory	29.95	760.7	30.06	763.6	62.2	16.8	60	n.	5.6	2 5	.....	.....	3	w.	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	27.31	541.2	.....	.....	35.1	1.7	.....	w.	.....	.....	1	.....	5	.....	w.	0.008	0.2	cloudy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.94	735.0	30.01	762.2	56.5	13.6	71	nw.	.....	.....	1	.....	2	nw.	nw.	0	0	slightly cl'dy	M. Tallien.
Puy de Dôme Obs'y, Summit	25.16	639.0	.....	.....	44.2	6.8	59	wsw.	.....	.....	4	5 c	0	.....	.....	0.004	0.1	½ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	29.97	761.3	30.00	762.1	56.8	13.8	89	sw.	.....	.....	2	.....	10	.....	.....	0.20	5.	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.69	754 2	29 91	759.7	56.8	13.8	84	sw.	.....	.....	3	.....	2	sw.	sw.	0	0	slightly cl'dy	M. Brotier, Director.
Rodez, Normal School	28.18	715.8	30.15	765.9	52.3	11.3	72	e.	.....	.....	2	.....	k; 8	.....	.....	0	0	.....	M. Seger, Director.
Rouen, Normal School	29.74	755.5	29.79	756.7	56.8	13.8	75	s.	.....	.....	1	.....	5	.....	se.	0	0	cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	58.6	14.8	72	sw.	.....	.....	3	.....	.....	.....	w.	0	0	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.71	754.7	29.88	758.9	56 8	13.8	69	sw.	.....	.....	1	.....	8	sw.	.....	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.10	746.8	30.13	765.2	57.9	14.4	75	se.	.....	.....	2	.....	5	w.	.....	0	0	cloudy	M. Baillaud, Director.
Tours	29.73	755.2	29.91	759.7	58.6	14.8	70	sw.	.....	.....	1	.....	8	sw.	sw.	0	0	very cloudy	M. de Tastes.
Versailles, Observatory	29.37	746.1	29.87	758.6	55.8	13.2	71	sw.	.....	.....	2	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
German.																			
Ansbache	28.63	727.1	30.09	764.3	49.6	9.8	79	se.	.....	.....	4	.....	1	se.	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.21	742 0	30.06	763.4	52.5	11.4	73	se.	.....	.....	2	0	2 8	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.88	758.9	30.05	763.4	52.2	11.2	71	sw.	.....	.....	2	.....	6	.....	.....	0.126	3.2	.....	Prof. Dr. Arndt.
Breslau	29.58	751.4	30.11	764.9	49.6	9.8	63	w.	.....	.....	4	.....	7	.....	.....	0.012	0.3	.....	Royal University Obs'y.
Carlsruhe.†	29.57	751.1	30.01	762.3	54.5	12.5	75	sw.	.....	.....	1	.....	3	ne.	.....	0.031	0.8	.....	Albert Senz.
Cassel	29.25	742 9	29.96	761.0	54.3	12.4	71	s.	.....	.....	2	.....	5	sw.	.....	0.039	1.0	.....	Dr. H. Möll.
Frankfort-on-the-Main	29.67	753.6	30.04	762.9	54.9	12.7	68	sw.	.....	.....	1	.....	2	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.63	727 2	30.09	764.2	47.8	8.8	80	sw.	.....	.....	2	.....	0	.....	.....	0.035	0.9	.....	Wilhelm, Chief Tel.
Hamburg	29.92	760.0	30.01	762.3	50.4	10.2	87	se.	.....	.....	3	.....	4	.....	.....	0.169	4.3	.....	E. Preller.
Kiel	29.96	760 9	29.97	761.3	49.1	9.5	90	ssw.	.....	.....	2	.....	4	.....	.....	0.004	0.1	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.67	753.6	30.10	764.4	50.4	10.2	74	s.	.....	.....	2	.....	2	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.72	754.8	30.05	763.2	55.2	12.9	59	sse.	.....	.....	1	.....	0	.....	.....	0.028	0.7	hazy	Weather Observatory.
Memel	29.87	758.8	29.92	760.0	43.0	6.1	86	e.	.....	.....	1	.....	10	.....	.....	.....	.....	covered	Issermann.
Munich	28 25	717.5	30.11	764.9	50.9	10.5	66	e.	.....	.....	2	.....	1	.....	.....	0.075	1.9	.....	Central Station.
Neufahrwasser	29.94	760 4	29.95	760.8	46.8	8.2	75	nw.	.....	.....	4	.....	7	WnW.	.....	0.063	1.6	.....	A. Lothes.
Neustadt, Palatinate	29.48	748.8	30.01	762.2	50.4	10.2	82	w.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dicknether.
Stuttgart	29.05	737.8	29.94	760 4	55.9	13.3	65	se.	.....	.....	1	.....	2	w.	.....	0.008	0.2	.....	Prof. Dr. Schoder.
Wustrow	30.04	763.1	30.07	763.7	45.3	7.4	94	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Profs. Brandes & Reimer.
Greek.																			
Athens	29.61	752.2	29.99	761.8	70.5	21.4	.....	nw.	.....	.....	1.0	c	6 k	.....	.....	0	0	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.90	759.6	29.96	760.8	88.1	31.2	40	ene.	20.0	8.9	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.35	745 6	29.82	757.4	89.2	31.8	34	nw.	8.0	3.6	.....	.....	2	sse.	.....	0	0	d. clouds	
Bombay	29.76	756.0	29.80	756.9	80.5	26.9	72	nw.	5.0	2.2	.....	.....	4	sSW.	.....	0	0	d. clouds	
Poona, Yarrowda	27.93	709.4	29.76	755.8	86.2	30.1	18	wnw.	1.0	0.4	.....	.....	4	W.	.....	0	0	d. clouds	
Trichinopoly	29.32	749.9	29.80	757.0	87.0	30.6	39	s.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Bellary	28 28	718.4	29.73	755.2	85.0	29.4	36	nnw.	4.0	1.8	.....	.....	3	.....	.....	0	0	d. clouds	
Belgaum	27.26	692.5	29.81	757.1	73.3	22.9	64	wsw.	3.0	1.3	.....	.....	4	e.	.....	0	0	d. clouds	
Lahore	29.13?	760.2?	29.88	759.0	74.8	23.8	44	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	28.93	734.7	29.83	757.7	77.2	25.1	36	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	.....	
Agra	29.27	743 5	29.83	757.8	84.2	29.0	26	nw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.72	729.5	29.75	755.7	84.5	29.2	38	n.	8.0	3.6	.....	.....	9	.....	ne.	0	0	gloomy	
Jubbulpore	28.48	723.5	29.65	758.2	76.3	24.6	55	ne.	6.0	2.7	.....	.....	7	.....	ne.	0	0	d. clouds	
Lucknow	29.44	747.7	29.87	757.3	77.2	25.1	48	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.49	749.1	29.81	757.1	73.8	23.2	65	calm	0	0	.....	.....	1	.....	.....	0	0	d. clouds	
Patna	29.64	752.8	29.83	757.6	77.5	25.3	63	nw.	1.3	0.6	.....	.....	6	nW.	nW.	0	0	d. clouds	
Hazaribagh	27 79	705.8	29.81	757.2	74.1	23.4	67	e.	5.1	2.3	.....	.....	10	.....	.....	0	0	overcast	
Cuttack	29.68	753 9	29.76	756.0	78.0	25.6	92	calm	0	0	.....	.....	8	.....	.....	1.27	32.3	d. clouds	
Calcutta, Alipore	29.76	756.0	29.79	756.6	76.7	24.8	94	sse.	1.0	0 4	.....	.....	9	.....	.....	0	0	d. clouds	
Dhubri	29 68	754 0	29.80	757.0	77.5	25.3	80	calm	2.9	1.3	.....	.....	3	sSW.	.....	0	0	d. clouds	
Chittagong	29.73	755 2	29.82	757.5	77.7	25.4	92	calm	1.7	0.8	.....	.....	6	.....	.....	0	0	d. clouds	
Sibsagar	29.51	749.5	29.85	758.1	74.1	23.4	81	ne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.92	760.0	29.94	760 6	84.2	29.0	54	ese.	6.7	3.0	.....	.....	8	.....	e.	0	0	d. clouds	
Jeypore	28.40	721.4	29.84	757.8	82.9	28.3	52	nw.	5.6	2.5	.....	.....	1	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.76	755.8	30.17	766.3	59.5	15.3	52	calm	0	0	.....	.....	1	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.69	754 0	30.21	767.3	55.4	13.0	79	se.	2.5	1.1	.....	.....	4	sW.	.....	0	0	.....	Prof. Schiapparelli.
Padua	30.08	763 9	30.19	766.7	58.1	14.5	67	se.	0.7	0.3	.....	.....	2	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.27	743.4	30.19	766.7	54.7	12.6	71	ese.	1.3	0.6	.....	.....	4	w.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.99	761.7	30.18	766.6	62.2	16.8	61	s.	1.3	0.6			10	se.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.26	717.7	30.19	766.9	51.4	10.8	64	nw.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.11	764.9	30.16	766.1	58.3	14.6	76	n.	0	0			0			0	0		Prof. Luigi Guidi.
Florence	29.93	760.3	30.19	766.8	59.0	15.0	64	calm			0		0			0	0		Prof. Costantino Pitter.
Leghorn	30.05	763.3	30.14	765.5	59.2	15.1	74	nw.	1.8	0.8			3			0	0		Prof. P. Monte.
Rome	30.02	762.4	30.19	766.8	64.2	17.9	68	n.	0.7	0 3			2			0	0		Prof. P. Tachini.
Lecce	29.89	759.3	30.15	765.7	64.9	18.3	67	ene.	11.2	5.0			3	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.28	743.7	30.17	766.4	61.9	16.6	70	se.	3.1	1.4			0			0	0		Prof. D. Conti.
Cagliari	29.98	761.5	30.17	766.4	67.8	19.9	63	nw.			2		0			0	0		Prof. A. Pacinotti.
Palermo	29.96	761.0	30.21	767.4	67.5	19.7	59	nne.	4.9	2.2			1			0	0		Prof. G. Cacciatore.
Syracuse	30.11	764.9	30.16	766.0	66.2	19.0	62	wsw.	8.1	3.6			4	w.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.67	753.6	30.19	766.9	64.4	18.0	62	nw.	1.3	0.6			0			0	0		Prof. F. Brioschi.
Stelvio	22.25	565.2			30.7	— 0.7	71	s.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.29	566.2			35.6	2.0	59	w.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.00	762.0	30.04	762.8	52.3	11.3	72	wnw.			4		10 s		w.	1.028	26.1	cloudy	Hattori.
Awomori	29.92	759.9	29.96	761.0	50.0	10.0	83	nnw.	16.4	7.3			10 ks			0.425	10.8	gloomy	K. Ogawa.
Hakodate	29.92	759.9	29.93	760.1	48.5	9.2	82	nw.	24.0	10.7			10			0.070	1.8	covered	
Hiroshima					58.6	14.8	70	nne.	15.2	6.8			9 ck		ne.	0.900	22.9	cloudy	Y. Miwa.
Kanazawa	30.05	763.1	30.15	765.8	51.0	10.6	92	e.	3.3	1.4			10			1.470	37.3	raining	S. Endo.
Kioto	29.86	758.4	30.04	763.0	56.9	13.8	83	nnw.	6.2	2.8			10 n		n.	0.750	19.0	light rain	M. Tojima.
Nagasaki, I. M. Obs'y	29.86	758.5	30.06	763.6	57.8	14.3	81	ne.	3.9	1.7		0	2 s			0.010	0.3	clear	S. Takehayashi.
Nemuro	29.91	759.7	29.98	761.5	51.0	10.6	93	s.	15.0	6.7			10		nw.	0	0	cloudy	
Nigata	30.07	763.8	30.10	764.5	53.6	12.0	87	nw.	9.1	4.0			10 n			0.820	20.8	light rain	M. Morita.
Nobiru	29.93	760.3	29.95	760.7	57.7	14.3	89	wnw.	6.5	2.9			10 n			0.490	12.4	rainy	H. Midzushina.
Osaka	30.02	762.5	30.04	762.9	57.7	14.3	79	ne.	11.3	5.0			10 n			0.660	16.8	light rain	
Supporo					45.5	7.5	77	nw.	17.4	7.8			10			0	0	covered	
Tokei Obs'y, Yeddo	29.88	758.9	29.95	760.8	59.2	15.1	90	nw.	9.2	4.1			10 n			1.200	30.5	raining	The Staff.
Wakayama	29.96	760.9	30.02	762.4	60.0	15.6	80	n.	14.4	6.4			10		nne.	1.200	30.6	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.89	759.2	30.08	764.0	75.4	24.1	68	ene.	15.0	6.7		0	6 ks;ku		ese.	0.04	1.0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.70	601.8	29.92	759.8	55.4	13.0	78	calm	0	0		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.35	618.5	30.14	765.5	50.0	10.0	88	nnw.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.72	754.8	29.98	761.4	73.8	23.2	68	nnw.	0.9	0.4		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.13	587.4	30.23	767.8	50.9	10.5	66	calm			0	0	0			0	0	fine	The Staff.
Morelia	24.26	610.3	30.25	768.2	55.4	13.0	73	e.	1.8	0.8		0	0			0	0	clear	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascallentes	23.98	609.1	30.02	762.5	51.8	11.0	50	nw.			1	0	0			0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.7	30.20	767.0	50.0	10.0	77	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.66	575.0	30.40	772.2	49.5	9.7	73	e.	7.5	3.3		5 cs	0	sw.		0	0	½ cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.79	756.7	29.79	756.7	54.5	12.5		sse.			4					0	0		
Groningen	29.85	758.3	29.91	759.7	51.6	10.9		s.			2					0	0		
Helder	29.85	758.1	29.85	758.1	51.1	10.6		se.			2					0.024	0.6		
Hellevoetsluis	29.82	757.5	29.82	757.5	52.9	11.6	79	se.			2					0	0		
Utrecht	29.84	757.9	29.89	759.1	53.4	11.9	76	sse.			3		2			0	0	slightly cld'y	H. van der Brink
NORWEGIAN.																			
Bergen	29.74	755.3	29.80	756.9	47.5	8.6	70	sse.	13	6			5			0	0		
Brono	29.84	758.0	29.88	759.0	41.0	5.0	68	e.	4	2			0			0	0		
Christiania	29.79	756.7	29.94	760.5	41.4	5.2	80	nw	7	3			9			0	0		
Gjæsvær	29.91	759.7	29.93	760.3	32.4	0.2		nnw.			6		10					snowing	
Lodingen	29.94	760.4	29.98	761.6	34.3	1.3	59	ene.			4		0			0	0		
PORTUGUESE.																			
Angra, Azores	30.16	766.1	30.32	770.1	62.4	16.9	56	w.	4.9	2.2			2			0	0		Dr. J. A. Sampaï
Campo Major	29.20	741.7	30.20	767.1	62.2	16.8	59	ssw.	0.7	0.3			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.09	764.3	30.18	766.5	73.2	22.9	59	ssw.	4.3	1.9			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.90	759.5	30.26	768.7	60.3	15.7	80	nne.	9.4	4.2			9			0.031	0.8		The Staff.
Ponta Delgada, Azores	30.29	769.3	30.36	771.1	64.0	17.8	55	calm	0	0			3			0	0		
Saint Paul de Loando	29.67	753.5	29.87	758.6	78.8	26.0	90	wsw.	1.3	0.6			6	sse.		0	0		
Serra da Estrella	25.40	645.1	30.23	767.9	41.0	5.0	95	nw.	15.0	6.7			10			0.669	17.0	foggy	
RUSSIAN.																			
Akmollnski	28.98	736.2	30.11	764.9	30.0	— 1.1	100	wsw.	31	14			10 n			0.008	0.2		Major K. Lasarew.
Archangel	29.74	755.3	29.76	755.8	29.5	— 1.4	96	wsw.	13	6			10			0.087	2.2	snowing	Capt. Sselliwerstow.
Astrakhan	30.20	767.1	30.12	765.0	50.9	10.5	87	sse.	7	3			10			0	0	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.97	761.1	30.53	775.5	0.9	—17.3	80	calm	0	0			10			0.138	3.5		Meteorological Obs'y.
Dorpat	29.72	755.0	29.98	761.4	40.6	4.8	100	nw.	4	2			10 kn			0	0		Observatory.
Ekaterinburg	28.91	734.4	29.90	759.4	36.1	2.3	84	w.	7	3			10			0.035	0.9		Meteorological Obs'y.
Kasan	29.59	751.5	29.87	758.6	37.2	2.9	95	ssw.	2	1			10			0.004	0.1	foggy	Observatory.
Kertch	29.82	757.3	29.84	757.8	60.6	15.9	81	calm	0	0		0	5 n			0	0		Lagorio & Sastyrez.
Kieff	29.24	742.8	29.89	759.2	43.9	6.6	96	nw.	7	3			10 ks;n					light rain	Observatory.
Lugan	29.71	754.7	29.91	759.8	58.8	14.9	58	ssw.	2	1			5			0	0	light clouds	Meteorological Obs'y.
Nikolaiev	29.82	757.5	29.89	759.3	54.1	12.3	95	calm	0	0			10 n			0	0		Capt. Kurdakow.
Pekin, China	30.32	770.1	30.46	773.7	38.3	3.5	62	calm	0	0		0	7 k			0	0		Physical Observatory.
St. Petersburg	29.93	760.3	29.95	760.7	37.9	3.3	78	nne.	7	3			10 n			inap.	inap.		Central Physical Obs'y.
Semipalatinsk	29.82	757.5	30.55	775.9	13.6	—10.2	87	e.	13	6			8			inap.	inap.		Major Lasarew.
Tashkend, Laboratory	28.93	734.9	30.56	776.1	47.3	8.5	42	calm	0	0			0						Teich, A. M.
Tiflis	28.71	729.3	30.11	764.9	64.2	17.9	54	e.	9	4		0	0			0	0		Physical Observatory.
Tomsk																			
Vladivostock	30.21	767.4	30.28	769.1	33.4	0.8		nw.	7	3		0	0			0	0		
Warsaw	29.62	752.4	30.05	763.3	45.7	7.6	86	wnw.	11	5		0	6 kn						Astronomical Obs'y.
Wilna	29.50	749.2	29.92	760.0	44.6	7.0	85	ssw.	7	3			10			0.028	0.7		Berg, Assistant.
Yeniseisk	30.04	763.0	30.36	771.2	3.0	—16.1	78	wsw.	9	4			10			0.100	2.7	snowing	M. O. Marks.
SCOTTISH.																			
Monach Lt			29.19	741.4	55	12.8	93	s.			6		10			0.5	13.	raining	J. Youngclause.
North Unst			29.72	754.9				e. ●			2	4	0	e.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.98	761.5	30.08	764.1	65.1	18.4	79	sw.	2.7	1.2		0	1			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.11	764.9	30.17	766.4	59.0	15.0	78	nw.	6.3	2.8			10			0	0	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.20	690.8	30.22	767.5	48.2	9.0	80	s.	5.1	2.3			10			0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.95	710.0	30.19	766.9	56.8	13.8	60	calm	0.4	0.2		10	0	w.		0	0	light clouds	The Staff.
Murcia, Met. Obs'y	30.01	762.3	30.17	766.2	68.4	20.2	61	sw.	1.6	0.7		1	4	ne.		0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.26	743.1	30.13	765.2	59.0	15.0	52	e.	15.2	6.8		0	1 k		w.	0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.24	742.6	30.13	765.2	60.1	15.6	67	w.	8.1	3.6			7			0.413	10.5	cloudy	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.84	757.8	29.89	759.3	80.5	26.9	81	ne.	1.1	0.5		0	1 ks			0.114	2.9	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.13	765.2	30.23	767.8	67.1	19.5	69	w.	6.2	2.8		1	7	nw.	w.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.83	757.6	29.92	759.9	77.0	25.0	92	calm	0	0		6 cs	4 kn	s.	s.	0.787	20.0	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.81	757.2	29.95	760.6	77.8	25.4	85	nw.	2.9	1.3		0	8 ks		nnw.	0	0	very cloudy	José L. Yrastorza.
SWEDISH																			
Haparanda	30.04	763.0	30.08	764.0	26.2	— 3.2	91	nw.			2		0			0	0		
Umea	30.05	763.2	30.10	764.5	27.0	— 2.8	92	nw.			2		10			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
SWEDISH—Continued.																			
Hernosand	29.97	761.3	30.02	762.6	35.6	2.0	89	calm			0		10			0.012	0.3		
Stockholm	29.79	756.6	29.97	761.1	44.6	7 0	99	e.			2		10			0.020	0.5		
Wisby	29.84	757.8	29.89	759.3	47.1	8.4	81	sse.			2		7			0.004	0.1		
Sub-series.																			
Upsala	29.88	758.9	29.97	761.1	42.6	5.9	95	e.	3.4	1.5			8		se.	0.063	1.6		S. G. Fineman.
SWISS.																			
Geneva	28.65	727.8	30.09	764.2	51.3	10.7	71	n.			1		3			0	0	vapory.	The Observatory.
TURKISH.																			
Constantinople			29.99	761.7	59.9	15.5	78	n.	14	6.5			10		n.	0.563	14.3		The Observatory.
Valona			30.14	765.5	66.6	19.2		nw.			1		0			0	0	clear	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			29.95	760.7	75.6	24.2	50	ne.			2		0			0	0		Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.02	762.5	30.10	764.5	59	15.0	60	nw.	3	1.3		0	0			0.01	0.3	clear	J. O. Barnes.
Alpena, Michigan	29.54	750.3	30.24	768.1	36	2.2	79	w.	4	1.8		10 cs	0	w.		0	0	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.96	634.0	30.06	763.5	30	— 1.1	62	ne.	1	0.4		0	0			0	0	clear	W. U. Barnes.
Assinnaboine, Ft., Montana	27.45	697.2	30.43	772.9	20	— 6.7	73	s.	2	0.9		5 c	0	sw.		0	0	fair	B. O. Lenoir.
Atlanta, Georgia	29.00	736.6	30.22	767.6	60	15.6	100	n.	3	1.3		0	5 s;fg			inap.	inap.	fair	H. C. Smith.
Atlantic City, New Jersey	30.08	764.0	30.09	764.3	62	16.7	93	sw.	3	1.3		6 ck	0			0	0	fair	Jas. M. Watson.
Augusta, Georgia	30.00	762.0	30.20	767.1	65	18.3	92	nw.	2	0.9			10 s			0.06	1.5	cloudy	John Healy.
Baltimore, Maryland	30.08	764.0	30.13	765.3	61	16.1	93	se.	1	0.4		3 c	2ks;fg	w.	w.	0	0	fair	Geo W Felger.
Barnegat, New Jersey	30.08	764.0	30.10	764.5	62.0	16.7	93	w.	6	2.7			10 s			0.03	0.8	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.76	730.5	30.45	773.4	29	— 1.7	88	ne.	4	1.8			10 n		ne.	0.12	3.0	light snow	A. Pritchard.
Benton, Fort, Montana	27.50	698.5	30.46	773.7	22	— 5.6	73	calm	0	0			10 s			0.01	0.3	cloudy	S. Wheaton.
Bismarck, Dakota	28.54	724.9	30.46	773.7	30	— 1.1	88	e.	5	2.2			10 s			0	0	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.04	763.0	30.07	763.8	60.5	15.8	93	w.	13	5.8		0	9 ks;fg		w.	0.06	1.5	cloudy	J. T. Elker.
Boise City, Idaho	27.06	687.3	30.00	762.0	35	1.7	89	se.	16	7.2			10 s		calm	0	0	cloudy	B. E. Light.
Boston, Massachusetts	29.86	758.4	30.02	762.5	62.0	16.7	93	sw.	10	4.5			10 ks		sw.	inap.	inap.	threatening	O. B. Cole.
Brownsville, Texas	29.90	759.4	29.96	761.0	76.0	24.4	90	calm	0	0		0	0			0	0	clear	M. McCarty.
Buffalo, New York	29.44	747.8	30.22	767.6	49	9.4	62	sw.	5	2.2		2 cs	0	sw.		0.06	1.5	clear	W. Finn.
Buford, Fort, Dakota	28.48	723.4	29.46	748.3	32	0.0	100	se.	4	1.8			10 n			inap.	inap.	light snow	F. A. Mellen.
Burlington, Vermont	29.75	755.6	30.06	763.5	52.7	11.5	51	w.	9	4.0		0	0			0.04	1.0	clear	W. B Gates.
Cairo, Illinois	29.67	753.6	30.09	764.3	65.6	18.7	91	sw.	7	3.1		0	1 ks		sw.	0.22	5.6	clear	W. H. Ray.
Cape Henry, Virginia	30.14	765.5	30.16	766.1	65	18.3	93	sw.	2	0.9		0	0			0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.09	764.3	30.12	765.0	64.0	17.8	90	sw.	6	2.7		0	7 s		w.	0	0	fair	W. E. Smith.
Cape Mendocino, California	29.20	741.7	29.73	755.1	42	5.6	100	se.	12	5.4			10ks		se.	0.55	14.0	cloudy	J. J. McLean.
Cedar Keys, Florida	30.08	764.0	30.10	764.5	72	22.2	90	ne.	6	2.7		2 cs	5 k		ne.	0.53	13.5	fair	F. W. Mixer.
Champaign, Illinois	29.27	743.4	30.13	765.3	47.2	8.4	71	ne.	16	7.2			10 s			0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.10	764.5	30.16	766.1	68	20.0	93	ne.	4	1.8			10s;fg			0	0	threatening	J. H. Smith.
Charlotte, N. Carolina	29.28	743.7	30.16	766.1	61.0	16.1	93	calm	0	0		5 c	fg.	w.		0	0	fair	D. O'Donoghue.
Chattanooga, Tennessee	29.38	746.2	30.23	767.8	59.0	15.0	100	s.	2	0.9			fg.			0.67	17.0	dense fog	B. L. Goulding.
Cheyenne, Wyoming	24.16	613.7	30.37	771.4	27.3	— 2.6	61	n.	1	0.4			10 s			0	0	cloudy	E. McGovern.
Chicago, Illinois	29.45	748.0	30.19	766.8	52.0	11.1	83	e.	10	4.5		0	2 s			0	0	clear	J. Mitchell.
Chincoteague, Virginia	30.11	764.8	30.13	765.3	64	17.8	100	s.	5	2.2		0	3ks;fg			0	0	clear	O. F. Dickens.
Cincinnati, Ohio	29.45	748.0	30.14	765.5	64	17.8	90	se.	3	1.3			10 n		se.	0.19	4.8	light rain	R. B. Watkins.
Cleveland, Ohio	29.47	748.5	30.24	768.1	53.2	11.8	52	ne.	10	4.5		4 c	1 k	w.	w.	0.03	0.8	fair	J. B. Newlin.
Coleman City, Texas	28.20	716.3	30.09	764.3	67	19.4	93	s.	1	0.4			10 s		s.	0	0	cloudy	L. Dorman.
Columbus, Ohio	29.28	743.7	30.17	766.3	56	13.3	69	ne.	7	3.1		0	9 s		sw.	0.05	1.3	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.08	713.2	30.09	764.3	65.0	18.3	93	sw.	6	2.7			10 s			0	0	cloudy	J. McGlone.
Custer, Fort, Montana	27.08	687.8	30.40	772.1	30	— 1.1	71	ne.	4	1.8			10 s		calm	0.09	2.3	cloudy	W. B. Lamar.
Davenport, Iowa	29.50	749.3	30.19	766.8	44	6.7	68	ne.	5	2.2		6 cs	0			0	0	fair	R. R. Martin.
Davis, Fort, Texas	25.30	642.6	30.20	767.1	45	7.2	65	sw.	4	1.8		0	0			0	0	clear	J. Williams.
Dayton, Washington T'y	28.08	713.2	29.86	758.4	39	3.9	65	ne.	5	2.2			10 s			0.01	0.3	cloudy	H. Clifford.
Deadwood, Dakota	25.54	648.7	30.38	771.6	24.5	— 4.2	88	nw.	1	0.4		0	0			0	0	clear	G. W. Scott.
Delaware Breakwater, Del.	30.09	764.3	30.11	764.8	63	17.2	93	sw.	10	4.5		4 ck	0	sw.		0	0	fair	T. S. Townsend.
Denison, Texas	29.17	740.9	30.01	762.2	70.0	21.1	90	s.	10	4.5			10 s		s.	0	0	cloudy	J. W. Byram.
Denver, Colorado	24.91	632.7	30.41	772.4	30.0	— 1.1	64	s.	5	2.2		0	0			0	0	clear	F. M. Neal.
Des Moines, Iowa	29.25	742.9	30.20	767.1	41	5.0	65	e.	2	0.9		0	sk.			0	0	clear	F. W. Conrad.
Detroit, Michigan	29.51	749.5	30.25	768.3	47.0	8.3	93	w.	3	1.3		0	0			0.11	2.8	clear	C. F. R. Wappenhans.
Dodge City, Kansas	27.45	697.2	30.19	766.8	38	3.3	92	n.	25	11.2		0	0			0	0	clear	V. P. Temple.
Dubuque, Iowa	29.47	748.5	30.22	767.6	38.2	3.4	82	calm	0	0		0	1 s;fg			0	0	clear	J. Harvey Smith.
Duluth, Minnesota	29.56	750.8	30.36	771.1	35	1.7	69	w.	1	0.4			10 s			0	0	clear	N. B. Conger.
Eagle Pass, Texas	29.20	741.7	30.03	762.7	73.0	22.8	90	se.	3	1.3			10 s		se.	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25 27	641.8	30.13	765.3	24	— 4.4	88	sw.	10	4.5		3 cs	3 s	sw.		0.05	1.3	fair	J. M. Clifford.
Eastport, Maine	29.82	757.4	29.89	759.2	56.0	13.3	93	sw.	7	3.1			10s;fg		w;sw	0.03	0.8	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.19	690.6	30.12	765.0	44	6.7	63	nw.	24	10.7		0	0			0	0	clear	W. J. Cundall.
El Paso, Texas	26.30	668.0	30.15	765.8	40	4.4	73	calm	0	0		0	0			0	0	clear	J. O'Howd.
Erie, Pennsylvania	29.48	748.8	30.24	768.1	51	10.6	59	n.	6	2.7		0	0			0.08	2.0	clear	Peter Wood.
Escanaba, Michigan	29.56	750.8	30.26	768.6	35.0	1.7	82	nw.	10	4.5		0	8 s		nw.	0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.27	718.0	30.09	764.3	71	21.7	100	sw.	6	2.7		0	5 s		s.	0	0	fair	Frank Halwegler.
Galveston, Texas	29.96	761.0	30.01	762.2	76	24.4	97	s.	6	2.7		2 cs	3 s	s.		0	0	fair	E. O'C. MacInerney.
Grand Haven, Michigan	29.52	749.8	30.22	767.6	38.5	3.6	86	ne.	3	1.3		3 c	0	w.		0	0	clear	J. Mueller.
Grant, Fort, Arizona	25.32	643.1	30.16	766.1	50	10.0	50	ne.	5	2.2		0	0			0	0	clear	Robert C. Lord.
Hatteras, North Carolina	30.14	765 5	30.16	766.1	67	19.4	93	nw.	4	1.8		0	0			0	0	clear	R. M. Crawford.
Helena, Montana	25.94	658.9	30.32	770.1	21	— 6.1	91	calm	0	0			10 s		calm	0.01	0.3	cloudy	N. C. Smith.
Henrietta, Texas	28.95	735.3	29.99	761.7	64	17.8	90	s.	2	0.9		0	0			0	0	clear	J. P. Sherry.
Huron, Dakota	28.90	734.0	30.38	771.6	33.2	0.7	78	n.	10	4.5			10 s			inap.	inap.	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.30	744.2	30.14	765.5	50	10.0	86	ne.	8	3.6			10 s		ne.	0.34	8.6	cloudy	O. Schutze
Indianola, Texas	29.96	761.0	29.99	761.7	77.4	25.2	97	se.	4	1.8		4 ck	2 k	s.	s.	inap.	inap.	fair	I. A. Reed.
Jacksboro, Texas	28 79	731.3	30.01	762.2	68	20.0	61	sw.	10	4.5		0	0			0	0	clear	D. J. Carr.
Jacksonville, Florida	30.08	764.0	30.13	765.3	70	21.1	100	calm	0	0			fg.			0	0	dense fog	J. W. Smith.
Keogh, Fort, Montana	27.78	705.6	30.45	773.4	32	0.0	81	w.	4	1.8			10 s		nw.	0.03	0.8	cloudy	A. Schneider.
Keokuk, Iowa	29.39	746.5	30.08	764.0	52.0	11.1	59	ne	6	2.7			10 s			0	0	cloudy	F. Z. Gosewisch
Key West, Florida	29.99	761.7	30.01	762 2	78.0	25.6	88	ne.	5	2.2		0	0			0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.16	766.1	30.18	766.6	65	18.3	93	s.	3	1.3		hz.	0			0	0	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	29.18	741.2	30.25	768.3	60.8	16.0	100	ne.	1	0.4			10s;fog			0.28	7.1	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.42	747.3	30.24	768.1	41	5.0	73	n.	8	3.6		0	5 s			0	0	fair	S. C. Emery.
Leavenworth, Kansas	29.17	740.9	30.11	764.8	51	10.6	66	n.	6	2.7		4 k	0	nw.		0	0	fair	A. W. Browne.
Lewiston, Idaho	29.06	738.1	29.93	760.2	40.0	4.4	48	ne.	11	4.9			10 s			0	0	threatening	W. Bell.
Little Rock, Arkansas	29.72	754.9	30.05	763.3	69	20.6	93	s.	2	0.9		1 ck	3 s			0	0	fair	W. U. Simons.
Los Angeles, California	29.62	752.3	30.02	762 5	58	14.4	74	w.	1	0.4		5 k	0	sw.		0	0	fair	T S Collins.
Louisville, Kentucky	29.50	749.3	30.10	764.5	65	18.3	93	s.	4	1.8			fg.			0.52	13.2	dense fog	L. M. Dey.
Lynchburg, Virginia	29.44	747.8	30.16	766.1	59	15.0	87	sw.	1	0.4		3 cs	0			0	0	clear	Lewis Dunne.
Mackinaw City, Michigan	29.56	750.8	30.25	768.3	40.0	4.4	73	nw.	15	6.7		8 cs	0	w.		0	0	cloudy	F. R. Dey.
Macon, Fort, North Carolina	30.15	765.8	30.16	766.1	65	18.3	100	ne.	3	1.3		2 c	fg.			0	0	clear	F. P. Chaffee.
Madison, Wisconsin	29.16	740.7	30.23	767.8	42	5.6	83	se.	3	1.3		3 c	0	w.		0	0	clear	C. A. Shaw.
Maginnis, Fort, Montana	25.74	653.8	30.25	768.3	32	0.0	81	nw.	4	1.8			10 n		nw.	0.09	2.3	light snow	F. Burke.
McKavett, Fort, Texas	27.80	706.1	30.18	766.6	69	20.6	90	sw.	2	0.9		0	6 ks		sw.	0	0	fair	J. E. Thatcher.
Marquette, Michigan	29.53	750.0	30.30	769.6	35	1.7	69	nw.	4	1.8			10 s		nw.	inap.	inap.	cloudy	J. Gilligan.
Memphis, Tennessee	29.75	755 6	30.10	764.5	68	20.0	93	se.	3	1.3			10 s		se.	0	0	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.44	747.8	30.23	767.8	43	6.1	74	nw.	9	4.0		0	fg.			0	0	clear	W. Linn.
Missoula, Fort, Montana	26.77	679.9	30.18	766.6	21	— 6.1	48	sw.	2	0.9		0	0			inap.	inap.	clear	J. H. Young.
Mobile, Alabama	30.06	763.5	30.10	764.5	71.4	21.9	92	se.	2	0.9			10 s		se.	5.20	132.1	cloudy	C. A. Read.
Montgomery, Alabama	29.93	760.2	30.17	766.3	62	16.7	93	e.	2	0.9		7 k	fg.	w.		0.65	16.5	fair	J. B. McLaughlin.

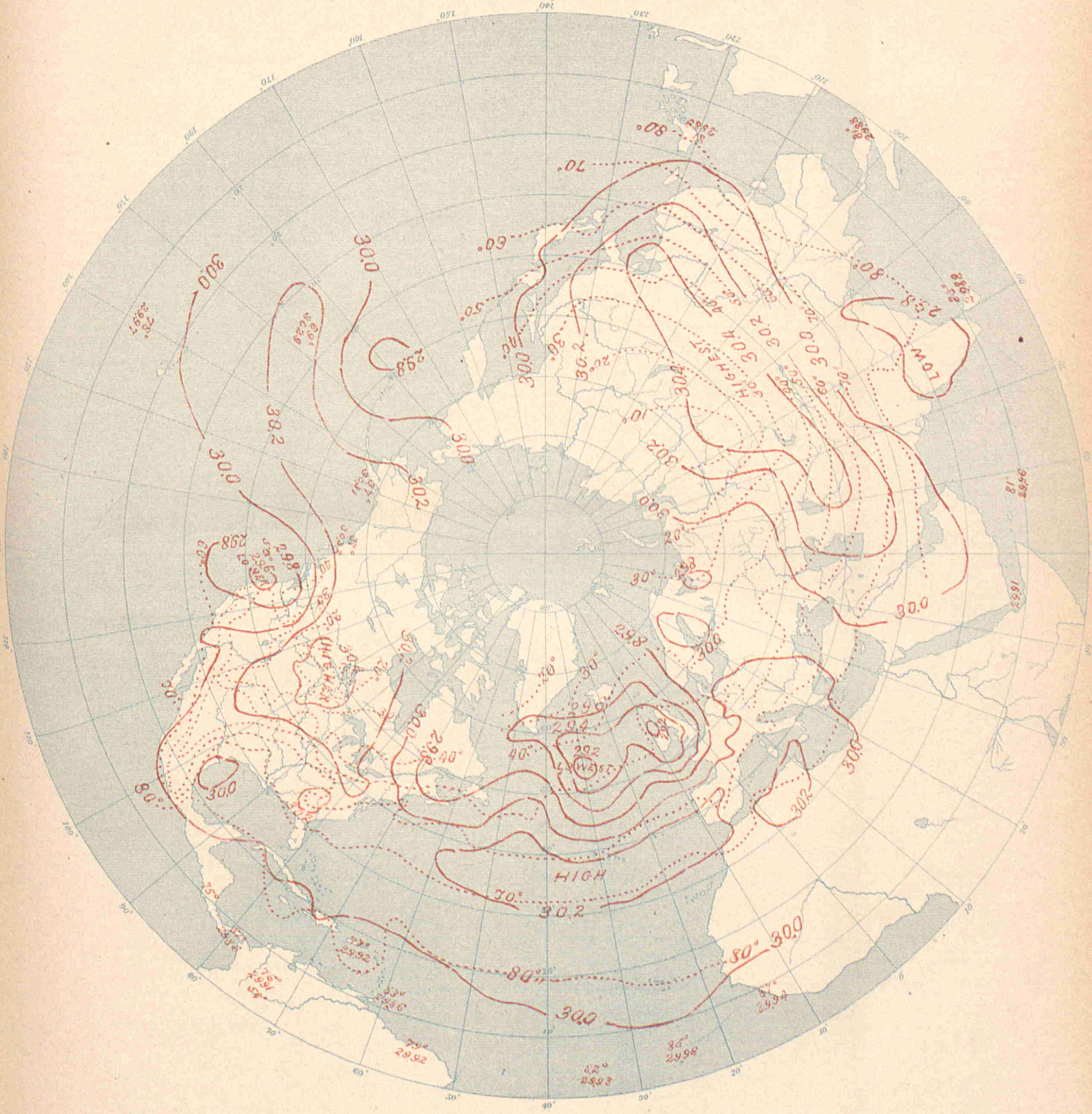
STATIONS.	BAROMETER. Corrected for instrumental error and for temperature.		BAROMETER. Reduced to sea-level.		Temperature of the air.		Relative humidity.	WIND. Direction.	WIND. Velocity.		WIND. Force.	CLOUDS. Amount and kind.		CLOUDS. Direction.		Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.37	746.0	30.43	772.9	24.1	— 4.4	88	ne.	12	5.4			10 s		ne.	0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.16	740.7	30.22	767.6	62.5	16.9	87	calm	0	0			fg.			0.20	5.1	dense fog	J. C. Sprigg, jr
Mt. Washington, N. H.	23.69	601.7	30.25	768.3	28.0	— 2.2	92	nw.	68	30.4		6 cs	0	nw.		0.10	2.5	fair	J. G. Linsley
Nashville, Tennessee	29.55	750.6	30.15	765.8	64.5	18.1	90	se.	1	0.4		4 ck	0	w.		inap.	inap.	fair	L. N. Jesunofsky.
New Haven, Connecticut	29.95	760.7	30.07	763.8	60	15.6	100	sw.	3	1.3			fg.			0.01	0.3	dense fog	J. H. Sherman.
New London, Connecticut	30.03	762.7	30.08	764.0	60	15.6	100	calm	0	0			fg.			0.04	1.0	dense fog	J. G. Lynch.
New Orleans, Louisiana	30.00	762 0	30.06	763.5	73.5	23.1	85	e.	2	0.9		2 c	2s;sk		e.	0	0	fair	L. Dunne.
Newport, Rhode Island	30.01	762.2	30.06	763.5	59.0	15.0	100	sw.	4	1.8			fg.			0.06	1.5	dense fog	W. McGillivray.
New York, New York	29.93	760.2	30.11	764.8	60.5	15.8	100	sw.	5	2.2		5 cs	fg.	sw.		0	0	fair	J. B. Merrill.
Norfolk, Virginia	30.12	765.0	30.15	765.8	63	17.2	100	s.	3	1.3			fg.			0	0	dense fog	Wm. Davis.
North Platte, Nebraska	27.28	692.9	30.36	771.1	37.6	3.1	52	calm	0	0		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	29.72	754.9	29.76	755.9	37.0	2.8	89	ne.	6	2.7			10 n			0.08	2.0	light rain	J. Dascomb.
Omaha, Nebraska	28.98	736.1	30.22	767.6	42.0	5.6	70	n.	10	4.5		0	0			0	0	clear	A. Pollak.
Oswego, New York	29.84	757.9	30.18	766.6	53.0	11.7	61	nw.	7	3.1		0	0			0.09	2.3	clear	S. W. Beall.
Palestine, Texas	29.50	749.3	30.07	763.8	72.0	22.2	97	s.	9	4.0		0	3 ks		sw.	0	0	clear	L. M. Pindell.
Pensacola, Florida	30.07	763.8	30.10	764.5	70.7	21.5	95	e.	6	2.7		0	8 s		se.	0.24	6.1	cloudy	M. McGauran.
Philadelphia, Pa	30.01	762.2	30.11	764.8	63	17.2	100	w.	5	2.2			10s;fg		w.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.78	451.6	30.44	773.2	15	— 9.4	87	w.	28	12.5		0	5 ks		w.	0	0	fair	H. Hall.
Pioche, Nevada	23.93	607.8	30.07	763.8	32	0.0	81	sw.	1	0.4		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.35	745.5	30.20	767.1	57.3	14.1	69	nw.	3	1.3		0	0			0.05	1.3	clear	W. Daly.
Poplar River, Montana	27.93	709.4	30.22	767.6				nw.			4		10 s			0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.06	763.5	30.07	763.8	74.6	23.7	95	se.	6	2.7		0	5 s		e.	0.03	0.8	fair	M. Herman.
Port Huron, Michigan	29.54	750 3	30.26	768.6	43.0	6.1	72	sw.	2	0.9		0	0			0.01	0.3	clear	W. O. Bailey.
Portland, Maine	29.89	759.2	29.94	760.5	60.0	15.6	87	w.	10	4.5		0	hz.			0.03	0.8	clear	W. W. Eichelberger.
Portland, Oregon	29.59	751.6	29.66	753 4	41.0	5.0	92	e	4	1.8			10 n			0.40	10.2	heavy rain	M. L. Hearne.
Portsmouth, N. C.					68	20.0	93	nw.	4	1.8		hz.	hz.			0	0	light haze	F. S Coburn.
Prescott, Arizona	24.76	628.9	30.10	764.5	41.4	5.2	76	s.	6	2.7		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	30.00	762.0	30.03	762.7	58	14.4	93	sw.	8	3.6			fg.			0.03	0.8	dense fog	P. T. Jenkins.
Punta Rassa, Florida	30.03	762.7	30.04	763.0	72.5	22.5	94	ne.	10	4.5		10 cs	0			0	0	cloudy	W. J. Evans.
Red Bluff, California	29.42	747.3	29.83	757.7	47.2	8.4	83	se.	22	9.8			10 s		sw.	0.03	0.8	cloudy	E. van Dyk.
Rochester, New York	29.50	749.3	30.20	767.1	45	7.2	76	w.	9	4.0		0	sk.			0.01	0.3	clear	E. W. McGann
Roseburg, Oregon	29.12	739.6	29.70	754.4	38.2	3.4	86	sw.	3	1.3		0	5 s		sw.	0.28	7.1	fair	J. J. Nanry.
Sacramento, California	29.83	757.7	29.91	759.7	49.7	9.8	64	se.	12	5.4			10 s		se.	0.01	0.3	cloudy	J. A. Barwick
St. Louis, Missouri	29.45	748.0	30.08	764.0	57.0	13.9	100	ne.	3	1.3			10 n		ne.	0.08	2.0	light rain	J. H. Weber.
St. Paul, Minnesota	29.38	746.2	30.30	769.6	37.0	2.8	72	n.	9	4.0			10 s		n.	0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.51	749.5	30.44	773.2	18	— 7.8	83	nw.	4	1.8		0	fg.			0	0	clear	C. B Dilley.
Salt Lake City, Utah	25 62	650.7	30.19	766.8	38	3.3	48	calm	0	0			10 ks		sw.	inap.	inap.	cloudy	J. Craig.
San Antonio, Texas	29.30	744.2	30.02	762.5	74.0	23.3	90	se.	1	0.4		0	8 ks		se.	0	0	cloudy	T. J. Kenan.
San Diego, California	29.94	760.5	30.01	762.2	54.3	12.4	79	calm	0	0		8 k	0	se.		0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.53	750.0	30.25	768.3	52.5	11.4	59	ne.	18	8.0		0	5 s			0	0	fair	M. H. Perry.
Sandy Hook, New Jersey	30.07	763.8	30.10	764.5	61.0	16.1	93	sw.	8	3.6			10 s		sw.	0	0	cloudy	B. A. Blundon.
San Francisco, California	29.85	758.2	29.92	760.0	53	11.7	93	s.	13	5.8			10 n		sw.	0.16	4.1	light rain	N. Gorom.
Santa Fé, New Mexico	23.28	591.3	30.32	770.1	42	5.6	48	calm	0	0		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.07	763.8	30.16	766.1	67	19.4	93	n.	4	1.8			fg.			0	0	dense fog	H. W. Ford.
Shaw, Fort, Montana	26.61	675.9	30.43	772.9	19	— 7.2	87	ne.	1	0.4		5 cs	0			0.03	0.8	fair	A. L. Mathews.
Shreveport, Louisiana	29.81	757.2	30.06	763.5	70	21.1	93	s.	1	0.4		2 ck	6 s			0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.71	729.2	30.02	762.5	58.5	14.7	92	sw.	4	1.8			fg.			0	0	dense fog	W. M. Mattingly.
Silver City, New Mexico	24.32	617.7	30.16	766.1	40.5	4.7	51	calm	0	0		0	2 s			0	0	clear	N. D. Lane.
Sitka, Alaska	30.25	768.3	30.32	770.1	36.6	2.6	34	ne.	8	3.6		0	0			c	0	clear	F. W. Fickett.
Smith, Fort, Arkansas	29.52	749.8	30.01	762.2	68.5	20.3	90	e.	3	1.3			10 s			0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.13	765.3	30.17	766.3	61	16.1	100	ne.	5	2.2		4 ck	fg.	w.		0	0	fair	O. Parker.
Spokane Falls, Wash. Ter.	27.89	708.4	29.97	761.2	29	— 1.7	84	ne.	7	3.1		10 cs	0			0.04	1.0	cloudy	D. Moore.
Springfield, Illinois	29.41	747.0	30.13	765.3	52	11.1	69	e.	10	4.5			10 s		se.	0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	29.93	760.2	30.07	763.8	60.5	15.8	95	s.			1	6 ck	0	s.		0	0	fair	Charles Mayr.
Springfield, Mo.	28.57	725.7	30.08	764.0	65	18.3	93	s.	8	3.6		0	8 ks		sw.	0	0	cloudy	J. B. Marbury.
Starkville, Miss.	29.66	753.4	30.16	766.1	66	18.9	93	e.	5	2.2			fg			0	0	dense fog	O. Dill.
Stevenson, Fort, Dakota	28.49	723.6	30.46	773.7	30	— 1.1	100	e.	3	1.3			10 s			0	0	cloudy	W. Burrows
Stockton, Fort, Texas	26.99	685.5	30.11	764.8	48.0	8.9	58	sw.	8	3.6		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	29.96	761.0	30.01	762.2	55.5	13.1	90	sw.	12	5.4		5 k	fg.	w.		0	0	fair	G. Liebmann.
Thomas ; Camp, Arizona	27.24	691.6	30.08	764.0	41.5	5.3	53	calm			0	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.50	749.3	30.23	767.8	47	8.3	56	n.	6	2.7		0	3 s		w.	0.02	0.5	clear	A. Buell.
Tucson, Arizona	27.57	700.3	30.03	762.7	52	11.1	61	s.	5	2.2		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.45	748.0	29.83	757.7	44	6.7	68	se.	7	3.1			10 n			0.02	0.5	light rain	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					42.9	6.1	76	w.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.83	757.7	30.10	764.5	67.3	19.6	97	se.	7	3.1		0	9s;fg			0	0	cloudy	James Kenealy.
Visalia, California	29.61	752.1	29.99	761.7	40.8	4.9	90	se.	4	1.8		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.57	624.1	30.31	769.9	23.4	— 4.8	60	calm	0	0			10 s			0	0	cloudy	T. M. Ambler.
Washington, D. C.	30.03	762.7	30.15	765.6	60.4	15.8	93	calm	0	0		1 k	fg.	w		0	0	clear	B. M. Pursell.
West Las Animas, Colorado	26.24	666.5	30.36	771.1	28	— 2.2	59	w.	7	3.1		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.52	749 8	30.15	765.8	57	13.9	93	calm	0	0		2 ck	7 ks	w.		0.11	2.8	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.12	765.0	30.18	766.6	63	17.2	93	se.	1	0.4		8 ck	hz.			0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.40	645.1	29.93	760.2	33	0.6	62	ne.	8	3.6		0	5 s		sw.	0	0	fair	J. Grover.
Yankton, Dakota	28.91	734.3	30.29	769.4	45	7.2	68	nw.	6	2.7		0	5 ks			0	0	fair	J. H. Atfield.
Yuma, Arizona	29.76	755.9	29.91	759.7	57.8	14.3	80	ne.	2	0.9		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.99	558.5			54.0	12.2	77	w.	2	0.9		0	5ks;s		w.	1.77	45.0	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.95	760 7	30.02	762.5	75.8	24.3	90	e.	3	1.3		1 c	2 k	nw.	e.	0	0	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.91	759.7	29.92	760.0	75	23.9	86	n.	3	1.3		5 cs	1 s	e.		0	0	clear	Robert Johnston.
Navassa, W. I.	29.78	756.4	29.86	758 4	81.5	27.5	76	ne.	8	3.6		1 cs	3 k	e.	ne.	0	0		F. M. Everett.
Paramaribo, S. A.	29.92	760.0	29.92	760.0	79	26.1	82	se.			2	0	hz.			0	0	hazy	Dr. O. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	76	24.4	89	n.			1		10 ks		s.	0.04	1.0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75.2	24.0	98	ne.			1	2 ck	0	w.		0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	29.91	759 7	29.94	760.5	77	25.0	82	n.	7.2	3.2		1 ck	1 s		ne.	0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	30.25	768.3	30.31	769.9	37	2.8	89	calm			0	6 cs	0			0	0	fair	W. J. Fisher.
St. Thomas, W. I.	29182	757.4	29.94	760.5	77	25.0	100	e.					8 kn		e.	0.58	14.7	cloudy	Aug. Walloe.
York Factory, B. A	30.22	767.6	30.28	769.1	28.0	— 2.2	100	ne.	17	7.6		4 k	5 s	e.	ne.	0.03	0.8	snowing	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
BRITISH NAVAL.																		
H. M. S. Albatross, Chee Foo, China	30.46	773.7	45	7.2	.....	nne.	.....	.....	3-5	.....	7	ne.	.....	.....	.....	4	ne.	squally.
H. M. S. Amethyst, Colonia, Uruguay†	29.85	758.2	64	17.8	94	ese.	.....	.....	2-3	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
H. M. S. Antelope, N. 41° 08′, E. 29° 03′	29.98	761.5	57	13.9	.....	nnw.	.....	.....	3	.....	10	nnw.	.....	.....	.....	.....	.....	overcast.
H. M. S. Audacious, Suez Canal, Egypt	29.87	758.7	78	25.6	65	wnw.	.....	.....	1	.....	1	wnw.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Carysford, N. 29° 56′ E. 32° 33′	29.93	760.2	79.5	26.4	78	ssw.	.....	.....	2	.....	3	ssw.	.....	.....	.....	1	ssw.	d. clouds.
H. M. S. Champion, N. 31° 14′ E. 121° 38′	.....	.....	56	13.3	93	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	overcast
H. M. S. Comus, Esquimalt, Vancouver Island, B C	29.77	756.1	41	5.0	73	nne.	.....	.....	1	.....	8	n.	.....	.....	.....	.....	.....	d. clouds
H. M. S. Condor, N. 34° 10′, E. 33° 55′	30.05	763.3	74.5	23.6	70	ene.	.....	.....	3-4	.....	0	.....	.....	.....	.....	6	ese.	blue sky.
H. M. S. Crocodile, N. 32° 20′, E. 30° 00′	29.91	759.7	74	23.3	81	n.	.....	.....	3-4	.....	9	nnw.	.....	.....	.....	1-2	n.	d. clouds.
H. M. S. Curacoa, N. 34° 16′ E., 133° 13′	29.91	759.7	62.5	16.9	?	nne.	.....	.....	1-5	.....	10	ne.	.....	.....	.....	.....	.....	squally.
H. M. S. Diamond, S. 17° 00′, W. 176° 56′ *†	29.63	752.6	79	26.1	86	ne.	.....	.....	2-3	.....	3	e.	.....	.....	.....	1	ne.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	30.11	764.8	73.5	23.1	88	se.	.....	.....	1-2	.....	7	se.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Eclipse, N. 13° 06′, E. 46° 32′	29.85	758.2	.....	.....	.....	ese.	.....	.....	3	.....	2	e.	.....	.....	.....	1	w.	d. clouds.
H. M. S. Espiegle, S. 28° 18′, E. 161° 44′	.....	.....	69	20.6	95	se.	.....	.....	6	.....	8	.....	.....	.....	.....	4	se.	d. clouds.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.92	760.0	76.5	24.7	82	s.	.....	.....	3	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Flying Fish, N. 37° 11′ E. 126° 33′	30.26	768.6	47	8.3	77	n.	.....	.....	2	.....	5	.....	.....	.....	.....	1	nw.	misty.
H. M. S. Gannet, S. 13° 51′, W. 76° 17′	29.87	758.7	62	16.7	94	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
H. M. S. Iris, N. 36° 40′, E. 22° 35′	30.00	762.0	68	20.0	79	nnw.	.....	.....	1-2	.....	1	nnw.	.....	.....	.....	1	nnw.	blue sky.
H. M. S. Iron Duke, N. 32° 44′ E. 129° 51′	29.99	761.7	62	16.7	88	sse.	.....	.....	1-2	.....	9	e.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Kingfisher, N. 44° 33′ W. 126° 21′	29.56	750.8	46	7.8	.....	ene.	.....	.....	1-4	.....	6	ene.	.....	.....	.....	3	nne.	raining.
H. M. S. Lark. S. 1° 51′, E. 162° 25′	29.88	758.9	80.3	26.8	98	calm	.....	.....	0	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Liffey, N. 29° 56′, W. 71° 20′	29.87	758.7	60	15.6	.....	e.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.04	763.0	51.5	10.8	?	ene.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Northampton, Halifax, Nova Scotia	29.92	760.0	57	13.9	97	ssw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Nelson, Melbourne, Australia	30.07	763.8	59	15.0	81	s.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.88	758.9	81	27.2	80	w.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Rocket, Panama, Panama	29.86	758.4	81	27.2	95	nw.	.....	.....	2	.....	4	.....	.....	.....	.....	3-4	sw.	d. clouds
H. M. S. Sappho, S. 26° 00′, W. 145° 00′	29.97	761.2	72.2	22.3	?	n.	.....	.....	3-4	.....	10	w.	.....	.....	.....	8	sw.	showery.
H. M. S. Superb N. 39° 37′ E. 19° 56′ *	29.99	761.7	69	20.6	60	nw.	.....	.....	3	.....	.....	.....	.....	.....	.....	2	nw.	d. clouds.
H. M. S. Sylvia, S. 53° 00′ W. 73° 35′	29.15	740.4	43.5	6.4	91	nne.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Thetis, S. 17° 46′, W. 75° 56′	29.93	760.2	63	17.2	78	se.	.....	.....	4	.....	10	.....	.....	.....	.....	3	sse.	overcast
H. M. S. Tourmaline, Aden, Arabia	29.91	759 7	.....	.....	.....	e.	.....	.....	2-3	.....	1	e.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, Bushire, Persia	30.03	762.7	77.5	25.3	57	wnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Zephyr, N. 38° 57′, E. 117° 58′	30.23	767.8	43	6.1	?	wnw.	.....	.....	1	.....	1	s.	.....	.....	.....	3	n.	blue sky.
PORTUGUESE NAVAL.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.05	763.3	82.4	28.0	77	ne.	.....	.....	1	.....	1	.....	ne.	.....	.....	1	se.	blue sky.
Tamega, Macao, China	30.01	762.2	80.6	27.0	84	e.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
UNITED STATES NAVAL.																		
Navy Yard, Pensacola, Fla	29.94	760.5	73	22.8	94	ne.	5	2.2	.....	.....	5	.....	ne.	0	0	.....	.....	fair.
Navy Yard, Portsmouth, N. H	29.95	760.7	60	15.6	88	w.	6	2.7	.....	.....	2	.....	w.	0	0	.....	.....	fair.
Naval Hospital, Yokohama, Japan*	29.86	758.4	66	18.9	86	sw.	.....	.....	1	.....	10	.....	w.	0.06	1.5	.....	.....	rain & mist.
Adams, Sitka, Alaska	.....	.....	47	8.3	41	ene.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Alaska, Honolulu, Sandwich Islands	30.00	762.0	79	26.1	95	ne.	.....	.....	1	.....	5	.....	n.	0	0	sm'h	.....	fair.
Alliance, Hampton Roads, Va	30.08	764.0	65	18.3	?	wsw.	.....	.....	0-1	.....	2	.....	.....	0	0	.....	.....	clear.
Ashuelot, Yokohama, Japan	29.93	760.2	69	20.6	84	ssw.	.....	.....	2	.....	10	.....	sw.	.....	.....	.....	.....	cloudy.
Brooklyn, S. 48° 30′, W. 65° 59′	29.56	750.8	46	7.8	100	wsw.	6	2.7	.....	.....	2	.....	calm	0	0	light	w.	fair.
Colorado, New York, N. Y.	30.17	766.3	62	16.7	100	sw.	3	1.3	.....	.....	10	.....	calm	0	0	.....	.....	foggy.
Enterprise, Hampton Roads, Va	30.17	766 3	64	17.8	?	sw.	.....	.....	1	.....	2	.....	calm	.....	.....	sm'h	.....	clear.
Essex, Callao, Peru	29.89	759.2	65	18.3	94	calm	.....	.....	0	.....	8	.....	sse.	.....	.....	sm'h	sse.	fair.
Franklin, Norfolk, Va	30.13	765.3	62	16.7	100	ssw.	2	0.9	.....	.....	2	.....	ssw.	0	0	.....	.....	foggy.
Galena, Montevideo, Uruguay	29.72	754.9	63	17.2	?	ese.	.....	.....	2	.....	10	.....	.....	.....	.....	mod.	se.	rainy.
Hartford, Montevideo, Uruguay*	29.67	753.6	63	17.2	100	e.	.....	.....	2	.....	10	.....	.....	h'vy	h'vy	sm'h	.....	cloudy.
Independence, Mare Island, Cal.	29.94	760.5	52	11.1	79	se.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Iroquois, Callao, Peru	29.94	760.5	65	18.3	94	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	.....	fair.
Jamestown, Newport, R. I.	30.05	763.3	58	14.4	100	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	foggy.
Kearsarge, Hampton Roads, Va	30.11	764.8	64	17.8	100	sw.	.....	.....	2	.....	5	.....	.....	.....	.....	sm'h	.....	fair.
Lackawanna, Talcahuana, Chili*	29.92	760.0	55	12.8	86	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear.
Lancaster, Alexandria, Egypt*	29.89	759.2	79	26.1	82	nw.	.....	.....	4	.....	5	.....	nw.	0	0	.....	.....	fair.
Michigan, Erie, Pa	30.06	763.5	52	11.1	66	n.	.....	.....	3	.....	2	.....	n.	.....	.....	.....	.....	fair.
Minnesota, New York, N. Y	30.11	764.8	62	16.7	94	s.	5	2.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	foggy.
Monocacy, Yokohama, Japan*	29.73	755.1	68	20.0	94	s.	.....	.....	2	.....	10	.....	sw.	.....	.....	.....	.....	raining.
New Hampshire, Newport, R. I.	30.10	764.5	59	15.0	100	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	foggy.
Nipsic, N. 38° 39′, E. 26° 15′*	29.92	760.0	67	19.4	74	nnw.	.....	.....	4	.....	5	.....	.....	.....	.....	sm'h	.....	fair.
Onward, Callao, Peru†	30.04	763.0	63	17.2	94	calm	.....	.....	0	.....	10	.....	n.	.....	.....	long	w.	foggy.
Palos, N. 33° 46′, E. 131° 43′*	29.95	760.7	64	17.8	73	nnw.	.....	.....	4	.....	8	.....	n.	.....	.....	mod	nnw.	fair.
Pensacola, Callao, Peru*	29.89	759.2	63	17.2	88	nnw.	1	0.4	.....	.....	8	.....	.....	0	0	sm'h	.....	foggy.
Powhatan, Portsmouth, N. H	29.95	760.7	61	16.1	94	w.	.....	.....	2	.....	5	.....	w.	.....	.....	.....	.....	fair.
Quinnebaug, Venice, Italy *	30.14	765.5	58	14.4	81	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear
Ranger, Mare Island, Cal.	29.95	760.7	53	11.7	93	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	.....	overcast.
Richmond, Yokohama, Japan*	29.84	757.9	68	20.0	84	ssw.	.....	.....	3	.....	10	.....	sw.	0.02	0.5	.....	.....	raining.
Saratoga, N. 17° 09′, W. 79° 26′	29.81	757.2	81	27.2	91	nne.	.....	.....	3-4	.....	5	.....	ne.	.....	.....	sm'h	.....	fair.
St. Louis, League Island, Pa	30.30	769.6	60	15.6	100	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	foggy.
Swatara, S. 11° 15 W. 14° 58′*	29.95	760 7	75	23.9	68	se.	.....	.....	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Tennessee, Hampton Roads, Va	30.12	765.0	66	18.9	94	sse.	8	3.6	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Vandalia, Chester, Pa *	30.07	763.8	60	15.6	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	foggy.
Wabash, Boston, Mass	30.03	762.7	62	16.7	94	sw.	3	1.3	.....	.....	8	.....	sw.	0	0	.....	.....	cloudy.
Wachusetts, Mare Island, Cal†	29.93	760.2	51	10.6	93	s.	.....	.....	2	.....	10	.....	calm	.....	.....	sm'h	.....	rainy.
Wyandotte, Washington, D. C	29.97	761.2	78	25.6	82	calm.	.....	.....	0	.....	5?	.....	calm	.....	.....	.....	.....	clear.
Yantic, Hampton Roads, Va	30.14	765.5	65	18.3	94	sw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	fair.
MERCHANT MARINE.																		
S. S. Grecian, S. 33° 30′, W. 52° 00′*	29.79	756.7	73	22.8	76	ne.	.....	.....	5	.....	10	.....	ne.	0	0	mod.	e.	cloudy.
S. S. Indiana, N. 46° 37′, W. 53° 04′†	29.69	754.1	47	8.3	92	wnw.	.....	.....	5	.....	10	.....	nw.	.....	.....	mod.	nw.	squally.
S. S. Pennsylvania, N. 49° 31, W. 29° 58′ †	29.45	748 0	50	10.0	.....	w.	.....	.....	6	.....	10	.....	nw.	.....	.....	r'gh	nw.	squally.
S. S. Castor, N. 47° 41′, W. 26° 00′*	29.50	750.8	57.2	14	.....	w.	.....	.....	7	.....	10	.....	w.	.....	.....	6	wnw.	fine.
S. S. Jason, N. 45° 51′, W. 54° 04′	29.91	759.8	.....	.....	.....	nw.	.....	.....	7½	4 ck	0	.....	.....	.....	.....	4	wnw.	clear.
S. S. Anchoria, N. 55° 07′, W. 15° 09′†	29.44	747.8	.....	.....	.....	w.	.....	.....	2	.....	1	.....	w.	sh'rs	sh'rs	sli't	var.	fine.
S. S. Bolivia, Glasgow, Scotland	29.19	741.4	53	11.7	86	w.	.....	.....	.....	.....	.....	.....	.....	5 h'r	5 h'r	.....	.....	overcast
S. S. Dorian, Cape de Palos, Spain*	30.04	763.0	64	17.8	.....	calm	.....	.....	0	.....	.....	.....	.....	0	0	sm'h	.....	clear.
S. S. Ethiopia, N. 45° 38′, W. 51° 16′	30.11	764.8	51	10.6	86	sw.	.....	.....	4	.....	8	.....	sw.	0	0	sm'h	.....	cloudy.
S. S. Galatia, N. 8° 28′ E. 82° 58′†	30.08	764.0	83.0	28.3	.....	sw.	.....	.....	2	.....	2	.....	ssw.	0	0	sm'h	wsw.	fair.
S. S. Utopia, N. 11° 00′, E. 59° 20′†	30.16	766.1	81	27.2	70	nw.	.....	.....	3	.....	2	.....	nnw.	0	0	sm'h	.....	clear.
S. S. Ailsa, Savanilla, U. S. C†	29.92	760.0	84	28?9	83	e.	.....	.....	2	.....	2	.....	e.	1 h'r	1 h'r	.....	.....	fair.
S. S. Alpin, St. John's, Porto Rico, W. I.	29.94	760.5	.....	.....	.....	ese.	.....	.....	2	.....	.....	.....	se.	1 h'r	1 h'r	sm'h	.....	
S. S. Alvo, Port Antonio, Jamaica, W. I.	.....	.....	.....	.....	.....	ese.	.....	.....	1	.....	.....	.....	e.	6 h'r	6 h'r	sm'h	.....	cloudy.
S. S. Ambrose, N. 0° 50′, W 46° 40′†	29.90	759 4	.....	.....	.....	e.	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	fine.
S. S. British Merchant, S. 23° 19′, W. 99° 39′	30.16	766.1	68	20.0	79	ese.	.....	.....	3	.....	4	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Dynomene, S. 10° 00′ E. 87° 30′	29.90	759.4	77.5	25.3	95	sw.	.....	.....	1	.....	4	.....	.....	.....	.....	.....	.....	showery.
S. S. Gordon Castle, N. 2° 50′, E. 195° 02′	29.89	759.2	81.5	27.5	75	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	n.	overcast.
May Hulke, N. 19° 17, W. 25° 19′	30.03	762.7	78	25.6	69	nne.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	blue sky.
Markland, N. 20° 30′ W. 34° 01′	30.09	764.3	80.1	26.7	78	ne.	.....	.....	3	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Seine, Lisbon, Portugal	30.24	768.1	62.2	16.8	77	n.	.....	.....	4-5	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.
Inchkeith, N. 5° 29′, W. 25° 14′	29.90	761.0	75.3	24.1	90	calm	.....	.....	0	.....	4	.....	.....	.....	.....	.....	.....	showery
S. Meriola, N. 47° 18′ W. 11° 19′	29.85	758.2	54.6	12.6	90	w.	.....	.....	9	.....	4	.....	.....	.....	.....	.....	.....	squally.
S. S. Scythia, N. 50° 08′, W. 27° 13′	29.31	744.5	54	12.2	93	w.	.....	.....	6	.....	10	.....	w.	8 h'r	8 h'r	r'gh	wsw.	showery.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. France, N. 41° 20′, W. 67° 45′†	30.03	762.7	57.2	14	.....	sw.	.....	.....	4	ck	0	w.	.....	.....	.....	sm'h	.....	hazy.
S. S. Ville de Marseilles, N. 43° 49′, W. 53° 37′ *†	30.05	763.3	54	12.2	.....	s.	.....	.....	5	.....	7	.....	sw.	o	o	sm'h	.....	covered.
S. S. Abyssinia, N. 41° 37′, W. 62° 27′*	30.06	763.5	64	17.8	100	sw.	.....	.....	4	.....	fg.	.....	sw.	o	o	sm'h	.....	foggy.
S. S. Wisconsin, N. 50° 45′ W. 30° 30′	29.15	740.4	50	10.0	.....	wsw.	.....	.....	7	.....	10	.....	wsw.	7 h'r	7 h'r	h'vy	w.	heavy rain.
S. S. Wyoming, N. 51° 20′, W. 15° 35′ *	29.55	750.6	52	11.1	.....	w.	.....	.....	0	.....	6	.....	wsw.	3 h'r	3 h'r	long	wsw.	threatening.
S. S. Bohemia, N. 45° 26′, W. 51° 20′†	30.16	766.1	.....	.....	.....	ssw.	.....	.....	4	.....	5	.....	ssw.	o	o	mod.	sw.	fine.
S. S. Cimbria, N. 50° 35′, W. 27° 49′	29.27	743.4	50.4	10.2	.....	w.	.....	.....	7	.....	4	.....	nw.	3 h'r	3 h'r	hv'y	nw.	cloudy.
S. S. Silesia, Hamburg, Germany	.....	.....	53.1	11.7	.....	se.	.....	.....	4	.....	2	.....	s.	12 h'r	12 h'r	.....	.....	fair.
S. S. Vandalia, New York, N. Y	30.45	773.4	48.9	9.4	.....	ne.	.....	.....	2	.....	.....	.....	.....	o	o	.....	.....	hazy.
S. S. Wieland, N. 49° 46′, W. 34° 20′	29.75	755.6	50.5	10.3	.....	nnw.	.....	.....	6	.....	5	.....	nnw.	7 h'r	7 h'r	6	wnw.	
S. S. Hevelius, Buenos Ayres, Argentine Rep*†	29.90	759.4	69	20.6	.....	sse.	.....	.....	4	.....	8	.....	se.	4 h'r	4 h'r	.....	.....	cloudy.
S. S. Bulgarian, N. 44° 33′, W. 52° 01′ *	30.18	766.6	.....	.....	.....	s.	.....	.....	1	.....	0	.....	.....	o	o	.....	.....	clear.
S. S. Colorado, Galveston, Texas†	30.02	762.5	75	23.9	.....	se.	.....	.....	2	.....	3	.....	se.	o	o	.....	.....	clear.
S. S. Rio Grande, N. 27° 32′, W. 80° 08′ †	30.06	763.5	80	26.7	.....	se.	.....	.....	2	.....	1	.....	s.	o	o	mod.	se.	
S. S. Archimede, Palermo, Sicily *†	30.22	767.6	72	22.2	62	n.	.....	.....	2	.....	2	.....	n.	o	o	sm'h	n.	clear.
S. S. Hermod, N. 49° 28′ W. 7° 28′†	29.32	744.7	55.4	13	.....	w.	.....	.....	2	.....	10	.....	w.	4 h'r	4 h'r	h'vy	w;s.	misty.
S. S. Glenapp, N. 6° 10′, W. 50° 00′ †	29.91	759.7	81	27.2	.....	e.	.....	.....	2	4 ks	.....	ese.	ese.	1½h'r	1½h'r	sm'h	e.	fine.
S. S. Chalmette, N. 26° 36′, W. 80° 01′ †	30.08	764.0	80	26.7	.....	e.	.....	.....	5	3	.....	ese.	ese.	o	o	sm'h	.....	clear.
S. S. Egypt, N. 42° 37′, W. 48° 00′ *†	30.23	767.8	.....	.....	.....	ne.	.....	.....	2	2	.....	wnw.	wnw.	o	o	sm'h	nne.	clear.
S. S. England, Staten Island, N Y	30.15	765.8	.....	.....	.....	calm	.....	.....	0	fg.	.....	.....	.....	o	o	.....	.....	foggy.
S. S. Erin, N. 48° 33′, W. 41° 40′	30.10	764.5	50	10.0	.....	wnw.	.....	.....	7	8	.....	wnw.	wnw.	shr's	shr's	h'vy	nw.	squally.
S. S. Helvetia, Liverpool Eng	29.48	748 8	55	12.8	.....	ssw.	.....	.....	4	10	.....	sse.	sse.	o	o	.....	.....	overcast.
S. S. The Queen, N. 44° 58′, W. 52° 58′	30.07	763.8	50	10.0	.....	w.	.....	.....	4	5?	.....	.....	.....	o	o	sm'h	.....	clear?
S. S. City of Alexandria, N. 23° 12′, W. 84° 25′†	30.09	764.3	81	27.2	.....	e.	.....	.....	6	2	.....	ene.	ene.	o	o	mod.	ene.	clear.
S. S. City of Merida, N. 23° 09′, W. 82° 22′ *†	29.92	760.0	78.8	26	.....	sw.	.....	.....	5	1	.....	sw.	sw.	o	o	mod.	ne.	fine.
S. S. City of Washington, Vera Cruz, Mexico *†	30.12	765.0	85	29.4	.....	ene.	.....	.....	4	5	.....	n.	n.	o	o	sm'h	.....	fine.
S. S. Alvena, N. 33° 38′, W. 74° 21′†	30.12	765.0	79	26.1	.....	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	sm'h	.....	fine.
S. S. Amerika, N. 46° 51′, W. 43° 51′*	30.12	765.0	48.5	9.2	73	nw.	.....	.....	5	.....	3	.....	nw.	1 h'r	1 h'r	mod.	nw.	fair.
S. S. Donau, N. 45° 25′, W. 49° 32′	30.23	767.8	.....	.....	.....	wsw.	.....	.....	3	.....	5	.....	wsw.	o	o	sm'h	wsw.	fair.
S. S. Elbe, N. 44° 49′, W. 50° 28′	30.18	766.5	49.1	9.5	92	w.	.....	.....	4-5	.....	2	.....	w.	o	o	mod.	wsw.	clear.
S. S. Gen. Werder, N. 46° 47, W. 43° 39′	30.13	765.3	.....	.....	.....	w.	.....	.....	5	.....	4	.....	w.	3 h'r	3 h'r	mod.	wnw.	fair.
S. S. Habsburg, N. 46° 18′, W. 39° 23′	30.00	762.0	50.9	10.5	.....	nw.	.....	.....	6	.....	5	.....	nw.	3 h'r	3 h'r	r'gh	nw.	fair.
S. S. Hohenstaufen, N. 49° 09′, W. 16° 49′	29.78	756.4	48.2	9.0	.....	w.	.....	.....	6	6 cs	.....	w.	sh'rs	sh'rs	5	w.	cloudy.	
S. S. Koln, N. 49° 29′, W. 25° 18′	29.41	747.0	55.0	12.8	93	wsw.	.....	.....	6	10	.....	sw.	12 h'r	12 h'r	r'gh	sw.	raining.	
S. S. Kronprinz F. Wilhelm, N. 29° 11′ W. 19° 32′*	30.12	765.0	72.5	22.5	.....	wnw.	.....	.....	4	2	.....	nw.	o	c	long	nw.	fair.	
S. S. Oder, N. 50° 45′, E. 0° 40′	29.72	754.9	57.2	14.0	.....	sse.	.....	.....	5	8	.....	sse.	o	o	mod.	sse.	cloudy.	
S. S. Ohio, N. 28° 51′ W. 49° 35′	30.17	760.3	.....	.....	.....	nne.	.....	.....	5-6	4	.....	nne.	o	o	mod.	n.	fair.	
S. S. Strassburg, N. 49° 36′, W. 12° 03′	29.62	752.3	55.0	12.8	80	wnw.	.....	.....	7	0	.....	wnw.	4 h'r	4 h'r	h'vy	nw.	squally.	
S. S. Werra, N. 50° 18′ W. 15° 02′ *	29.78	756.4	57.2	14.0	.....	w.	.....	.....	6	8	.....	w.	2 h'r	2 h'r	high	w.	fair.	
S. S. Belgic, Yokohama, Japan†	30.01	762.2	70	21.1	75	s.	.....	.....	5	10	.....	sw.	2 h'r	2 h'r	sm'h	.....	raining.	
S. S. Coptic, N. 46° 08′, E. 177° 58′	29.73	755.1	50.0	10.0	86	var.	.....	.....	2	10	.....	nnw.	o	o	long	nnw.	foggy.	
S. S. City of Augusta, N. 33° 57′, W. 76° 34′†	30.23	767.8	.....	.....	.....	ne.	.....	.....	2	4	.....	.....	.....	o	o	short	ne.	clear.
S. S. Mississippi, Portland, Oregon†	29.99	761.7	46	7.8	84	sse.	.....	.....	1	10	.....	sse.	.....	.....	.....	light	sse.	light rain.
S. S. Columbia, Willamette river, Oregon†	29.59	751.6	43.5	6.4	83	s.	.....	.....	4	10	.....	.....	.....	.....	.....	light	nw.	light rain.
S. S. Oregon, N. 44° 50′, W. 124° 16′†	29.58	751.3	41	5.0	91	ne.	.....	.....	2	10	.....	ne.	.....	.....	.....	light	nw.	gloomy.
S. S. Ancon, N. 36° 34′, W. 122° 04′†	29.91	759.7	55	12.8	68	s.	.....	.....	2	2	.....	wnw.	.....	.....	.....	sm'h	.....	fair.
S. S. Dakota, N. 41° 38′, W. 124° 50′ †	29.61	752.1	52	11.1	66	se.	.....	.....	6	8	.....	sse.	4 h'r	4 h'r	h'vy	sse.	cloudy.	
S. S. Orizaba, N. 34° 08′, W. 119° 12′†	29.98	761.5	64	17.8	68	se.	.....	.....	6	.....	.....	.....	.....	.....	.....	mod.	sw.	clear.
S. S. Australia, Sydney, N. S. W.	29.95	760 7	66	18.9	89	w.	.....	.....	1	1	.....	w.	o	o	.....	.....	.....	clear.
S. S. City of New York, N. 13° 03′, W. 161° 03′†	29.97	761.2	78	25.6	86	e.	.....	.....	2	8	.....	se.	2 h'r	2 h'r	mod.	se.	squally.	
S. S. City Pekin, N. 34° 58′, W. 175° 13′†	30.39	771.9	69	20.6	90	s.	.....	.....	3	5	.....	sw.	o	o	mod.	w.	fair.	
S. S. City of Sydney, Sydney, N. S. W.†	30.23	767.8	61	16.1	66	se.	.....	.....	4	5	.....	ssw.	o	o	sm'h	.....	fair.	
S. S. Colima, Panama, Panama†	29.85	758.2	78	25.6	91	nw.	.....	.....	3	4	.....	nw.	0.10	2.5	.....	.....	clear.	
S. S. Colon, N. 32° 24′, W. 74° 00′ †	30.18	766.6	.....	.....	.....	ane.	.....	.....	3	.....	.....	nne.	.....	.....	.....	small	ene.	clear.
S. S. San Jose, N. 16° 45′, W. 96° 15′*†	30.06	763.5	.....	.....	.....	e.	.....	.....	2	8c	0	e.	.....	o	o	light	sse.	
S. S. Bermuda, N. 29° 15′, W. 68° 08′ †	30.13	765.3	78	25.6	.....	ese.	.....	.....	2	.....	6	.....	ese.	sh'rs	sh'rs	long	ese.	fine.
S. S. Muriel, Trinidad, W. I.	29.90	759.4	80	26.7	.....	calm	.....	.....	0	.....	10	.....	.....	o	o	sm'h	.....	overcast.
S. S. Caracas, Curacoa, W. I †	29.83	757.7	83	28.3	83	s.	.....	.....	2	.....	8	.....	s.	o	o	sm'h	.....	fair.
S. S. Belgenland, N. 44° 10′, W. 52° 15′†	30.29	769 4	51	10.0	93	wsw.	.....	.....	3	.....	1	.....	w.	o	o	sm'h	.....	fair.
S. S. Nederland, N. 49° 48′ W. 11° 07′†	29.76	755.9	56	13.3	.....	nw.	.....	.....	0	.....	8	.....	nw.	16 h'r	16 h'r	long	wnw.	cloudy.
S. S. Pennland, Antwerp, Belgium	29.92	760.0	54.5	12.5	87	se.	.....	.....	3	.....	2	.....	.....	o	o	.....	.....	hazy.
S. S. Rhyniand, Antwerp, Belgium	29.96	761.0	54	12.2	87	se.	.....	.....	2	.....	8	.....	sw.	o	o	.....	.....	gloomy.
S. S. Waesland, N. 50° 02′ W. 22° 37′	29.62	752.3	52	11.1	93	wsw.	.....	.....	5	.....	10	.....	w.	3 h'r	3 h'r	mod.	wsw.	light rain.
S. S. Maas, N. 44° 30′, W. 51° 42′	30.15	765.8	54.7	12.6	95	w.	.....	.....	4	.....	2	.....	e.	o	o	3	w.	clear.
S. S. P. Caland, N. 46° 57′, W. 36° 15′	29.94	760.5	53.8	12.1	83	nw.	.....	.....	6	.....	6	.....	nw.	.....	.....	o	nw.	cloudy.
S. S. W. A. Scholten, N. 49° 33′, W. 16° 54′	29.89	759.2	53.6	12.0	83	sw.	.....	.....	5	.....	5	.....	wsw.	9 h'r	9 h'r	con.	nw.	fair.
S. S. State of Florida, New York, N. Y	29.96	761.0	05	18.3	.....	sw.	.....	.....	2	.....	5	.....	sw.	o	o	light	sw.	foggy.
S. S. State of Georgia, N. 45° 43′, W. 50° 45′†	30.15	765.8	50	10.0	.....	sw.	.....	.....	3	.....	5	.....	.....	o	o	light	sw.	hazy.
S. S. State of Indiana, N. 53° 28′, W. 29° 17′†	29.66	738 1	48	8.9	.....	w.	.....	.....	1	.....	8	.....	w.	8 h'r	8 h'r	mod.	wsw.	hazy.
S. S. State of Nevada, Glasgow, Scotland	.....	.....	51	10.6	.....	sw.	.....	.....	4	.....	5?	.....	wsw.	o	o	.....	.....	clear?
S. S. Thingvalla, N. 59° 01′ E. 109° 30′	.....	.....	48.2	9.0	.....	e.	.....	.....	2	.....	10	.....	s.	2 h'r	2 h'r	.....	.....	covered.
S. S. Iowa, N. 51° 05′, W. 31° 33′	.....	.....	50	10.0	.....	w.	.....	.....	6	.....	6	.....	w.	12 h'r	12 h'r	r'gh	w.	fair.
S. S. Plantyn N. 45° 30′, W. 48° 44′	.....	.....	51.5	10.8	.....	.....	.....	.....	3	.....	4	.....	w.	.....	.....	cross	nnw.	fine.
S. S. Britannic, N. 45° 50′, W. 42° 21′†	30.16	766.1	51	10.6	?	nnw.	.....	.....	5	.....	5	.....	nne.	o	o	mod.	n.	d. clouds.
S. S. Celtic, Queenstown, Ireland †	29.21	741.9	57	13.9	81	sw.	.....	.....	6	.....	8	.....	sw.	12 h'r	12 h'r	.....	.....	squally.
S. S. Germanic, N. 46° 3′, W. 45° 47′ †	30.27	768.8	51	10.0	.....	w.	.....	.....	5	.....	4	.....	w.	4 h'r	4 h'r	r'gh	w.	d. clouds.
S. S. Marengo, N. 49° 41′, W. 20° 02′ *†	29.60	751.8	.....	.....	.....	sw.	.....	.....	4	.....	5	.....	sw.	2 h'r	2 h'r	mod.	sw.	rainy.
S. S. Romano, Hull, England	29.54	750.3	53	11.7	.....	s.	.....	.....	3	.....	10	.....	s.	o	o	.....	.....	overcast
S. S. Salerno, N. 41° 51′, E. 29° 13′*	29.87	758.7	68	20.0	.....	.....	.....	.....	5	.....	5?	.....	nw.	o	o	h'vy	n.	cloudy?
S. S. Aries, N. 41° 20′, W. 71° 25′*†	30.06	763.5	.....	.....	.....	wsw.	.....	.....	4	.....	fg.	.....	.....	o	o	short	ssw	dense fog.
S. S. Catherine Whiting, Philadelphia, Pa†	30.12	765.0	.....	.....	.....	nw.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	
S. S. Norman, N. 39° 56′, W. 75° 08′	30.23	767.8	.....	.....	.....	ne.	.....	.....	.....	.....	.....	.....	ne.	o	o	.....	.....	cloudy.
S. S. Saxon, N. 40° —′, W. 73° 29′ *†	30.26	768.6	66	18.9	.....	n.	.....	.....	3	.....	8	.....	.....	.....	.....	long	ese.	
MISCELLANEOUS																		
Bg. Abbie Clifford, N. 31° 44′, W. 76° 17′	.....	.....	77	25.0	.....	e.	.....	.....	2	.....	2	.....	.....	o	o	long	se.	
Bk. Adelaid, S. 4° 10′ W. 35° 20′*†	29.93	760.2	82	27.8	.....	e.	.....	.....	5	.....	1	.....	e.	o	o	sm'h	e.	clear.
Bg. Alcira, N. 37° 29′, W. 72° 37′	30.10	764.5	70	24.4	.....	sw.	.....	.....	4	.....	2	.....	s.	.....	.....	sm'h	s.	clear.
Schr. Anna A. Hilton, N. 36° 49′, W. 73° 48′†	30.15	765.8	74	23.3	.....	calm	.....	.....	0	.....	0	.....	.....	o	o	sm'h	.....	clear.
Bk Anna Thormann, S. 8° 27′, E. 115° 42′*	29.91	759.7	81.1	27.3	89	se.	.....	.....	1	....	2k	.....	e.	o	o	.....	.....	clear.
S. S. Antonio Lopez, Barcelona, Spain*	30.08	764.0	65	18.3	78	ssw.	.....	.....	4	.....	2	.....	.....	o	o	.....	.....	hazy.
Bk. Aquidneck, N. 27° 48′, W. 39° 14′*†	30.02	762.5	.....	.....	.....	se.	.....	.....	3	.....	.....	.....	se.	.....	.....	light	nnw.	cloudy.
Bk. Aureola, N. 42° 20′, W. 45° 30′†*	30.46	773 7	68	20.0	.....	nnw.	.....	.....	3	.....	3	.....	n.	1 h'r	1 h'r	mod.	wsw.	clear.
Bk. Alba, N. 44° 30′, W. 39° 20′*†	30.14	765.0	53.6	12.0	.....	wnw.	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	n.	covered.
Bk. Bayonnaise, N. 29° 16′, W. 54° 03′*†	30.26	768.5	.....	.....	.....	e.	.....	.....	5	.....	4	.....	e.	o	o	sm'h	.....	clear.
S. S. Buiswell, Antwerp, Belgium *†	29.90	759.4	59	15.0	.....	w.	.....	.....	3	.....	4	.....	wnw.	o	o	sm'h	.....	fine.
Bk. Champion, Rotterdam, Holland†	29.76	755.9	52.0	11.1	.....	w.	.....	.....	7	.....	5	.....	wsw.	o	o	.....	.....	fair.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.09	764.3	73	22.8	95	ne.	.....	.....	1	3 ck	2 d	.....	ne.	0.08	2.0	.....	.....	fair.
Schr. C. R. Flint, N. 17° 04′, W. 76° 38′†.	29.92	760 0	81	27.2	.....	ne.	.....	.....	3	.....	4	.....	ne.	o	o	sm'h	ene.	fair.
Bk. E. D. Bigelow, N. 39° 02′, W. 58° 25′*†	30.21	767.3	.....	.....	.....	wsw.	.....	.....	4	.....	1	.....	wsw.	o	o	.....	sw.	clear.
Schr. Edith R. Seward, Wilmington, N. C*†	30.22	767.6	72	22.2	.....	nw.	.....	.....	1	.....	0	.....	nw.	o	o	.....	.....	fair.
S. E. J. Spicer, New York, N. Y	30.11	764 8	66	18.9	100	w.	.....	.....	2	.....	8	.....	w.	.....	.....	.....	.....	foggy.
S Enoch Train, N. 22° 22′, W. 38° 30′*†	30.20	767.1	.....	.....	.....	se.	.....	.....	2	.....	2	.....	se.	o	o	light	ene.	clear.
Bk. Essex, Muscat, Arabia*†	29.80	759.9	88	31.1	.....	nw.	.....	.....	5	.....	.....	.....	nw.	.....	.....	2	nw.	fine.
Schr. F. E. McDonald, Washington, D. C†	30.13	765.3	.....	.....	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	fine.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
S. S. Foscolia, Rio de Janeiro, Brazil*†	29.56	750.8	.....	.....	.....	s.	.....	.....	4	.....	.....	.....	s.	0	0	.....	.....	fine.
Bk. Freya, N. 47° 24′, W. 12° 00′	29.45	748.0	59	15.0	.....	wnw.	.....	.....	8	.....	5	.....	wsw.	4 h'r	4 h'r	r'gh	sw	threatening.
S. Glendon, S 56° 50′, W. 74° 30′†	28.91	734.3	48	8.9	.....	nnw.	.....	.....	4	.....	6	.....	nw.	2 h'r	2 h'r	h'vy	sw.	cloudy.
S. Grecian, S. 11° 22′, W. 24° 46′*†	30.02	762.5	79	26.1	82	ne.	.....	.....	5	.....	4	.....	ne.	c	o	sm'h	se.	clear.
Bk. Gronsvaer, S. 43° 26′, E. 101° 34′†	29.53	750.1	57.8	14.3	98	w.	.....	.....	7	.....	10	.....	w.	8 h'r	8 h'r	8	w.	showery
Bk Hattie G. McFarland, N. 34° 30′, W. 75° 20′†	30.29	769.4	76	24.4	.....	n.	.....	.....	4	.....	3	.....	ne.	o	o	sm'h	e.	
Schr. Hattie Weston, Mayaro Bay, Trinidad W. I*†	29.93	760.2	82	27.8	.....	e.	.....	.....	2	.....	5	.....	e.	½ h'r	½ h'r	mod.	e.	fair.
S. Hedwig, N. 20° 16′, W. 49° 37′	30.02	762.5	81.1	27.3	83	e.	.....	.....	3	.....	6	.....	var.	rain	rain	2	ese.	
S. Ivy, Queenstown, Ireland†	29.51	749.5	50	10.0	.....	w.	.....	.....	8	.....	10	....	w.	10 h'r	10 h'r	.....	.....	raining.
Schr. Jennie N. Huddell, Gloucester Mass†	29.96	761.0	.....	.....	.....	wsw.	.....	.....	5	.....	5	....	.....	o	o	.....	.....	fair.
S. S. John Hopkins, Boston, Mass.	.....	.....	60	15.6	.....	sw.	.....	.....	2	.....	0	.....	.....	o	o	.....	.....	clear.
Schr. John L. Thomas, Vivorilla Cays, C. A*†	29.98	761.5	.....	.....	.....	nne.	.....	.....	2	.....	1	.....	e.	½h'r	½h'r	.....	.....	clear.
Bg. John Wesley, Cardenas, Cuba, W.I*†	29.88	758.9	.....	.....	.....	nne.	.....	.....	3	.....	2	.....	ne.	o	o	.....	.....	clear.
Bk. Joseph A. Ropes, N. 15° 14′, E. 59° 00′*†	29.94	760.5	82	27.8	71	ne.	.....	.....	4	.....	.....	.....	.....	.....	.....	mod.	ne.	fair
Light House Tender, Laurel, Key West, Florida†	29.99	761.7	78	25.6	.....	ene.	.....	.....	1–2	.....	6	.....	ene.	o	o	.....	.....	fair.
Bg. Lilian, N. 18° 00′, W. 57° 35′†	29.94	760.5	83	28.3	.....	ese.	.....	.....	6	.....	6	.....	ese.	1 h'r	1 h'r	r'gh	e.	cloudy.
Bg. L. & W. Armstrong, N. 27° 19′, W. 70° 55′*†	30.10	764.5	.....	.....	.....	nne.	.....	.....	2	.....	2	....	ne.	o	o	mod.	ne.	clear.
S. S. Madrid, Queenstown, Ireland*†	29.28	743.7	50	10.0	86	wnw.	.....	.....	7	.....	6	.....	.....	.....	.....	.....	.....	rainy.
S. S. Malabar, S. 5° 37′, E. 101° 37′*†	29.87	758.7	.....	.....	.....	se.	.....	.....	3	.....	0	.....	.....	o	o	mod.	se.	clear.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	29.95	760.7	74	23.3	.....	ene.	.....	.....	5	.....	0	.....	.....	1 h'r	1 h'r	.....	.....	clear.
Bg. Mattie B. Russell, Matanzas, Cuba*†	30.13	765.3	.....	.....	.....	calm	.....	.....	0	.....	1	....	ne.	o	o	.....	.....	fine.
Schr. Moravian, N. 12° 33′, W. 81° 43′†	29.98	761.5	.....	.....	.....	nne.	.....	.....	.....	.....	10	.....	ne.	2 h'r	2 h'r	sm'h	nne.	cloudy.
Bg. Myrtle, St. Martin, W. I†	30.07	763.8	.....	.....	.....	se.	.....	.....	4	.....	2	.....	se.	2 h'r	2 h'r	sm'h	.....	fair.
Bk. Norena, N. 26° 05′ W 79° 55′*†	30.15	765 8	.....	.....	.....	ene.	.....	.....	3	.....	1	.....	e.	o	o	light	nne.	fine.
Bg. O. C. Clary, N. 39° 23′, W. 73° 01′*†	30.10	764.5	64	17.8	89	sw.	.....	.....	4	.....	5	.....	sw.	.....	.....	sm'h	sw.	fair.
S. Orealia, S. 6° 58′, E. 81° 24′*	29.85	758.2	.....	.....	.....	calm	.....	.....	0	.....	5?	.....	var.	o	o	sm'h	.....	clear?
S Paramita, Mission Bay, Cal†	29.84	757.9	56	13.3	.....	se.	.....	.....	3	.....	7	.....	se.	o	o	.....	.....	foggy.
S. S. Radnorshire, N. 44° 43′, W. 8° 49′*†	30.09	764.3	.....	.....	.....	nnw.	.....	.....	8	.....	4	.....	nnw.	o	o	hv'y	wsw.	
Bk. Rebus, N. 24° 17′, W. 62° 46′	29.87	758.7	81	27.2	.....	e.	.....	.....	5	.....	3	.....	ese.	o	o	mod.	ese	fair
S. St. Francis, S. 50° 00′, W. 79° 20′†	29.21	741.9	44	6.7	.....	nnw.	.....	.....	6	.....	4	.....	nw.	sleet	sleet	h'vy	sw.	squally.
Schr. S. B. Hubbard, Jacksonville, Fla†	30.05	763.3	76	24.4	.....	calm	.....	.....	0	.....	fg.	.....	.....	o	o	.....	.....	dense fog.
Bk. Scud, Off Barbadoes, W. I*†	29.90	759.4	.....	.....	.....	ne.	.....	.....	5	....	7	.....	se.	2 h'r	2 h'r	sm'h	ne.	cloudy.
Bk. Southern Belle, N. 40° —′, W. 40° —′*†	30.25	768.3	70	21.1	.....	w.	.....	.....	3	.....	1	.....	nnw.	1 h'r	1 h'r	sm'h	w.	clear.
S. S. Sunbeam, Gravesend, Eng.	29.64	752.8	55	12.8	77	s	.....	.....	4	.....	10	.....	s.	o	o	.....	.....	overcast.
S. Sovereign of the Seas, N. 33° 50′, W. 126° 40′*†	29.82	757.4	59	15.0	100	nw.	.....	.....	5	.....	10	....	wsw.	2 h'r	2 h'r	h'vy	nw.	rainy.
Bg. Teneriffe, N. 31° 10′ W. 79° 40′	30.10	764.5	.....	.....	.....	ne.	.....	.....	1	.....	.....	.....	ne.	o	o	sm'h	.....	cloudy.
Bk. Truro, N. 48° 45′, W. 14° 35′*†	29.83	757.7	.....	.....	.....	w	.....	.....	5–6	.....	3	.....	w.	4 h'r	4 h'r	r'gh	nne.	fair.
U. S. F. C. S. S. FishHawk, Washington, D. C†.	30.28	769.0	63	17.2	89	calm	.....	.....	0	.....	3	.....	calm	o	o	.....	.....	clear.
Bk. Vincenzo Accame, N. 40° 17′, W. 18° 15′†	30.39	771.8	66.2	19.0	.....	n.	.....	.....	2	.....	0	.....	.....	5½ hr	5½ hr	r'gh	nw.	clear.
Schr. Viola Reppard, Savannah, Ga†	30.08	764.0	72	22.2	.....	calm	.....	.....	0	.....	10	....	.....	o	o	.....	.....	foggy.
Schr. Walter L. Plummer, N. 19° 45′, W. 73° 35′	30.00	762.0	.....	.....	.....	ne.	.....	.....	3	.....	2	.....	ne.	o	o	sm'h	.....	fine.
Bk. Wandering Jew, N. 8° 21′, W. 28° 24′†	29.87	758.7	80	26.7	.....	ese.	.....	.....	2	.....	3	.....	s.	5 h'r	5 h'r	long	ne.	clear.
Bk. Warden Law S. 58° 18′, W. 71° 15′	29.28	743.7	.....	.....	.....	nw.	.....	.....	3	.....	4	.....	nw.	snow	snow	mod.	nw.	fair.
Bgt. Willie, S. 31° 00′, W. 26° 50′*†	29.88	758.9	70	21.1	.....	n.	.....	.....	6	.....	6	.....	n.	6 h'r	6 h'r	h'vy	e.	fair.

International Chart I. November 1, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.

W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 2, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.17	766.3	68.7	20.4	89	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.19	766.7	66.2	19.0	72	nw.	.....	.....	2	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.21	767.3	68.4	20.2	83	w.	.....	.....	2	.....	2	.....	.....	0	0	fair	Fonfrède.
Tunis	.....	.....	30.22	767.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.23	767.9	73.8	23.2	67	w.	.....	.....	1	.....	1	.....	.....	0	0	very fair	Pérès.
Tebessa	.....	.....	30.28	769.2	63.0	17.2	68	ne.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	69.1	20.6	4	se.	.....	.....	3	.....	8	.....	.....	0	0	very cloudy.	Lonchamp.
Laghouat	.....	.....	30.30	769.6	59.0	15.0	30	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.29	769.4	71.2	21.8	38	nw.	.....	.....	1	.....	1	.....	.....	0	0	very fair	Malau.
Australian.																			
Melbourne, Victoria	30.24	768.1	30.33	770.4	53.0	11.7	79	sse.	4	1.8	.....	.....	9	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.53	750.0	30.08	763.9	59.0	15.0	62	e.	.....	.....	2	.....	3	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.24	742.6	30.01	762.2	48.2	9.0	76	w.	0.7	0.3	.....	.....	10	.....	.....	0.043	1.1	.....	Dr. Wierzbiski.
Eperies	29.13	740.0	30.03	762.7	45.7	7.6	86	calm	.....	.....	0	.....	10 s	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.81	731.8	30.00	763.5	55.4	13.0	60	nw.	.....	.....	2	.....	3	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.62	726.9	30.07	763.7	50.5	10.3	54	ene.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. A. Gottschling
Kremsmunster, Obs'y	28.81	731.8	30.17	766.3	49.1	9.5	78	wsw.	.....	.....	4	.....	7	.....	.....	0.181	4.6	fair	The Staff.
Lemberg	28.98	736.1	29.98	761.4	47.1	8.4	77	nw.	.....	.....	1	.....	9	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	30.01	762.2	30.12	765.0	59.2	15.1	83	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.62	752.4	30.09	764.2	50.0	10.0	72	sw.	.....	.....	1	.....	10	.....	.....	0.008	0.2	.....	Joseph Midlinszay, S. J.
Szegedin	29.76	755.8	30.04	762.9	55.8	13.2	56	s.	.....	.....	2	.....	5	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.02	762.6	30.13	765.2	60.8	16.0	71	sw.	.....	.....	1	.....	3	.....	.....	0	0	.....	Royal Academy.
Vienna	29.41	747.0	30.13	765.4	50.0	10.0	76	w.	.....	.....	2	.....	9	.....	.....	0.047	1.2	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.33	745.0	29.42	747.3	49.2	9.6	77	sse.	15	6.7	.....	.....	7	.....	.....	0.055	1.4	squally	W. Boswell
Armagh, Observatory	29.15	740.4	29.39	746.5	50.4	10.2	81	s.	19	8.5	.....	.....	10	.....	.....	.....	.....	squally	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.54	750 3	52.2	11.2	93	sse.	24	10.7	.....	.....	10	.....	.....	.....	.....	raining	John Hartnup.
Bolton, Sharples	29.04	737.6	29.57	751.1	51.2	10.7	86	s.	24	10.7	.....	.....	10	.....	.....	.....	.....	overcast	Thomas Mackereth.
Bradford, Yorkshire	29.19	741.4	29.58	751.3	52.7	11.5	78	sw.	.....	.....	3	.....	10	.....	.....	0.12	3.0	overcast	McLandsborough&Preston
Bridgetown, Barbadoes	29.82	757.4	29.85	758.2	84.0	28.9	74	se.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	29.58	751.3	29.70	754.4	57.0	13.9	71	sw.	.....	.....	2.0	.....	7	.....	.....	.....	.....	.....	John McLaren.
Chatham, School M. E	29.73	755.1	29.86	758.4	54.1	12.3	87	sw.	.....	.....	3	.....	10	.....	.....	blank	blank	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.49	749.0	29.72	754.9	51.3	10.7	94	wsw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	The Staff.
Fort Napier, Natal	27.62	701.5	29.83	757.7	88.0	31.1	40	ne.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.63	752.6	29.80	758.4	88.0	31.1	55	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.12	765.0	30.17	766.3	66.8	19.3	92	ene.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.15	740.4	29.36	745.7	50.4	10.2	91	ssw.	.....	.....	4	.....	10 n	.....	.....	.....	.....	raining	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.67	753.6	29.84	757.9	56.7	13.7	74	ssw.	.....	.....	4	.....	10	.....	.....	.....	.....	showery	The Staff.
Guernsey	29.58	751.3	29.88	758.9	57.0	13.9	81	s.	.....	.....	4	.....	9	.....	.....	.....	.....	drizzling	A. Collenette, F. M. S.
Kew, Observatory	29.80	756.9	29.83	757.7	55.3	12.9	78	s.	26	11.7	.....	.....	9	.....	.....	.....	.....	drizzling	The Staff.
Leicester, Museum	29.44	747.8	29.70	754.4	54.0	12.2	79	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	30.09	764.3	30.16	766.1	71.4	21.9	98	nw.	.....	.....	1	.....	6	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.95	760.7	29.99	761.7	80.0	26.7	71	ne.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.16	740.7	29.68	753.9	54.1	12.3	77	s.	.....	.....	6	.....	10	.....	.....	.....	.....	threatening	Warren Middleton.
Oxford, Radcliffe Obs'y	29.54	750.3	29.77	759.1	54.6	12.6	86	s.	.....	.....	6	.....	9	.....	.....	.....	.....	showery	The Staff.
Plymouth	29.66	753.4	29.74	755.4	55.5	13.1	90	ssw.	.....	.....	6	.....	10	.....	.....	.....	.....	squally	John Merrifield.
Sandwick Manse, Orkneys	29.21	741.9	29.31	744.5	48.1	8.9	85	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	d. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.04	763.0	30.11	764.8	57.2	14.0	58	nne.	.....	.....	2	.....	2	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.35	745.5	29.62	752.3	54.2	12.3	79	s.	.....	.....	4	.....	8	.....	.....	0.10	2.5	overcast	W. F. Cooper.
Silloth Rectory	29.38	746.2	29.41	747.0	53.8	12.1	85	ssw.	.....	.....	0	.....	10	.....	.....	0.180	4.6	raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.58	751.3	52.0	11.1	82	sse.	28	12.5	.....	.....	10	.....	.....	.....	.....	overcast	I. New.
Stratfield Turgiss	29.01	752.1	29.82	757.4	55.8	13.2	82	s.	.....	.....	2–3	.....	9	.....	.....	.....	.....	showery	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.69	754.1	29.75	755.6	53	11.7	86	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.33	745 0	29.30	745.7	52.7	11.5	72	s.	46	20.6	.....	.....	7	.....	.....	blank	blank	misty	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.95	760.7	29.99	761.7	38	3.3	61	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	H. J. Cundall, C. E.
Chatham, N. B*	29.90	761.0	30.03	762.7	31	— 0.6	81	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	G. A. Blair.
Father Point, Quebec*	29.99	761.7	30.01	762.2	36	2.2	09	w.	35	15.6	.....	.....	10 s	.....	w.	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.71	754.6	30.02	777.7	10	—12.2	86	n.	5	2.2	.....	0	0	.....	.....	0.23	5.8	hazy	James Stewart.
Halifax, N. S*	29.94	760.5	30.07	763.8	40	4.4	70	w.	5	2.2	.....	5 ck	0	w.	.....	0	0	fair	A. Allison.
Kingston, Ontario*	30.09	764.3	30.44	773.2	33	0.6	71	n.	8	3.6	.....	10 ok	0	w.	.....	0	0	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	30.11	764.8	30.33	770.4	33	0.6	08	w.	12	5.4	.....	.....	10 s	.....	w.	0	0	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.82	757.4	30.55	776.0	31	— 0.6	78	w.	8	3.6	.....	2 k	2 ks	w.	w.	0	0	fair	Rev. R. Mosley.
Port Dover, Ontario	29.77	756.1	30.49	774.4	37	2.8	100	n.	9	4.0	.....	0	0	.....	.....	0	0	clear	H. Morgan.
Port Stanley, Ontario	29.70	755 9	30.43	772.9	38	3.3	76	n.	.....	.....	3	2 k	0	nw.	.....	0	0	clear	M. Payne.
Quebec, Quebec*	29.88	758.9	30.22	767.6	31	— 0.6	78	w.	6	2.7	.....	0	2 s	.....	w.	0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.97	761.2	30.40	773.7	30	— 1.1	65	nw.	5	2.2	.....	5 c	0	nw.	.....	0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.78	756.4	30.53	775.4	36	2.2	61	nw.	28	12.5	.....	.....	10 ks	.....	.....	0	0	cloudy	
St. Andrews, N. B	30.07	763.8	30.12	765.0	36	2.2	58	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Sydney, C. B*	29.87	758.7	29.93	760.2	41	5.0	07	w.	11	4.9	.....	2 ck	2 k	w.	.....	0.01	0.3	clear	T. C. Hill, C. E
Toronto, Ontario*	30.11	764.8	30.51	774.9	37	2.8	04	n.	9	4.0	.....	.....	10 ks	.....	nw.	0	0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	30.07	763.8	30.14	765.5	43	6.1	80	nw.	10	4.5	.....	5 ck	0	w.	.....	0	0	fair	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	29.04	737.6	30.48	774.2	34.0	1.1	71	nnw.	.....	.....	4	.....	10kn	.....	.....	0	0	cloudy	Wm. Wylie.
St. Johns, Newfoundland	29.65	753.1	29.91	759.7	41	5.0	82	w.	4	1.8	.....	.....	10 ks	.....	.....	0.06	1.5	showery	John Denny.
Cape Colony.																			
Cape St. Francis Lt. House	30.01	762.2	30.04	763.0	67.0	19.4	75	sw.	5.0	2.2	.....	0	1 8	.....	.....	0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.99	761.7	30.03	762.7	70.8	24.9	54	s.	27	12.1	.....	1	6	.....	.....	0	0	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.13?	765.2?	40.1	4.5	83	sw.	4.0	1.8	.....	.....	8	.....	.....	0	0	covered	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.22	767.6	30.24	768.2	54.5	12.5	86	nw.	5.6	2.5	.....	.....	10	.....	.....	0.126	3.2	covered	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.84	757.9	29.89	759.1	46.6	8.1	88	sse.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	29.74	755.5	29.77	756.1	50.9	10.5	87	wsw.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.45	748.0	29.49	749.1	21.9	— 5 6	77	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.26	743.2	29.28	743.7	32.5	0.3	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.28	743.6	29.32	744.7	36.0	2.2	84	ne.	.....	.....	8	.....	5	.....	.....	.....	.....	.....	A. O. Thoriacius.
Thorshavn	29.16	740.7	29.20	741.6	49.3	9.6	86	s.	16	7	.....	.....	5	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.55	750.6	29.65	753.0	49.3	9.6	99	ssw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	Loearer Oesterbol.
French.																			
Agen, Normal School	29.52	749.7	30.17	766.2	60.1	15.6	91	calm	.....	.....	0	.....	0	.....	.....	0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.55	750.5	30.10	764.5	53.6	12	98	s.	.....	.....	1	.....	n	n.	n.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.72	754.8	29.97	761.2	55.4	13.0	83	sw.	.....	.....	6	.....	k	.....	.....	0.028	0.7	.....	M. Fénéon, Command't.
Avignon, Normal School	30.06	763.4	30.13	765.4	60.4	15.8	52	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.62	752.3	30.18	766.5	54.0	12.2	72	sw.	.....	.....	1	0	8 k	.....	w.	0.004	0.1	¾ covered	M. Saillard, Director.
Beauvais, Normal School	29.81	757.1	30.08	763.9	56.1	13.4	71	sw.	.....	.....	2	.....	8	.....	wsw.	0	0	very cloudy	M. Frère Eugène Marie.
Besançon, Normal School	29.28	743.8	30.18	766.6	65.1	18.4	80	ssw.	.....	.....	1	.....	n	.....	sw.	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.92	759.9	30.18	766.6	59.0	15.0	52	s.	.....	.....	1	.....	1	.....	.....	0.004	0.1	almost clear	M. Rayet, Director.
Bourges, Normal School	29.61	752.0	30.16	766.1	59.0	15	60	sw.	.....	.....	1	.....	kn	.....	sw.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.70	754.4	29.95	760.6	58.3	14.6	80	sw.	.....	.....	4	.....	10	.....	sw.	0	0	.....	M. de Kermaree, Dir.
Caen, Normal School	29.90	759.4	29.97	761.3	56.1	13.4	85	ssw.	.....	.....	3–5	.....	10	.....	ssw.	0.079	2.0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.78	756.5	30.11	764 7	54.1	12.3	79	ssw.	.....	.....	2	.....	2	.....	wsw.	0	0	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.57	751.1	30.09	764.3	55.0	12.8	76	w.	.....	.....	3	.....	5	.....	.....	0	0	½ covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.83	732.3	30.18	766.6	59.4	15.2	50	ne.	.....	.....	1	0	1 k	.....	.....	0	0	clear	M. Allard, Director.
Cluny, Normal School	29.39	746.5	30.25	768.4	58.1	14.5	60	w.	.....	.....	1	.....	5	.....	w.	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.32	744.8	30.17	766.4	54.0	12.2	70	w.	.....	.....	1	.....	8	w.	w.	0.012	0.3	very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.01	701.4	30.13	765.4	57.2	14	47	.....	.....	.....	.....	.....	0	.....	.....	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	29.01	736.9	30.13	765.4	58.1	14.5	58	nw.	.....	.....	2	.....	1	.....	nw.	0	0	.....	M. Kiss, Director.
Grenoble, Normal School	29.42	747.2	30.20	767.0	57.2	14	61	ese.	.....	.....	1	cs	0	ne.	.....	0.142	3.6	.....	M. Ablard, Director.
Guéret	28.59	726.2	30.19	766.8	51.8	11	68	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Delorme, Dir.
Lamballe, Normal School	29.69	754.2	29.97	761.2	58.3	14.6	84	w.	.....	.....	3	0	5 n	.....	w.	0.047	1.2	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.52	749.7	30.08	764.0	62.4	16.9	37	sw.	.....	.....	1	.....	0	.....	.....	0.110	2.8	clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.92	759.9	30.02	762.5	59.4	15.2	96	sw	.....	.....	6	.....	10	sw.	s.	0.142	3.6	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.16	740.6	30.22	767.6	55.6	13.1	49	nne.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. André, Director.
Mans, Normal School	29.78	756.4	30.08	763.9	50.3	13.5	87	wnw.	.....	.....	3	.....	.....	.....	sw.	0	0	.....	M. Piboen, Director.
Marseille, Observatory	29.86	758.5	30.13	765.3	60.6	15.9	60	nw.	.....	.....	2.3	.....	0	.....	.....	0	0	.....	M. Stephan, Director.
Mt. Louis	24.93	633.2	29.77	756.2	50.0	10.0	58	sw.	5.6	2.5	.....	.....	0	.....	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.93	760.1	30.06	763.4	62.6	17	57	nnw.	.....	.....	4	.....	0	.....	.....	0	0	clear	M. Gaizin, Director.
Nancy, Normal School	29.26	743.3	30.06	763.4	53.6	12.0	61	ssw.	.....	.....	1	ck	0	sw.	.....	0	0	.....	M. Basse, Director
Nantes, Observatory	29.96	761.0	30.12	765.1	57.0	13.9	81	ssw.	.....	.....	1–3	.....	10 kn	.....	sw.	0.157	4.0	.....	M. Larocque, Director.
Perpignan, Observatory	30.10	764.5	30.21	767.3	60.8	16.0	57	e.	3.8	1.7	.....	.....	1	.....	sw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.32	541.4	.....	.....	35.6	2.0	.....	sw.	.....	.....	1	.....	1	.....	sw.	0.024	0.6	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.04	737.5	30.12	765.0	58.3	14.6	48	s.	.....	.....	1	.....	1	n.	n.	0	0	clear	M. Taillen.
Puy de Dôme Obs'y, Summit	25.28	642.0	.....	.....	39.2	4.0	85	ssw.	.....	.....	2	.....	2	.....	.....	0.094	2.4	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.13	765.4	30.17	766.2	59.0	15.0	82	ssw.	.....	.....	1	.....	2	.....	wsw.	0.079	2.0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.79	750.7	30.00	762.1	58.1	14.5	76	ssw.	.....	.....	3	.....	2	.....	sw.	0.035	0.9	slightly cl'dy	M. Brotier, Director.
Rodez, Normal School	28.17	715.6	30.36	771.2	48.6	9.2	84	w.	.....	.....	1	.....	k; s	.....	.....	0.04	1.	.....	M. Seger, Director.
Rouen, Normal School	29.99	761.7	30.04	762.9	56.8	13.8	73	sw.	.....	.....	1	.....	5	sw.	.....	0.008	0.2	cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	57.0	13.9	76	ww.	.....	.....	2.5	.....	.....	s.	w.	0.067	1.7	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.94	760.4	30.11	764.9	55.8	13.2	72	wsw.	.....	.....	1	.....	6	wnw.	sw.	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.53	750.1	30.26	768.6	60.3	15.7	63	ne.	.....	.....	1	.....	1	ne.	.....	0	0	clear	M. Baillaud, Director.
Tours	29.94	760.5	30.12	765.0	59.0	15.0	69	sw.	.....	.....	2	.....	5	wsw.	sw.	0	0	cloudy	M. de Tastes.
Versailles, Observatory	29.00	751.8	30.09	764.3	55.0	12.8	77	sw.	.....	.....	2	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.69	728.8	30.16	766.0	49.1	9.5	70	w.	.....	.....	4	.....	7	w.	.....	0.016	0.4	.....	Prof. Jnedt.
Bamberg	29.23	742.5	30.08	764.0	51.8	11.0	64	sw.	.....	.....	2	0	6 ks	.....	.....	0.039	1.0	.....	Prof. Dr. Hoh.
Berlin	29.79	756.0	29.97	761.1	52.7	11.5	76	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.50	749.2	30.03	762.7	44.8	7.1	96	w.	.....	.....	2	.....	10	.....	.....	0.110	2.8	raining	Royal University Obs'y.
Carlsruhe	29.72	755.0	30.17	766.3	53.2	11.8	72	sw.	.....	.....	4	.....	9	sw.	.....	0	0	.....	Albert Senz.
Cassel	29.28	743.6	29.99	761.7	54.7	12.6	61	sw.	.....	.....	4	.....	6	sw.	.....	0.075	1.9	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.75	755.7	30.12	765.1	54.1	12.3	65	wsw.	.....	.....	2	.....	6	.....	.....	0.035	0.9	.....	Physical Society.
Friedrichshafen	28.77	730.8	30.22	767.7	51.8	11.0	64	sw.	.....	.....	4	.....	5	w.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.82	757.4	29.91	759 7	49.6	9.8	89	sw.	.....	.....	5	.....	10	.....	.....	0.067	1.7	rainy	E. Preller.
Kiel	29.84	758.0	29.86	758.4	49.5	9.7	85	wsw.	.....	.....	4	.....	4	.....	.....	0.087	2.2	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.61	752.1	30.03	762.8	53.1	11.7	66	w.	.....	.....	4	.....	8	w.	.....	0.055	1.4	.....	H. Leppig Asst
Magdeburg	29.79	756.7	29.98	761.6	52.0	11.1	79	wsw.	.....	.....	3	.....	10 ks	.....	w.	0.047	1.2	.....	Weather Observatory.
Memel	30.02	762.6	30.07	763.8	43.0	6.1	86	ene.	.....	.....	1	.....	10	.....	.....	.....	.....	covered	Isermann.
Munich	28.35	720.1	30.22	767.7	50.5	10.3	56	sw.	.....	.....	4	.....	6	w.	.....	0.79	2.0	.....	Central Station.
Neufahrwasser	30.02	762.6	30.04	763.0	45.0	7.2	84	ne.	.....	.....	1	.....	10	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.58	751.4	30.11	764.8	54.1	12.3	69	w.	.....	.....	2	.....	7	wsw.	.....	0	0	.....	Dickneather
Stuttgart	29.20	741.7	30.10	764.5	54.0	12.2	61	w.	.....	.....	3	.....	4	w.	.....	0.008	0.2	.....	Prof. Dr. Schoder.
Wustrow	29.95	760.6	29.97	761.3	47.8	8.8	95	s.	.....	.....	3	.....	10	.....	.....	0.106	2.7	.....	Profs. Brauns & Reimer.
Greek.																			
Athens	29.74	755.5	30.13	765.2	65.7	18.7	.....	ne.	.....	.....	1.0	0	2 k	.....	.....	0	0	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.94	760 5	29.99	761.8	82.9	28.3	57	e.	13.0	5.8	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.39	746.4	29.85	758.2	90.3	32.4	38	wnw.	4.0	1.8	.....	.....	0	.....	.....	0	0	hazy	
Bombay	29.81	757.1	29.85	758.1	79.5	26.4	86	nw.	13.0	5.8	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	27.97	710.4	29.79	756.6	87.0	30.6	26	w.	18.0	8.0	.....	.....	4	w.	.....	0	0	d. clouds	
Trichinopoly	29.53	750.1	29.81	757.1	87.0	30.9	54	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Bellary	28.34	719.0	29.75	755.6	89.2	31.8	36	w.	4.0	1.8	.....	.....	4	.....	.....	0	0	d. clouds	
Belgaum	27.30	693.3	29.84	757.8	74.8	23.8	71	sw.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.16	740.8	29.92	760.0	72.8	22.7	55	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	28.97	735.9	29.88	759 0	75.6	24.2	35	w.	.....	.....	.....	.....	0	.....	.....	0	0	.....	
Agra	29.32	744.6	29.88	759.0	82.2	27.9	27	w.	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28 75	730.2	29.78	756.4	84.5	29.2	54	calm	4.0	1.8	.....	.....	8	.....	ne.	0	0	d. clouds	
Jubbulpore	28.50	723.8	29.86	758.3	78.2	25.7	50	ne.	4.0	1.8	.....	.....	2	n.	.....	0	0	d. clouds	
Lucknow	29.49	749.0	29.87	758.0	76.7	24.8	46	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.53	750.0	29.85	758 1	74.1	23.4	70	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.67	753.7	29.86	758.5	77.5	25.3	69	ne.	1.9	0.8	.....	.....	4	ne.	ne.	0	0	d. clouds	
Hazaribagh	27.82	706.6	29.84	758 0	74.6	23.7	73	ne.	4.7	2.1	.....	.....	4	.....	.....	0	0	d. clouds	
Cuttack	29.73	755.1	29.81	757.2	81.0	27.2	81	calm	0	0	.....	.....	4	.....	.....	0.04	1.0	d. clouds	
Calcutta, Alipore	29.81	757.2	29.83	757.7	75.4	24.1	95	s.	0.5	0.2	.....	.....	10	.....	.....	1.39	35.3	overcast	
Dhubri	29.71	754.7	29.83	757.8	77.1	25.1	77	nne.	1.8	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.76	755.9	29.85	758.2	79.2	26.2	94	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.53	750.1	29.87	758.8	73.8	23.2	81	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29 93	760.2	29.95	760.8	80.7	27.1	72	nne.	4.6	2.1	.....	.....	4	.....	ese.	0.02	0.5	d. clouds	
Jeypore	28.45	722.6	29.89	759.2	82.4	28.0	51	nw.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.73	755.2	30.15	765.7	57.4	14.1	70	calm	0	0	.....	.....	7	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.61	752.2	30.14	765.5	56.1	13.4	69	nw.	4.3	1.9	.....	.....	0	.....	.....	0	0	.....	Prof. Schiapparelli.
Padua	30.02	762.5	30.13	765.3	56.3	13.5	75	nne.	1.8	0.8	.....	.....	3	e.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.22	742.2	30.14	765.5	52.2	11.2	80	sse.	0.7	0.3	.....	.....	0	.....	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	BAROMETER. Corrected for instrumental error and for temperature.		BAROMETER. Reduced to sea-level.		Temperature of the air.		Relative humidity.	WIND. Direction.	WIND. Velocity.		WIND. Force.	CLOUDS. Amount and kind. Upper.	CLOUDS. Amount and kind. Lower.	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN,—Continued.																			
Genoa	29.93	760.1	30.12	765.0	64.6	18.1	71	se.	6.3	2.8			2	se.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.20	716.2	30.13	765.4	52.9	11.6	67	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.08	763.9	30.12	765.1	60.6	15.9	68	n.	0	0			9	wsw.		0	0		Prof. Luigi Guidi.
Florence	29.91	759.6	30.16	766.1	54.0	12.2	95	nw.			2		10			0.079	2.0		Prof. Costantino Pitter.
Leghorn	29.99	761.7	30.08	763.9	61.9	16.6	89	s.	0	0			10			0.102	2.6		Prof. P. Monte.
Rome	29.97	761.3	30.15	765.7	64.8	18.2	64	w.	0.7	0.3			8			0	0		Prof. P. Tachini.
Lecce	29.89	759.1	30.14	765.5	65.8	18.8	49	e.	1.3	0.6			1			0	0		Prof. C. de Giorgi.
Cosenza	29.27	743.4	30.16	766.1	62.6	17.0	68	wsw.	2.5	1.1			0			0	0		Prof. D. Conti.
Cagliari	29.94	760.5	30.13	765.4	65.8	18.8	57	nw.			2		2	w.		0	0		Prof. A. Pacinotti.
Palermo	29.93	760.2	30.18	766.6	65.7	18.7	65	ne.	4.2	1.9			2			0	0		Prof. G. Cacciatore.
Syracuse	30.10	764.6	30.15	765.7	66.6	19.2	60	w.	4.9	2.2			1	wsw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.64	752.9	30.17	766.2	63.5	17.5	72	e.	0	0			10			0	0		Prof. F. Brioschi.
Stelvio	22.23	564.7			27.7	— 2.4	59	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.29	566.2			34.2	1.2	61	nw.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.26	768.6	30.29	769.4	37.8	3.2	57	calm			0	0	0			0	0	clear	Hattori.
Awomori	30.28	769.1	30.31	769.9	30.6	2.7	89	s.	0.7	0.3		0	0			0	0	clear	K. Ogawa.
Hakodate	30.29	769.4	30.30	769.7	37.4	3.0	86	nw.	6.0	2.7		0	0			0	0	clear	
Hiroshima					52.4	11.3	70	nne.	5.0	2.2		2 cs	0			0	0	clear	Y. Miwa.
Kanazawa	30.10	764.6	30.21	767.2	49.7	9.8	80	e.	2.0	0.9		0	0			0	0		S. Endo.
Kioto	30.00	762.0	30.18	766.6	46.0	7.8	93	nnw.	1.7	0.7		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.89	759.2	30.10	764.4	55.1	12.8	69	ne.	2.7	1.2		0	0			0.060	1.5	clear	S. Takehayashi.
Nemuro	30.24	768.1	30.30	769.6	44.0	6.7	80	nne.	6.0	2.7		0	0			0	0	clear	
Niigata	30.20	767.1	30.24	768.1	45.6	7.6	81	ese.	0.9	0.4		0	3 ck;s			0	0	fair	M. Morita.
Nobiru	30.26	768.7	30.28	769.1	41.1	5.1	91	n.	5.9	2.7		0	1 s			0	0	clear	H. Midzushima.
Osaka	30.16	766 0	30.17	766.4	49.2	9.6	85	ne.	1.4	0.6		0	0			0	0	clear	
Sapporo					33.0	0.6	78	s.	4.2	1.9		0	0			0	0	clear	
Tokei Obs'y, Yeddo	30.19	766.9	30.27	768.9	50.6	10.3	74	ne.	6.3	2.8		0	0			0	0	clear	The Staff.
Wakayama	30.11	764.9	30.17	766.4	53.1	11.7	71	ne.	0.9	0.4		0	0			0	0	clear	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.89	759.2	30.08	764.0	76.0	24.4	69	ene.	14.5	6.5		0	4 k;ks		e.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.79	604.3	30.01	762.3	55.0	12.8	73	e.	11.2	5.0		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.45	621.0	30.23	767.8	51.8	11.0	86	ne.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.73	755.2	29.99	761.8	71.0	21.7	85	ene.	0.9	0.4		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.20	589.2	30.29	769.3	53.4	11.9	77	nw.	0.2	0.1		0	6 k		n.	0	0	½ cloudy	The Staff.
Morelia	24.43	620.5	30.49	774.5	55.0	12.8	64	ne.	0.9	0.4		0	0			0	0	fine	M. Tena, M. D.
Orizaba																			Prof. M. M. Cházaro.
Pabellon, Aguascallentes	24.07	611.3	30 13	765.3	57.5	14.0	65	nw.			1	0	0			0	0	very fine	M. V.de Leon, M. E.
Puebla, Catholic Institute	23.46	595.5	30.14	765.5	58.37	14.82	40	calm	0	0		0	8		e.	0	0	cloudy	Prof. P. Spina.
Zacatecas	22.63	574.9	30.36	771.2	49.8	9.9	59	sse.	8.3	3.7		0	0			0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.96	760.9	29.96	760.9	54.3	12.4		ssw.			4					0.008	0.2		
Groningen	29.84	758 0	29.90	759.4	52.2	11.2		sw.			3					0.004	0.1		
Helder	29.87	758.6	29.87	758.6	53.8	12.1		sw.			4					0.075	1.9		
Helleveetsluis	29.94	760.4	29.94	760.4	54.3	12.4	81	sw.			3					0.004	0.1		
Utrecht	29.91	759.6	29.95	760.8	55.2	12.9	79	sw.			4		5			0	0	cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.52	749.9	29.59	751.5	52.9	11.6	42	ese.	11	5			7			0.663	1.6		
Brono	29.89	759.1	29.93	760.1	41.9	5.5	62	se.	29	13			2			0	0		
Ohristiania	29.80	756.8	29.95	760.6	44.8	7.1	78	ese.	7	3			8			0.004	0.1		
Gjæsvær	30.01	762.2	30.03	762.8	30.2	— 1.0		s.			7		1						
Lodingen	29.93	760.2	29.98	761.4	36.5	2.5	58	nne.			2		0			0	0		
PORTUGUESE.																			
Angra, Azores	30.15	765.8	30.30	769.7	64.8	18.2	88	nw.	10.5	4.7			4			0	0		Dr. J. A. Sampaio
Campo Major	29.16	740.6	30.15	765.8	65.5	18.6	63	calm	0	0			8			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.09	764.3	30.18	766.5	72.9	22.7	61	sw.	6.3	2.8			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.88	758.9	30.24	768.1	59.9	15.5	69	n.	8.7	3.9			5			0	0		The Staff.
Ponta Delgada, Azores	30.26	768.5	30.33	770.3	69.8	21.0	59	wnw.	11.9	5.3			4	ne.		0	0		
Saint Paul de Loando	29.66	753.3	29.86	758.4	76.3	24.6	93	wsw.	0.7	0.3			10			0.079	2.0		
Serra da Estrella	25.39	645.0	30.18	766.6	44.8	7.1	82	w.	4.9	2.2			3			0.004	0.1	foggy	
RUSSIAN.																			
Akmolinski	29.01	736 8	30.13	765.2	34.7	1.5	80	sw.	16	7		0	1 s			0	0		Major K. Lasarew.
Archangel	30.09	764.2	30.11	764.7	30.2	— 1.0	73	n.	13	6			10			blank	blank		Capt. Sseliwerstow.
Astrakhan	29.99	761.8	29.91	759.7	50.5	10.3	81	se.	2	1			10 s;n			0	0	heavy clouds	Capt. Wisganow.
Barnaul	29.61	752.0	30.13	765.4	26.6	— 3.0	98	calm	0	0			10			0.236	6.0		Meteorological Obs'y.
Dorpat	29.92	759.9	30.17	766.4	30.4	— 0.9	84	ne.	9	4			10 n			0	0		Observatory.
Ekaterinburg	28.87	733.4	29.86	758.4	36.1	2.3	96	wsw.	4	2			10			0.205	5.2		Meteorological Obs'y.
Kasan	29.56	750.7	29.83	757.7	39.7	4.3	92	sw.	2	1			10			0.173	4.4		Observatory.
Kertch	29.82	757.4	29.84	757.9	47.3	8.5	89	nw.	9	4			10 n			0.083	2.1		Lagorio & Sastyrex.
Kieff	29.19	741.4	29.84	757.8	42.1	5.6	82	wnw.	11	5			10 k;s;n						Observatory.
Lugan	29.53	750.1	29.74	755.3	53.2	11.8	72	s.	2	1			10			0.118	3.0		Meteorological Obs'y.
Nikolaiev	29.93	760.2	30.00	762.0	50.0	10.0	66	nnw.	13	6		0	2 k			0.098	2.5		Capt. Kurdukow.
Pekin, China	30.11	764.7	30.25	768.3	36.7	2.6	77	calm	0	0		0	1 k			0	0		Physical Observatory.
St. Petersburg	30.16	766 0	30.17	766.4	33.8	1.0	53	ene.	7	3		ck	1 ks			0	0		Central Physical Obs'y.
Semipalatinsk	29.01	752.2	30.30	769.6	36.0	2.2	84	s.	13	6			7			0	0		Major Lasarew.
Tashkend, Laboratory	28.61	720.7	30.21	767.3	50.4	10.2	63	calm	0	0			0						Teich, A. M.
Tiflis	28.52	724.4	29.90	759.4	68.7	20.4	36	w.	2	1		2 c	0			0	0		Physical Observatory.
Tomsk																			
Vladivostock	30.18	766.6	30.25	768.3	34.2	1.2		calm	0	0		0	5 k			0.138	3.5		Astronomical Obs'y.
Warsaw	29.00	751.8	30.04	762.9	39.2	4.0	95	wnw.	4	2			10					heavy clouds	Berg, Assistant.
Wilna	29.58	751.3	30.01	762.2	41.7	5.4	86	ne.	11	5			10			0	0		M. O. Marks.
Yeniseisk	30.10	764.4	30.43	772.8	— 9.0	—22.8	81	e.	2	1			8			0	0		
SCOTTISH.																			
Monach Lt			29.21	741.9	54	12.2	93	sw.			6		10			0.4	10.	h'y showers	J. Youngclause
North Unst			29.45	748.0				se.			8								Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.07	763.8	30.17	766.4	62.6	17	71	sw.	2.9	1.3		0	0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.08	764.1	30.14	765.6	66.7	19.3	56	sw.	1.8	0.8		0	0			0.020	0.5	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.22	691.3	30.22	767.6	50.9	10.5	74	W.	5.4	2.4		0	1			0.039	1.0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	27.97	710.4	30.19	766.8	58.6	14.8	61	se.	2.5	1.1		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.02	762.5	30.17	766.3	69.8	21.0	72	ese.	2.2	1.0		2	4	nw.		0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.30	744.3	30.18	766.6	55.8	13.2	63	se.	5.1	2.3		1 c	0	calm		0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.21	741.8	30.11	764.7	55.2	12.9	78	ssw.	1.3	0.6			10					sprinkling	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.85	758.3	29.91	759.7	80.0	26.7	74	ne.	4.4	2.0		0	1 k			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.10	764.4	30.20	767.0	62.4	16.9	64	calm	0	0		0	8		e.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.81	757.2	29.90	759.5	76.6	24.8	90	calm	0	0		3 cs	2 kn	s.	s.	0.205	5.2	d. clouds	Manuel Muese.
Tuguegarao, Philippine Id's	29.84	758.0	29.97	761.3	77.0	25.0	84	nnw.	8.3	3.7		0	0			0	0	clear	José L. Yrastorza.
SWEDISH																			
Haparanda	30.27	768.9	30.31	769.9	25.9	— 3.4	95	ne.			2		8			0	0		
Umea	30.20	767.1	30.25	768.4	33.8	1.0	83	s.			2		0			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	30.15	765.8	30.20	767.1	37.4	3.0	90	e.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Stockholm	29.94	760.4	30.11	764.9	44.6	7.0	85	ese.	.....	.....	2	.....	10	.....	.....	0.110	2.8	.....	
Wisby	29.97	761.2	30.03	762.7	45.7	7.6	74	sse.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Sub-series.																			
Upsala	30.00	762.1	30.09	764.3	44.6	7.0	87	ese.	6.0	2.7	.....	.....	6	.....	se.	0	0	.....	S. G. Fineman.
Swiss.																			
Geneva	28.77	730.7	30.19	766.9	54.7	12.6	49	n.	.....	.....	2	.....	0	.....	.....	0.012	0.3	clear	**The Observatory.**
Turkish.																			
Constantinople	.....	.....	30.17	766.3	55.0	12.8	54	n.	8	3.5	.....	.....	4	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.15	765.8	65.7	18.7	.....	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.88	759.0	77.7	25.4	48	n.	.....	.....	1	3 c	.....	sw.	.....	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.26	768.6	30.34	770.6	46	7.8	68	nw.	5	2.2	.....	.....	10 s	.....	w.	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.93	760.2	30.03	778.0	32	0.0	60	n.	8	3.6	.....	7 k	0	n.	.....	0	0	fair	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.07	636.8	30.17	766.3	35	1.7	53	e.	1	0.4	.....	0	3 s	.....	.....	0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.38	795.4	30.36	771.1	26	— 3.3	76	sw.	14	6.3	.....	6 c	1 s	sw.	sw.	0.03	0.8	fair	B. O. Lenoir.
Atlanta, Georgia	29.01	736.8	30.23	767.8	60	15.6	93	nw.	10	4.5	.....	2 c	0	.....	.....	0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.27	768.8	30.28	769.1	49	9.4	93	n.	13	5.8	.....	.....	10 n	.....	.....	0.02	0.5	light rain	Jas. M. Watson.
Augusta, Georgia	30.01	762.2	30.21	767.3	61	16.1	93	calm	0	0	.....	0	fg.	.....	.....	0.02	0.5	light rain	John Healy.
Baltimore, Maryland	30.27	768 8	30.32	770.1	54	12.2	74	ne.	6	2.7	.....	.....	10 s	.....	s.	0.02	0.5	clear	John Healy.
Barnegat, New Jersey	30.25	768.3	30.27	768.8	52.0	11.1	96	n.	9	4.0	.....	.....	10 n	.....	.....	0.04	1.0	cloudy	Geo W **Felger.**
Bennett, Fort, Dakota	28.81	731.8	30.50	774.7	29	— 1.7	88	se.	17	7.6	.....	2 cs	3 s	se.	se.	0.13	3.3	light rain	G. A. Hill.
Benton, Fort, Montana	27.43	696.7	30.39	771.9	20	— 6.7	73	calm	0	0	.....	0	0	.....	.....	inap.	inap.	fair	A. Pritchard.
Bismarck, Dakota	28.54	724.9	30.46	773.7	30	— 1.1	88	se.	12	5.4	.....	.....	10 s	.....	.....	0.08	2.0	clear	S. Wheaton.
Block Island, Rhode Island	30.17	766.3	30.20	767.1	52	11.1	59	ne.	16	7.2	.....	3 ck	7 s	w.	n.	0	0	cloudy	Cyrus Cramer.
Boise City, Idaho	27.36	694.9	30.30	769.6	30	— 1.1	88	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. T. Elker.
Boston, Massachusetts	30.11	764.8	30.27	768.8	47.0	8.3	48	nw.	12	5.4	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	B. E. Light.
Brownsville, Texas	30.08	764.0	30.13	765.3	71.8	22.1	97	calm	0	0	.....	0	0	.....	.....	0	0	clear	O. B. Cole.
Buffalo, New York	29.68	753.9	30.46	773.7	42	5.6	82	nw.	7	3.1	.....	1 ck	4 k	.....	nw	0	0	fair	M. McCarty.
Buford, Fort, Dakota	28 42	721.9	30.40	772.1	36	2.2	92	se.	6	2.7	.....	.....	10 s	.....	.....	0.03	0.8	cloudy	W. Finn.
Burlington, Vermont	30.02	762.5	30.33	770.4	35.7	2.1	65	n.	5	2.2	.....	0	4 ks	.....	nw.	0	0	fair	F. A. Mellen.
Cairo, Illinois	29.93	760.2	30.35	770.9	57.6	14.2	92	ne.	16	7.2	.....	.....	10 s	.....	ne.	0.26	6.6	threatening.	W. B Gates.
Cape Henry, Virginia	30.10	766.1	30.18	766.6	64	17.8	93	sw.	8	3.6	.....	3 k	5 s; fg	.....	w.	0	0	cloudy	W. H. Ray.
Cape May, New Jersey	30.25	768.3	30.28	769.1	52.0	11.1	86	n.	16	7.2	.....	.....	10 n	.....	.....	inap.	inap.	light rain	A. K. Alderson.
Cape Mendocino, California	29.28	743.7	29.81	757.2	52	11.1	66	se.	24	10.7	.....	0	5 ks	.....	se	0	0	fair	W. E. Smith.
Cedar Keys, Florida	30.11	764.8	30.13	765.3	68	20.0	90	ne.	10	4.5	.....	hz.	0	.....	.....	1.20	30.5	clear	J. J. McLean.
Champaign, Illinois	29.61	752.1	30.47	773.9	42.3	5.7	61	n.	20	8.9	.....	0	0	.....	.....	0	0	clear	F. W. Mixer.
Charleston, S. Carolina	30.10	764.5	30.16	766.1	67	19.4	90	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	L. A. Welsh.
Charlotte, N. Carolina	29.28	743.7	30.16	766.1	62.0	16.7	87	nw.	1	0.4	.....	0	fg.	.....	.....	0	0	clear	J. H. Smith.
Chattanooga, Tennessee	29.42	747.3	30.27	768.8	57.0	13.9	100	calm	0	0	.....	.....	fg.	.....	.....	0	0	clear	D. O'Donoghue.
Cheyenne, Wyoming	24.21	614.9	30.42	772.7	21.1	— 6.1	64	w.	2	0.9	.....	0	0	.....	.....	0	0	dense fog	B. L. Goulding.
Chicago, Illinois	29.89	759.2	30.63	778.0	44.0	6.7	80	ne.	24	10.7	.....	.....	10 s	.....	ne.	0	0	clear	E. McGovern.
Chincoteague, Virginia	30.18	766.6	30.20	767.1	60	15.6	75	ne.	23	10.3	.....	.....	9 ks	.....	e.	0	0	cloudy	J. Mitchell.
Cincinnati, Ohio	29.69	754.1	30.38	771.6	54	12.2	74	n.	6	2.7	.....	.....	10 s	.....	n.	0.02	0.5	cloudy	C. F. Dickens.
Cleveland, Ohio	29.73	755.1	30.50	774.7	47.5	8.6	65	ne.	15	6.7	.....	.....	10 k	.....	ne.	0.05	1.3	cloudy	R. B. Watkins.
Coleman City, Texas	28 45	722.6	30.34	770.6	55	12.8	86	n.	10	4.5	.....	6 cs	0	.....	.....	0	0	fair	J. B. Newlin.
Columbus, Ohio	29.52	749.8	30.41	772.4	50	10.0	63	ne.	12	5.4	.....	6 ck	0	sw.	.....	0.06	1.5	fair	L. Dorman.
Concho, Fort, Texas	28.31	719.1	30.32	770.1	56.0	13.3	80	calm	0	0	.....	4 ck	6 s	s.	.....	0	0	cloudy	D. Cuthbertson.
Custer, Fort, Montana	27.06	687.3	30.38	771.6	31	— 0.6	81	sw.	4	1.8	.....	0	3 k	.....	calm	0	0	clear	J. McGlone.
Davenport, Iowa	29.88	758.9	30.57	776.5	39	3.9	73	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	W. B. Lamar.
Davis, Fort, Texas	25.38	644.6	30.28	769.1	55	12.8	83	n.	5	2.2	.....	.....	10 ks	.....	.....	0	0	cloudy	R. R. Martin.
Dayton, Washington T'y	28.43	722.1	30.21	767.3	30	— 1.1	88	calm	0	0	.....	2 c	0	sw.	.....	0.04	1.0	clear	J. Williams.
Deadwood, Dakota	25.43	645.9	30.26	768.6	41	5.0	62	ne.	4	1.8	.....	5 c	0	w.	.....	0	0	fair	H. Clifford.
Delaware Breakwater, I.	30.21	767.3	30.23	767.8	55	12.8	93	ne.	30	13.4	.....	.....	10 s	.....	e.	0	0	threatening.	G. W. Scott.
Denison, Texas	29.39	746.5	30.23	767.8	62.0	16.7	93	nw.	4	1.8	.....	0	3 s	.....	.....	0	0	clear	T. S. Townsend.
Denver, Colorado	24.96	634.0	30.46	773.7	28.5	— 1.9	69	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Des Moines, Iowa	29.64	752.8	30.58	776.7	37	2.8	72	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Detroit, Michigan	29.81	757 2	30.55	776.0	37.3	2.9	72	n.	20	8.9	.....	0	0	.....	.....	0	0	clear	F. W. Conrad.
Dodge City, Kansas	27.79	705.9	30.53	775.4	31	— 0.6	88	n.	15	6.7	.....	6 c	0	.....	.....	0	0	clear	U. F. R. Wappenhans.
Dubuque, Iowa	29.88	758.9	30.63	778.0	34.8	1.6	79	n.	5	2.2	.....	0	2 s	.....	.....	0	0	fair	V. P. Temple.
Duluth, Minnesota	29.90	759.4	30.70	779.8	30	— 1.1	68	nw.	9	4.0	.....	0	2 s	.....	nw.	0	0	clear	J. Harvey Smith.
Eagle Pass, Texas	29.38	746.2	30.21	767.3	70.2	21.2	90	calm	0	0	.....	0	10 s	.....	se.	0	0	clear	N. B. Conger.
Eagle Rock, Idaho	25.44	646.2	30.30	769.6	30	— 1.1	92	w.	4	1.8	.....	0	0	.....	.....	0	0	cloudy	F. Belford.
Eastport, Maine	30.08	764.0	30.15	765.8	39.0	3.9	54	w.	10	4.5	.....	7 cjcs	0	w.	.....	0	0	clear	J. M. Clifford.
Elliott, Fort, Texas	27.52	699.0	30.45	773.4	40	4.4	73	n.	12	5.4	.....	0	0	.....	.....	0	0	fair	D. C. Murphy.
El Paso, Texas	26.43	671.3	30.28	769.1	50	10.0	80	se.	4	1.8	.....	2 c	0	.....	.....	0	0	clear	W. J. Gundall.
Erie, Pennsylvania	29.72	754.9	30.48	774.2	45	7.2	68	n.	14	6.3	.....	6 k	0	n.	.....	0	0	clear	J. O'Dowd.
Escanaba, Michigan	29.97	761.2	30.67	779.0	32.5	0.3	72	nw.	5	2.2	.....	0	8 s	.....	nw.	0	0	fair	Peter Wood.
Fredericksburg, Texas	28.48	723.4	30.30	769.6	69	20.6	81	w.	1	0.4	.....	0	5 s	.....	.....	0	0	cloudy	George Heathcote.
Galveston, Texas	30.10	764 5	30.15	765.8	75	23.9	97	se.	4	1.8	.....	hz.	5 ks	.....	s.	0	0	fair	Frank Hailwegler.
Grand Haven, Michigan	29.92	760.0	30.62	777.7	34.0	1.1	83	ne.	7	3.1	.....	0	0	.....	.....	0	0	fair	E. O'C. Machierney.
Grant, Fort, Arizona	25.38	644.6	30.22	767.6	56.9	13.8	42	e.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. Mueller.
Hatteras, North Carolina	30.14	765.5	30.16	766.1	66	18.9	100	ne.	10	4.5	.....	hz.	3 k	.....	n.	0	0	clear	Robert O. Lord.
Helena, Montana	25.99	660.1	30.37	771.4	17	— 8.3	83	sw.	1	0.4	.....	0	0	.....	.....	0.02	0.5	clear	R. M. Crawford.
Henrietta, Texas	29.24	742.7	30.28	769.1	52	11.1	86	nw.	4	1.8	.....	.....	10 ks	.....	n.	0	0	cloudy	N. C. Smith.
Huron, Dakota	29.10	739.1	30.58	776.7	26.2	— 3.2	77	e.	6	2.7	.....	0	1 s	.....	.....	inap.	inap.	clear	J. P. Sherry.
Indianapolis, Indiana	29.58	751.3	30.42	772.7	48.5	9.2	62	ne.	7	3.1	.....	0	1 s	.....	ne.	0.09	2.3	clear	S. W. Glenn.
Indianola, Texas	30.12	765.0	30.15	765.8	77.1	25.1	90	e.	6	2.7	.....	0	1 k	.....	s.	0	0	clear	O. Schatze
Jacksboro, Texas	29.06	738.1	30.28	769.1	55	12.8	69	nw.	3	1.3	.....	2 ck	0	n.	.....	0	0	clear	I. A. Reed.
Jacksonville, Florida	30.09	764.3	30.14	765.5	66	18.9	100	e.	1	0.4	.....	.....	fg.	.....	.....	1.85	47.0	dense fog	D. J. Carr.
Keogh, Fort, Montana	27.69	703.3	30.36	771.1	36	2.2	82	w.	4	1.8	.....	9 ck	0	w.	.....	0	0	cloudy	J. W. Smith.
Keokuk, Iowa	29.80	756.9	30.50	774.7	39.5	4.2	86	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	A. Schneider.
Key West, Florida	29.98	761.5	30.00	762.0	78.0	25.6	85	ne.	12	5.4	.....	2 cs	0	nw.	.....	0	0	clear	F. Z. Gosewisch
Kittyhawk, North Carolina	30.14	765.5	30.16	766.1	66	18.9	93	ne.	3	1.3	.....	0	7 ks	.....	ne.	0.17	4.3	fair	R. H. Paxton.
Knoxville, Tennessee	29.21	741.9	30.28	769.1	56.5	13.6	100	e.	2	0.9	.....	.....	fg.	.....	.....	0	0	dense fog	H. Mc P. Baldwin.
La Crosse, Wisconsin	29.82	757.4	30.64	778.2	32	0.0	78	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. A. Cody.
Leavenworth, Kansas	29.53	750.0	30.47	773.9	42	5.6	74	ne.	6	2.7	.....	0	2 s	.....	.....	0	0	clear	S. C. Emery.
Lewiston, Idaho	29.42	747.3	30.29	769.4	32.0	0.0	83	e.	1	0.4	.....	0	0	.....	.....	0	0	clear	A. W. Browne.
Little Rock, Arkansas	29.88	758 9	30.22	767.6	67	19.4	93	n.	6	2.7	.....	.....	10s; fg	.....	.....	0.02	0.5	clear	W. Bell.
Los Angeles, California	29.70	754.4	30.10	764.5	47	8.3	86	w.	6	2.7	.....	0	0	.....	.....	0.12	3.0	cloudy	W. U. Simons.
Louisville, Kentucky	29.73	755.1	30.32	770.1	54	12.2	86	n.	12	5.4	.....	.....	10 s	.....	n.	0.99	25.1	cloudy	T. S. Collins.
Lynchburg, Virginia	29.50	749.3	30.22	767.6	61.8	16.6	87	calm	0	0	.....	.....	10 s	.....	.....	0	0	clear	L. M. Dey.
Mackinaw City, Michigan	29.97	761.2	30.66	778.7	34.5	1.4	58	nw.	8	3.6	.....	0	4 s	.....	nw.	0	0	cloudy	Lewis Duane.
Macon, Fort, North Carolina	30.14	765.5	30.15	765.8	66	18.9	100	n.	3	1.3	.....	2 cs	fg.	.....	.....	0	0	fair	F. R. Day.
Madison, Wisconsin	29.57	751.1	30.64	778.2	30	— 1.1	78	e.	10	4.5	.....	0	0	.....	.....	0	0	clear	F. P. Chaffee.
Maginnis, Fort, Montana	25.71	653.0	30.22	767.6	28	— 2.2	59	nw.	16	7.2	.....	0	0	.....	.....	0.03	0.8	clear	C. A. Shaw.
McKavett, Fort, Texas	28.64	712.2	30.42	772.7	58	14.4	86	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. Burke.
Marquette, Michigan	29.91	759.7	30.68	779.3	34	1.1	79	w.	0	2.7	.....	.....	10 s	.....	nw.	0.02	0.5	cloudy	J. E. Thatcher.
Memphis, Tennessee	29.91	759.7	30.26	768.6	64	17.8	93	n.	1	0.4	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. Gilligan.
Milwaukee, Wisconsin	29.83	757.7	30.62	777.7	35	1.7	89	n.	14	6.3	.....	0	4 s	.....	ne.	0	0	fair	D. T. Flannery.
Missoula, Fort, Montana	26.95	684.5	30.36	771.1	22	— 5.6	39	calm	0	0	.....	0	7 s	.....	.....	0.08	2.0	fair	W. Line.
Mobile, Alabama	30.13	765.3	30.17	766.3	66	18.9	93	nw.	4	1.8	.....	0	1 ksnfg	.....	.....	0	0	clear	J. H. Young.
Montgomery, Alabama	29.96	761.0	30.20	767.1	63.8	17.7	98	ne.	2	0.9	.....	0	fg.	.....	.....	0	0	clear	C. A. Read.
																			J. B. McLaughlin.

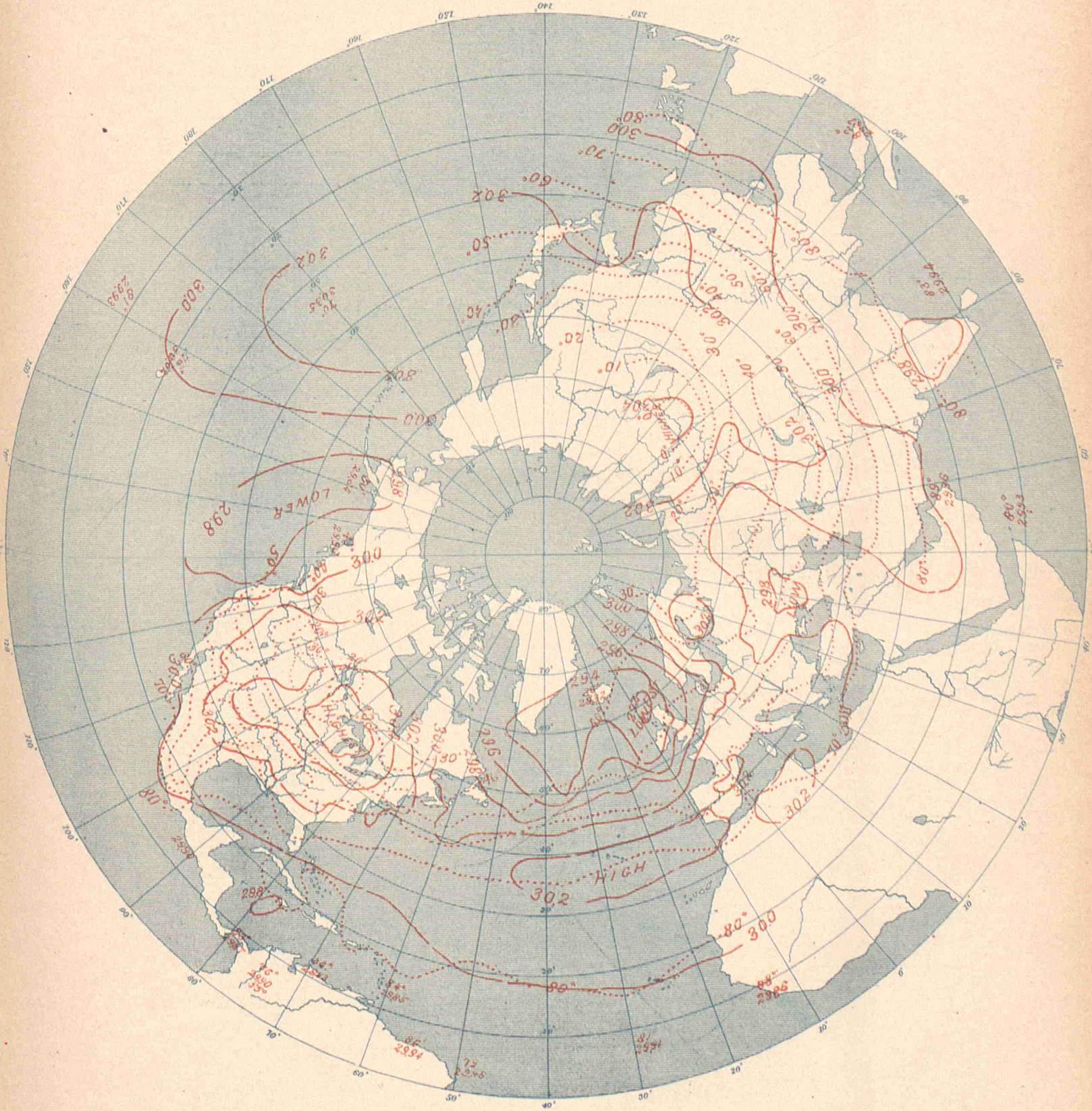
STATIONS	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.55	750.6	30.61	777.5	20	— 6.7	84	se.	4	1.8		0	5 s			0	0	fair	H. Bessant.
Morgantown, W. Virginia	29.35	745.5	30.41	772.4	54.0	12.2	62	ne.	6	2.7			10 s			0.02	0.5	cloudy	J. C. Sprigg, jr
Mt. Washington, N. H	23.72	602.5	30.28	769.1	11.0	—11.7	100	nw.	51	22.8			fg.		nw.	0.04	1.0	dense fog	J. G. Linsley.
Nashville, Tennessee	29.65	753.1	30.25	768.3	65.0	18.3	90	nw.	3	1.3		6 ck	0	w.		0	0	fair	L. N. Jesunofsky.
New Haven, Connecticut	30.15	765.8	30.27	768.8	50	10.0	58	n.	8	3.6		10 cs	0	w.		0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.24	768.1	30.29	769.4	52	11.1	59	nw.	3	1.3			10 s			0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.09	764.3	30.15	765.8	72.5	22.5	98	ne.	1	0.4			fg.			0	0	dense fog	L. Dunne.
Newport, Rhode Island	30.21	767.3	30.26	768.6	50.2	10.1	63	n.	3	1.3		2 ok	8 ks	nw.	nw.	0	0	cloudy	W. McGillivray.
New York, New York	30.13	765.3	30.31	769.9	54	12.2	61	nw.	3	1.3			10 s		nw.	0.02	0.5	cloudy	J. B. Merrill.
Norfolk, Virginia	30.15	765 8	30.18	766.6	64	17.8	93	e.	1	0.4			fg.			0	0	dense fog	Wm. Davis.
North Platte, Nebraska	27.49	698.2	30.57	776.5	28.1	— 2.2	77	calm	0	0		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.02	762.5	30.06	763.5	39.5	4.2	94	n.	4	1.8			10 s			0.40	10.2	cloudy	J. Dascomb.
Omaha, Nebraska	29.34	745.2	30.58	776.7	35.9	2.2	72	ne.	8	3.6		5 c	0			0	0	fair	A. Pollak.
Oswego, New York	30.07	763.8	30.41	772.4	43.6	6.4	55	n.	8	3.6		0	9 s		nw.	0	0	cloudy	S. W. Beall.
Palestine, Texas	29.64	752.8	30.21	767.3	71.5	21.9	94	sw.	6	2.7			fg.			0	0	dense fog	L. M. Pindell.
Pensacola, Florida	30.13	765.3	30.16	766.1	65.3	18.5	92	n.	6	2.7		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	30.21	767.3	30.31	769.9	52	11.1	72	ne.	3	1.3			10s; fg		ne.	0.11	2.8	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.90	454.7	30.56	776.2	18	— 7.8	80	w.	72	32.2		0	7 s		w.	0	0	fair	H. Hall.
Pioche, Nevada	24.11	612.4	30.25	768.3	42	5.6	57	s.	3	1.3		9 c	0	sw.		0	0	cloudy	C. N. Kitchel.
Pittsburg, Pennsylvania	29.58	751.3	30.42	772.7	51.5	10.8	59	n.	8	3.6		0	8 s		nw.	0.25	6.3	cloudy	W. Daly.
Poplar River, Montana	27.87	707.9	30.16	766.1				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.13	765.3	30.14	765.5	74.3	23.5	96	ne.	9	4.0		0	0			0.02	0.5	clear	M. Herman.
Port Huron, Michigan	29.82	757.4	30.54	775.7	36.2	2.3	79	nw.	11	4.9		0	5 ks		nw.	0	0	fair	W. O. Bailey.
Portland, Maine	30.18	766.6	30.23	767.8	46.0	7.8	60	nw.	3	1.3		7 cs	0	nw.		0	0	fair	W. W. Eichelberger.
Portland, Oregon	29.97	761.2	30.04	763.0	38.0	3.3	89	w.	4	1.8			10 s		sw.	0.54	13.7	cloudy	M. L. Hearne.
Portsmouth, N. C.					68	20.0	93	ne.	11	4.9		0	4 ks			0.04	1.0	fair	F. S Coburn.
Prescott, Arizona	24.91	632.7	30.25	768.3	37.5	3.1	92	sw.	3	1.3		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.20	767.1	30.23	767.8	51	10.6	59	n.	8	3.6		0	9 s		w.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.03	762.7	30.04	763.0	70.5	21.4	87	ne.	8	3.6		0	0			0	0	clear	W. J. Evans.
Red Bluff, California	29.61	752.1	30.02	762.5	47.5	8.6	93	n.	4	1.8			10 n		s.	0.26	6.6	light rain	E. van Dyk.
Rochester, New York	29.74	755.4	30.44	773.2	42	5.6	73	n.	5	2.2		9 k	0	nw.		0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.39	746.5	29.96	761.0	39	3.9	82	se.	1	0.4			10 s		s.	0	0	cloudy	J. J. Nanry.
Sacramento, California	29.98	761.5	30.06	763.5	52.2	11.2	86	w.	4	1.8			10 n			0.21	5.3	light rain	J. A. Barwick
St. Louis, Missouri	29.80	756.9	30.43	772.9	50.9	10.5	92	n.	13	5.8			8 s		n.	0 52	13.2	clearing	J. H. Weber.
St. Paul, Minnesota	29.72	754.9	30.64	778.2	29.0	— 1.7	77	ne.	3	1.3		0	0			0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.67	753.6	30.60	777.2	16	— 8.9	91	se.	2	0.9		5 cs	0	w.		0	0	fair	C. B Dilley.
Salt Lake City, Utah	25.79	655.1	30.36	771.1	39	3.9	50	ne.	2	0.9		6 cs	0	w.		0	0	fair	J. Craig.
San Antonio, Texas	29.48	748.8	30.20	767.1	70.5	21.4	90	calm	0	0			10 s			0	0	cloudy	T. J. Kenan.
San Diego, California	30.02	762.5	30.08	764.0	50.1	10.1	77	ne.	2	0.9		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.78	756.4	30.50	774.7	46	7.8	77	ne.	28	12.5			10 ks		ne.	0.10	2.5	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.27	768.8	30.30	769.6	54.0	12.2	93	ne.	7	3.1			10 n		ne.	0.02	0.5	light rain	B. A. Blundon
San Francisco, California	29.95	760.7	30.02	762.5	55	12.8	93	se.	10	4.5			10 n		s.	0.53	13.5	light rain	N. Gorom.
Santa Fé, New Mexico	23.44	595.4	30.48	774.2	42	5.6	48	nw.	8	3.6		10 ck	0	w.		0	0	cloudy	H. U. Jones.
Savannah, Georgia	30.07	763.8	30.16	766.1	66	18.9	93	n.	4	1.8		3 c	fg.			inap.	inap.	clear	H. W. Ford.
Shaw, Fort, Montana	26.55	674.4	30.37	771.4	4	—15.6	76	w.	2	0.9		0	0			0.11	2.8	clear	A. L. Mathews.
Shreveport, Louisiana	29.93	760.2	30.18	766.6	68	20.0	93	calm	0	0		0	5ks; fg			0	0	fair	E. N. Meekins.
Sill, Fort, Indian Territory	29.03	737.3	30.34	770.6	57.5	14.2	54	n.	14	6.3			10 ks		n.	0	0	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.42	620.3	30.26	768.6	46.0	7.8	53	calm	0	0		6 ck	1 s	sw.		0	0	fair	N. D. Lane.
Sitka, Alaska	29.89	759.2	29.96	761.0	43	6.1	71	e.	3	1.3			10 ks		s.	0	0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.74	755.4	30.23	767.8	65.3	18.5	90	e.	3	1.3		2 cs	2 ks		e.	0	0	fair	J. B. Campbell.
Smithville, North Carolina	30.11	764.8	30.15	765.8	63	17.2	93	n.	4	1.8		1 cs	1 ks			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.20	716.3	30.28	769.1	31	— 0.6	88	ne.	3	1.3			10 s		ne.	0.11	2.8	cloudy	D. Moore.
Springfield, Illinois	29.75	755.6	30.47	773.9	44	6.7	83	ne.	13	5.8		0	0			0.13	3.3	clear	T. B. Jennings.
Springfield, Massachusetts	30.15	765.8	30.29	769.4	48.6	9.2	68	nw.			1		9 n		w.	0	0	cloudy	Charles Mayr.
Springfield, Mo	28.85	732.8	30.36	771.1	53	11.7	90	ne.	12	5.4			10 s		ne.	0.98	24.9	cloudy	J. B. Marbury.
Starkville, Miss	29.71	754.6	30.21	767.3	66	18.9	93	n.	6	2.7		0	2 s			0	0	clear	C. Dill.
Stevenson, Fort, Dakota	28.49	723.6	30.46	773.7	30	— 1.1	88	e.	7	3.1		6 cs	3 s			0	0	cloudy	W. Burrows
Stockton, Fort, Texas	27.22	691.4	30.34	770.6	59.0	15.0	67	ne.	4	1.8			10 s		ne.	0	0	cloudy	J. F. Marshall.
Thatcher's Island, Mass	30.16	766.1	30.20	767.1	44.0	6.7	60	nw.	16	7.2		0	0			0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.34	694.4	30.18	766.6	48.5	9.2	67	e.			1	0	2 k		w.	0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.78	756.4	30.51	774.9	40	4.4	73	n.	12	5.4		0	1 s		ne.	inap.	inap.	clear	A. Buell.
Tucson, Arizona	27.64	702.0	30.10	764.5	52	11.1	61	s.	3	1.3		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.88	758.9	30.26	768.6	35.5	1.9	84	se.	3	1.3		6 ck	4 s			0.02	0.5	cloudy	J. Daly.
Uvalde, Texas											1								E. C. Imlay.
Verde, Fort, Arizona					45.2	7.3	93	n.				0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.94	760.5	30.20	767.1	66.3	19.1	92	n.	2	0.9			fg.			0	0	dense fog	James Kenealy.
Visalia, California	29.68	753.9	30.05	763.5	43.0	6.1	83	se.	2	0.9		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.61	625.1	30.35	770.9	23.9	— 4.5	56	calm	0	0		3 k	0	sw.		0	0	clear	T. M. Ambler.
Washington, D. C	30.19	766.8	30.31	769.9	53.5	11.9	87	n.	4	1.8			10 n		n.	0.63	16.0	light rain	B. M. Purssell.
West Las Animas, Colorado	26.36	669.5	30.48	774.2	32	0.0	71	e.	8	3.6			10 s		w.	0	0	cloudy	F. H. Brandenburg.
Williamsport, Pa	29.76	755 9	30.39	771.9	50	10.0	74	ne.	1	0.4			10 ks		w.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.10	764.5	30.16	766.1	64	17.8	93	calm	0	0			fg.			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.61	650.5	30.14	765.5	33	0.6	81	ne.	9	4.0		0	8 s		sw.	0	0	cloudy	J. Grover.
Yankton, Dakota	29.23	742.4	30.61	777.5	28	— 2.2	77	e.	2	0.9		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.88	758.9	30.03	762.7	54.1	12.3	93	calm	0	0		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8			55.0	12.8	91	w.	2	0.9			10 s		s.	0	0	cloudy	Joaquin Gomez.
Havana, Cuba, W. I	29.89	759.2	29.95	760 7	73.8	23.2	85	e.	4	1.8		ck	1 k; sk	nw.	ne.	0.06	1.5	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I	29.86	758.4	29.87	758.7	74	23.3	92	calm	0	0		0	3 s			0	0	fair	Robert Johnston.
Navassa, W. I	29.76	755.9	29.84	757.9	80.5	26.9	78	ne.	12	5.4		4 cs	3 k	e.	ne.	0	0	cloudy	F. M. Everett.
Paramaribo, S. A	29.94	760.5	29.94	760.5	80	26.7	82	se.			3	5 ck	4 s			0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.90	759.4	76	24.4	89	calm			0		10 ks		n.	0.13	3.3	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A					76.2	24.6	96	ne.			1	3 cs	0	se.		0.01	0.3	clear	Earl Flint.
Santiago de Cuba, W. I	29.88	758.9	29.90	759.4	79	26.1	82	calm	0	0		2 c	1 s		ne.	0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.58	751.3	29.64	752.8	30	— 1.1	100	se.			4		10 n			0.16	4.1	snowing	W. J. Fisher.
St. Thomas, W. I	29.78	756.4	29.92	760.0	80	26.7	91	se.					8 kn		se.	0.14	3.6	cloudy	Aug. Walloe.
York Factory, B. A	30.31	769.9	30.37	771.4	27.0	— 2.8	94	e.	13	5.8		4 k	4 s	e	e.	0	0	cloudy	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Chee Foo, China	30.24	768.1	50	10.0		calm			0		8	W.				1	ne.	drizzling.
H. M. S. Amethyst, Colonia, Uruguay †	29.94	760.5	66.5	19.2	85	sc.			1		2							d. clouds.
H. M. S. Antelope, N. 41° 08′, E. 29° 02′	30.16	766.1	59	15.0		n.			3		5	n.						d. clouds.
H. M. N. Audacious, Suez Canal, Egypt	29.87	758.7	73	22.8	63	nne.			2		3							showery.
H. M. S. Carlsford, N. 29° 56′, E. 32° 33′	30.05	763.3	69.5	20.8	90	var.			2–4		10							overcast.
H. M. S. Champion, N. 31° 14′, E. 121° 38′			60	15.6	88	calm			0		10							overcast.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C.	29.83	757.7	40	4.4	91	n.			1		10							overcast.
H. M. S. Condor, off Beiruet, Syria	29.93	760.2	78	25.6	61	n.			2		3	nw.				2	n.	d. clouds.
H. M. S Curacoa, N. 34° 18′, E. 133° 32′	30.04	753.0	58.5	14.7	81	ene.			3–5		0	ne.						d. clouds.
H. M. S. Diamond, S. 18° 11′, W. 179° 25′*†	29.61	752.1	81	27.2	82	nw.			1		2					1	nw.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	30.10	764.5	73	22.8	88	se.			1–2		5	se.						d. clouds.
H. M. S. Eclipse, N. 13° 51′, E. 48° 58′	29.83	757.7				se.			2		1	ne.				1	nw.	blue sky.
H. M. S. Espiegle, S. 25° 43′, E. 162° 46′			70	21.1	90	s.			5		3					4	s.	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.90	759.4	75.5	24.2	90	s.			4		2							misty.
H. M. S. Flying Fish, N. 37° 12′, E. 126° 27′	30.13	765.3	56.5	13.6	77	se.			4–6		10	se.				3	se.	misty.
H. M. S. Gannet, S. 15° 25′, W. 75° 20′	29.90	759.4	64	17.8	94	sse.			4		10					3	var.	misty.
H. M. S. Iris, N. 33° 15′ E. 26° 00′	30.03	762.7	73	22.8	71	nnw.			4–6		2	nnw.				2	nnw.	d. clouds.
H. M. S. Iron Duke, N. 32° 44′, E. 129° 51′	30.08	764.0	55	12.8	93	calm			0		0							blue sky.
H. M. S. Kingfisher, N. 43° 11′ W. 126° 22′	29.68	753.9	51	10.6		s.			6		6	s.				8	sse.	d. clouds.
H. M. S. Lark, S. 10° 51′, E. 162° 25′	29.88	758.9	79.3	26.3	98	calm			0		7							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.91	759.7	60	15.6		ne.			1		10							d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.08	764.0	58.6	14.8	79	nne.			1		0							blue sky.
H. M. S. Northampton, Halifax, N. S	29.90	759.4	42.5	5.8	66	nw.			2		5	wnw.						d. clouds.
H. M. S. Nelson, Melbourne, Australia	30.12	765.0	58	14.4	76	ssw.			1–3									d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.87	758.7	82	27.8	85	sw.			1		7							d. clouds.
H. M. S. Rocket, Panama, Panama	29.87	758.7	83	28.3	95	w.			2		4					3–4	sw.	d. clouds.
H. M. S. Sappho, S. 27° 34′, W. 144° 18′	29.93	760.2	72.2	22.3	100	n.			3–4		9	nw.				5	sw.	d. clouds.
H. M. S. Superb, N. 39° 37′, E. 19° 56′*	30.13	765.3	78	25.6	57	calm			0									d. clouds.
H. M. S. Sylvia, S. 53° 00′ W. 73° 35′	28.99	736.3	42.2	5.7	91	ene.			2		5	calm						d. clouds.
H. M. S. Thetis, S. 20° 02,′ W. 75° 19′	29.98	761.5	62	16.7	71	se.			3		10							overcast.
H. M. S. Tourmaline, Aden, Arabia	29.92	760.0				e.			3		2	e.				3	s.	squally.
H. M. S. Woodlark, Bushire, Persia	29.98	761.5	75.5	24.2	64	wnw.			2–3		0							blue sky.
H. M. S. Zephyr, N. 38° 56′, E. 117° 48′	30.22	767.6	43	6.1	83	w.			2		0					2	wnw.	blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.07	763.7	81.5	27.5	74	ne.			2		1		ne.			1	se.	blue sky.
Tamega, Macao, China	30.08	763.9	79.7	26.5	77	e.			3		0							blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	29.98	761.5	67	19.4	90	ne.	4	1.8			0			0	0			clear.
Navy Yard, Portsmouth, N. H	30.23	767.8	43	6.1	58	nw.	9	4.0			10		nw.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	30.09	764.3	54	12.2	68	ene.			4		0			1.84	46.7			clear.
Adams, Sitka, Alaska			52	11.1	58	ne.			1		10							light rain.
Alaska, Honolulu, Sandwich Islands	30.02	762.5	76	24.4	76	ne.			3		5		n.	0	0	sm'h		fair.
Alliance, Hampton Roads, Va	30.11	764.8	66	18.9	?	calm			0		8			0	0			hazy.
Ashuelot, Yokohama, Japan	30.26	768.6	56	13.3	80	nne.			3		1							clear.
Brooklyn, S. 50° 12′ W. 68° 14′	29.14	740.1	52	11.1	86	nw.	4	1.8			5		ne.	0	0	mod.	e.	fair.
Colorado, New York, N. Y	30.42	772.7	54	12.2	93	nne.	4	1.8			10		nw.	0.01	0.3			overcast.
Enterprise, Hampton Roads, Va	30.22	767.6	65	18.3	?	calm			0		10		calm			sm'h		cloudy.
Essex, Callao, Peru	29.94	760.5	63	17.2	94	ese.			1		10					sm'h		overcast.
Franklin, Norfolk, Va	30.17	766.3	63	17.2	100	s.	2	0.9			8		s.	0	0			foggy.
Galena, Montevideo, Uruguay	29.77	756.1	63	17.2	88	s.			3		8		sw.			mod.	s.	cloudy.
Hartford, Montevideo, Uruguay*	29.72	754.9	63	17.2	94	s.			3		10		s.	h'vy	h'vy	sm'h	s;w	cloudy.
Independence, Mare Island, Cal	30.05	763.3	54	12.2	93	se.			2		10							raining.
Iroquois, Callao, Peru	29.95	760.7	64	17.8	94	sse.			2		10							overcast.
Jamestown, Newport, R. I	30.24	768.1	49	9.4	93	n.			2		10		n.					cloudy.
Kearsarge, Hampton Roads, Va	30.14	765.5	65	18.3	100	calm			0		10					sm'h		foggy.
Lackawanna, Talcahuana, Chili*	29.74	755.4	55	12.8	86	nw.			2		10			rain	rain			cloudy.
Lancaster, Alexandria, Egypt*	29.82	757.4	75	23.9	59	nw.			5		8		nw.	0	0	sm'h	nw.	fair.
Michigan, Erie, Pa	30.38	771.6	46	7.8	100	ne.			5		8		ne.					cloudy.
Minnesota, New York, N. Y	30.34	770.6	53	11.7	66	nne.	2	0.9			10							clear?
Monocacy, Yokohama, Japan *	30.00	762.0	57	13.9	81	n.			5		0							clear.
New Hampshire, Newport, R. I	30.31	769.9	53	11.7	67	ne.			2		10		nw.			sm'h		cloudy.
Nipsic, N. 26° 21′, E. 22° 45′	30.06	763.5	69	20.6	65	e.			4		8					sm'h		cloudy
Onward, Callao, Peru	30.05	763.3	62	16.7	100	sse.			1		10		n.			long	w.	misty.
Palos, Port Lyndsey, Japan*	30.02	762.5	60	15.6	70	ne.			2		2		calm					fair.
Pensacola, Callao, Peru*	29.88	758.9	63	17.2	88	sse.	2	0.9			10			0	0	sm'h		cloudy.
Powhatan, Portsmouth, N. H	30.21	767.3	44	6.7	84	wnw.			1		5		nw.					fair.
Quinnebaug, Venice, Italy*	30.08	764.6	55	12.8	93	wsw.			1		2		calm			sm'h		dense haze.
Ranger, Mare Island, Cal	30.04	763.0	55	12.8	93	ese.			1		10							overcast.
Richmond, Yokohama, Japan*	30.24	768.1	57	13.9	69	ne.			6		0			0	0			clear.
Saratoga, N. 18° 32′ W. 82° 38′	29.81	757.2	81	27.2	87	nne.			5–6		5		ne.	0.6	15.	mod.	ene.	fair.
St. Louis, League Island, Pa	30.50	774.7	52	11.1	72	ne.			2		10							rainy.
Swatara, S. 9° 51′, W. 160° 56 *	29.85	758.2	75	23.9	72	ese.			4		5		ese.	0.06	1.5	sm'h		fair.
Tennessee, Hampton Roads, Va	30.15	765.8	66	18.9	94	ne.	5	2.2			8		sw.					cloudy.
Vandalia, Liston Point, Del*	30.22	767.6	51	10.6	93	nne.			3		10			0	0			cloudy.
Wabash, Boston, Mass	30.24	768.1	47	8.3	48	nnw.	6	2.7			10		nw.					cloudy.
Wachusetts, Mare Island, Cal	30.05	763.3	55	12.8	93	e.			1		10		calm	0	0			rainy.
Wyandotte, Washington, D. C	30.38	771.6	66	18.9	68	n.			1		5		sw.			sm'h		fair.
Yantic, Norfolk, Va	30.16	766.1	65	18.3	89	s.			1		5							fair.
Merchant Marine.																		
S. S. Grecian, Montevideo, Uruguay*	29.78	756.4	64	17.8	83	ssw.			3		10		ssw.	2 h'r	2 h'r	sm'h		cloudy.
S. S. Scandinavian, Boston, Mass	30.26	768.6	47.5	8.6		nw.			2		10		calm	0	0			overcast.
S. S. Indiana, N. 43° 55′, W 59° 09′			45	7.2	84	wnw.			6		10		nw.			r'gh	nw.	cloudy.
S. S. Lord Clive, N. 39° 45′ W. 70° 10′*†	30.02	762.5				n.			3		4		ne.			sli't	ese.	fine.
S. S. Lord Gough, off Mine Head, Ireland	29.48	748.8				ssw.			7		10		sw.	shr's	sh'rs	mod.	sw.	squally.
S. S. Ohio, Philadelphia, Pa	30.41	772.4	54	12.2	100	ne.			2		8		ne.					cloudy.
S. S. Pennsylvania, N. 50° 22′, W. 21° 00′†	29.67	753.6	50	10.0		wnw.			6		10		wnw.			long	nw.	squally.
S. S. Castor, N. 48° 55′, W. 21° 30′ *	29.73	755.1	57.2	14		nw.			6		8		nw.					
S. S. Jason, N. 44° 53′, W. 59° 22′						wnw.			4		6 k					7	wnw.	
S. S. Anchoria, N. 53° 59′, W. 22° 40′†	29.60	751.8				nw.			4		1		nnw.	sh'rs	sh'rs	mod.	w.	cloudy.
S. S. Bolivia, Glasgow, Scotland	29.18	741.2	53	11.7	86	nw.								12 h'r	12 h'r			showery.
S. S. Dorian, Malaga, Spain*	30.02	702.5	62	16.7		calm			0		0			0	0	sm'h		overcast.
S. S. Ethiopia, N. 47° 54′, W. 44° 25′	29.56	750.8	46.5	8.1	100	wnw.			5		10		wnw.	1 h'r	1 h'r	r'gh	wsw.	clear.
S. S. Galatia, N. 11° 54′, E. 84° 38′†	29.94	760 5	83.3	28.5		wnw.			3		7		wnw.	2 h'r	2 h'r	sm'h	wsw.	cloudy.
S. S. Utopia, N 11° 43′ E. 55° 02′			80	26.7	74	nnw.			3		6		nw.	0	0	mod.	ne.	cloudy.
S. S. Ailsa, Savanilla, U. S. C†	29.98	761.5	84	28.9	91	e.			2		5		nw.	1 h'r	1 h'r			fair.
S. S. Alpin, St. John, Porto Rico, W. I	29.93	760.2				se.			2				se.	3 h'r	3 h'r	sm'h		
S. S. Alvo, Port Antonio, Jamaica, W. I						ne.			3				ne.	2 h'r	2 h'r	3		hy. showers
S. S. Ambrose, Para river, Brazil†	29.96	761.0				ne			4		0			0	0			fine.
S. S. British Merchant, S. 21° 36′, W. 101° 04′	30.17	766.3	68.5	20.3	82	ese.			3		3							d. clouds.
S. S. Dynomene, S. 8° 20′, E. 87° 28′	29.91	759.7	81.5	27.5	91	w.			2		8							misty.
S. S. Gordon Castle, N. 5° 49′, E. 106° 54′	29.89	759.2	80.0	26.7	82	nw.			3		10					cf'd	w.	squally.
May Hulse, N. 17° 06′, W. 26° 13′	30.01	762.2	77.2	25.1	77	ne.			4		2							blue sky.
Markland, N. 22° 43′, W. 34° 15′	30.10	764.5	76.5	24.7	82	e.			3		7					4	ne.	d. clouds.
S. S. Olympus, N. 30° 37′. E. 32° 18′	29.90	759.4	92	33.3		nne.			2		1							blue sky.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mil.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	From.	From.	Inch.	Mil.			
MERCHANT MARINE.—Continued.																	
S. S. Seine, N. 40° 49′, W. 9° 45′	30.10	764.5	61.0	16.1	71	n.			5								d. clouds.
Inchkeith, N. 5° 32′ W. 24° 23′	29.89	759.2	80.6	27.0	85	e.			4								d. clouds.
S. S. Mertola, N. 47° 04′, W. 10° 55′	29.79	756.7	57.1	13.9	95	sw.			6								squally.
S. S. Gallia, N. 40° 28′, W. 68° 15′	30.15	765.8	57	13.9	87	nne.			4								fair
S. S. Marathon, Mersey River, England	29.54	750.3	56	13.3		s.			6								raining.
S. S. Scythia, N. 49° 00′ W. 32° 15′	29.66	751.8	57	13.9	100	ssw.			7								hazy.
S. S. Canada, N. 40° 19′ W. 68° 40′	30.21	767.3	51.8	11.0		nne.			3								clear?
S. S. Ville de Marseilles, N. 45° 14′ W. 48° 10′*†	29.75	755.6	61	16.1		w.			5								
S. S. Abyssinia, N. 40° 41′, W. 69° 14′*	30.17	760.3	59	15.0	94	n.			4								gloomy.
S. S. Arizona, N. 41° 35′, W. 65° 56′	30.17	760 3	51	10.6		nnw.			8								cloudy.
S. S. Wisconsin, N. 50° 05′ W. 35° 20′	29.35	745.5	54	12.2		ssw.			8								heavy rain.
S. S. Wyoming, N. 51° 52′ W. 7° 55′ *	29.41	747.0	54	12.2		sw.			6								threatening.
S. S. Bohemia, N. 46° 28′, W. 44° 53′†	29.83	757.7				sw.			5								foggy.
S. S. Cimbria, N. 50° 03′, W. 32° 05′	29.69	751.8	50.2	10.1		ssw.			7								covered.
S. S. Silesia, Hamburg, Germany			49	9.4		wsw.			2								rainy.
S. S. Vandalia, New York, N. Y.	30.44	773.2	57.2	14.0		nne.			2–3								fair.
S. S. Wieland, N. 50° 34′, W. 28° 24′	29.70	754.4	52	11.1		wsw.			5								misty.
S. S. Hevelius, Buenos Ayres, Argentine Rep*†	29.95	760.7	69	20.6		se.			3								clear.
S. S. Bulgarian, N. 46° 39′, W. 45° 53′ *	29.77	756.1				nnw.			4								clear.
S. S. City of San Antonio, N. 38° 26′, W. 74° 15′†	30.23	767.8	60	15.6		nne.			3								cloudy.
S. S. Colorado;Galveston, Texas†	30.15	765.8	75	23.9		n.			1								hazy.
S. S. Rio Grande, N. 24° 32′, W 81° 49′†	29.99	761.7	70	21.1		ene.			1								
S. S. Archimede, Palermo, Sicily *†	30.20	767.1	72	22.2	62	n.			1								clear.
S. S. Hermod, N. 49° 21′, W. 100 05′†	29.58	751.3	55.4	13		sw.			7								threatening.
S. S. Glenapp, N. 3° 30′, W. 49° 00′†	29.96	761.0	79	26.1		e.			2								fine.
S. S. Chalmette, N. 24° 40′, W. 83° 20′†.	30.04	763.0	79	26.1		e.			4								clear.
S. S. New York, N. 28° 23′, W. 88° 23′†	30.09	764.3	78	25.6		ne.			4								clear.
S. S. Egypt, N. 45° 07′, W. 41° 53′ *†	29.90	759.4				sw.			6								showery.
S. S. Erin, N. 46° 56′, W. 47° 01′	29.75	755.6	48	8.9		wsw.			6								foggy.
S. S. Helvetia, Liverpool, Eng	29.55	750.6	56	13.3		wnw.			4								cloudy.
S. S. The Queen, N. 43° 16′ W. 59° 05′	29.89	759.2	55.5	13.1		wnw.			8?								clear ?
S. S. City of Alexandria, Havana, Cuba. W. I.†	30.07	763.8	79	26.1		calm			0								fine.
S. S. City of Merida, N. 22° 54′, W. 85° 44′*†	29.92	759.4	71.6	22.		ne.			5								fine.
S. S. City of Washington, Vera Cruz, Mex. *†	30.10	764.5	84	28.9		n.			5								fine.
S. S. Alvena, N. 37° 28′ W. 74° 07′†	30.12	765.0	60	15.6		nne.			2								cloudy.
S. S. Amerika, N. 48° 10′ W. 36° 39′*	29.66	753.4	57.5	14.2	87	sw.			6								rainy.
S. S. Donau, N. 47° 13′, W. 42° 08′	29.69	754.1				wsw.			7								
S. S. Elbe, N. 42° 30′, W. 58° 52′	30.02	762.4	56.3	13.5	84	nw.			5								clear.
S. S. Gen. Werder, N. 45° 42′, W. 48° 51′	29.81	757.2				wsw.			5								hazy.
S. S. Habsburg, N. 45° 45′, W. 43° 40′	29.79	756.7	61.7	16.5		sw.			6								overcast.
S. S. Hohenstaufen, N. 49° 30′, W. 9° 26′	29.62	753.3	57.2	14.0		wsw.			6								clearing.
S. S. Koln, N. 48° 17′, W. 25° 42′	29.83	757.7	57.0	13.9	69	nw.			6								drizzling.
S. S. Kronprinz F. Wilhelm, N. 31°36′, W. 18° 10′*	30.15	765.8	71.6	22.0		nw.			4								fair.
S. S. Ohio, N. 28° 22′, W. 53° 45′	30.14	765.5				ne.			5								fair.
S. S. Strassburg, N. 49° 54′, W. 5° 37′	29.68	753 9	55.0	12.8	87	w.			6								covered.
S. S. Werra, N. 49° 48′, W. 5° 00′ *	29.80	756.9	56.3	13.5		ssw.			6								raining.
S. S. Belgic, Yokuhama, Japan†	30.21	767.3	58	14.4	?	ne.			5								clear.
S. S. Coptic, N. 46° 13′, W. 175° 26′	30.22	767.6	48.5	9.2	85	n.			2								foggy.
S. S. City of Augusta, N. 36° 52′, W. 74° 40′†	30.26	768.6				nw.			6								cloudy.?
S. S. Mississippi, near Astoria, Oregon †	30.09	764.3	43	6.1	92	e.			5								cloudy.
S. S. Columbia, N. 43° 34′ W. 124° 37′†	29.84	757.9	50	10.0	79	s.			3								cloudy.
S. S. Oregon, Portland, Oregon†	29.95	760.7	43	6.1	92	calm			5								rainy.
S. S. Ancon, San Francisco, Cal †	29.97	761.2	54	12.2	93	se.			0								foggy.
S. S. Dakota, N. 38° 00′, W. 122° 40′†	29.83	757.7	50	10.0	72	sw.			2		10						rainy.
S. S. Orizaba, N. 32° 40′, W. 117° 14′ †	30.08	764.0	58	14.4	82	calm			6		8						cloudy.
S. S. Australia, Sydney, N. S W	29.74	755.4	64	17.8	89	ne.			0								clear
S. S. City of New York, N. 8° 11′, W. 162° 22′†	29.93	760.2	81	27.2	78	ene.			1		1						clear,
S. S City of Pekin, N. 34° 50′, W. 179° 59′†	30.45	773.4	70	21.1	90	sse.			4		5						fair.
S. S. City of Sydney, S. 33° 54′ E. 153° 00′†	30.26	768.6	61	16.1	71	sse.			3		10						overcast.
S. S. Colima, N. 7° 13′ W. 80° 24′†	29.89	759.2	79	26.1	91	sw.			4		2						clear,
S. S. Colon, N. 36° 32′, W. 73° 40′ †	30.21	767.3				n.			3		2						clear.
S. S. San Jose, N. 14° 22′ W. 92° 00′*†	30.05	763.3				nne.			3		3						overcast.
S. S. Bermuda, N. 26° 12′, W. 67° 06′ †	30.05	763.3	79	26.1		ene.			1	5 c	10						
S. S. Muriel, Trinidad, W. I.	29.85	758.2	80	26.7		e.			2		0	ne.					
S. S. Caracas, Curacon, W. I†	29.83	757.7	83.5	28.6	85	sse.			2		10		ene.	h'vy	h'vy	long	ese.
S. S. Belgenland, N. 42° 58′, W. 58° 10′†	30.15	765.8	60	15.6	88	w.			3		2		4 h'r	4 h'r	sm'h		cloudy?
S. S. Nederland, N. 50° 06′, W. 4° 06′ †	29.84	757.9	55	12.8		ssw.			5		2						overcast.
S. S. Rhynland, Antwerp, Belgium	30.14	765 5	55	12.8	87	s.			6		2		w.	o	o	mod.	w.
S. S. Waesland, N. 50° 02′, W. 25° 21	29.75	755.6	52	11.1	66	w.			6		10						fair.
S. S. Maas, N. 43° 02′, W. 57° 12′	29.94	760.5	54.3	12.4	78	wnw.			6		1		s.	o	o		clear.
S. S. P. Caland, N. 48° 30′, W. 29° 31′	29.89	759 2	55.0	13.1	83	wsw.			6		8						clear,
S. S. W. A. Scholten, N. 49° 36′, W. 19° 07′	29 87	758.7	53.8	12.1	92	wnw.			5		8		ne.				cloudy.
S. S. State of Georgia, N. 44° 05′, W. 56° 00′†	29.98	761.5	52	11.1		wnw.			7		7		wsw.				
S. S. State of Indiana, N. 52° 24′, W. 35° 17′†	29.14	740.1	47	8.3		wsw.			3		0		w.	24 h'r	24 h'r	con.	wnw.
S. S. Nevada, Glasgow, Scotland			51	10.6		ssw.			3		9		wsw.	8 h'r	8 h'r	cross	var.
S. S. Thingvalla, Copenhagen, Denmark			48.2	9.0		ssw.			5		10		sw.	sh'rs	sh'rs		cloudy.
S. S. Iowa, N. 51° 21′, W. 23° 27′†	29.79	756.7	51	10.6		wnw.			3		10		ssw.	6 h'r	6 h'r		overcast
S. S. Pantyn, N. 45° 15′, W. 53° 20′	29.96	761.0	50	10.0					6		7		wnw.	6 h'r	6 h'r	high	covered.
S. S. Britannic, N. 47° 51′, W. 34° 04′ †	29.89	759.2	58	14.4	94	sw.			3		3		nw.			mod.	nw.
S. S. Celtic, N. 51° 31′, W. 13° 52′†	29.25	742.9	54	12.2	87	w.			5		10		sw.	o	o	mod	w.
S. S. Germanic, N. 44° 24′, W. 53° 27′ †	30.01	762.2	53	11.7		w.			7		5		w.	sh'rs	s'e'rs	h'vy	w.
S. S. Marengo, N. 49° 57′, W. 13° 46′*†	29.40	746.7				w.			5		0		w.	sh'rs	sh'rs	mod.	w.
S. S. Salerno, N. 43° 59′, E. 30° 16′†			64	17.8		s.			7		10		s.	8 h'r	8 h'r	long	sw.
S. S. Aries, N. 38° 55′, W. 75° 05′*†	30.22	767.6				nw.			9		10		nw.	o	o	h'vy	nw.
S. S. Catherine Whitting, Barnegat, N. J†	30.32	770.1				ne.			7		10			o	o	mod.	e.
S. S. Norman, N. 39° 56′, W. 75° 08′	30.26	768.6				nne.			1					rain	rain	light	se.
S. S. Saxon, N. 42° 10′, W. 70° 15′*†	30.40	772.1	55	12.8		nne.							n.	3 h'r	3 h'r		threatening
MISCELLANEOUS.						n.			9		8						cloudy.
Bg. Abbie Clifford, N. 33° 00′, W. 76° 14′			77	25.0		ne.			2		2		ne.	o	o	sm'h	fine.
Bk. Adelaid, S. 2° 10′, W. 37° 54′ *†	29.90	759.4	83	28.3		ese.			5		1		ese.	o	o	mod	se.
Bg. Alvira, N. 37° 29′, W. 71° 28′	30.15	765.8	77	25.0		ene.			4		10		ene.	o	o	sm'h	e.
Sch. Anna A. Holton, N. 37° 03′, W. 73° 48′†	30.11	764.8	74	23.3		nne.			4		10			o	o	sm'h	se.
S. Annie M. Law, Kobe, Japan*†	30.15	765.8	62	16.7		nne.			4		10			o	o		cloudy
Bk. Anna Thormann, S. 7° 56′ E. 115° 18′*.	29.90	759.4	82.4	28.0	86	calm			1		0			o	o	sm'h	
S. S. Antonio Lopez, Barcelona, Spain *.	30.20	767.1	62	10.7	80	s.			0		3 k		ne.	o	o		fine.
Bk. Aquidneck, N. 26° 09′ W. 40° 00′*†	30.03	762.7				se.			1		7			o	o		fair.
Bk. Aureola, N. 43° 18′, W 43° 13′*†	30.25	768.3	73	22.8		wsw.			2				se.			light	fair.
Bk. Alba, N. 46° 00′, W. 35° 50′ *†	30.04	763.0	59.4	15.2		sw.			5		7		wsw.	1 h'r	1 h'r	mod.	nnw.
Bk. Bayonnaise, N. 26° 27′, W. 53° 52′ *†	30.16	766.0				ne.			5								cloudy.
S. S. Burswell, Antwerp, Belgium*†	29.85	758.2	58	14.4		wnw.			4		4		e.	o	o	sm'h	rainy.
Bk. Champion, Rotterdam, Holland†.	29 71	754.5	54.5	12.5		w.			4		2		wnw.	5 h'r	5 h'r	sm'h	covered.
Schr. Chas. F Heyer, Apalachicola, Fla.	30.14	765.5	67	19.4	95	n.			7		5		w.	6 h'r	6 h'r		clear.
Schr.C. R. Flint, N. 17° 18′, W. 77° 45′†	29.88	758.9	82	27.8		nne.			2		0			0.45	11.4		fine.
S. Don Quixote, S. 7° 20′, E. 114° 08′*	29.78	756.4	87	30.6		wnw.			2		4		ene.	o	o		clear.
Bkt. David Preston, N. 42° 05′, W. 69° 50′*†	30.20	767.1	66	18.9		n.			2		4		n.			sm'h	nw.
											0			o	o	mod.	ne.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. E. D. Bigelow, N. 40° 00′ W. 54° 00′*†.....	30.05	763.3	.....	.....	.....	sw.	.....	.....	8	.....	5	.....	wsw.	0	0	.....	w.	fair.
Schr. Edith R. Seward, Wilmington, N. C*†.....	30.20	767.1	70	21.1	.....	calm	.....	.....	0	.....	1	.....	calm	0	0	.....	.....	clear.
S. E. J. Spicer, New York. N. Y.....	30.32	770.1	63	17.2	89	n.	.....	.....	4	.....	8	.....	nnw.	2 h'r	2 h'r	.....	.....	cloudy.
S. Enoch Train, N. 21° 45′. W. 40° 40′*†.....	30.12	765.0	.....	.....	.....	sse.	.....	.....	3	.....	2	.....	se.	0	0	long	ne.	clear.
Bk. Essex, Muscat, Arabia*†.....	29.86	758.4	89	31.7	.....	nnw.	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	fine.
Schr. F. E. McDonald, Washington, D. C†.....	30.39	771.9	.....	.....	.....	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	
S. S. Foscolia, Santos, Brazil*†.....	29.51	749.5	.....	.....	.....	e.	.....	.....	5	.....	.....	.....	se.	0	0	.....	.....	cloudy
Bk. Freya, N. 46° 27′, W. 10° 23′	.....	.....	58	14.4	.....	wsw.	.....	.....	6	.....	10	.....	.....	6 h'r	6 h'r	high	wnw.	rainy.
S. Glendon, S. 57° — W. 76° 35′†.....	28.73	729.7	44	6.7	.....	nnw.	.....	.....	3	.....	10	.....	nnw.	.....	.....	hv'y	sw.	rain & snow
S. Grecian. S. 9° 05′, W. 27° 35′†	29.99	761.7	80	26.7	78	ene.	.....	.....	5	.....	3	.....	ne.	0	0	sm'h	.....	clear.
Bk. Gronsvaer, S. 43° 31′ E. 105° 44′†.....	29.67	753.5	56.0	13.3	.94	w.	.....	.....	9	.....	10	.....	w.	8 h'r	8 h'r	10	w.	squally.
Bk. Hattie G. McFarland, N. 35° 20′, W. 74° 20′†.....	30.29	769.4	76	24.4	.....	nnw.	.....	.....	4	.....	3	.....	n.	0	0	long	e.	
Schr. Hattie Weston, Mayaro Bay, W. I*†.....	29.90	759.4	82	27.8	.....	ene.	.....	.....	2	.....	8	.....	e.	0	0	mod.	e.	cloudy.
S. Hedwig, N. 20° 16′, W. 51° 16′.....	30.01	762.3	80.6	27.0	83	ese.	.....	.....	3	.....	8	.....	ese.	¼ h'r	¼ h'r	3	nnw.	
S. Ivy, Queenstown, Ireland†.....	29.59	751.6	49	9.4	.....	wsw.	.....	.....	7	.....	9	.....	wsw.	7 h'r	7 h'r	.....	.....	cloudy.
Schr. Jennie N. Huddell, Vineyard Haven, Mass†.....	30.18	766.6	.....	.....	.....	nnw.	.....	.....	5	.....	5	.....	nw.	0	0	light	e.	fair.
S. S. John Hopkins, N. 41° 00′, W. 71° 40′	.....	.....	56	13.3	.....	n.	.....	.....	5	.....	4	.....	ne.	0	0	.....	.....	fair.
Schr. John L. Thomas, Vivorilla Cays, C. A *†.....	29.98	761.5	.....	.....	.....	nne.	.....	.....	3	.....	3	.....	ne.	0	0	.....	.....	fair.
Bg. John Wesley, Cardenas, Cuba, W. I†.....	29.86	758.4	.....	.....	.....	nne.	.....	.....	2	.....	2	.....	.....	0	0	.....	.....	clear.
Bk. Joseph A. Ropes, N. 14° 33′. E. 60° 28′*†.....	29.92	760.0	82	27.8	71	ene.	.....	.....	1	.....	4	.....	ene.	.....	.....	mod.	ne.	fair.
Light House Tender, Laurel, Key West, Fla.†.....	29.98	761.5	78	25.6	.....	ene.	.....	.....	2	.....	4	.....	ene.	1 h'r	1 h'r	.....	.....	fair.
Bk. Liberia, N. 29° 33′, W. 33° 05′*.....	30.14	765.5	71	21.7	85	e.	.....	.....	5	.....	8	.....	e.	12 h'r	12 h'r	large	ne.	squally.
Bg. Lilian, N. 15° 50′ W. 57° 40′†.....	29.90	759.4	81	27.2	.....	ese.	.....	.....	7	.....	9	.....	se.	1½h'r	1½h'r	rg'h	e.	cloudy.
Bg. L. & W. Armstrong, N. 29° 28′, W. 71° 38′*†.....	30.10	764.5	.....	.....	.....	e.	.....	.....	3	.....	1	.....	ene.	0	0	mod.	ene.	clear.
S. S. Madrid, N. 51° 31′, W. 8° 36′*†.....	29.58	751.3	54	12.2	87	sw.	.....	.....	6	.....	7	.....	wsw.	0	0	r'gh	wsw.	clearing.
S. S. Malabar, S. 4° 59′ E. 98° 26′*†.....	29.90	759.4	.....	.....	.....	ne.	.....	.....	1	.....	0	.....	.....	0	0	mod	sw.	clear.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†.....	29.92	760 0	73	22.8	.....	ene	.....	.....	5	.....	0	.....	.....	0	0	.....	.....	clear.
Bg. Mattie B. Russell, Matanzas, Cuba*†.....	30.14	765.5	.....	.....	.....	calm	.....	.....	0	.....	1	.....	ne.	0	0	.....	.....	fine.
Schr. Moravian, N. 12° 33′, E. 81° 43′†.....	29.93	760.2	.....	.....	.....	nne.	.....	.....	.....	.....	.....	.....	ne.	4 h'r	4 h'r	sm'h	nne.	cloudy.
Bg. Myrtle, N. 19° 06′, W. 63° 47′ †.....	30.02	762.5	.....	.....	.....	se.	.....	.....	4	.....	10	.....	se.	2 h'r	2 h'r	long	e.	cloudy.
Bk. Norena, N. 27° 35′, W 79° 13′*†.....	30.14	765.5	.....	.....	.....	ne.	.....	.....	3	.....	3	.....	ene.	0	0	light	e.	fine.
S. Orealla, S. 6° 25′, E. 81° 30′*.....	29.94	760.5	.....	.....	.....	sse.	.....	.....	1	.....	2	.....	sse.	4 h'r	4 h'r	sm'h	.....	clear.
S. Paramita, San Francisco, Cal†.....	29.84	757.9	56	13.3	.....	sse.	.....	.....	2	.....	3	.....	sse.	0	0	.....	.....	smoky.
S. S. Radnorshire, N. 41° 59′. W. 10° 35′*†.....	30.15	765.8	.....	.....	.....	w.	.....	.....	5	.....	7	.....	wsw.	2 h'r	2 h'r	mod.	nw.	drizzling.
Bk. Rebus, N. 25° 41′, W. 66° 02.....	29.81	757.2	78	25.6	.....	ese.	.....	.....	4	.....	8	.....	ese.	2 h'r	2 h'r	mod	ese.	cloudy.
S. St. Francis, S. 50° 00′ W. 79° 50′†.....	29.21	741.9	40	4.4	.....	w.	.....	.....	5	.....	4	.....	w.	0	0	long	sw.	clearing.
Schr. S. B. Hubbard, Jacksonville, Fla†.....	30.07	763.8	73	22.8	.....	calm	.....	.....	0	.....	10	.....	.....	4 h'r	4 h'r	.....	.....	dense fog.
Bk. Scud, Off Tobago, W. I*†.....	29.89	759.2	.....	.....	.....	ese.	.....	.....	3	.....	2	.....	ese.	2 h'r	2 h'r	sm'l.	e.	clear.
Bk. Southern Belle, N. 40° —′ W. 45° 45′*†.....	30.18	766.6	68	20.0	.....	sw.	.....	.....	4	.....	1	.....	sw	0	0	sm'h	.....	clear.
S. Sovereign Of The Seas, N. 34° 06′ W. 126° 40′*†.....	29.80	756.9	60	15.6	94	ssw.	.....	.....	1	.....	9	.....	sw.	20 h'r	20h'r	long	wnw.	rainy.
Bg. Teneriffe, N. 31° 52′, W. 78° 50′.....	30.09	764.3	.....	.....	.....	ne.	.....	.....	4	.....	.....	.....	ne.	rain	rain	mod.	.....	rainy.
Bk. Truro, N. 49° 15′ W. 14° 55′*†.....	29.77	756.1	.....	.....	.....	wsw.	.....	.....	6–7	.....	9	.....	wsw.	2 h'r	2 h'r	long	w.	squally
U.S. F. C. S. S. Fish Hawk, Washington, D. C†.....	30.42	772.7	54	12.2	100	ne.	.....	.....	3	.....	10	.....	ne.	0.83	21.1	.....	.....	raining.
Bk. Vincenzo Accame, N. 39° 42′, W. 16° 20′†.....	30.30	769.5	68.0	20.0	.....	w.	.....	.....	4	.....	8	.....	w.	0	0	r'gh	nw.	fair.
Schr. Viola Reppard. Savannah, Ga†.....	30.09	764.3	72	22.2	.....	calm.	.....	.....	0	.....	10	.....	.....	0	0	.....	.....	foggy.
Schr. Walter L. Plummer, N. 18° 57′, W. 73° 22′*†.....	29.90	759.4	.....	.....	.....	ene.	.....	.....	3	.....	8	.....	ene.	0	0	sm'h	.....	fine.
Bk. Wandering Jew, N. 7° 47′, W. 28° 33′†...	29.81	757.2	81	27.2	.....	ese.	.....	.....	3	.....	3	.....	se.	2 h'r	2 h'r	mod	ne.	clear.
Bk. Warden Law, S. 58° 32′. W. 73° 01′†.....	29.12	739.6	.....	.....	.....	nnw.	.....	.....	1	.....	3	.....	nnw.	3 h'r	3 h'r	mod.	nw.	fair.

International Chart I. November 2, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 3, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Velocity.		Force.	Clouds. Amount and kind.		Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.*																			
Nemours	.....	.....	30.17	766.4	66.2	19.0	94	s	.....	.....	1	.....	1	.....	.....	0	0	very fair.	Malaterre.
Algiers	.....	.....	30.12	765.0	64.8	18.2	65	n.	.....	.....	2	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.10	764.5	77.0	25.0	43	e.	.....	.....	2	.....	2	.....	.....	0	0	fair	Fonfréde.
Tunis	.....	.....	30.12	765.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.18	766.5	68.0	20.0	49	nw.	.....	.....	2	.....	1	.....	.....	0	0	very fair	Pérès.
Tebessa	.....	.....	30.16	766.1	62.6	17.0	43	sw.	.....	.....	4	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	64.8	18.2	9	nw.	.....	.....	2	.....	6	.....	.....	0	0	cloudy	Lonchamp.
Laghouat	.....	.....	30.20	767.1	60.4	15.8	35	ese.	.....	.....	3	.....	1	.....	.....	0	0	very fair.	Abraham.
Biskra	.....	.....	30.17	766.4	73.0	22.8	41	.....	.....	.....	.....	.....	5	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	30.07	763.8	30.16	766.0	51.3	10.7	78	sse.	7	3.1	.....	.....	1	.....	.....	0	0	very fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.67	753.6	30.22	767.6	57.2	14.0	61	e.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.45	748.1	30.24	768.0	46.0	7.8	92	w.	0	0	.....	.....	10	.....	.....	0.051	1.3	.....	Dr. Wierzbiski.
Eperies	29.32	744.6	30.21	767.4	47.1	8.4	84	calm	.....	.....	0	.....	10 s	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.95	735.3	30.21	767.4	51.8	11.0	73	sw.	.....	.....	3	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.75	730.3	30.21	767.4	48.4	9.1	74	nw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.81	731.7	30.17	766.4	46.4	8.0	86	ene.	.....	.....	1	.....	1	.....	.....	0	0	clear	The Staff.
Lemberg	29.22	742.2	30.24	768.0	42.1	5.6	82	ne.	.....	.....	1	.....	10	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	30.12	765.0	30.23	767.9	64.2	17.9	78	w.	.....	.....	1	.....	3	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.71	754.7	30.18	766.0	48.6	9.2	95	w.	.....	.....	2	.....	10	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.93	760.2	30.21	767.3	55.8	13.2	61	calm	.....	.....	0	.....	2	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.13	765.3	30.23	767.9	60.4	15.8	64	nw.	.....	.....	1	.....	2	.....	.....	0	0	.....	Royal Academy.
Vienna	29.52	749.8	30.22	767.5	50.0	10.0	76	e.	.....	.....	1	.....	0	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.36	745.7	29.46	748.3	47.7	8.7	74	s.	17	7.6	.....	.....	2	.....	.....	0.170	4.3	blue sky	W. Boswell
Armagh, Observatory	29.18	741.2	29.41	747.0	46.1	7.8	92	s.	27	12.8	.....	.....	10	.....	.....	.....	.....	raining	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.67	753.6	51.9	11.1	74	ssw.	21	9.4	.....	.....	10	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	29.14	740 1	29.68	753.9	50.0	10.0	81	ssw.	12	5.4	.....	.....	10	.....	.....	.....	.....	misty	Thomas Mackereth.
Bradford, Yorkshire	29.27	743.4	29.69	754.1	50.7	10.4	69	sw.	.....	.....	3	.....	4	.....	.....	0.49	12.4	d. clouds	McLandsborough&Preston
Bridgetown, Barbadoes	29.83	757.7	29.86	758.4	83.0	28.3	74	ne.	.....	.....	2	.....	8	.....	.....	.....	.....	overcast	Corpl. J. Surgenor, A. H. C.
Cardington	29.67	753.6	29.79	756.7	54.4	12.4	70	sw.	.....	.....	2.0	.....	5	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E	29.78	756 4	29.91	759.7	57.1	13.9	93	w.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.69	754.1	29.91	759.7	53.1	11.7	90	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	overcast	The Staff.
Fort Napier, Natal	27.58	700.5	29.79	756.7	88.0	31.1	30	n.	.....	.....	2	.....	2	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29 05	753 1	29.86	758.4	88.0	31.1	59	w.	.....	.....	1	.....	4	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.18	766.6	30.23	767.8	64.2	17.9	92	w.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.26	743 2	29.47	748.5	48.7	9.3	72	s.	.....	.....	6	.....	10	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.71	754.6	29.89	759.2	54.2	12.3	70	wsw.	.....	.....	4	.....	0	.....	.....	.....	.....	d. clouds	The Staff.
Guernsey	29.73	755.1	30.02	762.5	54.0	12.2	86	sw.	.....	.....	1	.....	10	.....	.....	blank	blank	overcast	A. Collenette, F. M. S.
Kew, Observatory	29.86	758.4	29.89	759.2	55.7	13.2	95	sw.	22	9.8	.....	.....	8	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.52	749.8	29.77	756.1	54.0	12.2	63	sw.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	J. C. Smith.
Malta, Mediterranean	30.10	764 5	30.17	766.3	68.8	20.4	90	ne.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.87	758.7	29.91	759.7	79.0	26.1	79	ne.	.....	.....	3	.....	8	.....	.....	.....	.....	overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.27	743.4	29.79	756.7	52.9	11.6	70	ssw.	.....	.....	5	.....	3	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.63	752.6	29.86	758.4	54.1	12.3	76	sw.	.....	.....	5	.....	5	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.83	757.7	29.91	759.7	54.4	12.4	79	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	overcast	John Merrifield.
Sandwick Manse, Orkneys	29.18	741.2	29.28	743.7	46.7	8.2	81	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	d. clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.06	763.5	30.13	765.3	61.2	16.2	61	sw.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	29.42	747.3	29.70	754 4	53.5	11.9	70	ssw.	.....	.....	4	.....	5	.....	.....	0.27	6.9	d. clouds	W. F. Cooper.
Siloth Rectory	29.52	749.8	29.55	750.6	52.2	11.2	71	wsw.	.....	.....	4	.....	10	.....	.....	1.170	29.7	squally	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.69	754.1	50.0	10.0	97	s.	17	7.6	.....	.....	10	.....	.....	.....	.....	overcast	I. New.
Stratfield Turgiss	29.69	754.1	29.90	759.4	54.4	12.4	70	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	showery	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.81	757.2	29.87	758.7	55	12.8	86	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	gloomy	W. Newcombe.
Valencia, Observatory	29.42	747.3	29.45	748.0	54.9	12 7	90	ssw.	58	25.9	.....	.....	10	.....	.....	blank	blank	misty	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.24	768.1	30.28	769.1	34	1.1	74	n.	13	5.8	.....	.....	10 n	.....	nw.	0.135	3.4	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	30.33	770.4	30.40	772.1	31	— 0.6	71	nw.	10	4.5	.....	2 k	8 ks	nw.	nw.	0	0	cloudy	G. A. Blair.
Father Point, Quebec*	30.43	772.9	30.45	773.4	29	— 1.7	88	n.	35	15.6	.....	.....	10 s	.....	n.	Imap.	Imap.	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.45	748.0	30.33	770.4	20	— 6.7	84	w.	8	3.6	.....	0	0	.....	.....	Imap.	Imap.	hazy	James Stewart.
Halifax, N. S*	30.15	765 8	30.29	769.4	35	1.7	89	n.	13	5.8	.....	8 k	0	ne.	.....	Imap.	Imap.	cloudy	A. Allison.
Kingston, Ontario*	30.25	768.3	30.00	777.2	28	— 2.2	84	n.	3	1.3	.....	5 cs	2 s	w.	.....	0	0	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	30.35	770.9	30.57	776.5	30	— 1.1	62	nw.	5	2.2	.....	8 cs	0	nw.	.....	0	0	cloudy	C. H. McLeod, C. F.
Parry Sound, Ontario*	29.84	757 9	30.58	776.7	29	— 1.7	84	e.	8	3.6	.....	2 k	5 ks	e.	e.	0	0	fair	Rev. R. Mosley.
Port Dover, Ontario	29.84	757.9	30.58	776 7	28	— 2.2	100	ne.	7	3.1	.....	10 ck	0	w.	.....	0	0	fair	H. Morgan.
Port Stanley, Ontario	29.85	758.2	30.53	775.4	31	— 0.6	68	e.	10	4.5	.....	.....	10 ks	.....	w.	0	0	cloudy	M. Payne.
Quebec, Quebec*	30.16	766.1	30.51	774.9	27	— 2.8	64	w.	.....	.....	1	8 cs	2 k	w.	w.	0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.12	765 0	30.61	777 5	26	— 3.3	92	w.	3	1.3	.....	5 c	0	nw.	.....	0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.80	756.9	30.56	776.2	29	— 1.7	67	se.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	
St. Andrews, N. B	30.36	771.1	30.42	772.7	31	— 0.6	68	nnw.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Sydney, C. B*	30.10	764.5	30.16	766.1	36	2.2	82	nw.	13	5.8	.....	.....	10 n	.....	nw.	0	0	cloudy	T. C. Hill, C. E
Toronto, Ontario*	30.20	767.1	30.61	777.5	28	— 2.2	64	n.	10	4.5	.....	5 ck	0	w.	.....	0	0	fair	Magnetic Observatory.
Yarmouth, N. S*	30.32	770.1	30.39	771.9	37	2.8	72	n.	6	2.7	.....	.....	10 k	.....	n.	0	0	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	.....	.....	.....	.....	26.0	— 3.3	75	ne.	.....	.....	3	.....	10 ks	.....	.....	0	0	cloudy	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	36	2.2	100	.....	.....	.....	.....	.....	10	.....	.....	0.23	5.8	snowy	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.90	759.4	29.93	760.2	67.0	19.4	78	w.	3.8	1.7	.....	8 c	0	.....	.....	0	0	.....	John Duthie.
Cape Town, C. G. H. Obs'y	29.91	759.7	29.95	760.7	81.5	27.5	55	sse.	10	7.2	.....	0	2	.....	.....	0	0	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.16	766.1	44.2	6.8	46	calm	7.4	3.3	.....	.....	10	.....	.....	0	0	foggy	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.30	769 7	30.33	770.3	44.2	6.8	91	w.	3.8	1.7	.....	.....	3	.....	.....	0.079	2.0	.....	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.96	760.9	30.00	762.1	50.2	10.1	87	s.	.....	.....	2	.....	9	.....	.....	.....	.....	hazy	Oversergent Fischer.
Fanöe	29.83	757.7	29.85	758 3	48.9	9.4	100	ssw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	Overloerer Lauridsen.
Godthaab, Greenland	29.58	751.3	29.62	752.4	20.3	— 6.5	84	nne.	.....	.....	4	.....	4	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.47	748.6	29.49	749.1	27.7	— 2.4	.....	n.	.....	.....	4	.....	5	.....	.....	.....	.....	.....	.....
Stykkisholm, Iceland	28.80	731.6	28.85	732.7	36.0	2.2	94	ne.	.....	.....	8	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.00	736.5	29.03	737.4	47.5	8.6	74	se.	23.5	10.5	.....	.....	7	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.69	754.1	29.78	756.5	50.4	10.2	96	s.	.....	.....	6	.....	9	.....	.....	.....	.....	.....	Loerer Oesterbol.
French																			
Agen, Normal School	29.67	753.6	30.32	770.1	56.5	13.6	86	calm	.....	.....	0	.....	0	.....	.....	0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.58	751.3	30.13	765.3	55.0	12.8	90	sw.	.....	.....	1	.....	n	ne.	ne.	0.055	1.4	.....	M. Nicot, Director.
Arras, Engineer School	29.68	753 9	29.93	760.3	55.4	13.0	81	sw.	.....	.....	6	.....	k; n	.....	.....	0.063	1.6	.....	M. Fénéon, Command't.
Avignon, Normal School	30.18	766.5	30.26	768.5	60.4	15.8	67	nnw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	M. Giraud, Director.
Bar-sur-Seine	29.62	752.3	30.18	766.5	55.4	13.0	64	sw.	.....	.....	2	0	5 k	.....	w.	0	0	cloudy	M. Saillard, Director.
Beauvais, Normal School	29.81	757.2	30.08	764.0	55.9	13.3	73	wsw.	.....	.....	2	.....	8	.....	w.	0.012	0.3	very cloudy.	M. Frère Eugène Marie.
Besançon, Normal School	29.28	743.6	30.18	766.6	64.4	18	78	ssw.	.....	.....	2	.....	.....	.....	.....	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.98	761.6	30.25	768.3	58.6	14.8	72	sw.	.....	.....	1	.....	8	.....	.....	0	0	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.62	752.3	30.18	766.5	57.6	14.2	60	calm	.....	.....	0	.....	kn	.....	sw.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.85	758.1	30.09	764.2	58.3	14.6	78	w.	.....	.....	2	.....	10	.....	w.	0.047	1.2	.....	M. de Kermaree, Dir.
Caen, Normal School	29.89	759.2	29.97	761.1	56.5	13.6	67	wsw.	.....	.....	2	.....	2	.....	wsw.	0.217	5.5	slightly cld'y	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.78	756.5	30.10	764.6	53.4	11.9	83	wsw.	.....	.....	2	.....	5	.....	ssw.	0	0	cloudy	M. Jadot, Director.
Charleville, Normal School	29.56	750.9	30.08	764.1	50.9	10.5	76	wsw.	.....	.....	3	.....	10	.....	.....	0	0	covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.85	732.8	30.20	767.0	60.8	16.0	44	ne.	.....	.....	1	2 c;ck	0	.....	.....	0	0	¼ covered	M. Allnard, Director.
Cluny, Normal School	29.41	746.9	30.27	768.9	59.4	15.2	60	sw.	.....	.....	1	.....	2	w.	.....	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.28	743.6	30.15	765.8	55 0	12.8	61	sw.	.....	.....	3	.....	10	sw.	sw.	0	0	covered	Dr. Coulet, Director.
Gap, Normal School	27.69	703.4	30.25	768.4	55.4	13.0	50	.....	.....	.....	.....	.....	2	.....	n.	0	0	.....	M. Jeangirard, Director.
Grésque, du Rhone	29.11	739.5	30.24	768.1	59.2	15.1	61	e.	.....	.....	1	.....	5	.....	se.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.48	748.9	30.27	768.8	54.0	12.2	67	ese.	.....	.....	1	c	0	se.	.....	0	0	.....	M. Ablard, Director.
Guéret	28.60	726.4	30.20	767.0	53.2	11.8	75	e.	.....	.....	.....	.....	5	.....	.....	0	0	cloudy	M. Delorme, Dir.
Lamballe, Normal School	29.75	755.7	30.03	762.7	56.3	13.5	79	w.	.....	.....	2	0	5 k	.....	w.	0.051	1.3	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.01	752.2	30.18	766.6	60.8	16.0	69	sse.	.....	.....	1	0	1 k	.....	.....	0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.04	762.9	30.14	765.5	58.6	14.8	78	wsw.	.....	.....	2	.....	8	.....	w.	0.079	2.0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.20	741.6	30.27	768.8	54.1	12.3	71	e.	.....	.....	1	1 c	0	.....	.....	0	0	clear	M. André, Director.
Mans, Normal School	29.83	757.6	30.12	765.1	55.9	13.3	89	wnw.	.....	.....	3	.....	.....	.....	sw.	0	0	.....	M. Piboen, Director.
Marseille, Observatory	29.95	760.6	30.21	767.4	63.9	17.7	70	sw.	.....	.....	1	.....	3	.....	.....	0	0	.....	M. Stephan, Director.
Mt. Louis	24.98	634.5	29.82	757.5	47.8	8.8	57	sw.	7.4	3.3	.....	.....	0	.....	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	30.11	764.7	30.22	767.7	61.9	16.6	66	ne.	.....	.....	4	.....	0	.....	.....	0	0	clear	M. Gaizin, Director.
Nancy, Normal School	29.32	744.6	30.10	764.6	54.0	12.2	65	ssw.	.....	.....	1	ck	0	.....	.....	0	0	.....	M. Husse, Director
Nantes, Observatory	30.02	762.4	30.19	766.7	59.5	15.3	70	sw.	.....	.....	1–3	.....	10 kn;n	.....	sw.	0.035	0.9	.....	M. Larocque, Director.
Perpignan, Observatory	30.14	765.5	30.25	768.4	59.4	15.2	69	e.	5.6	2.5	.....	.....	4	sw.	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.32	541.6	.....	.....	38.3	3.5	.....	calm	.....	.....	0	.....	1	sw.	0	0	clear	Gen'l de Nansouty, Dir.	
Privas, Normal School	29.11	739.3	30.18	766.5	59.0	15	44	s.	.....	.....	3	.....	1	n.	n.	0	0	clear	M. Taillen.
Puy de Dôme Obs'y, Summit	25.30	642.6	.....	.....	40.6	4.8	69	wsw.	.....	.....	3	2 c	0	.....	.....	0	0	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.20	767.0	30.23	767.8	59.0	15.0	80	wsw.	.....	.....	1	.....	2	.....	sw.	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.87	758.6	30.08	764.0	58.6	14.8	76	sw.	.....	.....	1	.....	5	sw.	sw.	0.012	0.3	cloudy	M. Brotier, Director.
Rodez, Normal School	28.20	716.3	30.39	771.8	50.0	to	76	w.	.....	.....	1	0	1 n	.....	.....	0	0	clear	M. Seger, Director.
Rouen, Normal School	30.01	762.2	30.06	763.4	57.6	14.2	71	sw.	.....	.....	1	.....	5	sw.	.....	0.028	0.7	cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	55.0	12.8	.....	w.	.....	.....	2	.....	.....	.....	w.	0.020	0.5	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.95	760.7	30.11	764.9	55.8	13.2	70	sw.	.....	.....	2	.....	9	.....	wsw.	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.57	751.0	30.30	769.5	60.3	15.7	75	ese.	.....	.....	1	.....	1	w.	.....	0	0	clear	M. Baillaud, Director.
Tours	29.96	761.6	30.16	766.1	57.9	14.4	76	sw.	.....	.....	1	.....	5	w.	sw.	0	0	cloudy	M. de Tastes.
Versailles, Observatory	29.61	752.1	30.10	764.6	54.7	12.6	72	w.	.....	.....	2	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28 73	729.8	30.20	767.1	49.6	9.8	66	s.	.....	.....	4	.....	.....	.....	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.30	744.3	30.15	765.8	54.1	12.3	56	se.	.....	.....	2	0	1 8	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.94	760.5	30.12	765 0	54.0	12.2	70	sw.	.....	.....	2	.....	10	.....	.....	0.059	1.5	.....	Prof. Dr. Arndt.
Breslau	29.71	754.5	30.24	768.1	51.4	10.8	72	sw.	.....	.....	1	.....	0	.....	.....	0.067	1.7	.....	Royal University Obs'y.
Carlsruhe	29.72	755.0	30.17	766.3	51.8	11.0	70	sw.	.....	.....	1	.....	1	.....	.....	0	0	.....	Albert Senz.
Cassel	29.32	744.6	30.03	762.7	56.8	13.8	57	s.	.....	.....	4	.....	5	sw.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.77	756.1	30.14	765.5	54.5	12.5	63	ssw.	.....	.....	1	.....	1	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.77	730.8	30.24	768.1	45.9	7.7	86	ssw.	.....	.....	1	.....	2	w.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.93	760.2	30.02	762.5	54.5	12.5	72	s.	.....	.....	4	.....	7	.....	.....	0.020	0.5	.....	E. Preller.
Kiel	29.94	760.4	29.95	760.8	53.2	11.8	77	s.	.....	.....	3	.....	9	.....	.....	0.004	0.1	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.76	755.8	30.18	766 6	50.7	10.4	76	s.	.....	.....	3	.....	8	wsw.	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.93	760.2	30.12	765.1	51.8	11.0	81	s.	.....	.....	2	.....	10 ks	.....	sw.	0	0	hazy	Weather Observatory.
Memel	30.27	768.8	30.32	770.0	36.7	2.6	74	se.	.....	.....	2	9 cs	0	.....	.....	.....	.....	.....	Issermann.
Munich	28.36	720.3	30.23	767.9	48.7	9.3	70	n.	.....	.....	1	.....	2	nw.	.....	0	0	.....	Central Station.
Neufahrwasser	30.22	767.7	30.24	768.1	47.5	8.6	81	s.	.....	.....	1	.....	9	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.60	751.9	30.13	765.3	53.2	11.8	76	s.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dicknether.
Stuttgart	29.20	741.6	30.10	764.4	54.0	12.2	72	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	30.05	763.3	30.08	763.9	49.6	9.8	84	sse.	.....	.....	3	.....	10	.....	.....	0	0	.....	Profs. Brauns & Reimer.
Greek.																			
Athens	29.78	756.4	30.16	766.1	66.0	18.9	.....	ne.	.....	.....	2.0	.....	1 k	.....	.....	0	0	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.96	760.8	30.01	762.1	79.9	26.6	58	wsw.	14.0	6.3	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.42	747.3	29.89	759.2	87.8	31.0	26	nw.	4.0	1.8	.....	.....	0	.....	.....	0	0	hazy	
Bombay	29.85	758.1	29.88	759.0	81.1	27.3	78	nw.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	27.99	710.9	29.82	757.3	86.4	30.2	30	wnw.	19.0	8.5	.....	.....	4	w.	w.	0	0	d. clouds	
Trichinopoly	29.58	751.2	29.85	758.2	89.2	31.8	55	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Bellary	28.33	719.5	29.76	755.9	91.8	33.2	34	w.	8.0	3.6	.....	.....	7	.....	.....	0	0	d. clouds	
Belgaum	27.33	694.2	29.88	759.0	73.9	23.3	81	wsw.	7.0	3.1	.....	.....	8	ne.	.....	0	0	d. clouds	
Lahore	29.17	740.9	29.92	760.1	72.3	22.4	52	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.00	736.5	29.91	759.7	73.8	23.2	50	sw.	.....	.....	.....	.....	0	.....	.....	0	0	.....	
Agra	29.35	745.4	29.91	759.8	81.2	27.3	26	w.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.79	731.2	29.82	757.5	83.5	28.6	57	ne.	5.0	2.2	.....	.....	9	.....	ne.	0	0	gloomy	
Jubbulpore	28.52	724.5	29.89	759.1	78.0	25.6	42	ene.	4.0	1.8	.....	.....	2	.....	.....	0	0	d. clouds	
Lucknow	29.52	749.7	29.90	759.4	77.2	25.1	48	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.56	750.9	29.88	759.0	73.8	23.2	61	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.71	754.6	29.90	759.3	77.3	25.2	72	n.	1.8	0.8	.....	.....	2	n.	n.	0	0	.....	
Hazaribagh	27.86	707.5	29.88	759 0	74.1	23.4	69	ne.	5.0	2.2	.....	.....	5	.....	.....	0	0	d. clouds	
Cuttack	29.77	756.1	29.85	758.2	79.5	26.4	88	calm	0	0	.....	.....	5	.....	.....	0	0	d. clouds	
Calcutta, Alipore	29.82	757.5	29.85	758.1	79.6	26.4	80	ene.	1.0	0.4	.....	.....	8	.....	.....	0.01	0.3	d. clouds	
Dhubri	29.73	755.2	29.85	758.2	77.4	25.2	77	calm	0.6	0.3	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.77	756.2	29.86	758.5	80.7	27.1	95	w.	1.5	0.7	.....	.....	3	.....	e.	0	0	blue sky	
Sibsagar	29.54	750.3	29.88	759.0	75.6	24.2	80	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.93	760.3	29.96	760 8	85.6	29.8	48	se.	5.6	2.5	.....	.....	6	.....	se.	0	0	d. clouds	
Jeypore	28.48	723.4	29.93	760.1	80.7	27.1	46	nw.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.82	757.5	30.24	768.0	58.8	14.9	64	calm	0	0	.....	.....	1	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.75	755.6	30.27	768.9	55.4	13.0	79	w.	3.1	1.4	.....	.....	4	.....	wsw.	0	0	.....	Prof. Schiapparelli.
Padua	30.14	765.5	30.25	768.3	58.3	14.6	66	wnw.	2.5	1.1	.....	.....	8	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.35	745.4	30.26	768.7	53.8	12.1	85	sse.	1.8	0.8	.....	.....	5	ne.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec.	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	30.04	763.1	30.24	768.0	60.4	15.8	58	n.	1.8	0.8			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.32	719.4	30.26	768.6	51.1	10.6	80	nw.			4		3			0	0		Prof. D. C. Bruno
Pesaro	30.20	767.1	30.25	768.3	58.3	14.6	80	n.	0	0			0			0	0		Prof. Luigi Guidi.
Florence	29.98	761.6	30.24	768.1	56.8	13.8	89	w.			2		0			0.004	0.1		Prof. Costantino Pitter.
Leghorn	30.08	764.0	30.17	766.2	61.9	16.6	77	nne.	4.9	2.2			9			0	0		Prof. P. Monte.
Rome	30.04	763.0	30.21	767.4	63.7	17.6	61	n.	0	0			6			0	0		Prof. P. Tachini.
Lecce	29.95	760.7	30.20	767.1	64.4	18.0	56	nnw.	11.9	5.3			5	nw.		0	0		Prof. C. de Giorgi.
Cosenza	29.32	744.8	30.22	767.5	61.2	16.2	69	sw.	2.5	1.1			9	w.		0	0		Prof. D. Conti.
Cagliari	29.97	761.1	30.16	766.0	67.1	19.5	63	se.			2		1			0	0		Prof. A. Pacinotti.
Palermo	29.95	760.6	30.20	767.0	65.3	18.5	60	ne.	4.2	1.9			6			0	0		Prof. G. Cacciatore.
Syracuse	30.14	765.6	30.19	766.7	64.8	18.2	70	nne.	12.3	5.6			5	sw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.69	754.0	30.21	767.3	64.9	18.3	46	nnw.	0.7	0.3			3	nw.		0	0		Prof. F. Brioschi.
Stelvio	22.29	566.2			29.1	— 1.6	56	sw.			4		1			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.31	566.8			32.7	0.4	69	e.			2		2			0	0	clear	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.90	759.5	29.93	760.3	54.1	12.3	75	calm			0		10 n		w.	0.224	5.7	raining	Hattori.
Awomori	29.67	758.7	29.91	759.7	49.0	9.4	83	n.	0.4	0.2			10 s			0	0	overcast	K. Ogawa.
Hakodate	29.89	759.1	29.90	759.4	54.5	12.5	77	sse.	25.8	11.5			10			0.175	4.4	overcast	
Hiroshima					54.4	12.4	95	nne.	6.3	2.8			10 ck			0.014	0.3	covered	Y. Miwa.
Kanazawa	29.85	758.1	29.95	760.7	56.5	13.6	92	ese.	1.3	0.5			10			0.250	6.3	raining	S. Endo.
Kioto	29.78	756.4	29.95	760.7	57.6	14.2	83	nnw.	1.9	0.8			10s;ks			0.755	19.2	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.84	757.9	30.04	763.0	58.5	14.7	88	n.	2.1	0.9			10 s			0.140	3.6		S. Takehayashi.
Nemuro	30.24	768.1	30.30	769.6	46.0	7.8	86	se.	15.0	6.7		10	0			0	0	cloudy	
Niigata	29.89	759.2	29.92	759.9	58.2	14.6	65	se.	13.3	5.9			10ck;s		w.	0.145	3.7	covered	M. Morita.
Nobiru	30.00	761.9	30.01	762.3	52.1	11.2	87	nnw.	7.0	3.1			10 s			0.010	0.2	covered	H. Midzushima.
Osaka	29.93	760.3	29.95	760.7	57.7	14.3	84	n.	4.6	2.1			10 s			0.590	15.1		
Sapporo					45.0	7.2	93	se.	21.6	9.6			10			0	0	covered	
Tokei Obs'y, Yeddo	29.98	761.4	30.06	763.4	53.7	12.1	76	nnw.	6.3	2.8			10 s			0	0	cloudy	The Staff.
Wakayama	29.89	759.1	29.94	760.6	59.0	15.0	95	calm	0	0			10			0.614	15.6	raining	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.91	759.7	30.10	764.5	77.0	25.0	65	ene.	15.0	6.7		0	6 k;ks		e.	0.11	2.8	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.84	605.5	30.06	763.5	54.9	12.7	74	ene.	inap.	inap.		0	1 k		ene.	0	0	clear	Prof. Vicente Fernandez.
Leon	24.45	621.0	30.21	767.3	53.6	12.0	87	ene.			3	6 c	0	ne.		0	0	cloudy	Prof. M. Leal.
Mazatlan	29.78	756.3	30.04	762.9	72.0	22.2	92	e.	1.6	0.8		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.25	590.5	30.39	772.0	49.6	9.8	75	nw.	0.4	0.2		0	1 ks			inap.	inap.	fine	The Staff.
Morelia	24.35	618.5	30.49	774.3	57.7	14.3	67	ne.	1.8	0.8		0	0			0	0	clear	M. Tena, M. D.
Orizaba																			
Pabellon, Aguascalientes	24.12	612.7	30.20	767.1	57.7	14.3	73	n.			2	0	7 ks		ene.	0	0	cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.9	30.24	768.0	50.4	10.2	48	nw.	1.8	0.8		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.64	575.3	30.42	772.6	46.2	7.9	70	w.	7.8	3.4		2 c	1 c			0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.93	760.2	29.93	760.2	51.6	10.9		ssw.			5					0.098	2.5		
Groningen	29.87	758.6	29.92	760.0	51.1	10.6		s.			4					0.043	1.1		
Helder	29.85	758.2	29.85	758.2	51.1	10.6		s.			5					0.492	12.5		
Hellevoetsluis	29.93	760.1	29.93	760.1	50.5	10.3	90	ssw.			2					0.197	5.0		H. van der Brink
Utrecht	29.92	760.0	29.97	761.2	52 0	11.1	86	ssw.			4		8			0.067	1.7	very cloudy	
NORWEGIAN.																			
Bergen	29.48	748.9	29.55	750.5	53.2	11.8	65	s.	29	13			10			0.764	19.4	raining	
Brono	29.61	752.0	29.65	753.0	46.4	8.0	50	sse.	29	13			5			0	0		
Christiania	29.67	753.6	29.82	757.3	46.6	8.1	92	sse.	13	6			10			0.228	5.8	raining	
Gjæsvær	29.87	758.6	29.89	759.2	33.4	0.8		se.			4		1						
Lodingen	29.76	755 9	29.81	757.1	42.4	5.8	52	s.			7		8			0	0		
PORTUGUESE.																			
Angra, Azores	30.19	766.9	30.35	770.8	64.0	17.8	84	calm	0	0			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.21	741.8	30.20	767.1	64.4	18.0	58	wnw.	0.7	0.3			2			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.17	766.4	30.26	768.6	72.1	22.3	49	se.	3.8	1.7			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.92	759.9	30.28	769.1	59.2	15.1	77	ene.	4.3	1.9			8			0	0		The Staff.
Ponta Delgada, Azores	30.31	769.9	30.38	771.7	71.6	22.0	58	calm	0	0			4			0	0		
Saint Paul de Loando	29.04	752.9	29.84	758.0	78.6	25.9	93	wsw.	1.8	0.8			5	w.		0	0		
Serra da Estrella	28.46	646.0	30.23	767.8	47.3	8.5	69	sse.	7.4	3.3			2			0	0		
RUSSIAN.																			
Akmolinski	28.93	734.9	30.05	763.3	33.3	0.7	80	sw.	7	3		3 c	0			0	0		Major K. Lasarew.
Archangel	30.02	777.8	30.64	778.3	2.1	—16.6	69	ne.	4	2			0			0	0		Capt. Sseliwerstow.
Astrakhan	30.12	765.0	30.04	762.9	54.1	12.3	41	wnw.	11	5		ck	1 s			0	0	light clouds	Capt. Wisganow.
Barnaul	29.47	748.5	29.98	761.6	33.6	0.9	89	sw.	13	6			10			0.059	1.5		Meteorological Obs'y.
Dorpat	30.13	765.3	30.39	771.9	32.0	0.0	65	sse.	2	1			10 n			0	0		Observatory.
Ekaterinburg	29.15	740.4	30.23	767.8	0.1	—17.7	76	nne.	11	5			10			0.110	2.8	snowing	Meteorological Obs'y.
Kasan	29.34	745.1	29.61	752.2	25.0	— 3.9	89	nne.	20	9			10			0.201	5.1	snowing	Observatory.
Kertch	30.01	762.3	30.03	762.8	55.2	12.9	62	calm	0	0			9 n			0	0		Lagorio & Saatyrex.
Kieff	29.46	748.2	30.12	765.1	34.0	1.1	66	nw.	13	6		0	8 ks;n						Observatory.
Lugan	29.72	754.9	29.93	760.2	42.4	5.8	78	w.	22	10			10			blank	blank		Meteorological Obs'y.
Nikolaiev	30.08	763.9	30.15	765.7	48.6	9.2	72	nnw.	18	8		0	6 km			0	0		Capt. Kurdakow.
Pekin, China	30.06	763.5	30.20	767.1	41.9	5.5	33	nw.	4	2		0	0			0	0		Physical Observatory.
St. Petersburg	30.37	771.5	30.39	771.9	26.8	— 2.9	64	ene.	9	4			10km			inap.	inap.		Central Physical Obs'y.
Semipalatinsk	29.57	751.1	30.26	768.5	35.6	2.0	80	sse.	13	6			3			0	0		Major Lasarew.
Tashkend, Laboratory	28.52	724.4	30.10	764.4	55.2	12.9	48	calm	0	0			0						Teich, A. M.
Tiflis	28.03	727.3	30.03	762.7	66.4	19.1	40	nw.	0	4		4 c8	0			0	0		Physical Observatory.
Tomsk																			
Vladivostock	29.66	753.3	29.72	755.0	36.3	2.4		n.	9	4			10 n			1.547	39.3		
Warsaw	29.82	757.5	30.26	768.6	44.8	7.1	74	calm	0	0		ck	4 s						Astronomical Obs'y.
Wilna	29.89	759.1	30.33	770.4	30.6	— 0.8	75	ne.	7	3			10			0.004	0.1		Berg, Assistant.
Yeniseisk	29.75	755.6	30.07	763.7	2.3	—16.5	85	e.	9	4			10			0.020	0.5	snowing	M. O. Marks.
SCOTTISH.																			
Monach Lt			29.16	740.7	52	11.1	93	wsw.			7		10			0.2	5.	raining	J. Youngclause.
North Unst			29.35	745 5				sw.			4	7	0	ne.				blue sky	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.10	764.5	30.21	767.2	61.9	16.6	80	e.	1.8	0.8		0	3			0	0	clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.24	768.0	30.30	769.5	62.6	17.0	55	nw.	1.8	0.8		2	0	ne.		0	0	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.29	693.1	30.30	769.6	51.8	11.0	85	w.	4.9	2.2		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	27.99	711.0	30.22	767.6	60.3	15.7	52	ne.	4 e	1.8		0	1			c	0	almost clear	The Staff.
Murcia, Met. Obs'y	30.02	762.4	30.16	766.0	68.4	20.2	76	sse.	1.3	0.6		3	5	sw.		0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.40	746.8	30.28	769.0	58.6	14.8	64	s.	5.4	2.4		1 c	0	calm		0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.34	745.3	30.24	768.2	59.0	15.0	85	se.	1.3	0.6			4			0.169	4.3	cloudy	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.80	757.0	29.86	758.4	80.8	27.1	68	ne.	7.7	3.4		0	2 ks			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.13	765.3	30.23	767.8	64.0	17.8	78	wnw.	5.6	2.5		0	2		w.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.79	756.7	29.88	759.0	75.9	24.4	98	calm	0	0		4 s	2 k	sw.	sw.	0.138	3.5		Manuel Maese.
Tuguegarao, Philippine Id's	29.84	757.8	29.97	761.2	74.2	23.4	86	nw.	4.5	2.0		6 c8	4 ks	e.	ne.	0.01	0.3		José L. Yrastorza.
SWEDISH.																			
Haparanda	30.31	769.8	30.35	770.8	27.7	— 2.4	87	s.			4		10			0	0		
Umea	30.20	767 0	30.25	768.3	35.2	1.8	85	s.			4		10			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From	Lower. From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	30.13	765.4	30.19	766.7	40.3	4.6	68	s.	.....	.....	6	.....	10	.....	.....	0.091	2.3	....	.....
Stockholm	30.04	762.9	30.21	767.4	40.3	4.6	71	sse.	.....	.....	2	.....	10	.....	.....	0.008	0.2	.....	.....
Wisby	30.11	764.7	30.17	766.2	42.1	5.6	82	sse.	.....	.....	4	.....	10	.....	.....	0.004	0.1	.....	.....
Sub-sertes.																			
Upsala	30.08	764.1	30.17	766.3	38.8	3.8	74	se.	15.7	7.0	.....	.....	8	.....	ssw.	0.024	0.6	.....	S. G. Fineman.
Swiss.																			
Geneva	28.81	731.8	30.22	767.7	58.1	14.5	54	ssw.	.....	.....	5	.....	1	.....	.....	0	0	clear.....	**The Observatory.**
Turkish.																			
Constantinople	.....	.....	30.18	766.6	57.6	14.2	67	e.	3	1.5	.....	.....	4	.....	sw.	0	0	.....	The Observatory.
Yalona	.....	.....	30.19	766.7	64.6	18.1	.....	nw.	.....	.....	1	.....	2	.....	.....	0	0	slightly cl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.90	759.4	73.9	23.3	48	nw.	.....	.....	1	8 cs	.....	sw.	.....	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.51	774.9	30.59	777.0	33	0.6	60	n.	1	0.4	.....	10 c	0	nw.	.....	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.84	757.9	30.54	775.7	30	— 1.1	88	nw.	6	2.7	.....	3 k	4 s	w.	w.	0	0	fair.....	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.22	640.6	30.32	770.1	36	2.2	61	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	W. O. Barnes.
Assinnaboine, Ft., Montana	27.20	692.4	30.24	768.1	23	— 5.0	64	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	B. O. Lenoir.
Atlanta, Georgia	29.12	739.6	30.34	770.6	55	12.8	80	n.	18	8.0	.....	.....	10 s	.....	.....	0	0	cloudy.....	H. C. Smith.
Atlantic City, New Jersey	30.51	774.9	30.52	775.2	34	1.1	72	n.	15	6.7	.....	4 k	0	nw.	.....	0.03	0.8	fair.....	Jas. M. Watson.
Augusta, Georgia	30.16	766.1	30.36	771.1	56	13.3	83	ne.	8	3.6	.....	.....	10 n	.....	ne.	0.12	3.0	light rain....	John Healy.
Baltimore, Maryland	30.55	776.0	30.60	777.2	37	2.8	61	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	Geo W Felger.
Barnegat, New Jersey	30.51	774.9	30.53	775.4	38	3.3	72	n.	20	8.9	.....	0	8 k	.....	nw.	0.13	3.3	cloudy.....	G. A. Hill.
Bennett, Fort, Dakota	28.72	729 5	30.41	772.4	24	— 4.4	88	calm	0	0	.....	0	1 s	.....	.....	0	0	clear.....	A. Pritchard.
Benton, Fort, Montana	27.27	692.6	30.23	767.8	24	— 4.4	76	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	S. Wheaton.
Bismarck, Dakota	28 47	723.1	30.39	771.9	27	— 2.8	88	nw.	3	1.3	.....	0	1 s	.....	.....	0	0	clear.....	Cyrus Cramer.
Block Island, Rhode Island	30.49	774.4	30.52	775.2	37	2.8	82	n.	29	13.0	.....	0	0	.....	.....	0	0	clear.....	J. T. Elker.
Boise City, Idaho	20.94	684.3	29.88	758.9	37	2.8	92	nw.	2	0.9	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	B. E. Light.
Boston, Massachusetts	30.38	771.6	30.54	775.7	32.0	0.0	68	nw.	10	4.5	.....	2 c	0	w.	.....	0	0	clear.....	O. B. Cole.
Brownsville, Texas	30.13	765.3	30.18	766.6	68.5	20.3	93	n.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	M. McCarty.
Buffalo, New York	29.80	756.9	30.58	776.7	31.8	— 0.1	78	ne.	3	1.3	.....	4 ck	sk.	sw.	.....	0	0	fair.....	W. Finn.
Buford, Fort, Dakota	28.42	721.9	30.40	772.1	30	— 1.1	80	s.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	F. A. Mellen.
Burlington, Vermont	30.20	768.6	30.57	776.5	32.0	0.0	65	n.	7	3.1	.....	1 cs	9 s	w.	n.	inap.	inap.	cloudy.....	W. B Gates.
Cairo, Illinois	29.90	761.0	30.38	771.6	52.6	11.4	85	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	W. H. Ray.
Cape Henry, Virginia	30.43	772.9	30.45	773.4	48	8.9	77	n.	12	5.4	.....	0	4 s	.....	n.	0.05	1.3	fair.....	A. K. Alderson.
Cape May, New Jersey	30.50	774.7	30.53	775.4	38	3.3	57	n.	20	8.9	.....	0	0	.....	.....	inap.	inap.	clear.....	W. E. Smith.
Cape Mendocino, California	29.18	741.2	29.72	754.9	48	8.9	93	se.	14	6.3	.....	.....	10 ks	.....	se.	0.82	20.8	cloudy.....	J. J. McLean.
Cedar Keys, Florida	30.06	763.5	30.08	764.0	68	20.0	84	ne.	13	5.8	.....	0	0	.....	.....	0	0	clear.....	F. W. Mixer.
Champaign, Illinois	29.50	750.8	30.42	772.7	36.6	2.6	77	se.	6	2.7	.....	0	hz	.....	.....	0	0	clear.....	L. A. Welsh.
Charleston, S. Carolina	30.19	766.8	30.25	768.3	59	15.0	87	ne.	19	8.5	.....	.....	10 s	.....	ne.	0	0	threatening..	J. H. Smith.
Charlotte, N. Carolina	29.52	749.8	30.40	772.1	49.0	9.4	77	ne.	9	4.0	.....	4 cs	0	.....	.....	0.21	5.3	fair.....	D. O'Donoghue.
Chattanooga, Tennessee	29.48	748.8	30.34	770.6	58.0	14.4	90	ne.	2	0.9	.....	0	9 s; fg	.....	s.	inap.	inap.	cloudy.....	B. L. Goulding.
Cheyenne, Wyoming	24.22	615.2	30.43	772.9	27.2	— 2.7	51	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	E. McGovern.
Chicago, Illinois	29.74	755.4	30.48	774.2	42.5	5.8	81	se.	8	3.6	.....	0	1 s	.....	se.	0	0	clear.....	J. Mitchell.
Chincoteague, Virginia	30.45	773.4	30.47	773.9	42	5.6	82	n.	32	14.3	.....	3 k	0	e.	.....	0.01	0.3	clear.....	C. F. Dickens.
Cincinnati, Ohio	29.74	755.4	30.43	772 9	40	4.4	82	e.	3	1.3	.....	2 ck	0	e.	.....	0	0	clear.....	R. B. Watkins.
Cleveland, Ohio	29.75	755.6	30.52	775.2	34.7	1.5	67	se.	8	3.6	.....	10 k	0	w.	.....	0	0	cloudy	J. B. Newlin.
Coleman City, Texas	28.50	723.9	30.39	771.9	52	11.1	80	n.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	L. Dorman.
Columbus, Ohio	29.50	750.8	30.45	773.4	35	1.7	69	ne.	2	0.9	.....	2 cs	0	.....	.....	0	0	clear.....	D. Cuthbertson.
Concho, Fort, Texas	28.35	720.1	30.36	771.1	54.8	12.7	80	calm	0	0	.....	0	5 s	.....	.....	0	0	fair.....	J. McGlone.
Custer, Fort, Montana	27.07	687.6	30.39	771.9	30	— 1.1	81	calm	0	0	.....	0	5 k	.....	calm	0	0	fair.....	W. B. Lamar.
Davenport, Iowa	29.70	755.9	30.45	773.4	37	2.8	82	ne.	4	1.8	.....	4 cs	fg.	.....	.....	0	0	fair.....	R. R. Martin.
Davis, Fort, Texas	25.44	746.2	30.34	770.6	54	12.2	77	nw.	4	1.8	.....	.....	fg.	.....	.....	0	0	dense fog....	J. Williams.
Dayton, Washington T'y	28.05	712.5	29.83	757.7	36.7	2.6	99	w.	2	0.9	.....	0	7 s	.....	sw.	0.04	1.0	threatening.	H. Clifford.
Deadwood, Dakota	25 51	647.9	30.34	770.6	48	8.9	54	ne.	3	1.3	.....	5 c	0	w.	.....	0	0	fair.....	G. W. Scott.
Delaware Breakwater, Del	30.49	774.4	30.51	774.9	42	5.6	74	n.	33	14.8	.....	0	0	.....	.....	0	0	clear.....	T. S. Townsend.
Denison, Texas	29.45	748 8	30.32	770.1	60.0	15.6	87	n.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. W. Byram.
Denver, Colorado	24.94	633.5	30.44	773.2	33.0	0.6	65	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	F. M. Neal.
Des Moines, Iowa	29.50	749.3	30.45	773.4	37	2.8	82	se.	2	0.9	.....	0	sk.	.....	.....	0	0	clear.....	F. W. Conrad.
Detroit, Michigan	29.78	756 4	30.52	775.2	41.5	5.8	73	e.	13	5.8	.....	.....	10 s	.....	w.	0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.70	703.6	30.44	773.2	42	5.6	100	s.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog ...	V. P. Temple.
Dubuque, Iowa	29.73	755.1	30.48	774.2	34.8	1.6	79	calm	0	0	.....	0	1s; fg	.....	.....	0	0	clear.....	J. Harvey Smith.
Duluth, Minnesota	29.57	751.1	30.36	771.1	39	3.9	73	w.	8	3.6	.....	0	2 s	.....	.....	0	0	clear.....	N. B. Conger.
Eagle Pass, Texas	29.40	748.3	30.29	769 4	65.1	18.4	90	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	F. Belford.
Eagle Rock, Idaho	25.33	643.4	30.19	766.8	30	— 1.1	80	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	J. M. Clifford.
Eastport, Maine	30.34	770.6	30.41	772.4	33	0.6	68	n.	16	8.0	.....	2 k	0	n.	.....	0	0	clear.....	D. C. Murphy.
Elliott, Fort, Texas	27.52	699.0	30.45	773.4	38	3.3	73	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	W. J. Cundall.
El Paso, Texas	26.49	672.8	30.34	770.6	54	12.2	80	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	J. O'Dowd.
Erie, Pennsylvania	29.80	756.9	30.56	776.2	35	1.7	69	se.	4	1.8	.....	10 k	0	se.	.....	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.70	755.9	30.46	773.7	38	3.3	72	w.	1	0.4	.....	.....	10 n	.....	w.	inap.	inap.	light rain....	George Heathcote.
Fredericksburg, Texas	28.53	724.6	30.35	770.9	68	20.0	66	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	Frank Halwegler.
Galveston, Texas	30.15	765.8	30.20	767.1	73	22.8	84	n.	12	5.4	.....	0	hz.	.....	.....	0	0	clear.....	E. O'C. MacInerney.
Grand Haven, Michigan	29.80	756.9	30.50	774.7	36.0	2.2	69	e.	6	2.7	.....	.....	10 k	.....	w.	0	0	cloudy.....	J. Mueller.
Grant, Fort, Arizona	25.39	644.9	30.23	767.8	52	11.1	52	s.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	Robert C. Lord.
Hatteras, North Carolina	30.28	769.1	30.30	769.6	59	15.0	75	ne.	32	14.3	.....	6 k	3 s	ne.	.....	0	0	cloudy.....	R. M. Crawford.
Helena, Montana	25.84	656.3	30.22	767.6	28	— 2.2	77	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	N. C. Smith.
Henrietta, Texas	29.32	744 7	30.36	771.1	47	8.3	100	n.	6	2.7	.....	.....	fg.	.....	.....	0	0	dense fog....	J. P. Sherry.
Huron, Dakota	28.93	734.8	30.41	772.4	29	— 1.7	74	nw.	4	1.8	.....	1 cs	0	.....	.....	0	0	clear.....	S. W. Glenn.
Indianapolis, Indiana	29 57	751.1	30.41	772.4	36	2.2	82	ne.	2	0.9	.....	0	hz.	.....	.....	0	0	clear.....	O. Schutze
Indianola, Texas	30.18	766.6	30.21	767.3	73.7	23.2	99	nw.	14	6.3	.....	0	8 ks	.....	n.	0	0	threatening.	I. A. Reed.
Jacksboro, Texas	29.13	739.9	30.35	770 9	54	12.2	67	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	D. J. Carr.
Jacksonville, Florida	30.07	763.8	30.12	765.0	67	19.4	90	ne.	12	5.4	.....	.....	10 s	.....	ne.	0.72	18.3	cloudy.....	J. W. Smith.
Keogh, Fort, Montana	27.04	702.0	30.31	769.9	30	— 1.1	80	ne.	6	2.7	.....	4 c	0	.....	.....	0	0	fair.....	A. Schneider.
Keokuk, Iowa	29.73	755.1	30.42	772.7	42.0	5.6	82	n.	1	0.4	.....	0	1 s	.....	.....	0	0	clear.....	F. Z. Gosewisch.
Key West, Florida	29.90	759.4	29.92	760.0	75.5	24.2	85	n.	14	6.3	.....	0	3 k	.....	n.	0.09	2.3	clear.....	R. H. Paxton.
Kittyhawk, North Carolina	30.37	771.4	30.39	771.9	55.5	13.1	72	ne.	36	16.1	.....	0	8 ks	.....	ne.	0.20	5.1	cloudy.....	H. Mc P. Baldwin.
Knoxville, Tennessee	29.25	742.9	30.32	770 1	55.4	13.0	89	n.	3	1.3	.....	2 c	3 s	w.	.....	0	0	fair.....	J. A. Cody.
La Crosse, Wisconsin	29.62	752.3	30.44	773.2	38	3.3	72	s.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	S. C. Emery.
Leavenworth, Kansas	29.46	748.3	30.40	772.1	52	11.1	72	e.	2	0.9	.....	.....	10 s	.....	.....	inap.	inap.	cloudy.....	A. W. Browne.
Lewiston, Idaho	29.05	737 9	29.92	760.0	37.5	3.1	85	e.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	W. Bell.
Little Rock, Arkansas	29.98	761.5	30.31	769.9	60	15.6	93	n.	7	3.1	.....	.....	10s; fg	.....	.....	0	0	cloudy	W. U. Simons.
Los Angeles, California	29.78	756.4	30.18	766.6	50	10.0	80	n.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy..	T. S. Collins.
Louisville, Kentucky	29.76	755.9	30.35	770.9	43	6.1	74	ne.	10	4.5	.....	.....	9 s	.....	.....	0	0	cloudy	L. M. Dey.
Lynchburg, Virginia	29.80	756.9	30.52	775.2	42	5.6	70	n.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	Lewis Duane.
Mackinaw City, Michigan	29.80	756.9	30.49	774.4	35.0	1.7	64	s.	5	2.2	.....	10 cs	0	s.	.....	0	0	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.27	768.8	30.28	769.1	57	13.9	80	n.	30	13.4	.....	.....	10 s	.....	n.	0.28	7.1	cloudy.....	F. P. Chaffee.
Madison, Wisconsin	29.40	746.7	30.47	773.9	38	3.3	89	s.	4	1.8	.....	4 cs	0	w.	.....	0	0	fair.....	C. A. Shaw.
Maginnis, Fort, Montana	25.52	648.2	30.04	763.0	33	0.6	88	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	F. Burke.
McKavett, Fort, Texas	28.02	711.7	30.40	772.1	58	14.4	80	se.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	J. E. Thatcher.
Marquette, Michigan	29.67	753.6	30.44	773.2	35	1.7	79	se.	1	0.4	.....	.....	10 n	.....	.....	0.01	0.3	light snow..	J. Gilligan.
Memphis, Tennessee	29.96	761.0	30.31	769 9	59	15.0	93	n.	4	1.8	.....	.....	10 s	.....	.....	inap.	in ap.	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.69	754.1	30.48	774.2	47	8.3	77	s.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy.....	W. Linn.
Missoula, Fort, Montana	26.77	679.9	30.18	766.6	26	— 3.3	77	calm	0	0	.....	.....	8 s	.....	.....	0	0	cloudy.....	J. H. Young.
Mobile, Alabama	30.12	765.0	30.16	766.1	66	18.9	90	n.	4	1.8	.....	2 c	0	.....	.....	0	0	clear.....	C. A. Read.
Montgomery, Alabama	29.99	761.7	30.23	767.8	64.5	18.1	89	ne	6	2.7	.....	2 k	1 s	w.	e.	0	0	clear.....	J. B. McLaughlin.

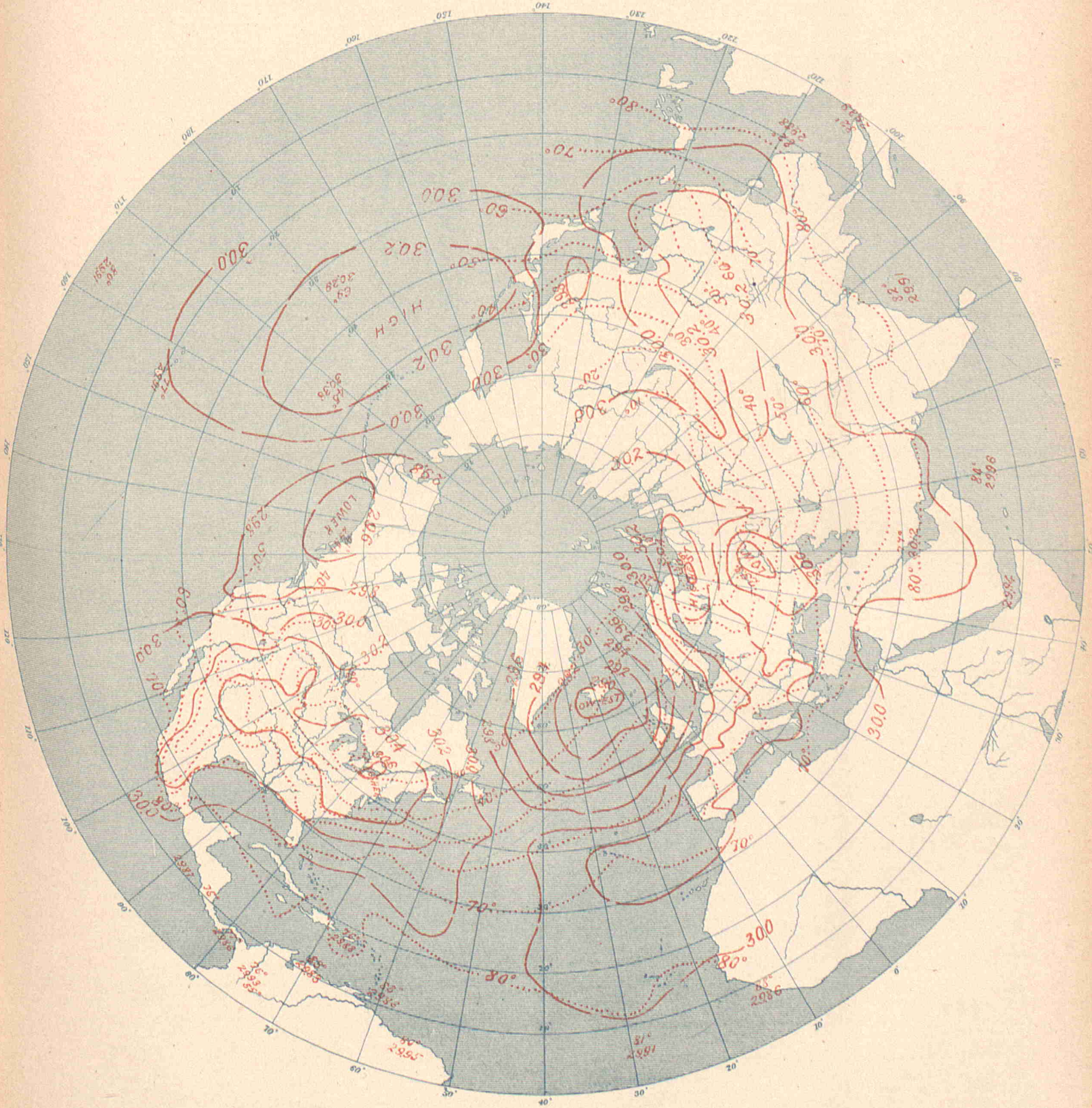
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.26	743.2	30.32	770.1	30	— 1.1	88	sw.	4	1.8		0	5 8			0	0	fair	H. Bessant.
Morgantown, W. Virginia	29.43	747.5	30.49	774.4	35.5	1.9	79	calm	0	0		0	0			0	0	clear	J. C. Sprigg, jr
Mt. Washington, N. H.	23.89	606.8	30.45	773.4	7.5	—13.6	89	nw.	35	15.6			fg		nw.	0.02	0.5	dense fog	J. G. Linsley.
Nashville, Tennessee	29.70	754 4	30.30	769.6	54.0	12.2	80	n.	3	1.3			10 ks		nw.	Inap.	Inap.	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.42	772.7	30.54	775.7	29	— 1.7	67	n.	10	4.5		0	0			0	0	clear	J. H. Sherman.
New London, Connecticut	30.52	775.2	30.57	776.5	35	1.7	64	nw.	4	1.8		0	0			0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.11	764.8	30.17	766.3	71.0	21.7	84	n.	2	0.9		3 c	sk.	nw.		Inap.	Inap.	clear	L. Dunne.
Newport, Rhode Island	30.47	773.9	30.52	775.2	35.0	1.7	64	n.	8	3.6		0	0			0	0	clear	W. McGillivray.
New York, New York	30.40	772.1	30.58	776.7	35.5	1.9	69	nw.	6	2.7		0	0			0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.42	772 7	30.45	773.4	47	8.3	77	ne.	10	4.5		0	0			0.02	0.5	clear	Wm. Davis.
North Platte, Nebraska	27.36	694.9	30.44	773.2	37.6	3.1	69	calm	0	0		0	4 s			0	0	fair	E. F. Brady.
Olympia, Washington T'y	29.70	754.4	29.74	755.4	41.5	5.3	96	calm	0	0			10 n			0.37	9.4	light rain	J. Dascomb.
Omaha, Nebraska	29.20	741.7	30.44	773.2	41.5	5.3	72	calm	0	0		0	0			0	0	clear	A. Pollak.
Oswego, New York	30.23	767.8	30.57	776.5	37.5	3.1	52	se.	5	2.2			10 s		nw.	0	0	cloudy	S. W. Beall.
Palestine, Texas	29.71	754.6	30.28	769.1	63.5	17.5	97	n	6	2.7			fg.			0	0	dense fog	L. M. Pindell.
Pensacola, Florida	30.12	765.0	30.18	765.8	65.3	18.5	96	nw.	4	1.8		1 c	0	nw.		0	0	clear	M. McGauran.
Philadelphia, Pa.	30.48	774.2	30.58	776.7	35	1.7	64	n.	10	4.5		0	0			Inap	Inap.	clear	T. T. Townsend.
Pike's Peak, Colorado	18.03	458.0	30.69	779.5	22	— 5.6	80	w.	52	23.3		0	5 s		w.	0	0	fair	H. Hall.
Ploche, Nevada	24.08	611.6	30.22	767.6	47	8.3	61	se.	8	3.6		0	4 ks			0	0	fair	C. N. Kitchel.
Pittsburg, Pennsylvania	29.66	753.4	30.50	774.7	32.8	0.4	68	e.	5	2.2		5 ck	0	w.		0	0	fair	W. Daly.
Poplar River, Montana	28.96	712.7	30.35	770.9				sw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.13	765.3	30.14	765.5	74.0	23.3	90	ne.	11	4.9		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.82	757.4	30.54	775.7	31.3	— 0.4	83	e.	5	2.2		10 cs	0			0	0	cloudy	W. O. Bailey.
Portland, Maine	30.43	772.9	30.48	774.2	37.0	2.8	61	nw.	10	4.5		7 c	0	nw.		0	0	fair	W. W. Elchelberger.
Portland, Oregon	29.72	754 9	29.79	756.7	43.0	0.1	93	calm	0	0			10 n			0.39	9.9	light rain	M. L. Hearne.
Portsmouth, N. O.					60	15.6	75	ne.	45	20.1			10 s		ne.	0.01	0.3	cloudy	F. S Coburn.
Prescott, Arizona	24.93	633 2	30.27	768.8	39.5	4.2	59	sw.	2	0.9			8 ks			0	0	cloudy	W. H. Clendenon.
Provincetown, Mass.	30.46	773.7	30.49	774.4	39	3.9	54	nw.	19	8.5		3 k	3 s	w.		0	0	fair	P. T. Jenkins.
Punta Rassa, Florida	29.95	760.7	29.96	761.0	67.5	19.7	90	n.	12	5.4		0	1 s			Inap.	Inap.	clear	W. J. Evans.
Red Bluff, California	29.44	747.8	29.84	757.9	47.3	8.5	92	w.	6	2.7			10 n			3.46	87.9	heavy rain	E. van Dyk.
Rochester, New York	29.88	758.9	30.58	776.7	32	0.0	78	calm	0	0		10 k	hz.	e.		0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.22	742.2	29.80	756.9	45	7.2	93	e.	1	0.4		0	9 s		s.	0.23	5.8	cloudy	J. J. Nanry.
Sacramento, California	29.81	757.2	29.89	759.2	50.9	10.5	93	nw.	5	2.2			10 n			1.30	33.0	heavy rain	J. A. Barwick
St. Louis, Missouri	29.77	756.1	30.40	772.1	50.7	10.4	93	ne	4	1.8			10 s			0	0	cloudy	J. H. Weber.
St. Paul, Minnesota	29.46	748.3	30.38	771.6	33.0	0.6	88	se.	5	2.2		10 k	0	w.		0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.43	747.5	30.36	771.1	20	— 6.7	84	se.	3	1.3		0	0			0.06	1.5	clear	C. B Dilley.
Salt Lake City, Utah	25.66	651.8	30.23	767.8	50	10.0	47	se.	4	1.8			10 ks		sw.	0	0	cloudy	J. Craig.
San Antonio, Texas	29.54	750.3	30.26	768.6	65.0	18.3	78	n.	5	2.2		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.09	764.3	30.16	766.1	55.4	13.0	92	n.	1	0.4			fg.		nw.	0	0	dense fog	A. C. Dobbins.
Sandusky, Ohio	29.75	755.6	30.47	775.9	38	3.3	61	s.	12	5.4			10 s		sw.	0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.53	775.4	30.56	776.2	37.2	2.9	61	ne.	25	11.2		3 k	0			0.01	0.3	clear	B. A. Blundon.
San Francisco, California	29.82	757.4	29.89	759.2	53	11.7	93	e.	6	2.7			10 n		s.	2.41	61.2	light rain	N. Gorom.
Santa Fé, New Mexico	23.47	596.1	30.51	774.9	49	9.4	46	e.	5	2.2		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.15	765.8	30.24	768.1	59	15.0	78	n	12	5.4			10 ks		n.	0	0	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.38	670.0	30.20	767.1	28	— 2.2	77	se.	2	0.9		8 cs	0	w.		0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	30.00	762.0	30.25	768.3	66	18.9	93	ne.	9	4.0			10 s		ne.	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	29.08	738.6	30.39	771.9	48.5	9.2	88	nw.	6	2.7			10 s		n.	0	0	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.52	622.8	30.36	771.1	43.0	6.1	63	se.	1	0.4		3 c	2 s			0	0	fair	N. D. Lane.
Sitka, Alaska	29.36	745.7	29.44	747.8	41	5.0	78	e.	26	11.6			10 n		e.	0.60	15.2	light rain	F. W. Fickett.
Smith, Fort, Arkansas	29.81	757.2	30.30	769.6	65.0	18.3	90	e.	4	1.8			10 s			0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.24	768.1	30.28	769.1	55	12.8	80	n.	15	6.7			10 s		ne.	0	0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	27.84	707.1	29.92	760.0	36	2.2	72	e.	12	5.4			10 s			0	0	cloudy	D. Moore.
Springfield, Illinois	29.70	754.4	30.42	772.7	44.5	6.9	76	e.	4	1.8		1 c	8 s	w.	w.	0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.43	772.9	30.57	776.5	33.2	0.7	66	calm			0	0	1 n		sw.	0	0	clear	Charles Mayr.
Springfield, Mo.	28.87	733.3	30.38	771.6	55	12.8	93	se.	3	1.3		0	8s;fg		se.	0	0	cloudy	J. B. Marbury.
Starkville, Miss.	29.76	755.9	30.26	768.6	61	16.1	93	n.	0	2.7		3 c	2 s	nw.		Inap.	Inap.	fair	C. Dill.
Stevenson, Fort, Dakota	28.42	721.9	30.39	771.9	27	— 2.8	88	nw.	1	0.4		6 cs	0	nw.		0	0	fair	W. Burrows
Stockton, Fort, Texas	27.23	691.6	30.35	770.9	52.5	11.4	100	s.	4	1.8		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	30.46	773.7	30.51	774.9	37.5	3.1	72	n.	24	10.7		0	0			0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.43	696.7	30.27	768.8	47.5	8.6	59	calm			0	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.75	755.6	30.48	774.2	41	5.0	65	se.	4	1.8		5 cs	4 s	w.		0	0	cloudy	A. Buell.
Tucson, Arizona	27.67	702.8	30.13	765.3	50	10.0	48	s.	1	0.4		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.50	749.3	29.88	758.9	40	4.4	89	sw.	2	0.9			10 n			0.05	1.3	light rain	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					45.3	7.4	49	nw.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.99	761.7	30.26	768.6	65.2	18.4	91	n.	4	1.8			10 s		ne.	0.30	7.6	cloudy	James Kenealy.
Visalia, California	29.64	752.8	30.02	762.5	45.0	7.2	80	w.	3	1.3		1 cs	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.59	624.6	30.33	770.4	26.4	— 3.1	83	w.	3	1.3		0	1 k			0	0	clear	T. M. Ambler.
Washington, D. C.	30.46	773.7	30.52	776.7	33.5	0.8	73	n.	6	2.7		0	0			0.03	0.8	clear	B. M. Purssell.
West Las Animas, Colorado	26.28	667.5	30.40	772.1	30	— 1.1	80	w.	7	3.1		0	7 s		w.	0	0	fair	F. H. Brandenburg.
Williamsport, Pa.	29.95	760.7	30.58	776.7	32	0.0	78	calm	0	0		7 cs	3 ks	nw.	nw.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.26	768.6	30.32	770.1	56	13.3	80	ne.	10	4.5			10 ks		n.	0.41	10.4	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.40	645.1	29.94	760.5	37	2.8	72	ne.	9	4.0		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.98	736.1	30.36	771.4	35	1.7	69	n.	1	0.4		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.89	759.2	30.04	763.0	57.0	13.9	86	sw.	1	0.4		0	8 s		sw.	0	0	cloudy	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.99	558.5			55.0	12.8	83	w.	2	0.9			10 s		se.	0	0	cloudy	Joaquin Gomez.
Havana, Cuba, W. I.	29.83	757.7	29.89	759.2	77.0	25.0	74	ne.	7	3.1		ck	2 k	nw.	ne.	0.01	0.3	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.83	757.7	29.84	757.9	75	23.9	87	n.	4	1.8		2 cs	0			0	0	fair	Robert Johnston.
Navassa, W. I.	29.72	754.9	29.80	756.9	80	26.7	72	ne.	4	1.8		4 ks	2 k	se.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	29.95	760.7	29.95	760.7	80	26.7	78	se.			2	3 c	2 s	e.		0	0		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.93	760.2	76	24.4	89	calm			0		10 ks		calm	1.72	43.7	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75.5	24.2	99	ne.			1		10 ks		ne.	0	0	cloudy	Earl Flint.
Santiago de Cuba, W. I.	29.81	757.2	29.84	757.9	77	25.0	86	nw.	2.4	1.1		7 c	2 s	w.	ne.	0.92	23.4	cloudy	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.48	748.8	29.54	750.3	16	— 8.9	48	n.			8	0	6 k			0.08	2.0	fair	W. J. Fisher.
St. Thomas, W. I.	29.76	755.9	29.88	758.9	79	26.1	91	se.				3 k	5 k		se.	0.84	20.3	cloudy	Aug. Wallee.
York Factory, B. A.	30.28	769.1	30.34	770.6	28.5	— 1.9	94	ne.	8	3.6		2 c	0	ne.		0	0	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill			
British Naval.																	
H. M. S. Albatross, N. 36° 16′, E. 122° 52′	30.15	765.8	53	11.7	.....	wnw.	.....	.....	5–6	.....	5	w.	.....	.....	6	w.	squally.
H. M. S. Amethyst, Colonia, Uruguay†	29.99	761.7	67.5	19.7	90	e.	.....	.....	2–3	.....	0	.....	.....	.....	.....	.....	blue sky.
H. M. S. Antelope, N. 39° 48′, E. 26° 07′	30.20	767.1	60	15.6	.....	wnw.	.....	.....	3	.....	2	nnw.	.....	.....	1	nnw.	d clouds.
H. M. S. Audacious, Suez Canal, Egypt	30.03	762.7	75	23.9	76	n.	.....	.....	1	.....	1	nne.	.....	.....	.....	.....	blue sky.
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	29.97	761.2	75.5	24.2	76	wnw.	.....	.....	1	.....	2	nw.	.....	.....	.....	.....	d. clouds.
H. M. S. Champion, N. 31° 14′, E. 121° 38′	.....	.....	50	10.0	86	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island	29.99	761.7	42	5.6	87	calm	.....	.....	0	.....	6	nnw.	.....	.....	.....	.....	d. clouds.
H. M. S. Condor, off Beirut, Syria	29.96	761.0	79	26.1	100	var.	.....	.....	1–2	.....	4	.....	.....	...	1	.....	d. clouds.
H. M. S. Curacoa, N. 34° 28′, E. 134° 18′	29.96	761.0	66.5	19.2	64	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	raining.
H. M. S. Diamond, S. 18° 10′ E. 178° 31′ *†	29.62	752.3	80	26.7	82	wsw.	.....	.....	1–2	.....	7	.....	.....	.....	.....	.....	d. clouds.
H. M. Dock Yard, Bermuda, W. I.	30.14	765.5	73	22.8	81	nne.	.....	.....	1	.....	3	nne.	.....	.....	.....	.....	d. clouds.
H. M. S. Eclipse, N. 14° 26′ E. 51° 21′	29.89	759.2	.....	.....	.....	e.	.....	.....	1	.....	5	e.	.....	.....	1	n.	d. clouds.
H. M. S. Espiegle, S. 22° 40′ E 163° 05′	.....	.....	72	22.2	80	sse.	.....	.....	4	.....	5	.....	.....	.....	4	se.	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.91	759.7	76	24.4	84	s.	.....	.....	2	.....	4	sw.	.....	.....	.....	.....	d. clouds.
H. M. S. Flying Fish, N. 37° 12′, E. 126° 27′	29.96	761.0	53	11.7	69	nw.	.....	.....	3–6	.....	9	nnw.	.....	.....	3	nw.	showery.
H. M. S. Gannet, S. 16° 30′, W. 73° 20′	29.96	761.0	65	18.3	94	se.	.....	.....	2	.....	10	.....	.....	.....	2	s.	drizzling.
H. M. S. Iris, N. 31° 12′, E. 29° 50′	29.99	761.7	74	23.3	76	nw.	.....	.....	1	.....	1	nw.	.....	.....	2	nnw.	blue sky.
H. M. S. Iron Duke, N. 32° 44′, E. 129° 51′	30.01	762.2	60	15.6	88	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	showery.
H. M. S. Kingfisher, N. 41° 05′, W. 126° 15′	29.78	756.4	51	10.6	.....	s.	.....	.....	2	.....	5	s.	.....	.....	sm'h	.....	d. clouds.
H. M. S. Lark, S. 10° 24′, E. 102° 07′	29.88	758.9	80.3	26.8	98	se.	.....	.....	3	.....	3	.....	.....	.....	1	se.	showery.
H. M. S. Liffey, N. 29° 56′, W. 71° 20′	29.90	759.4	63	17.2	.....	nw.	.....	.....	1	.....	10	..	.....	.....	.....	.....	d clouds.
H. M. S. Magpie, Nagasaki, Japan	30.04	763.0	61.8	16.6	83	nnw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	misty.
H. M. S. Northampton, Halifax, N. S.	30.23	767.8	36.5	2.5	85	nnw.	.....	.....	2	.....	3	nnw.	.....	.....	.....	.....	d clouds.
H. M. S. Nelson, Melbourne, Australia	29.92	760.0	61	16.1	77	s.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.89	759.2	82	27.8	81	w.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	d. clouds.
H. M. S Rocket, N. 9° 00′, W. 79° 31′	29.86	758.4	77	25.0	95	calm	.....	.....	0	.....	4	.....	.....	.....	3-4	sw.	d. clouds.
H. M. S Sappho, S. 28° 35′, W. 142° 47′	29.96	761.0	63.2	17.3	94	calm	.....	.....	0	.....	10	.....	.....	.....	5	sw.	raining
H. M. S Superb, N. 39° 37′ E. 19° 56′*	30.08	764.0	74	23.3	47	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sylvia, S. 53° 00′, W. 73° 35′	29.34	744.2	38.5	3.6	95	n.	.....	.....	3-4	.....	9	.....	.....	.....	.....	.....	squally.
H. M. S. Thetis, S. 22° 31′ W. 74° 48′	30.03	762.7	63	17.2	67	s.	.....	.....	2	.....	10	.....	.....	.....	4	s.	overcast.
H. M. S. Tourmaline, Aden, Arabia	29.94	760.5	.....	.....	.....	e.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, Bushire, Persia	30.02	762.5	76.5	24.7	60	wnw.	.....	.....	3	.....	4	w.	.....	.....	3	wnw.	misty.
H. M. S. Zephyr, N. 39° 05′, E. 117° 19′	30.09	764.3	41	5.0	83	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	blue sky
Portuguese Naval.																	
Rio Lima, Porto Praya, Cape Verd Islands	30.11	764.8	82.4	28.0	85	ne.	.....	.....	1	.....	0	.....	.....	.....	1	se.	blue sky.
Tamega, Macao, China	30.19	766.7	69.4	20.8	59	n.	.....	.....	5	.....	0	.....	.....	.....	.....	.....	blue sky.
United States Naval.																	
Navy Yard, Pensacola, Fla	29.99	761.7	69	20.6	84	n.	2	0.9	.....	.....	5	.....	ne.	o	o	.....	fair.
Navy Yard, Portsmouth, N. H.	30.51	774.9	32	0.0	79	n.	7	3.1	2	.....	2	.....	nw.	o	o	.....	fair.
Naval Hospital, Yokohama, Japan*	29.98	761.5	55	12.8	71	n.	.....	.....	1	.....	10	.....	.....	o	o	.....	overcast.
Adams, Sitka, Alaska	.....	.....	47	8.3	77	e.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	heavy rain.
Alaska, Lahina, Sandwich Islands	29.99	761.7	77	25.0	77	calm	.....	.....	0	.....	2	.....	.....	o	o	sm'h	fair.
Alliance, Hampton Roads, Va.	30.42	772.7	51	10.6	?	ne.	.....	.....	3-4	.....	5	.....	.....	light	light	.....	fair.
Ashuelot, Yokohama, Japan	30.07	763 8	56	13.3	87	nnw.	.....	.....	2	.....	10	.....	n.	.....	.....	.....	cloudy.
Brooklyn, Keel Point, Patagonia	29.36	745.7	48	8.9	100	ssw.	8	3.6	.....	.....	10	.....	sw.	0.20	5.1	sm'h	cloudy.
Colorado, New York, N. Y.	30.64	778.2	37	2.8	54	nne.	12	5.4	.....	.....	0	.....	.....	o	o	.....	clear.
Enterprise, Hampton Roads, Va.	30.45	773.4	50	10.0	?	ne.	.....	.....	6	.....	2	.....	calm	.....	.....	sm'h	clear.
Essex, Callao, Peru	29.99	761.7	65	18.3	89	se.	.....	.....	1	.....	10	.....	.....	.....	.....	sm'h	overcast.
Franklin, Norfolk, Va.	30.45	773.4	49	9.4	77	ne.	6	2.7	.....	.....	0	.....	.....	0.05	1.3	.....	clear.
Galena, Montevideo, Uruguay	29.88	758.9	64	17.8	94	ese.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	clear.
Hartford, Montevideo, Uruguay*	29.86	758.4	64	17.8	94	e.	.....	.....	2	.....	2	.....	.....	o	o	sm'h	e. clear.
Independence, Mare Island, Cal.	29.91	759.7	51	10.6	100	se.	.....	.....	3	.....	10	.....	se.	.....	.....	.....	raining.
Iroquois, Callao, Peru	30.02	762.5	64	17.8	94	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	overcast.
Jamestown, Newport, R. I.	30.47	773.9	44	6.7	?	n.	.....	.....	1	.....	8	.....	.....	.....	.....	.....	fair.
Kearsarge, Hamton Roads, Va.	30.41	772.4	52	11.1	86	nne.	.....	.....	5	.....	5	.....	ne.	.....	.....	sm'h	fair.
Lackawanna, Talcahuana, Chili*	29.92	760.0	58	14.4	76	nw.	.....	.....	3	.....	10	.....	nw.	rain	rain	.....	cloudy.
Lancaster, Alexandria, Egypt*	29.90	759.4	74	23.3	63	nw.	.....	.....	3	.....	5	.....	nw.	o	o	sm'h	nw. fair.
Michigan, Erie, Pennsylvania	30.45	773 4	30	— 1.1	?	se.	.....	.....	2	.....	10	.....	se.	.....	.....	.....	cloudy.
Minnesota, New York, N. Y.	30.60	777.2	36	2.2	80	nnw.	8	3.6	.....	.....	.....	.....	.....	.....	.....	.....	clear.
Monocacy, Yokohama, Japan*	29.86	758.4	57	13.9	81	nnw.	.....	.....	2	.....	10	.....	calm	.....	.....	.....	cloudy.
New Hampshire, Newport, R. I.	30.57	776.5	40	4.4	64	nne.	.....	.....	3-5	.....	0	.....	.....	.....	.....	sm'h	clear.
Nipsic, N. 37° 08′, E. 18° 34′ *	30.15	765.8	73	22.8	54	nnw.	.....	.....	1	.....	5	.....	.....	.....	.....	sm'h	fair.
Onward, Callao, Peru†	30.10	764.5	62	16.7	100	sse.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w. misty.
Palos, Nagasaki, Japan*	29.93	760.2	61	16.1	88	nw.	.....	.....	1	.....	10	.....	nw.	.....	.....	.....	cloudy.
Pensacola, Callao, Peru*	29.92	760.0	64	17.8	94	sse.	2	0.9	.....	.....	10	.....	.....	o	o	sm'h	cloudy.
Powhatan, Boston, Mass	30.52	775.2	36	2.2	80	nnw.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	clear.
Quinnebaug, Venice, Italy*	30.21	767.3	57	13.9	81	sw.	.....	.....	1	.....	2	.....	calm	.....	.....	sm'h	hazy.
Ranger, San Francisco, Cal.	29.91	759.7	57	13.9	87	ese.	.....	.....	2	.....	10	.....	.....	o	o	.....	overcast.
Richmond, Yokosuka, Japan*	29.96	761.0	58	14.4	75	n.	.....	.....	2	.....	10	.....	n.	o	o	.....	cloudy.
Saratoga, N. 20° 32′, W. 84° 46′	29.83	757.7	80	26.7	95	ne.	.....	.....	4-5	.....	5?	.....	ne.	.....	.....	mod.	ne. clear.?
St. Louis, Leagne Island, Pa.	30.79	782.1	33	0.6	79	n.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	clear.
Swatara, S. 8° 18′, W. 18° 54′*	29.83	757.7	76	24.4	64	ese.	.....	.....	4	.....	8	.....	s.	.....	.....	sm'h	fair.
Tennessee, Hampton Roads, Va.	30.40	772.1	53	11.7	80	nne.	25	11.2	.....	.....	5	.....	ne.	0.01	0.3	.....	squally.
Vandalia, Delaware Breakwater, Del*	30.49	774.4	44	6.7	84	nne.	.....	.....	6	.....	2	.....	calm	.....	.....	.....	clear.
Wabash, Boston, Mass.	30.53	775.4	35	1.7	80	sw.	4	1.8	.....	.....	2	.....	sw.	o	o	.....	fair.
Wachusetts, Mare Island, Cal†	29.92	760.0	52	11.1	100	n.	.....	.....	1	.....	10	.....	calm	.....	.....	sm'h	rainy.
Wyandotte, Washington, D. C.	30.56	776.2	53	11.7	79	e.	.....	.....	1	.....	5	.....	e.	.....	.....	.....	fair.
Yantic, Norfolk, Va.	30.43	772.9	50	10.0	86	nne.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	clear.
Merchant Marine.																	
S. S. Grecian, Montevideo, Uruguay*	29.87	758.7	61	16.1	94	ese.	.....	.....	3	.....	2	.....	ese.	o	o	sm'h	..... clear.
S. S. Scandinavian, Boston, Mass.	30.52	775.2	34	1.1	.....	nnw.	.....	.....	2	.....	0	.....	.....	o	o	.....	..... blue sky.
S. S. Indiana, N. 41° 45′, W 65° 49′	.....	.....	39	3.9	91	ne	.....	.....	4	.....	2	.....	ne.	.....	.....	sm'h	ne.
S. S. Lord Clive, N. 41° 25′, W. 64° 45′*†	30.12	765.0	.....	.....	.....	nnw.	.....	.....	5	.....	8	.....	n.	o	o	mod.	n. cloudy.
S. S. Lord Gough, N. 51° 30′, W. 12° 13′	29.42	747.3	54	12.2	.....	sw.	.....	.....	7	.....	10	.....	sw.	sh's	sh's	long	sw. squally.
S. S. Ohio, Philadelphia, Pa.	30.50	774.7	34	1.1	100	nw.	.....	.....	5	.....	1	.....	nw.	.....	.....	.....	fine.
S. S. Pennsylvania, N. 51° 19′, W. 13° 19′ †	29.43	747.5	58	14.4	.....	ssw.	.....	.....	6	.....	10	.....	sw.	.....	.....	r'gh	sw. squally.
S. S. Castor, N. 49° 20′ W. 16° 15′*	29.58	751.3	55.4	13	.....	nw.	.....	.....	6	.....	10	.....	wnw.	.....	.....	3	wnw.
S. S. Jason, N. 42° 42′, W. 64° 06′	30.45	773.3	.....	.....	.....	calm	.....	.....	0	.....	7 k	.....	.....	.....	.....	1	ne. cloudy.
S. S. Anchoria, N. 52° 58′ W. 28° 01′†	29.30	744.2	.....	.....	.....	wsw.	.....	.....	9	.....	1	.....	wsw.	sh's	sh's	hv'y	wsw. squally.
S. S. Bolivia, Glasglow, Eng	29.32	744.7	49	9.4	78	nw.	.....	.....	.....	.....	.....	.....	.....	o	o	.....	overcast.
S. S. Dorian, Gibraltar, Mediterranean*	30.04	763 0	63	17.2	.....	sw.	.....	.....	2	.....	4	.....	w.	o	o	sm'h	..... clear.
S. S. Ethiopia, N. 49° 57′ W. 37° 50′	29.60	751.8	48	8.9	85	wnw.	.....	.....	6	.....	0	.....	wnw.	3 h'r	3 h'r	h'vy	wnw. cloudy.
S. S. Galatia, N. 15° 53′, E. 58° 54′†	30.01	762.2	82.0	27.8	.....	wnw.	.....	.....	3	.....	3	.....	nne.	o	o	long	ssw. fair.
S. S. Utopia, N. 12° 05′, E. 51° 18′	.....	.....	80	26.7	82	nnw.	.....	.....	2	.....	2	.....	calm	o	o	sm'h	e. clear.
S. S. Ailsa, Savanilla, U. S. C.†	29.98	761.5	79	26.1	78	nw.	.....	.....	2	.....	10	.....	nw.	3 h'r	3 h'r	.....	..... cloudy.
S. S. Alpin, Mayaguez, W. I.	29.94	760.5	.....	.....	.....	calm	.....	.....	0	.....	.....	.....	s.	½ h'r	½ h'r	sm'h	.....
S. S. Alvo, N. 20° 31′, W. 73° 46′	.....	.....	.....	.....	.....	ne.	.....	.....	3	.....	.....	.....	ne.	o	o	3	..... clear.
S. S. Ambrose, Para, Brazil†	29.86	758.4	.....	.....	.....	ne.	.....	.....	3	.....	0	.....	.....	o	o	.....	..... fine.
S. S. British Merchant, S. 19° 49′ W. 102° 44′	30.12	765.0	67	19.4	90	se.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	..... d. clouds.
S. S. Dynomene, S. 7° 20′ E. 87° 38′	29.92	760 0	83.5	28.6	87	ese.	.....	.....	2	.....	8	.....	.....	.....	.....	.....	..... misty.
S. S. Gordon Castle, N. 8° 42′, E. 108° 54′	29.88	758.9	81.5	27.5	79	ne.	.....	.....	1-2	.....	4	.....	.....	.....	.....	.....	..... d. clouds.
May Hulse, N. 15° 00′, W. 26° 00′	29.94	760.5	79	26.1	78	nne.	.....	.....	4	.....	3	.....	.....	.....	.....	.....	..... d. clouds.
Markland, N. 24° 52′, W. 34° 21′	30.10	764.5	78.3	25.7	74	ene.	.....	.....	3-5	.....	5	.....	.....	.....	.....	4	nne. d. clouds.
S. S. Olympus, N. 36° 37′, E. 32° 18′	29.89	759.2	89.8	32.1	44	n.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	..... blue sky.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Seine, N. 44° 25′ W 8° 30′	30.22	767.6	58.5	14.7	76	nw.			5		5							d. clouds.
Inchkeith, N. 4° 19′ W. 25° 08′	29.89	759.2	80.6	27.0	84	se.			6		5							d. clouds.
S. S. Mertola, N. 46° 10′, W. 10° 52′	30.15	765.8	58.2	14.6	94	sw.			6		8							d. clouds.
S. S. Gallia, N. 41° 03′, W. 60° 13′	30.11	764.8	55	12.8	?	nw.			6		8		n.	o	o	sm'h		fair.
S. S. Marathon, N. 51° 46′, W. 6° 00′			56	13.3		sw.			6		10		sw.	9 h'r	9 h'r	r'gh	sw.	raining.
S. S. Scythia, N. 47° 53′, W. 36° 14′	29.80	756.9	54	12.2	93	w.			7		10?		w.	4 h'r	4 h'r	h'vy	wnw.	clear?
S. S. Canada, N. 41° 30′ W. 62° 08′	30.19	766.8	42.8	6		nw.			6		5?		nw.	o	o	sm'h	n.	clear.?
S. S. Ville de Marseilles, N. 47° 10′, W. 42° 10′ *†	29.80	756.9	50	10.0		wnw.			6		7		nnw.	8 h'r	8 h'r	h'vy	nw.	cloudy.
S. S. Arizona, N. 43° 24′, W. 58° 37′	30.12	765.0	43	6.1		nw.			4		3		nw.	o	o	sm'h	w.	clear.
S. S. Wisconsin, N. 49° 10′, W. 38° 00′			48	8.9		nw.			9		2		nw.	o	o	h'vy	wnw.	clear.
S. S. Wyoming, Liverpool, Eng *	29.70	754.4	52	11.1		wnw.			3		4		wnw.	o	o			fair.
S. S. Bohemia, N. 47° 15′, W. 38° 52′†	29.91	759.7				w.			5		9		nw.	o	o	long	w.	cloudy.
S. S. Cimbria, N. 49° 21′, W. 36° 04′	29.55	753.1	49.6	9.8		w.			8		5		wnw	2 h'r	2 h'r	h'vy	nw.	cloudy.
S. S. Silesia, Hamburg, Germany			56	13.3		s.			3–4		7		s.	o	o			fair.
S. S. Vandalia, New York, N. Y	30.66	778.7	41.2	5.1		n.			2		0			o	o			fair.
S. S. Wieland, N. 50° 43′, W. 20° 01′	29.57	751.1	54	12.2		wsw.			6		8		wsw.	8 h'r	8 h'r	6	wsw.	cloudy.
S. S. Hevelius, Buenos Ayres, Agentine Rep*†	30.00	762.0	70	21.1		ese.			4		0			o	o			clear.
S. S. Bulgarian, N. 49° 07′, W. 40° 01′*	29.72	754.9				w.			6		2		w.	6 h'r	6 h'r	high	wnw.	
S. S. City of San Antonio, N. 34° 25′, W. 75° 00′ †	30.26	768.6	70	21.1		nne.			8		10		ne	4 h'r	4 h'r	h'vy	ne.	cloudy.
S. S. Colorado, N. 28° 12′, W. 92° 11′.†	30.16	766.1	75	23.9		ne.			2		3		ne.	o	o	small	ne.	clear.
S. S. Rio Grande, N. 25° 33′ W. 85° 33′†	29.98	761.5	70	21.1		n.			3		3		nw.	o	o	small	ene.	
S. S. Archimede, Palermo, Sicily*†	30.20	767.1	68	20.0	65	calm			0		1		sw.	o	o	sm'h	n.	clear.
S. S. Hermod, N. 49° 21′, W. 12° 55′ †	29.72	754.9	57.2	14		sw.			9		10		sw.	o	o	r'gh	wsw.	threatening.
S. S. Glenapp, N. 0° 16′ W. 47° 50′ †.	29.93	760.2	80	26.7		ne.			3		2 k		ne.	o	o	sm'h		fine.
S. S. Chalmette, N. 27° 40′, W. 87° 25′†	30.07	763.8	74	23.3		ne.			5		4		nne.	½h'r	½h'r	mod.	ne.	fair.
S. S. New York, N. 25° 35′, W. 85° 00′ †	30.05	763.3	78	25.6		ne			6		3		ne.	o	o	mod.		clear.
S. S. Egypt, N. 47° 19′, W. 35° 13′*†	29.98	761.5				w.			5		10		wnw.	o	o	long	w.	cloudy.
S. S. Erin, N. 43° 18′ W. 52° 21′	30.03	762.7	48	8.9		w.			4		2		wnw.	shr's	shr's	sm'h	w.	clear.
S. S. Helvetia, Liverpool, Eng	29.73	755.1	57	13.9		nw.			5		2		wnw.	2 h'r	2 h'r			fair.
S. S. The Queen, N. 41° 50′, W. 65° 08′	30.15	765.8	46	7.8		nnw.			6		10		calm	3 h'r	3 h'r	mod.	n	cloudy.
S. S. City of Alexandria, Havana, Cuba, W. I†	30.02	762.5	84	28.9		nne.			3		2		n.	o	o	h'vy	nne.	clear.
S. S. City of Merida, N. 21° 20′, W. 89° 40′*†	29.88	758.9	80.6	27		n.			3		5		n.	2 h'r	2 h'r	mod.	n.	squally.
S. S. City of Washington, N. 19° 25′, W. 94° 00′ *†	30.10	764.5	84	28.9		n.			4		5		n.	o	o	mod.	n.	fine.
S. S. Amerika, N. 49° 18′, W. 28° 55′ *	29.63	752.6	55.5	13.1	84	wsw.			8		5?		wsw.	2 h'r	2 h'r	hv'y	wsw.	cloudy?
S. S. Donau, N. 48° 29′, W. 34° 11′	29.82	757.4				wsw.			6		10		wsw.	5 h'r	5 h'r	h'vy	wsw.	cloudy.
S. S. Elbe, N. 41° 05′, W. 67° 00′	30.31	769.8	45.5	7.5	91	n.			5		3?		n.	o	o	mod.	n.	cloudy?
S. S. Gen. Werder, N. 44° 29′, W. 54° 19′.	30.02	762.5				wnw.			0		7		wsw.	o	o	mod.	w.	fair.
S. S. Habsburg, N. 44° 43′, W. 48° 44′	29.99	761.7	47.3	8.5		calm			0		10		nw.	o	o	sm'h		overcast.
S. S. Hohenstaufen, N. 50° 18′, W. 2° 00′	29.97	761.2	59.9	15.5		sw.			6		10		sw.	12 h'r	12 h'r	4	sw.	cloudy.
S. S. Kolu, N 48° 15′, W. 28° 11′	29.76	755.9	59.0	15.0	70	nnw.			6		8		nw.	8 h'r	8 h'r	r'gh	n.	
S. S. Kronprinz F. Wilhelm, N, 34° 03′, W. 16° 54′*	30.31	769.9	68.0	20.0		wnw.			2		0			o	o	mod.	nw.	clear.
S. S. Ohio, N. 27° 55′, W. 59° 49′	30.04	763.0				ene.			3		8		ene.	o	o	sm'h	ne.	cloudy.
S. S. Sailer, N. 37° 07′ W. 75° 13′	30.45	773.4				ne.			6		5		ne.	o	o	cross	ne.	fair.
S. S. Strassburg, East Goodwin, England	29.92	760.0	56.0	13.3	81	w.			4		2		w.	2 h'r	2 h'r	mod.	w.	fair.
S. S. Werra, N. 52° 25′. E. 3° 01′ *	29.92	760.0	55.4	13.0		sw.			6		8		sw.	2 h'r	2 h'r	high	sw.	heavy rain.
S. S. Belgic, N. 33° 30′, E. 137° 40′†	30.05	763.3	70	21.1	75	ene.			3		7		ne.	o	o			overcast.
S. S. Coptic, N. 46° 23′, W. 168° 58′	30.38	771.6	44.5	6.9	88	ne.			5		10		ne.	o	o	high	ne.	overcast.
S. S. City of Augusta, New York, N. Y †	30.47	773.9				nw.			3		2			o	o			clear.
S. S. Mississippi, N. 48° 10′, W. 124° 44′†	29.84	757.9	45	7.2	84	se.			2		8		ssw.					light rain.
S. S. Columbia, N. 38° 50′, W. 123° 51′†	29.76	755.9	53.5	11.9	83	se.			5		10		se.			cross	var.	raining.
S. S. Oregon, Portland, Oregon†	29.73	755.1	40	4.4	91	calm			0									foggy.
S. S. Ancon, San Francisco, Calf	29.83	757.7	54	12.2	80	se.			2		10		se.					rainy.
S. S. Orizaba, N. 32° 40′ W. 117° 14′†	30.14	765.5	64	17.8	73	calm			0							sm'h	nw.	clear.
S. S. Australia, Sydney, N. S. W	30.02	762.5	61	10.1	94	ssw.			2		1		ssw.	o	o			clear.
S. S. City of New York, N. 3° 33′, W. 163° 45′†	29.91	759.7	80	26.7	78	se.			3		0			o	o	sm'h		clear.
S. S. City of Pekin, N. 34° 32′, E. 175° 19′ †.	30.39	771.9	69	20.6	95	s.			3		2		s.	o	o	small	ssw.	clear.
S. S. City of Sydney, S. 34° 02′, E. 158° 50′ †.	30.13	765.3	61	16.1	61	sw.			5		5?		sw.	o	o	h'vy	sw.	cloudy?
S. S. Colima, N. 8° 21′, W. 83° 39′ †	29.86	758.4	76	24.4	100	nnw.			4		10		wnw.	0.70	17.8	mod.	ssw.	raining.
S. S. Colon, N. 39° 38′, W. 74° 00′†	30.47	773.9				nne.			6		3		nne.			mod.	nne.	fair.
S. S. San Jose, N. 13° 05′. W. 89° 00′ *†	30.02	762.5				ene.			2		10		ne.	o	o	light	se.	overcast.
S. S. Bermuda, N. 23° 22′, W. 65° 30′†	29.85	758.2	80	26.7		ene.			2		8		e.	sq'lls	sq'lls	long.	ene.	cloudy.
S. S. Muriel, N. 12° 40′, W. 60° 00′	29.86	758.4	80	26.7		ese.			2		10			o	o	long	ene.	overcast.
S. S. Caracas, Curacon, W. I †	29.83	757.7	83.3	28.5	83	sw.			4		8		sw.	½ h'r	½ h'r			fair.
S. S. Belgenland, N. 41° 10′, W. 63° 50′ †	30.37	771.4	50	10.0	100	n w.			6		9		nw.	o	o	mod.	nw.	cloudy.
S. S. Pennland, Antwerp, Belgium	29.98	761.5	53.5	11.9	93	s.			3		10		ssw.	4 h'r	4 h'r			cloudy.
S. S. Rhynland, Antwerp, Belgium	30.07	763.8	54	12.2	87	ssw.			3		7			12 h'r	12 h'r			overcast.
S. S. Switzerland, N. 39° 06′, W. 70° 31′†	30.42	772.1				ne.			4		5		ne.	o	o	mod.	ne.	fair.
S. S. Wuesland, N. 49° 50′, W. 28° 48′	29.68	753.9	54	12.2	87	w.			7		3		w.	sh'rs	sh'rs	h'vy	w.	fair.
S. S. Mans, N. 42° 07′, W. 61° 51′	30.11	764.8	50.7	10.4	76	n.			4		6		ese.	o	o	2	wnw.	overcast.
S. S. P. Culand, N. 49° 35′, W. 22° 28′	29.61	752.1	57.0	13.9	86	w.			7		6		wsw.			9	w.	cloudy.
S. S. W. A. Scholten, N. 49° 36′, W. 21° 50′	29.76	755.9	55.0	12.8	87	wsw.			7		8		w.	h'v'y	h'v'y	high	w.	
S. S. State of Florida, N. 40° 21′, W. 69° 19′	30.28	769.1	44	6.7		nne.			5		7		ne.	o	o	mod.	nne.	cloudy.
S. S. State of Georgia, N. 42° 38′, W. 61° 46′†	30.19	766.8	44	6.7		nnw.			5		5		nw.	o	o	sm'h		squally.
S. S. State of Indiana, N. 51° 42′, W. 37° 20′†	29.34	745.2	45	7.2		w.			8		3		w.	4 h'r	4 h'r	high	w.	clearing.
S. S. State of Nevada, Glasgow, Scotland†	29.56	750.8	48	8.9		ssw.			6		8		sw.	h'vy	h'vy			overcast.
S. S. Thingvalla, Copenhagen, Denmark†	29.99	761.7	49.1	9.5		ssw.			2		10		ssw.	o	o			covered.
S. S. Iowa, N. 51° 22′, W. 15° 36′ *†	29.55	750.6	57	13.9		wsw.			6		10			5 h'r	5 h'r	r'gh	wsw.	light rain
S. S. Phrtyn, N 43° 30′, W. 58° 40′	30.00	762.0	52.5	11.4					3		3		w.	o	o	mod.	w.	cloudy.
S. S. Adriatic, N. 40° 27′, W. 68° 16′ †	30.46	773.7	46	7.8		n.			4		5		n.			mod.	nw.	fair.
S. S. Britannic, N. 49° 35′ W. 24° 36′†	29.78	756.4	59	15.0	88	w.			4		5		w.	4 h'r	4 h'r	high	w.	d. clouds.
S. S. Celtic, N. 51° 21′, W. 20° 06′ †.	29.43	747.5	55	12.8	80	wsw.			7		5		w.	sh'rs	sh'rs	h'vy	w.	showery.
S. S. Germanic, N. 42° 24′, W. 61° 09′ †.	30.26	768.6	45	7.2		wnw.			5		8		wnw.	sh'rs	sh'rs	mod.	nw.	d. clouds.
S. S. Marengo, N. 49° 25′, W. 7° 53′*†	29.84	757.9				s.			0		10		sw.	7 h'r	7 h'r	light	sw.	rainy.
S. S. Romano, Hull, England	29.64	752.8	53	11.7		wsw.			3		5		sw.	o	o			fine.
S. S. Salerno, Odessa, Russia			58	14.4		nw.			3		0			o	o			clear.
S. S. Catherine Whiting, Providence, R. I †	30.52	775 2				n.			1		0			o	o			
S. S. Norman, N. 39° 56′, W. 75° 08′	30.54	77?87				nne.							n.	o	o			clear.
S. S. Saxon, Boston, Mass*†	30.45	773.2	48	8.9		nw.			1		2							fine.
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 33° 35′, W. 76° 11′			72	22.2		ene.			7		10		ene.	2 h'r	2 h'r	h'vy	ne.	
Bk. Adelaid, S. 0° 15′, W. 40° 08′*†	29.87	758.7	82	27.8		ese.			4		1		e.	o	o	mod.	ese.	clear.
Bg. Alelra, N. 34° 19′, W. 69° 18′	30.15	765.8	69	20.6		ne.			6		10		ne.	o	o	r'gh	n.	cloudy.
Schr. Anna A. Holton, N. 36° 52′, W. 73° 46′†	30.27	768.8	64	17.8		nne.			5		2		n.	1 h'r	1 h'r	h'vy	n.	clear
S. Annie M. Law, Kobe, Japan*†	29.94	760.5	63	17.2		ene.			3		10			4 h'r	4 h'r			raining.
Bk. Anna Thormann, S. 8° 02′, E. 114° 50′*	29.89	759.1	83.8	28.8	70	ese.			2		2 k		sw.	o	o			clear.
S. S. Antonio Lopez, Barcelona, Spain*	30.20	707.1	61.5	10.4	82	e.			1		7			o	o			hazy.
Bk. Aquidneck, N. 25° 01′, W. 39° 09′ *†	30.02	762.5				ene to s			3				ene.			light	se.	clear.
Bk. Aureola, N. 44° 25′, W. 40° 38′*†	30.17	766.3	62	16.7		wnw.			2		6		wnw.	6 h'r	6 h'r	mod	wnw.	fair.
Bk. Alba, N. 47° 09′, W. 31° 10′*†	29.88	759.0	54.9	12.7		wsw.			0									covered.
Bk. Bayonnaise, N. 25° 34′, W. 54° 05′*†	30.10	764.5				sse.			1		5		sse.	o	o	sm'h		clear.
S. S. Burswell, Antwerp, Belgium*†	29.97	761.2	58	14.4		ssw.			3		4		ssw.	3 h'r	3 h'r	sm'h		fine.
Bk. Champion, Rotterdam, Holland†	29.73	755.1	53.0	11.7		ssw.			8		8		sw.	12 h'r	12 h'r			fair.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.12	765.0	70	21.1	80	ne.			3		0			o	o			clear.
Schr. C. R. Flint, N. 17° 37′, W. 78° 31′†	29.90	759.4	83	28.3		ne.			2		0		ne.	2 h'r	2 h'r	sm'h	nnw.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																	
Bk. Don Quixote, S. 7° 30′, E. 113° 42′*.....	29.75	755.6	88	31.1	.....	nnw.	.....	.....	2	.....	5?	.....	nnw.	.....	.....	sm'h	nw.	clear.?
Bkt. David Preston, N. 39° 40′ W. 70° 05′.....	.....	.....	68	20.0	.....	ne.	.....	.....	.....	.....	10	.....	ne.	0	0	r'gh	ne.	
Bk. E. D. Bigelow, N. 40° 20′, W. 52° 00′*†.....	29.85	758.2	.....	.....	.....	e.	.....	.....	1	.....	10	.....	var.	3 h'r	3 h'r	.....	w.	gloomy.
Schr. Edith R. Seward, Wilmington, N. C.*†.....	30.30	769.6	60	15.6	.....	nne.	.....	.....	2	.....	7	.....	ene.	2 h'r	2 h'r	.....	.....	drizzling.
S. E. J. Spicer, New York, N. Y.....	30.55	776.0	56	13.3	87	n.	.....	.....	6	.....	2	.....	n.	0	0	.....	.....	clear.
S. Enoch Train, N. 21° 36′ W. 41° 50′*†.....	30.10	764.5	.....	.....	.....	sse.	.....	.....	2	.....	4	.....	sse.	sh'rs	sh'rs	long	ne.	showery.
Bk. Essex, Muscat, Arabia*†.....	29.89	759.2	86.0	30.0	.....	w.	.....	.....	3	.....	.....	.....	nnw.	.....	.....	.....	.....	fine.
Schr. F. E. McDonald, Washington, D. C†.....	30.49	774.4	.....	.....	.....	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	
S. S. Foscolia, Santos, Brazil*†.....	29.54	750.3	.....	.....	.....	se.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	fine.
Bk. Freya, N. 44° 43′ W. 10° 55′.....	.....	.....	60	15.6	.....	wsw.	.....	.....	4	.....	1	.....	wnw.	0	0	mod.	nw.	clear.
S. Glendon, S. 56° —′ W. 78° 12′†.....	28.93	734.8	40	4.4	.....	wsw.	.....	.....	6	.....	10	.....	w.	.....	.....	h'vy	sw.	rain & snow
S. Grecian, S. 6° 40′, W. 30° 00′†.....	29.94	760.5	82	27.8	71	ene.	.....	.....	6	.....	3	.....	se.	0	0	sm'h	.....	clear.
Bk. Gronsvaer, S. 43° 42′ E. 110° 20′†.....	29.70	754.3	57.5	14.2	100	w.	.....	.....	6	.....	10	.....	w.	4 h'r	4 h'r	10	w.	clear.
Bk. Hattie G. McFarland, N. 36° 00′, W. 73° 45′†.....	30.44	773.2	68	20.0	.....	ne.	.....	.....	7	.....	8	.....	ne.	3 h'r	3 h'r	h'vy	ne.	stormy.
Schr. Hattie Weston, Mayaro Bay, W. I.*†.....	29.90	759.4	83	28.3	.....	ese.	.....	.....	3	.....	2	.....	se.	0	0	mod.	ese.	stormy.
S. Hedwig, N. 20° 17′, W. 53° 21′	29.95	760.8	80.4	26.9	84	se.	.....	.....	4	.....	6	.....	var.	1 h'r	1 h'r	3	se.	fair.
S. Ivy, Queenstown, Ireland†.....	29.86	758.4	51	10.6	.....	nw.	.....	.....	8	.....	10	.....	sw.	8 h'r	8 h'r	.....	.....	raining.
Schr. Jennie N. Huddell, N. 39° 30′, W. 74° 00′†.....	30.43	772.9	.....	.....	.....	ne.	.....	.....	5	.....	5	.....	e.	0	0	hv'y	ne.	fair.
S. S. John Hopkins, N. 37° 20′ W. 75° 40′.....	.....	.....	60	15.6	.....	ne.	.....	.....	7	.....	5	.....	n.	0	0	long	ene.	fair.
Schr. John L. Thomas, Vivorilla Cays, C. A*†..	29.92	760.0	.....	.....	.....	nnw.	.....	.....	3	.....	3	.....	nne.	½ h'r	½ h'r	short	nnw.	squally.
Bg. John Wesley, Cardenas, Cuba, W. I†.....	29.72	754.9	.....	.....	.....	wsw.	.....	.....	1	.....	2	.....	.....	0	0	.....	.....	clear.
Bk. Joseph A. Ropes, N. 15° 13′, E. 60° 08′ *†.....	29.96	761.0	84	28.9	68	ene.	.....	.....	1	.....	4	.....	ne.	.....	.....	mod.	ne.	fair.
Light House Tender, Laurel, Key West, Fla†.....	29.92	760.0	76	24.4	.....	nne.	.....	.....	2–3	.....	4	.....	nne.	0	0	.....	.....	fair.
Bk. Liberia, N. 29° 23′, W. 32° 56′*	30.08	764.0	72	22.2	85	ese.	.....	.....	3–4	.....	8	.....	se.	10 h'r	10 h'r	large	ne.	squally.
Bg. Lilian, N. 15° 00′. W. 57° 55′†.....	29.90	759.4	82	27.8	.....	sse.	.....	.....	5	.....	9	.....	se.	1½h'r	1½h'r	r'gh	e.	heavy rain.
Bg. L. & W. Armstrong, N. 31° 37′, W. 72° 28′*†.....	30.12	765.0	.....	.....	.....	ene.	.....	.....	4	.....	2	.....	ene.	0	0	mod.	e.	clear.
S. S. Madrid, N. 50° 24′, W. 100° 45′*†.....	29.80	756.9	54	12.2	93	sw.	.....	.....	6	.....	8	.....	wsw.	shr's	shr's	rg'h	wsw.	
S. S. Malabar, S. 2° 10′, E. 95° 32′*†.....	29.90	759.4	.....	.....	.....	var.	.....	.....	.....	.....	10	.....	sw.	10 h'r	10 h'r	mod.	sw.	raining.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†.....	29.85	758.2	74	23.3	.....	ne.	.....	.....	3	.....	.....	.....	.....	0	0	.....	.....	fair.
Bk. Mattie B. Russell, Matansas, Cuba, W. I*†.....	30.11	764.8	.....	.....	.....	n.	.....	.....	1	.....	2	.....	n.	1 h'r	1 h'r	light	nne.	squally.
Schr. Moravian, N. 12° 33′, W. 81° 43†.....	29.93	760.3	.....	.....	.....	nne.	.....	.....	.....	.....	.....	.....	ne.	6 h'r	6 h'r	sm'h	ne.	fair.
Bg. Myrtle, N 20° 34′, W. 63° 53′†	29.90	759.4	.....	.....	.....	w.	.....	.....	2	.....	10	.....	w.	12 h'r	12 h'r	long	ne.	misty.
Bk. Norena. N. 29° 30′, W. 80° 05′*†.....	30.15	765.8	.....	.....	.....	ne.	.....	.....	6	.....	9	.....	ne.	1 h'r	1 h'r	con.	var.	squally.
S. Orealla, S. 6° 00′, E. 81° 34′*.....	29.94	760.5	.....	.....	.....	ese.	.....	.....	2	.....	3	.....	ese.	0	0	mod.	se.	clear.
S. Paramita, San Francisco, Cal†.....	29.83	757.7	56	13.3	.....	se.	.....	.....	2	.....	10	.....	se.	7 h'r	7 h'r	.....	.....	rainy.
S. S. Radnorshire, N. 37° 57′, W. 9 44′.†*.....	30.22	767.6	.....	.....	.....	ese.	.....	.....	1	.....	0	.....	.....	2 h'r	2 h'r	mod.	nw.	clear.
Bk. Rebus, N. 27° 59′, W. 69° 11′..	29.79	756.7	77	25.0	.....	ene.	.....	.....	5	.....	3	.....	ene.	0	0	mod.	ne.	fair.
S. St. Francis, S. 47° 30′, W. 80° 50′†..	29.80	756.9	44	6.7	.....	w.	.....	.....	7	.....	7	.....	w.	1 h'r	1 h'r	long	sw.	threatening
Schr. S. B. Hubbard, Jacksonville, Fla†.....	30.05	763.3	74	23.3	.....	ne.	.....	.....	1	.....	10	.....	.....	sh'rs	sh'rs	.....	.....	foggy.
Bk. Scud, Trinidad, W. I*†.....	29.89	759.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Bk. Southern Belle, N. 41° 20′, W. 42° 20′*†.....	30.00	762.0	68	20.0	.....	sw.	.....	.....	5–6	.....	0	.....	.....	0	0	mod.	sw.	clear.
S. Sovereign of the Seas, N. 35° 45′, W. 125° 40′*†.....	29.74	755.4	58	14.4	88	sw.	.....	.....	5	.....	2	.....	sw.	12 h'r	12 h'r	long	wnw.	clear.
Bg. Teneriffe, N. 32° 10′, W. 78° 10′.....	.....	.....	.....	.....	.....	ne.	.....	.....	6	.....	.....	.....	ne.	0	0	r'gh	.....	
Bk. Truro, N. 48° 35′, W. 15° 45′†*.....	29.89	759.2	.....	.....	.....	sw.	.....	.....	6–7	.....	10	.....	wsw.	2 h'r	2 h'r	long	w.	squally.
U.S.F.C.S.S. Fish Hawk, Washington, D. C†.....	30.62	777.7	36	2.2	90	nne.	.....	.....	3	.....	1	.....	nne.	0.02	0.5	.....	.....	clear.
Bk. Vincenzo Accame N. 39° 14′, W. 13° 35′†.....	30.43	772.8	66.2	19	.....	nne.	.....	.....	3	.....	0	.....	.....	0.15	3.8	r'gh	nnw.	clear.
Schr Viola Reppard, Savannah, Ga†.....	30.15	765.8	68	20.0	.....	nne.	.....	.....	2	.....	10	.....	ne.	0	0	.....	.....	cloudy.
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†...	29.90	759.4	.....	.....	.....	ne.	.....	.....	1	.....	2	.....	.....	0	0	.....	.....	fine.
Bk. Wandering Jew, N. 6° 07′, W. 28° 35′†.	29.81	757.2	81	27.2	.....	sse.	.....	.....	6	.....	10	.....	sse.	10 h'r	10 h'r	mod.	sse.	squally.
Bk. Warden Law, S. 58° 22′, W. 75° 20′...	29.18	741.2	.....	.....	.....	ssw.	.....	.....	6	.....	6	.....	ssw.	snow	snow	cross	ssw.	clearing.
Bgt. Willie, S. 33° 50′, W. 23° 00′*†.....	30.06	763.5	71	21.7	.....	ne.	.....	.....	3	.....	2	.....	ne.	6 h'r	6 h'r	mod	ne.	clear.

International Chart I. November 3, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 4, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.26	768.7	65.5	18.6	83	n.	.....	.....	1	.....	2	.....	.....	0	0	fair	Malaterre.
Algiers	.....	.....	30.29	769.3	66.2	19.0	85	ne.	.....	.....	1	.....	6	.....	.....	0	0	cloudy	Thève.
La Calle	.....	.....	30.22	767.7	67.6	19.8	74	nne.	.....	.....	2	.....	2	.....	.....	0	0	fair	Fonfréde.
Tunis	.....	.....	30.22	767.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.22	767.5	67.3	19.6	49	n.	.....	.....	1	.....	2	.....	.....	0	0	fair	Pérès.
Tebessa	.....	.....	30.30	769.5	62.2	16.8	55	ese.	.....	.....	1	.....	1	.....	.....	0	0	very fair	Dognon.
Geriville	.....	.....	.....	.....	64.0	17.8	2	e.	.....	.....	4	.....	4	.....	.....	0	0	cloudy	Louchamp.
Laghouat	.....	.....	30.32	770.1	64.4	18.0	36	ne.	.....	.....	4	.....	1	.....	.....	0	0	very fair	Abraham.
Biskra	.....	.....	30.31	769.8	75.2	24.0	45	.....	.....	.....	.....	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	30.05	763.3	30.14	765.5	53.1	11.7	86	s.	5	2.2	.....	.....	1	.....	.....	0	0	very fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.69	754 0	30.24	768.1	55.4	13.0	63	sw.	.....	.....	1	.....	0	.....	.....	0	0	foggy	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.33	745.0	30.10	764 6	50.5	10.3	73	wsw.	6.3	2.8	.....	.....	2	.....	.....	0.016	0.4	.....	Dr. Wierzbiski.
Eperies	29.30	744.2	30.19	766.9	49.3	9.6	82	s.	.....	.....	4	4 cs	fg.	n.	.....	0	0	.....	Julius Mikolik.
Gratz	28.97	735.7	30.23	767.8	51.1	10.6	75	sw.	.....	.....	2	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.82	732.1	30.28	769.0	53.2	11.8	76	se.	.....	.....	2	.....	4	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.79	731.3	30.15	765.8	49.5	9.7	86	ne.	.....	.....	1	4 c	0	.....	.....	0	0	almost clear	The Staff.
Lemberg	29.18	741.1	30.18	766.6	47.5	8.6	70	s.	.....	.....	2	.....	3	.....	.....	0.157	4.0	.....	Dr. T. Stanecki.
Pola	30.19	766.7	30.30	769.6	57.7	14.3	80	w.	.....	.....	1	.....	7	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	.....	.....	.....	.....	53.4	11.9	66	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Joseph Midlinszay, S. J.
Szegedin	29.96	760.9	30.24	768.0	56.1	13.4	62	se.	.....	.....	2	.....	0	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.21	767.2	30.31	769.8	58.6	14.8	72	calm	.....	.....	0	.....	2	.....	.....	0	0	.....	Royal Academy.
Vienna	29.47	748.4	30.19	766.8	52.0	11.1	78	calm	.....	.....	0	.....	3	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	28.91	734.3	29.01	736.8	48.7	9.3	60	sw.	18	8.0	.....	.....	6	.....	.....	0	0	squally	W. Boswell
Armagh, Observatory	29.20	741.7	29.44	747.8	48.0	8.9	82	sw.	17	7.6	.....	.....	7	.....	.....	.....	.....	squally	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.47	748.5	51.2	10.7	77	wsw.	47	21.0	.....	.....	2	.....	.....	.....	.....	blue sky	John Hartnup.
Bolton, Sharples	28.92	734.6	29.45	748.0	47.6	8.7	85	wsw.	30	10.1	.....	.....	8	.....	.....	.....	.....	squally	Thomas Mackereth.
Bradford, Yorkshire	29.02	737.1	29.42	747.3	46.4	8.0	91	sw.	.....	.....	5	.....	8	.....	.....	0.50	12.7	d. clouds	Mcl.andsborough&Preston
Bridgetown, Barbadoes	29.85	758.2	29.88	758.9	85.0	29.4	71	ne.	.....	.....	1	.....	2	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	29.41	747.0	29.53	750.0	55.0	12.8	80	sw.	.....	.....	3–0	.....	5	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E	29.56	750.8	29.68	753.9	56.1	13.4	65	w.	.....	.....	2	.....	3	.....	.....	blank	blank	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.67	753.6	29.90	759.4	53 9	12.2	76	w.	.....	.....	6	.....	8	.....	.....	.....	.....	showery	The Staff.
Fort Napier, Natal	27.56	700.0	29.78	756.4	80.0	26.7	40	e.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.89	759.2	88.0	31.1	52	nw.	.....	.....	1	.....	5	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.24	768.1	30.30	769.6	63.5	17.5	91	e.	.....	.....	4	.....	7	.....	.....	.....	.....	d. clouds	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	28.98	736.1	29.19	741.4	48.3	9.1	74	wsw.	.....	.....	8	.....	6	.....	.....	.....	.....	squally	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.51	749.5	29.68	753.9	55.7	13.2	01	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.03	752.6	29.93	760.2	54.0	12.2	79	w.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	29.66	753.4	29.69	754.1	54.7	12.6	58	wsw.	28	12.5	.....	.....	5	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.28	743.7	29.53	750.0	52.6	11.4	66	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	30.18	766.6	30.26	768.6	68.4	20.2	96	ne.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.75	755.6	29.80	756.9	77.5	25.3	72	se.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.07	738.4	29.59	751.6	50.8	10.4	75	wsw.	.....	.....	6	.....	5	.....	.....	.....	.....	threatening	Warren Middleton.
Oxford, Radcliffe Obs'y	29.44	747.8	29.67	753.6	52.3	11.3	83	wsw.	.....	.....	7	.....	7	.....	.....	.....	.....	showery	The Staff.
Plymouth	29.79	756.7	29.86	758.4	55.0	12.8	73	w.	.....	.....	5	.....	5	.....	.....	.....	.....	squally	John Merrifield.
Sandwick Manse, Orkneys	28.62	726 9	28.72	729.5	49.0	9.4	70	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.21	767.3	30.28	769.1	58.4	14.7	55	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	29.22	742.2	29.50	749.3	51.5	10.8	78	sw.	.....	.....	4	.....	2	.....	.....	0.01	0.3	d. clouds	W. F. Cooper.
Silloth Rectory	29.29	744.0	29.32	744.7	50.4	10.2	78	wsw.	.....	.....	6	.....	7	.....	.....	0.295	7.5	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.45	748.0	50.5	10.3	97	wsw.	33	14.8	.....	.....	9	.....	.....	blank	blank	d. clouds	I. New.
Stratfield Turgiss	29.48	748.8	29.70	754.4	53.7	12.1	71	w.	.....	.....	3–4	.....	4	.....	.....	.....	.....	showery	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.90	759.4	29.97	761.2	57	13.9	75	w.	.....	.....	7	.....	6	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	29.76	755.9	29.79	756.7	53.0	11.7	75	wsw.	34	15.2	.....	.....	5	.....	.....	blank	blank	squally	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.37	771.4	30.41	772.4	32	0.0	85	w.	4	1.8	.....	.....	10 n	.....	calm	0.280	7.1	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	30.42	772.7	30.49	774.4	29	— 1.7	80	nw.	6	2.7	.....	2 k	8 ks	nw.	nw.	0	0	cloudy	G. A. Blair.
Father Point, Quebec*	30.46	773.7	30.49	774.4	29	— 1.7	90	n.	17	7.6	.....	.....	10 k	.....	n.	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.27	743.4	30.14	795 5	24	— 4.4	88	se.	8	3.6	.....	0	5 8	.....	se.	0	0	hazy	James Stewart.
Halifax, N. S*	30.31	769.9	30.45	773.4	31	— 0.6	88	w.	4	1.8	.....	5 cs	hz	w.	.....	0	0	hazy	A. Allison.
Kingston, Ontario*	30.15	765.8	30.51	774.9	25	— 3.9	92	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	A. P. Knight, M. A.
Montreal, Quebec*	30.31	769.9	30.52	775.2	30	— 1.1	78	se.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.78	756 4	30.52	775.2	25	— 3.9	88	e.	8	3.6	.....	2 cs	0	e.	.....	0	0	fair	Rev. R. Mosley.
Port Dover, Ontario	29.68	753.9	30.41	772.4	34	1.1	100	ne.	14	6.3	.....	0	0	.....	.....	0	0	clear	H. Morgan.
Port Stanley, Ontario	29.71	754.6	30.39	771.9	30	— 1.1	88	ne.	12	5.4	.....	0	0	.....	.....	0	0	clear	M. Payne.
Quebec, Quebec*	30.18	766.6	30.52	775.2	27	— 2.8	88	n.	.....	.....	3	.....	10 n	.....	.....	0.02	0.5	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.07	763.8	30.56	776.2	17	— 8.3	87	calm	0	0	.....	0	0	.....	.....	0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.72	754.9	30.48	774.2	26	— 3.3	92	e.	9	4.0	.....	2 cs	0	.....	.....	0	0	clear	
St. Andrews, N. B	30.40	772.1	30.45	773.4	31	— 0.6	68	ne.	2	0.9	.....	.....	10 n	.....	.....	0	0	cloudy	
Sydney, C. B*	30.33	770.4	30.40	772.1	32	0.0	88	w.	1	0.4	.....	.....	10 s	.....	.....	0.08	2.0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.07	763.8	30.47	773.9	32	0.0	71	ne.	10	4.5	.....	2 ck	2 ks	ne.	e.	0	0	fair	Magnetic Observatory.
Yarmouth, N. S*	30.38	771.6	30.45	773.4	31	0.0	85	e.	2	0.9	.....	.....	10 k	.....	w.	0.01	0.3	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	.....	.....	.....	.....	25.0	— 3.9	75	n.	.....	.....	3	0	3 k	.....	.....	0	0	clear	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	33	0.0	89	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.99	761.7	30.02	762.5	67.0	19.4	73	sw.	8.2	3.7	.....	0	1 8	.....	.....	0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.96	761.0	30.00	762.0	81.4	27.4	54	sse.	6	2.7	.....	1	2	.....	.....	0	0	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower	Clouds. Direction. Upper	Clouds. Direction. Lower	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (Sub-series).																			
Tchang-kia-tchouang	.....	.....	30.13	765.2	41.9	5.5	59	sw.	7.6	3.4	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.33	770.3	30.35	770.9	43.7	6.5	93	calm	0	0	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.40	746.7	29.45	747.9	49.5	9.7	92	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	Oversergent Fischer.
Fanöe	29.34	745.1	29.36	745.7	50.2	10.1	82	wsw.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.64	752.8	29.68	753.9	14.7	— 9.6	91	se.	.....	.....	2	.....	7	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.60	751.7	29.61	752.2	19.9	— 6.7	.....	n.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.19	741.5	29.24	742.6	31.1	— 0.5	90	ne.	.....	.....	8	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	28.63	727.1	28.66	728.0	46.9	8.3	78	ne.	16	7	.....	.....	3	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.16	740.6	29.25	743.0	46.9	8.3	89	sw.	.....	.....	6	.....	9	.....	.....	.....	.....	thund'r storm	Loerer Oesterboi.
French.																			
Agen, Normal School	29.77	756.1	30.42	772.7	59.7	15.4	76	calm	.....	.....	0	0	0	.....	.....	0	0	.....	M. Labroue, Director.
Alençon, Normal School	29.47	748.5	30.02	762.5	55.4	13	98	sw.	.....	.....	2	.....	10 n	ne.	ne.	.....	.....	raining	M. Nicot, Director.
Arras, Engineer School	29.76	755.9	30.02	762.5	51.4	10.8	86	w.	.....	.....	8	.....	1 n	.....	.....	0.370	9.4	clear	M. Fénéon, Command't.
Avignon, Normal School	30.26	768.7	30.34	770.7	57.9	14.4	74	nnw.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.55	750.6	30.11	764.8	54.0	12.2	72	sw.	.....	.....	3	.....	10	.....	w.	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.05	753.2	29.92	759.9	56.5	13.6	84	w.	.....	.....	3	.....	8	.....	w.	0.161	4.1	very cloudy	M. Frère Eugène Marie.
Besançon, Normal School	29.29	744.0	30.19	766.9	62.2	16.8	68	ssw.	.....	.....	2	.....	cn	.....	sw.	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	30.08	763.9	30.34	770.5	60.3	15.7	67	sw.	.....	.....	1	.....	8	.....	sw.	0.012	0.3	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.63	752.6	30.19	766.8	56.3	13.5	73	ssw.	.....	.....	4	.....	kn	.....	ssw.	0.051	1.3	.....	M. Malet, Director.
Brest, Naval Observatory	29.85	758.5	30.10	764.6	58.6	14.8	84	w.	.....	.....	3	.....	9	.....	w.	0.205	5.2	.....	M. de Kermaree, Dir.
Caen, Normal School	29.83	757.7	29.91	759.6	57.9	14.4	89	wsw.	.....	.....	2	.....	10	.....	wsw.	0.24	6.	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.67	753.5	29.99	761.7	53.8	12.1	83	wsw.	.....	.....	4	.....	5	.....	sw.	0	0	cloudy	M. Jadot, Director.
Charleville, Normal School	29.39	746.4	29.91	759.6	51.1	10.6	78	n.	.....	.....	3	.....	10	.....	.....	.....	.....	raining	M. Grimard, Director
Clermont-Ferrand Obs'y	28.92	734.6	30.28	769.0	59.9	15.4	47	sw.	.....	.....	3	.....	5	.....	.....	0	0	½ covered	M. Allnard, Director.
Cluny, Normal School	29.42	747.3	30.29	769.3	61.7	16.5	44	sw.	.....	.....	1	.....	7	.....	sw.	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.27	743.4	30.14	765.6	52.9	11.6	67	wsw.	.....	.....	4	.....	2	wsw.	wsw.	0.067	1.7	slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	29.76	705.2	30.32	770.2	55.4	13	50	.....	.....	.....	.....	.....	1	.....	nw.	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	29.35	745.5	30.49	774.4	59.9	15.5	52	nne.	.....	.....	2	.....	1	.....	sw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.54	756.4	30.33	770.3	55.0	12.8	66	ese.	.....	.....	1	c	0	.....	.....	0	0	.....	M. Ablard, Director.
Guéret	28.07	727.8	30.25	768.4	51.8	11	58	w.	.....	.....	4	.....	0	.....	.....	0	0	clear	M. Delorme, Dir.
Lamballe, Normal School	29.73	755.2	30.01	762.2	59.7	15.4	72	sw.	.....	.....	2	0	5 k	.....	sw.	0.024	0.6	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.73	755.2	30.30	769.5	63.1	17.3	50	sse.	.....	.....	1	1 c	0	.....	.....	0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.02	762.5	30.12	765.1	60.1	15.6	89	w.	.....	.....	4	.....	8	w.	calm	0.098	2.5	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.24	742.7	30.30	769.7	59.0	15.0	60	s.	.....	.....	1	5 c	0	.....	.....	0	0	fair	M. André, Director.
Mans, Normal School	29.75	755.6	30.04	763.1	55.6	13.1	97	w.	.....	.....	4	.....	.....	.....	w.	0.024	0.6	.....	M. Piboen, Director.
Marseille, Observatory	30.04	763.0	30.31	769.8	62.6	17.0	70	w.	.....	.....	1.2	.....	0	.....	.....	0	0	.....	M. Stephan, Director.
Mt. Louis	25.10	637.5	29.94	760.5	49.1	9.5	56	se.	5.6	2.5	.....	.....	0	.....	.....	0	0	.....	M. Carê for Dr. Fines.
Montpellier, Normal School	30.17	766.2	30.30	769.6	61.5	16.4	65	s.	.....	.....	2	.....	1	.....	n.	0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.22	742.3	30.01	762.3	54.0	12.2	67	ssw.	.....	.....	2	.....	kn	.....	ssw.	0	0	.....	M. Hasse, Director
Nantes, Observatory	30.02	762.4	30.18	766.5	58.3	14.6	93	sw.	.....	.....	2-3	.....	10	.....	.....	0.031	0.8	rainy	M. Larocque, Director.
Perpignan, Observatory	30.24	768.1	30.35	771.0	64.9	18.3	41	ne.	1.8	0.8	.....	.....	0	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.47	545.2	.....	.....	36.3	2.4	.....	nw.	.....	.....	1	.....	2	.....	nw.	0	0	slightly cl'dy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.15	740.4	30.23	767.8	58.1	14.5	53	sw.	.....	.....	1	.....	2	sw.	sw.	0	0	slightly cl'dy	M. Tailleu.
Puy de Dôme Obs'y, Summit	25.28	642.0	.....	.....	37.0	2.8	98	w.	.....	.....	8	.....	10	.....	.....	0.028	0.7	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	30.22	767.6	30.25	768.4	57.6	14.2	95	wsw.	.....	.....	3	.....	8	.....	sw.	0.47	12.	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.97	761.1	30.18	766.6	56.8	13.8	98	sw.	.....	.....	3	.....	5	.....	sw.	0.004	0.1	light rain	M. Brotier, Director.
Rodez, Normal School	28.21	716.4	30.37	771.5	52.9	11.6	56	w.	.....	.....	1	.....	kn	.....	.....	0	0	.....	M. Seger, Director.
Rouen, Normal School	29.88	759.0	29.93	760.2	58.6	14.8	78	wsw.	.....	.....	4	.....	8	w.	.....	0.055	1.4	raining	M. Mouillot.
Saint Lô	.....	.....	.....	.....	58.6	14.8	.....	w.	.....	.....	2	.....	.....	sw.	w.	0	0	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.84	757.9	30.00	762.1	55.4	13.0	82	sw.	.....	.....	4	.....	10	.....	sw.	0.008	0.2	.....	M. Renou, Director.
Toulouse, Observatory	29.67	753.7	30.41	772.3	59.0	15.0	72	se.	.....	.....	1	.....	2	w.	.....	0	0	slightly cl'dy	M. Baillaud, Director.
Tours	29.96	760.9	30.13	765.4	57.9	14.4	80	sw.	.....	.....	3	.....	10	.....	wsw.	0	0	covered	M. de Tastes.
Versailles, Observatory	29.50	749.2	29.99	761.7	54.3	12.4	87	w.	.....	.....	0	.....	.....	.....	.....	0.142	3.6	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.62	726.9	30.07	763.7	54.0	12.2	58	sw.	.....	.....	4	.....	9	sw.	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.16	740.6	30.00	762.0	53.8	12.1	60	wnw.	.....	.....	3	0	8 ks	.....	w.	0.110	2.8	raining	Prof. Dr. Hoh.
Berlin	29.65	753.2	29.83	757.7	50.2	10.1	83	se.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	Prof. Dr. Arndt.
Breslau	29.50	749.4	30.04	762.9	54.5	12.5	62	ssw.	.....	.....	2	.....	2	wnw.	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.01	752.0	30.05	763.2	57.4	14.1	60	sw.	.....	.....	10	.....	6	sw.	.....	0.295	7.5	.....	Albert Senz.
Cassel	29.06	738.2	29.78	756.3	49.3	9.6	95	s.	.....	.....	8	.....	10	sw.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.58	751.4	29.95	760.7	52.2	11.2	77	sw.	.....	.....	3	.....	10	.....	.....	0.016	0.4	.....	Physical Society.
Friedrichshafen	28.75	730.3	30.21	767.2	50.7	10.4	75	s.	.....	.....	1	.....	8	wsw.	.....	0.209	5.3	.....	Wilhelm, Chief Tel.
Hamburg	29.87?	758.7?	29.96?	761.0?	50.9	10.5	93	sw.	.....	.....	8	.....	10	.....	.....	0.358	9.1	raining	E. Preller.
Kiel	29.51	749.5	29.52	749.9	50.2	10.1	91	sw.	.....	.....	4	.....	9	.....	.....	0.441	11.2	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.48	748.8	29.90	759.5	52.5	11.4	66	sw.	.....	.....	5	.....	10	.....	.....	.....	.....	sprinkling	H. Leppig, Asst.
Magdeburg	29.58	751.3	29.77	756.1	51.1	10.6	89	ssw.	.....	.....	4	.....	10 n	.....	.....	0.063	1.6	raining	Weather Observatory.
Memel	29.95	760.8	30.00	762.0	40.8	4.9	79	sse.	.....	.....	4	.....	10	.....	.....	.....	.....	covered	Iessermann.
Munich	28.30	718.9	30.17	766.2	55.2	12.9	50	w.	.....	.....	4	.....	3	w.	.....	0	0	.....	Central Station.
Neufahrwasser	29.86	758.5	29.88	758.9	47.7	8.7	73	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.45	748.1	29.98	761.4	57.6	14.2	63	sw.	.....	.....	4	.....	6	sw.	.....	0.098	2.5	.....	Dicknether.
Stuttgart	29.08	738.7	29.98	761.4	55.4	13.0	58	w.	.....	.....	6	.....	10	.....	.....	0.043	1.1	.....	Prof. Dr. Schoder.
Wustrow	29.59	751.6	29.61	752.2	49.1	9.5	84	s.	.....	.....	5	.....	10 8	.....	.....	0.181	4.6	.....	Profs. Brandes & Reimer.
Greek.																			
Athens	29.91	759.7	30.29	769.4	65.1	18.4	.....	ne.	.....	.....	1.0	.....	9	.....	.....	0	0	covered	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.92	759.9	29.97	761.2	78.7	25.9	78	wsw.	16.0	7.2	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.40	746.8	29.87	758.7	85.8	29.9	27	wnw.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.83	757.8	29.87	758.7	80.5	26.9	72	nnw.	15.0	6.7	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	27.97	710.5	29.80	756.8	86.8	30.4	24	w.	13.0	5.8	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.57	751.2	29.85	758.3	83.6	28.7	69	calm	0	0	.....	.....	8	.....	.....	0	0	d. clouds	
Bellary	28.32	719.4	29.77	756.2	86.2	30.1	49	w.	6.0	2.7	.....	.....	10	.....	.....	0	0	gloomy	
Belgaum	27.30	693.5	29.84	758.0	75.5	24.2	71	sw.	7.0	3.1	.....	.....	5	ne.	.....	0	0	d. clouds	
Lahore	29.17	741.0	29.93	760.2	70.7	21.5	53	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	28.99	736.4	29.91	759.6	73.8	23.2	49	w.	.....	.....	.....	.....	0	.....	.....	0	0	.....	
Agra	29.34	745.4	29.91	759.8	78.7	25.9	33	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.80	731.5	29.85	758.2	76.5	24.7	86	calm	1.0	0.4	.....	.....	10	.....	n.	1.47	37.3	overcast	
Jubbulpore	28.53	724.6	29.89	759.2	78.8	26.0	45	ene.	4.0	1.8	.....	.....	8	.....	ne.	0	0	gloomy	
Lucknow	29.52	749.8	29.90	759.4	80.2	26.8	36	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.57	751.2	29.89	759.3	72.3	22.4	65	calm	0	0	.....	.....	1	.....	.....	0	0	d. clouds	
Patna	29.72	754.8	29.90	759.5	77.5	25.3	69	ne.	1.5	0.7	.....	.....	5	ne.	ne.	0	0	d. clouds	
Hazaribagh	27.86	707.7	29.89	759.2	74.1	23.4	73	calm	4.3	1.9	.....	.....	10	.....	.....	0	0	overcast	
Cuttack	29.78	756.3	29.86	758.4	79.8	26.6	82	calm	1.0	0.4	.....	.....	3	.....	.....	0	0	d. clouds	
Calcutta, Alipore	29.82	757.5	29.84	758.0	82.1	27.8	63	ne.	1.0	0.4	.....	.....	6	.....	.....	0	0	d. clouds	
Dhubri	29.73	755.1	29.85	758.2	76.6	24.8	77	calm	2.0	1.2	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.76	755.9	29.85	758.2	78.7	25.9	95	calm	1.4	0.6	.....	.....	2	.....	.....	0	0	d. clouds	
Sibsagar	29.54	750.4	29.88	759.1	76.3	24.6	77	e.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.95	760.8	29.98	761.4	80.3	26.8	74	n.	4.8	2.2	.....	.....	7	.....	nnw.	0	0	d. clouds	
Jeypore	28.46	722.9	29.91	759.8	77.7	25.4	26	se.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.89	759.2	30.30	769.7	55.8	13.2	85	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.81	757.1	30.33	770.4	49.3	9.6	91	wsw.	3.8	1.7	.....	.....	9	wnw.	.....	0	0	.....	Prof. Schiapparelli.
Padua	30.19	766.8	30.30	769.6	52.5	11.4	90	s.	1.3	0.6	.....	.....	5	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Monçalieri	29.39	746.6	30.31	769.9	49.5	9.7	92	e.	3.8	1.7	.....	.....	10	.....	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	30.11	764.9	30.31	769.8	64.0	17.8	59	sw.	3.1	1.4	.....	.....	6	sw.	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.37	720.5	30.30	769.7	50.2	10.1	64	nw.	.....	.....	2	.....	1	sw.	.....	0	0	.....	Prof. D. C. Bruno
Pesaro	30.31	769.9	30.36	771.1	57.2	14.0	82	nw.	0	0	.....	.....	1	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	30.06	763.5	30.31	769.9	60.1	15.6	70	w.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	30.15	765.7	30.23	767.9	63.0	17.2	80	nw.	0.7	0 3	.....	.....	3	.....	.....	0	0	.....	Prof. P. Monte.
Rome	30.13	765.3	30.30	769.7	64.0	17.8	50	n.	0	0	.....	.....	0	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	30.05	763.3	30.30	769.7	64.8	18.2	58	nne.	7.4	3.3	.....	.....	2	n.	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.41	746.9	30.30	769.6	60.4	15.8	69	sw.	1.8	0.8	.....	.....	9	s.	.....	0	0	.....	Prof. D. Conti.
Caglinri	30.08	764.0	30.27	768.9	66.6	19.2	61	s.	.....	.....	2	.....	1	.....	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	30.06	763.5	30.31	769.9	66.7	19.3	55	ne.	5.6	2.5	.....	.....	4	.....	.....	0	0	.....	Prof. G. Cacciatore.
Syracuse	30.24	768.1	30.24	768.2	64.0	17.8	70	wnw.	9.4	4.2	.....	.....	5	W.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.78	756.5	30.31	769.8	64.2	17.9	50	n.	0	0	.....	.....	1	n.	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.33	567.3	.....	.....	29.7	— 1.3	91	sw.	.....	.....	4	.....	2	.....	.....	0	0	misty	Prof. P. F. Denza.
Valdobbia	22.36	568.0	.....	.....	34.3	1.3	43	se.	.....	.....	2	.....	2	.....	.....	0	0	clear	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.93	760.1	29.96	760.9	53.0	11.7	69	nw.	.....	.....	4	.....	9 n;s	.....	w.	0.744	18.9	raining	Hattori.
Awomori	29.86	758.4	29.90	759.4	48.1	8.9	80	wsw.	11.8	5.3	.....	.....	10 ks	.....	.....	0.214	5.4	overcast	K. Ogawa.
Hakodate	29.84	757.8	29.85	758.1	48.5	9.2	65	w.	24.0	10.7	.....	2	0	.....	.....	0.320	8.1	clear	
Hiroshima	.....	.....	.....	.....	45.3	7.4	84	n.	3.3	1.4	.....	0	0	.....	.....	0.108	2.7	clear	Y. Miwa.
Kanazawa	29.99	761.8	30.10	764.5	51.0	10.6	85	sw.	3.9	1.7	.....	.....	10	.....	.....	2.309	58.6	raining	S. Endo.
Kioto	29.94	760.5	30.12	765.0	49.3	9.6	77	nw.	1.5	0.6	.....	0	3s;ck	.....	.....	0.019	0.5	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.03	762.8	30.24	768.1	49.4	9.7	75	calm	0	0	.....	0	0	.....	.....	0	0	clear	S. Takehayashi.
Nemuro	29.66	753.3	29.72	754.9	52.8	11.6	90	sw.	3.0	1.3	.....	8	0	ne.	.....	0.530	13.5	cloudy	
Niigata	29.98	761.5	30.02	762.5	57.7	14.3	61	w.	9.9	4.4	.....	.....	10 ck	.....	w.	0.295	7.5		M. Morita.
Nobiru	29.90	759.6	29.92	760.0	54.2	12.3	71	nw.	11.7	5.2	.....	0	1 s	.....	.....	0.190	4.8	clear	H. Midzushima.
Osaka	30.10	764.5	30.11	764.9	51.0	10.6	75	n.	5.5	2.4	.....	0	0	.....	.....	0	0	clear	
Supporo	.....	.....	.....	.....	55.5	13.1	66	w.	18.6	8.3	.....	3	0	.....	.....	0.045	1.1	clear	
Tokei Obs'y, Yeddo	29.85	758.3	29.93	760.2	56.3	13.5	97	nnw.	5.8	2.6	.....	.....	10 s	.....	.....	0.260	6.6	overcast	The Staff.
Wakayama	30.07	763.7	30.13	765.2	55.4	13.0	60	nw.	5.8	2.6	.....	5	4	wsw.	n.	0.003	0.1	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.92	760.0	30.11	764.8	77.4	25.2	61	ese.	14.0	6.3	.....	4 c;cs	4 k;ks	nw.	sse.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.76	603.6	29.98	761.6	52.9	11.6	84	nne.	Inap.	Inap.	.....	0	8 kn	.....	ene.	0	0	cloudy	Prof. Vicente Fernandez.
Leon	24.43	620 5	30.27	768.8	47.5	8.6	87	e.	.....	.....	1	1 c	0	ne.	.....	0	0	clear	Prof. M. Leal.
Mazatlan	29.65	753.0	29.90	759.6	72.0	22.2	90	e.	1.6	0.8	.....	0	0	.....	.....	0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.18	588.8	30.34	770.5	46.8	8.2	76	w.	0.9	0.4	.....	0	0	.....	.....	0	0	fine	The Staff.
Morelia	24.41	620.0	30.44	773.2	52.9	11.6	69	ne.	5.1	2.3	.....	0	0	.....	.....	0	0	clear	M. Tena, M. D.
Orizaba	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Chazaro.
Fabellon, Aguascallentes	24.04	610.6	30.10	764.4	50.5	10.3	77	calm	0	0	.....	0	0	.....	.....	inap.	inap.	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.7	30.35	770.9	45.5	7.5	81	nw.	4.5	2.0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.63	574.7	30.37	771.3	48.0	8.9	55	se.	4.8	2.1	.....	0	0	.....	.....	0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.68	753.9	29.68	753.9	54.0	12.2	.....	wsw.	.....	.....	6	.....	.....	.....	.....	0.240	6.1	.....	
Groningen	29.50	749.2	29.55	750.6	52.0	11.1	.....	wsw.	.....	.....	4	.....	.....	.....	.....	0.480	12.2	.....	
Helder	29.53	750.0	29.53	750.0	53.6	12.0	.....	wsw.	.....	.....	6	.....	.....	.....	.....	0.028	0.7	.....	
Hellevoetsluis	29.65	753.0	29.65	753.0	53.1	11.7	80	wsw.	.....	.....	3	.....	.....	.....	.....	0.165	4.2	.....	
Utrecht	29.69	751 7	29.64	752.9	51.8	11.0	84	sw.	.....	.....	5	.....	8	.....	.....	0.382	9.7	very cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	28.93	734.8	28.99	736.4	47.1	8.4	81	s.	20	9	.....	.....	10	.....	.....	0.575	14.6	raining	
Brono	29.16	740.6	29.20	741.6	41.5	5.3	96	sse.	45	20	.....	.....	6	.....	.....	0	0	.....	
Christiania	29.00	736.5	29.14	740.2	45.9	7.7	94	s.	9	4	.....	.....	9	.....	.....	0.925	23.5	raining	
Gjæsvær	29.63	752.6	29.65	753.2	34.5	1.4	.....	ssw.	.....	.....	7	.....	7	.....	.....	.....	.....	.....	
Lodingen	29.46	748.3	29.51	749.5	44.8	7.1	50	s.	.....	.....	7	.....	9	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.18	766.5	30.33	770.4	66.2	19.0	75	s.	11.2	5.0	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29 33	744.9	30.32	770.2	65.5	18.6	49	ene.	6.3	2.8	.....	.....	1	.....	.....	0	0	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	30.18	766.6	30.27	768.8	71.2	21.8	42	ene.	9.8	4.4	.....	.....	2	nne.	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	30.02	762.4	30.38	771.6	60.1	15.6	65	nne.	11.9	5.3	.....	.....	0	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.30	769.0	30.37	771.4	69.8	21.0	67	sse.	3.1	1.4	.....	.....	4	.....	.....	0	0	.....	
Saint Paul de Loando	29.63	752.5	29.83	757.6	80.2	26.8	90	w.	1.8	0.8	.....	.....	4	sse.	.....	0	0	.....	
Serra da Estrella	25.57	049.8	30.39	772.0	49.5	9.7	64	se.	4.9	2.2	.....	.....	0	.....	.....	0	0	.....	
RUSSIAN.																			
Akmolinski	28.95	735.2	30.06	763.6	32.9	0.5	85	se.	7	3	.....	7 c	0	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	30.58	776.8	30.60	777.3	0.3	—17.6	70	e.	2	1	.....	.....	0	.....	.....	0	0	.....	Capt. Sseliwerstow.
Astrakhan	30.23	767.9	30.15	765.8	46.8	8.2	69	calm	0	0	.....	.....	10 s;n	.....	.....	0.031	0.8	.....	Capt. Wisganow.
Barnaul	29.93	760.1	30.49	774.4	3.4	—15.9	75	n.	4	2	.....	.....	9	.....	.....	0.004	0.1	.....	Meteorological Obs'y.
Dorpat	30.00	762.0	30.26	768.6	23.4	— 4.8	71	se.	7	3	.....	0	6 k	.....	.....	0.055	1.4	.....	Observatory.
Ekaterinburg	29.29	744.0	30.38	771.7	— 3.5	—19.7	77	e.	11	5	.....	.....	10	.....	.....	0.031	0.8	snowing	Meteorological Obs'y.
Kasan	29.56	750.8	29.85	758.2	10.4	—12.0	82	n.	7	3	.....	.....	10	.....	.....	0.098	2.5	snowing	Observatory.
Kertch	30.22	767.7	30.24	768.2	38.3	3.5	73	nw.	4	2	.....	.....	9 n	.....	.....	0.039	1.0	.....	Lagorio & Sastyrez.
Kieff	29.61	752.2	30.29	769.4	28.2	— 2.1	69	w.	7	3	.....	c;cs	3 ks	.....	.....	.....	.....	.....	Observatory.
Lugan	29.98	761.4	30.19	766.9	29.3	— 1.5	60	wnw.	13	6	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	30.34	770.6	30.41	772 4	32.4	0.2	73	n.	9	4	.....	.....	9 n	.....	.....	c	0	.....	Capt. Kurdukow.
Pekin, China	29.94	760.5	30.08	764.1	43.7	6.5	48	sw.	7	3	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	30.30	769.5	30.31	769.9	21.0	— 5.8	55	ese.	9	4	.....	0	0	.....	.....	0	0	.....	Central Physical Obs'y.
Semipalatinsk	29.60	751.9	30.29	769.3	36.7	2.6	77	n.	9	4	.....	.....	3	.....	.....	0	0	.....	Major Lasarew.
Tashkend, Laboratory	28.60	726.5	30.19	766.7	55.0	12.8	52	calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.75	730.3	30.19	766.7	52.9	11.6	85	calm	0	0	.....	.....	10 n	.....	.....	0.004	0.1	light rain	Physical Observatory.
Tomsk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vladivostock	29.87	758.7	29.94	760.4	31.3	— 0.4	.....	nw.	7	3	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.68	753.8	30.11	764.7	47.8	8.8	83	s.	11	5	.....	3 ck	0	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.78	756.3	30.22	767.5	32.4	0.2	92	se.	7	3	.....	.....	5	.....	.....	0	0	.....	Berg, Assistant.
Yeniseisk	30.19	766.8	30.52	775.1	— 7.6	—22.0	77	n.	4	2	.....	.....	0	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	28.94	735.1	52	11.1	93	nw.	.....	.....	8	.....	10	.....	.....	0.6	15.	heavy sleet	J. Youngclause.
North Unst	.....	.....	28.80	731.5	.....	.....	.....	sw.	.....	.....	6	5	0	se.	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.23	767 8	30.34	770.5	62.2	16.8	69	sw.	2.0	0.9	.....	0	0	.....	.....	0	0	clear	Antonio Reve, Director.
Bilbao, Met. Obs'y	30.34	770.5	30.39	772.0	63.7	17.6	60	se.	2.0	0.9	.....	3	2	e.	.....	0	0	cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.42	696.5	30.42	772.7	55.0	12.8	57	w.	5.4	2.4	.....	0	1	.....	.....	0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.14	714.8	30.39	771.8	60.4	15.8	61	se.	2.5	1.1	.....	0	0	.....	.....	0	0	clear	The Staff.
Murcia, Met. Obs'y	30.18	766.5	30.32	770.1	71.2	21.8	73	se.	2.2	1.0	.....	1	4	nw.	.....	0	0	clouds	Olayo Diaz, Director.
Oviedo	29.50	749.3	30.38	771.6	61.2	16.2	61	se.	5.6	2.5	.....	1 c	0	calm	.....	0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.45	748.1	30.36	771.1	58.6	14.8	77	se.	1.8	0.8	.....	.....	9	.....	.....	0	0	almost cov	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.60	751.8	29.66	753.3	77.0	25.0	87	n.	14.5	6.5	.....	.....	10 n	.....	.....	0.220	5.6	light rain	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.19	766.7	30.28	769.2	70.3	21.3	53	e.	25.8	11.5	.....	0	5	.....	e.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.72	754.9	29.81	757.2	81.3	27.4	76	calm	0	0	.....	6 ks	1 k	se.	se.	0.177	4.5	d. clouds	Manuel Maese.
Tuguegarao, Philippine Id's	29.69	754.2	29.82	757.5	74 2	23.4	90	nnw.	14.1	6.3	.....	2 cs	8 kn	ese.	ne.	0.01	0.3	overcast	José L. Yrastorza.
SWEDISH																			
Haparanda	30.08	764.0	30.12	765.0	25.5	— 3.6	91	s.	.....	.....	6	.....	10	.....	.....	0	0	.....	
Umea	29.88	758.9	29.93	760.2	31.6	— 0.2	100	s.	.....	.....	8	.....	10	.....	.....	1.244	31.6	.....	

STATIONS.	BAROMETER. Corrected for instrumental error and for temperature.		BAROMETER. Reduced to sea-level.		Temperature of the air.		Relative humidity.	WIND. Direction	WIND. Velocity.		WIND. Force.	CLOUDS. Amount and kind.		CLOUDS. Direction.		Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
SWEDISH—Continued.																			
Hernosand	29.66	753.4	29.71	754.7	39.9	4.4	93	sse.	.....	.....	8	.....	10	.....	.....	0.402	10.2	.....	
Stockholm	29.51	749.5	29.69	754.0	46.0	7.8	89	sse.	.....	.....	7	.....	10	.....	.....	0.024	0.6	raining	
Wisby	29.69	754.1	29.75	755.6	46.8	8.2	89	s.	.....	.....	7	.....	10	.....	.....	0	0	.....	
Sub-series.																			
Upsala	29.74	755.5	29.83	757.7	44.6	7.0	94	se.	19.7	8.8	.....	.....	10	.....	sse.	0.602	15.3	raining	S. G. Fineman.
SWISS.																			
Geneva	28.83	732.3	30.24	768.1	59.4	15.2	48	ssw.	.....	.....	4	.....	3	.....	.....	0	0	vapory	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.36	771.1	57.0	13.9	67	ne.	8	3.5	.....	.....	5	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.30	769.5	64.6	18.1	.....	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.06	763.6	74.8	23.8	58	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.41	772.4	30.49	774.4	33	0.6	78	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. O. Barnes.
Alpena, Michigan	29.73	755.1	30.43	772.9	38	3.3	82	sw.	6	2.7	.....	3 ck	5 s	w.	sw.	0	0	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25 20	640.1	30.30	769.6	34	1.1	66	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. U. Barnes.
Assinnaboine, Ft., Montana	27.02	686.3	30.00	762.0	38	3.3	72	sw.	18	8.0	.....	.....	10 s	.....	sw.	0	0	cloudy	B. O. Lenoir.
Atlanta, Georgia	28.97	735.8	30.19	766.8	45.8	7.7	77	n.	9	4.0	.....	0	1 s	.....	.....	0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.30	769.6	30.32	770.1	46	7.8	93	ne.	12	5.4	.....	.....	10 n	.....	n.	0.02	0.5	light rain	Jas. M. Watson.
Augusta, Georgia	29.99	761.7	30.19	766.8	53	11.7	66	ne.	8	3.6	.....	.....	10 s	.....	ne.	0.02	0.5	cloudy	John Healy.
Baltimore, Maryland	30.32	770.1	30.38	771.6	44	6.7	76	ne.	6	2.7	.....	.....	10 n	.....	ne.	inap.	inap.	light rain	Geo W Felger.
Barnegat, New Jersey	30.31	769.9	30.33	770.4	50.0	10.0	86	e.	21	9.4	.....	.....	10 s	.....	e.	0	0	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.14	714.7	29.83	757.7	49	9.4	93	se.	20	8.9	.....	.....	10 n	.....	se.	inap.	inap.	light rain	A. Pritchard.
Benton, Fort, Montana	27.11	688.6	30.07	763.8	43	6.1	93	sw.	14	6.3	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	S. Wheaton.
Bismarck, Dakota	27.95	709.9	29.87	758.7	44	6.7	93	se.	20	8.9	.....	.....	10 s	.....	.....	0	0	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.40	772.1	30.43	772.9	44	6.7	68	e.	10	7.2	.....	.....	10s; ks	.....	e.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.48	698.0	30.42	772.7	34	1.1	82	nw.	4	1.8	.....	0	0	.....	.....	0.01	0.3	clear	B. E. Light.
Boston, Massachusetts	30.32	770.1	30.48	774.2	36.0	2.2	57	n.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	O. B. Cole.
Brownsville, Texas	29.99	761.7	30.04	763.0	69.5	20.8	93	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	M. McCarty.
Buffalo, New York	29.64	752.8	30.42	772.7	30	— 1.1	78	ne.	7	3.1	.....	0	sk.	.....	.....	0	0	clear	W. Finn.
Buford, Fort, Dakota	27.70	703.6	29.68	753.9	36	2.2	82	e.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	F. A. Mellen.
Burlington, Vermont	30.20	767.1	30.51	774.9	33.0	0.6	86	e.	4	1.8	.....	0	1 s	.....	n.	inap.	inap.	clear	W. B Gates.
Cairo, Illinois	29.84	757.9	30.26	768.6	49.7	9.8	88	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. H. Ray.
Cape Henry, Virginia	30.20	767.1	30.22	767.6	58	14.4	74	ne.	24	10.7	.....	.....	10 s	.....	e.	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.28	769.1	30.31	769.9	46.0	7.8	76	n.	14	6.3	.....	.....	10 s	.....	n.	0	0	cloudy	W. E. Smith.
Cape Mendocino, California	29.62	752.3	30.15	765.8	52	11.1	59	se.	12	5.4	.....	.....	10ks	.....	se.	0	0	cloudy	J. J. McLean.
Cedar Keys, Florida	29.92	760.0	29.94	760.5	60	15.6	87	n.	18	8.0	.....	.....	10 ks	.....	.....	0	0	cloudy	F. W. Mixer.
Champaign, Illinois	29.44	747.8	30.30	769.6	37.4	3.0	60	ne.	3	1.3	.....	0	hz.	.....	.....	0	0	clear	L. A. Welsh.
Charleston, S. Carolina	30.01	762.2	30.07	763.8	52	11.1	86	n.	10	7.2	.....	.....	10 s	.....	n.	0	0	threatening	J. H. Smith.
Charlotte, N. Carolina	29.32	744.7	30.20	767.1	43.0	6.1	83	ne.	7	3.1	.....	0	4 s	.....	.....	0	0	fair	D. O'Donoghue.
Chattanooga, Tennessee	29.36	745.7	30.21	767.3	54.0	12.2	93	nw.	2	0.9	.....	5 k	fg.	n.	.....	0	0	fair	B. L. Goulding.
Cheyenne, Wyoming	23.95	608.3	30.16	766.1	40.2	4.6	31	nw.	20	8.9	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.61	752.1	30.35	770.9	45.6	7.6	81	se.	0	2.7	.....	0	0	.....	.....	0	0	clear	J. Mitchell.
Chincoteague, Virginia	30.23	767.8	30.25	768.3	53	11.7	80	ne.	14	6.3	.....	.....	10 n	.....	e.	0.03	0.8	light rain	C. F. Dickens.
Cincinnati, Ohio	29.63	752.6	30.32	770.1	41	5.0	73	ne.	3	1.3	.....	0	hz.	.....	.....	0	0	clear	R. B. Watkins.
Cleveland, Ohio	29.59	751.6	30.30	771.1	33.3	0.7	78	se.	5	2.2	.....	0	fg.	.....	.....	0	0	clear	J. B. Newlin.
Coleman City, Texas	28.24	717.3	30.13	765.3	56	13.3	93	sw.	4	1.8	.....	3 cs	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.44	747.8	30.33	770.4	36	2.2	69	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	D. Cuthbertson.
Concho, Fort, Texas	28.11	714.0	30.12	765.0	61.0	16.1	90	s.	9	4.0	.....	0	5 s	.....	.....	0	0	fair	J. McGlone.
Custer, Fort, Montana	26.66	677.2	29.98	761.5	43	6.1	53	w.	16	7.2	.....	0	4 k	.....	calm	0	0	fair	W. B. Lamar.
Davenport, Iowa	29.58	751.3	30.27	768.8	38	3.3	82	e.	10	4.5	.....	2 cs	fg.	.....	.....	0	0	clear	R. R. Martin.
Davis, Fort, Texas	25.30	642.6	30.20	767.1	59	15.0	78	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.52	724.4	30.30	769.6	34.8	1.6	90	s.	1	0.4	.....	0	0	.....	.....	0.42	10.7	clear	H. Clifford.
Deadwood, Dakota	25.08	637.0	29.91	759.7	51	10.6	52	ne.	10	4.5	.....	8 cs	0	.....	.....	0	0	cloudy	G. W. Scott.
Delaware Breakwater, Del.	30.24	768.1	30.26	768.6	50	10.0	100	ne.	32	14.3	.....	.....	10 s	.....	ne.	0	0	cloudy	T. S. Townsend.
Denison, Texas	29.28	743.7	30.12	765.0	63.0	17.2	93	s.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	J. W. Byram.
Denver, Colorado	24.60	624.8	30.10	764.5	54.0	12.2	23	w.	10	4.5	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.20	741.7	30.15	765.8	51	10.6	80	se.	6	2.7	.....	.....	10 s	.....	s.	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.67	753.6	30.41	772.4	32.0	0.0	78	n.	11	4.9	.....	0	0	.....	.....	0	0	clear	O. F. R. Wappenhans.
Dodge City, Kansas	27.22	691.4	29.96	761.0	52	11.1	86	s.	11	4.9	.....	0	fg.	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.53	750.0	30.28	769.1	35.6	2.0	94	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	J. Harvey Smith.
Duluth, Minnesota	29.53	750.0	30.32	770.1	38	3.3	82	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	N. B. Conger.
Eagle Pass, Texas	29.28	743.7	30.11	764 8	63.1	17.3	84	calm	0	0	.....	2 ck	2 s	.....	.....	0	0	fair	F. Belford.
Eagle Rock, Idaho	25 38	644.6	30.24	768.1	31	— 0.6	81	sw.	22	9.8	.....	0	0	.....	.....	0.09	2.3	clear	J. M. Clifford.
Eastport, Maine	30.41	772.4	30.48	774.2	33.0	0.6	68	n.	10	4.5	.....	.....	10 s	.....	w.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.18	690.4	30.12	765.0	55	12.8	74	se.	8	3.6	.....	.....	10 s	.....	se.	0	0	cloudy	W. J. Cundall.
El Paso, Texas	26.32	668.5	30.17	766.3	56	13.3	60	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.62	752.3	30.38	771.6	34	1.1	79	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	Peter Wood.
Escanaba, Michigan	29.69	754.1	30.39	771.9	35.0	1.7	89	calm	0	.....	.....	0	3 s	.....	.....	0.04	1.0	clear	George Heathcote.
Fredericksburg, Texas	28.34	719.8	30.10	766.1	65	18.3	73	calm	0	0	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	30.01	762.2	30.06	763.5	70	21.1	90	e.	10	4.5	.....	.....	10 ks	.....	se.	0	0	threatening	E. O'C. Macinerney.
Grand Haven, Michigan	29.69	754.1	30.39	771.9	32.0	0.0	88	e.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. Mueller.
Grant, Fort, Arizona	25.34	643.6	30.18	766.6	52	11.1	52	n.	4	1.8	.....	8 cs	0	.....	.....	0	0	cloudy	Robert O. Lord.
Hatteras, North Carolina	30.07	763 8	30.09	764.3	62	16.7	87	ne	22	9.8	.....	.....	10 s	.....	ne.	0	0	cloudy	R. M. Crawford.
Helena, Montana	28.81	731.8	30.19	766.8	40	4.4	82	sw.	16	7.2	.....	0	0	.....	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	29.05	737.9	30.09	764.3	58	14.4	86	se.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	J. P. Sherry.
Huron, Dakota	28.45	722 6	29.93	760.2	49.8	9.9	74	se.	21	9.4	.....	.....	10 ks	.....	se.	0	0	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.48	748.8	30.32	770.1	36	2.2	79	ne.	2	0.9	.....	0	hz.	.....	.....	0	0	clear	O. Schutze
Indianola, Texas	30.05	763.3	30.08	764.0	73.2	22.9	97	e.	12	5.4	.....	0	8 ks	.....	se.	0	0	cloudy	I. A. Reed.
Jacksboro, Texas	28.87	733.3	30.09	764.3	59	15.0	70	se.	4	1.8	.....	0	3 s	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	29.93	760.2	29.98	761 5	57	13.9	86	n.	13	5.8	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.24	691.9	29.91	759.7	40	4.4	82	w.	2	0.9	.....	10 k	0	w.	.....	0	0	cloudy	A. Schneider.
Keokuk, Iowa	29.53	750.0	30.22	767.6	47.0	8.3	86	e.	4	1.8	.....	2 cs	6 s	.....	sw.	0	0	cloudy	F. Z. Gosewisch
Key West, Florida	29.78	756 4	29.80	756.9	76.0	24.4	79	ne.	13	5.8	.....	2 k	4 k	n.	ne.	0	0	fair	R. H. Paxton.
Kittyhawk, North Carolina	30.13	765 3	30.15	765.8	59.5	15.3	84	ne.	25	11.2	.....	6 cs	4 ks	nw.	ne.	0	0	cloudy	H. McP. Baldwin.
Knoxville, Tennessee	29.17	740 9	30.24	768.1	52.8	11.6	90	ne.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.46	748.3	30.28	769.1	33	0.6	78	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	S. C. Emery.
Leavenworth, Kansas	29.14	740.1	30.08	764.0	54	12.2	86	se.	10	4.5	.....	5 ck	2 s	w.	s.	0	0	fair	A. W. Browne
Lewiston, Idaho	29.48	748.8	30.35	770.9	34.0	1.1	88	e.	1	0.4	.....	2 k	0	w.	.....	0.17	4.3	clear	W. Bell.
Little Rock, Arkansas	29.84	757 7	30.16	766.1	58	14.4	86	ne.	4	1.8	.....	0	4 s	.....	.....	0	0	fair	W. U. Simons.
Los Angeles, California	29.80	756.9	30.20	767.1	48	8.9	93	w.	6	2.7	.....	0	fg.	.....	.....	0.05	1.3	clearing	T. S Collins.
Louisville, Kentucky	29.66	753.4	30.25	768.3	42	5.6	92	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	L. M. Dey.
Lynchburg, Virginia	29.58	751.3	30.30	769.6	44	6.7	76	ne.	3	1.3	.....	.....	10 s	.....	ne.	0.05	1.3	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.70	754.4	30.39	771.9	39.0	3.9	82	sw.	5	2.2	.....	0	3 k	.....	sw.	0.04	1.0	clear	F. R. Day.
Macon, Fort, North Carolina	30.08	764.0	30.09	764.3	57	13.9	100	nw.	20	11.6	.....	.....	10 s	.....	nw.	0.05	1.3	cloudy	F. P. Chaffee.
Madison, Wisconsin	29.28	743.7	30.35	770.9	36	2.2	93	s.	2	0.9	.....	.....	fg.	.....	.....	0	0	dense fog	O. A. Shaw.
Maginnis, Fort, Montana	25.37	544.4	29.88	758.9	34	1.1	82	nw.	48	21.5	.....	.....	10 n	.....	nw.	0.03	0.8	light rain	F. Burke.
McKavett, Fort, Texas	27.83	705.9	30.21	767.3	62	16.7	90	s.	9	4.0	.....	0	0	.....	.....	0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.62	755.3	30.39	771.9	34	1.1	79	w.	3	1.3	.....	.....	10 s	.....	w.	0	0	cloudy	J. Gilligan.
Memphis, Tennessee	29.83	757 7	30.18	766.6	59	15.0	87	ne.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.56	750.8	30.34	770.6	40	4.4	82	w.	3	1.3	.....	.....	10s; fg	.....	se.	0	0	cloudy	W. Line.
Missoula, Fort, Montana	26.86	682.2	30.27	768.8	39	3.9	65	sw.	7	3.1	.....	0	5 s	.....	n.	0.07	1.8	fair	J. H. Young.
Mobile, Alabama	30.05	763.3	30.09	764.3	60	15.6	86	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	C. A. Read.
Montgomery, Alabama	29.88	758.9	30.12	765.0	52	11.1	86	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. B. McLaughlin.

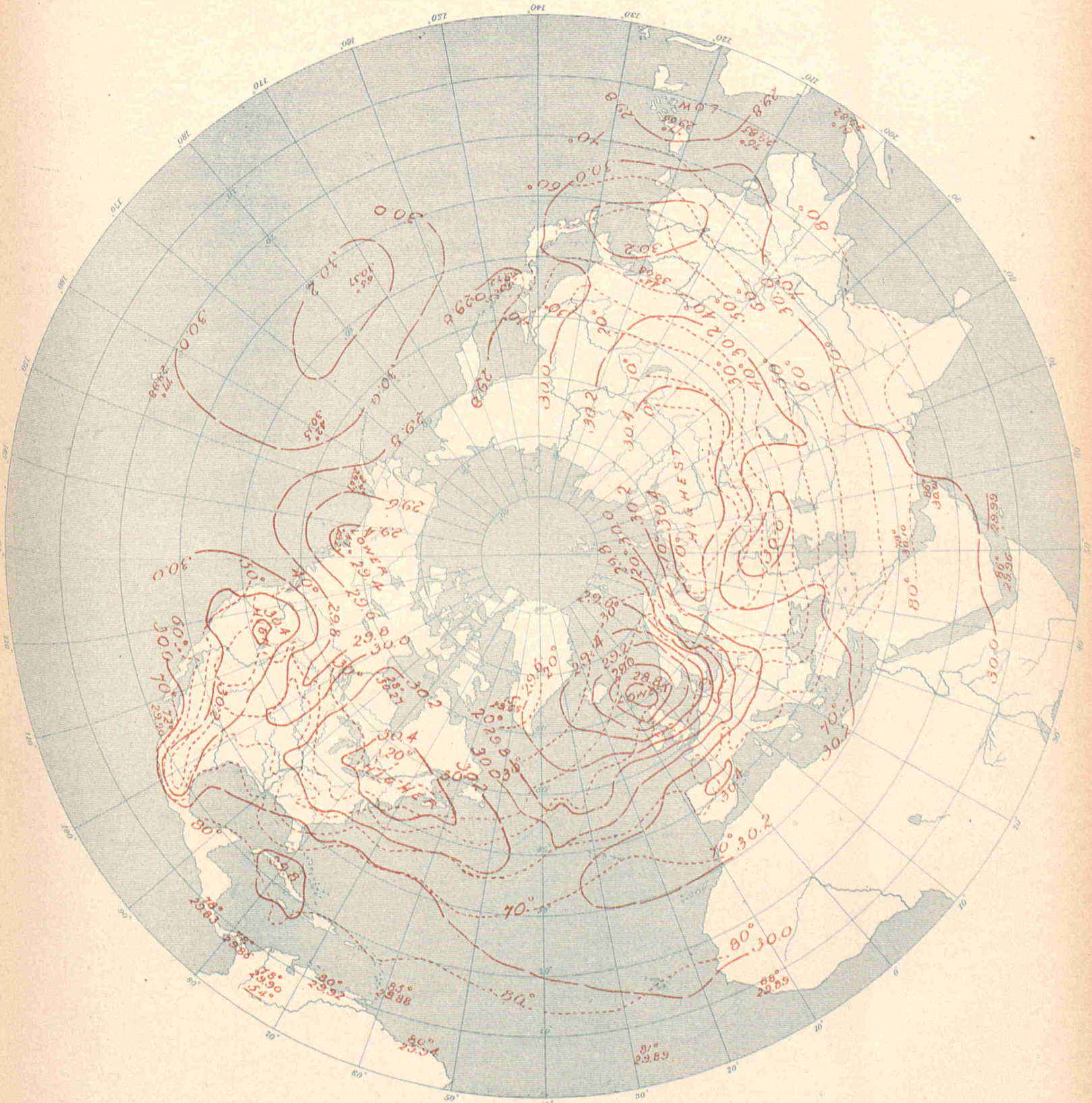
STATIONS	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.00	736.6	30.06	763.5	37	2.8	89	se.	16	7.2			10 s		se.	0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.25	742.9	30.31	769.9	39.0	3.9	82	ne.	4	1.8		0	0			0	0	clear	J. C. Sprigg, jr
Mt. Washington, N. H.	23.86	606.0	30.42	772.7	7.0	—13.9	80	nw.	26	11.6		1 cs	0			0	0	clear	J. G. Linsley.
Nashville, Tennessee	29.61	752.1	30.21	767.3	50.0	10.0	93	ne.	1	0.4		0	fg.			0	0	clear	L. N. Jesunofsky.
New Haven, Connecticut	30.31	769.9	30.43	772.9	35	1.7	64	ne.	11	4.9			10 s			0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.41	772.4	30.46	773.7	37	2.8	82	n.	4	1.8			10 s		n.	0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.02	762.5	30.08	764.0	64.8	18.2	85	ne.	6	2.7			10 s		ne.	0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.42	772.7	30.47	773.9	38.3	3.5	72	ne.	7	3.1			10 s		n.	0	0	cloudy	W. McGillivray.
New York, New York	30.23	767.8	30.41	772.4	43	6.1	51	ne.	10	4.5			10s;fg		ne.	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.19	766.8	30.32	767.6	55	12.8	80	ne.	12	5.4			10 n		ne.	inap.	inap.	light rain	Wm. Davis.
North Platte, Nebraska	26.89	683.0	29.97	761.2	51.6	10.9	78	s.	5	2.2			10 n			inap.	inap.	light rain	E. F. Brady.
Olympia, Washington T'y.	30.07	763.8	30.11	764.8	36.0	2.2	90	s.	1	0.4		10 ck	0	w.		0.06	1.5	cloudy	J. Dascomb.
Omaha, Nebraska	28.82	732 0	30.06	763.5	55.1	12.8	86	se	10	4.5			10 s		se.	0	0	cloudy	A. Pollak.
Oswego, New York	30.13	765.3	30.47	773.9	34.4	1.3	68	e.	4	1.8		0	0			0	0	clear	S. W. Beall.
Palestine, Texas	29.58	751.3	30.15	765.8	64.0	17.8	90	e.	3	1.3			10 ks		e.	0.03	0.8	cloudy	L. M. Pindell.
Pensacola, Florida	30.04	763.0	30.08	764.0	58.3	14.6	86	n.	5	2.2		0	0			c	0	clear	M. McGauran,
Philadelphia, Pa	30.28	769.1	30.38	771.6	43.5	6.4	60	ne.	14	6.3			10 s		ne.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.71	449.8	30.37	771.4	15	— 9.4	87	sw.	52	23.3		0	0			0	0	clear	H. Hall.
Ploche, Nevada	24.16	613.7	30.30	769.6	38	3.3	47	nw.	7	3.1		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.48	748.8	30.33	770.4	37.0	2.8	72	n.	3	1.3		0	0			0	0	clear	W. Daly.
Poplar River, Montana	27.46	697.5	29.74	755.4				nw.			1		10 s			0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.04	763.3	30.05	763.3	70.9	21.6	84	ne.	19	8.5		0	8 k		ne.	0.01	0.3	cloudy	M. Herman.
Port Huron, Michigan	29.71	754.6	30.43	772.9	34.0	1.1	85	ne.	9	4.0		0	0			0	0	clear	W. O. Bailey.
Portland, Maine	30.44	773.2	30.49	774.4	33.0	0.6	60	n.	8	3.6		0	0			0	0	clear	W. W. Elchelberger.
Portland, Oregon	30.13	765.3	30.20	767.1	40.0	4.4	89	calm	0	0		1 k	0			0.30	7.6	clear	M. L. Hearne.
Portsmouth, N. C.					62	16.7	93	ne.	31	13.9			10 s		ne.	0.02	0.5	cloudy	F. S Coburn.
Prescott, Arizona	24.85	631.2	30.19	766.8	33.5	0.8	65	sw.	2	0.9		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.42	772.7	30.45	773 4	40.5	4.7	65	n.	12	5.4		0	9 s		n.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	29.83	757.7	29.84	757.9	67	19.4	84	n.	8	3.6			10 s		n.	0	0	cloudy	W. J. Evans.
Red Bluff, California	29.87	758.7	30.28	769.1	47.5	8.6	94	n.	3	1.3		1 ck	0	w.		0.64	16.3	clear	E. van Dyk.
Rochester, New York	29.76	755 9	30.46	773.7	30	— 1.1	77	e.	8	3.6		7 k	sk.	e.		0	0	fair	E. W. McGann
Roseburg, Oregon	29.64	752.8	30.21	767.3	36.5	2.5	89	se.	1	0.4		0	fg.			0	0	clear	J. J. Nunry.
Sacramento, California	30.21	767.3	30.29	769.4	47.7	8.7	86	w.	4	1.8		0	0			0.61	15.5	clear	J. A. Barwick
St. Louis, Missouri	29.64	754 8	30.27	768 8	51.0	10.6	88	ne.	4	1.8			8 s		ne.	0	0	cloudy	J. H. Weber.
St. Paul, Minnesota	29.30	744.2	30.22	767.6	36.0	2.2	89	e.	12	5.4		2 cs	0			0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.16	740.7	30.09	764.3	29	— 1.7	88	se.	12	5.4		5 k	0			0	0	fair	O. B Dilley.
Salt Lake City, Utah	25.82	655.8	30.39	771.9	43	6.1	68	calm	0	0			10 ks		sw.	0.11	2.8	cloudy	J. Craig.
San Antonio, Texas	29.38	746.2	30.10	764.5	61.0	16.1	84	ne.	3	1.3		4 cs	0			0	0	fair	T. J. Kenan.
San Diego, California	30.11	764.8	30.18	766.6	51.3	10.7	88	ne.	6	2.7		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.62	752.3	30.34	770.6	44	6.7	76	ne.	27	12.1		0	0			0	0	clear	M. H. Perry.
Sandy Hook, New Jersey	30.36	771.1	30.39	771.9	46.0	7.8	68	ne.	25	11.2			10 s		ne.	0	0	cloudy	B. A. Blundon.
San Francisco, California	30.21	767.3	30.28	769.1	52	11.1	86	sw.	5	2.2		0	0			0.75	19.0	clear	N. Gorom.
Santa Fé, New Mexico	23.28	591.3	30.32	770.1	43	6.1	37	e.	3	1.3		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	29.98	761.5	30.07	763.8	52	11.1	77	n.	10	4.5		9 cs	0	n.		0	0	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.30	668.0	30.12	765.0	40	4.4	59	sw.	14	6.3		5 cs	0			0	0	fair	A. L. Mathews.
Shreveport, Louisiana	29.89	759.2	30.14	765 5	62	16.7	87	ne.	6	2.7			10 s		ne.	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.79	731.3	30.10	764.5	55	12.8	90	s.	4	1.8		0	9 s			0	0	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.37	619.0	30.21	767.3	46.5	8.1	77	sw.	7	3.1		2 c	2 s			0	0	fair	N. D. Lane.
Sitka, Alaska	29.20	741.7	29.27	743.4	47.1	8.4	48	e.	32	14.3			10 ks		e.	0.18	4.6	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.65	753.1	30.14	765.5	60.0	15.6	87	e.	3	1.3		4 k	0	s.		0	0	fair	J. B. Campbell.
Smithville, North Carolina	30.03	762.7	30.07	763.8	52	11.1	86	n.	13	5.8			10 s			0	0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.20	716.3	30.28	769.1	38	3.3	92	s.	5	2.2			10 s			0.30	7.6	cloudy	D. Moore.
Springfield, Illinois	29.56	750.8	30.28	769.1	42.5	5.8	78	ne.	6	2.7		0	0			0	0	clear	T. B. Jennings.
Springfield, Massachusetts	30.36	771.1	30.50	774.7	34.7	1.5	67	n.			2	8?	8 n	se.	nw.	0	0	cloudy	Charles Mayr.
Springfield, Mo	28.68	728.5	30.20	767.1	54	12.2	86	se.	8	3.6		8 cs	0	w.		0	0	cloudy	J. B. Marbury.
Starkville, Miss	29.65	753.1	30.15	765.8	59	15.0	93	nw.	5	2.2		0	fg.			0	0	clear	O. Dill.
Stevenson, Fort, Dakota	27.89	708.4	29.86	758.4	41	5.0	92	e.	8	3.6			10 s			0	0	cloudy	W. Burrows
Stockton, Fort, Texas	27.10	688.3	30.22	767.6	54.0	12.2	86	se.	4	1.8		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	30.45	773.4	30.50	774.7	40.0	4.4	73	n.	10	4.5		5 k	0	w.		0	0	fair	G. Liebmann.
Thomas, Camp, Arizona	27.33	694.2	30.17	766.3	39	3.9	57	nw.			1	hz.	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.62	752.3	30.36	771.1	36	2.2	79	n.	6	2.7		0	0			0	0	clear	A. Buell.
Tucson, Arizona	27.64	702.0	30.10	764.5	48	8.9	58	se.	6	2.7		0	0			0	0	clear	J. L. Whitesides.
Umatilla, Oregon	29.94	760.5	30.32	770.1	33	0.6	88	se.	6	2.7		0	0			0.13	3.3	clear	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					39.9	4.4	67	nw.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.89	759.2	30.16	766.1	61.2	16.2	93	ne.	2	0.9			10 s		ne.	0	0	cloudy	James Kenealy.
Visalia, California	29.86	758.4	30.24	768.1	43.0	6.1	93	e.	1	0.4		2 cs	0			0.10	2.5	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.36	618.7	30.10	764.5	42.0	5.6	29	sw.	23	10.3		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	30.24	768.1	30.36	771.1	43.7	6.5	78	ne.	5	2.2			10 s		ne.	0	0	cloudy	B. M. Pursell.
West Las Animas, Colorado	25.89	657.6	30.01	762.2	35	1.7	56	nw.	4	1.8		0	1 s			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.79	756.7	30.42	772.7	41	5.0	89	calm	0	0		0	1 ks		e.	0	0	clear	B. F. Hough.
Wilmington, N. Carolina	30.05	763.3	30.11	764.8	52	11.1	86	n.	13	5.8			10 s			0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.86	656.8	30.39	771.9	42	5.6	76	ne.	2	0.9		0	4 s		sw.	0.12	3.0	fair	J. Grover.
Yankton, Dakota	28.60	726.4	29.98	761.5	56	13.3	69	se.	18	8.0			10 s			0	0	cloudy	J. H. Atfield.
Yuma, Arizona	29.87	758.7	30.02	762.5	55.0	12.8	62	sw.	3	1.3		2 cs	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.98	558.3			54.0	12.2	77	calm	0	0			10 s		s.	0	0	cloudy	Joaquin Gomez.
Havana, Cuba, W. I.	29.71	754.6	29.76	755.9	69.7	20.9	84	e.	4	1.8		1 ck	2k;sk	n.	nw.	inap.	inap.	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.79	756.7	29.80	756.9	74	23.3	92	calm	0	0		30;cs	0			0	0	fair	Robert Johnston.
Navassa, W. I.	29.70	754.4	29.78	756.4	80	26.7	76	ne.	12	5.4		6 ks	2 k	e.	ne.	0	0	cloudy	F. M. Everett.
Paramaribo, S. A.	29.94	760.5	29.94	760.5	80	26.7	78	se.			3	3 c	0			0	0	clear	Dr. C. J. Hering.
Puerto Berrio, U. S. Colombia	29.34	745.2	29.90	759.4	78	25.6	89	calm			0		10 ks		ne.	0.20	5.1	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					74.5	23.6	98	sw.			1	5 ck	0	nw.		0	0	fair	Earl Flint.
Santiago de Cuba, W. I.	29.77	756.1	29.79	756.7	75	23.9	85	n.	2.4	1.1		1 ck	0			0.42	10.7	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.61	752.1	29.67	753 6	24	— 4.4	88	n.			7	0	5 k			0.03	0.8	fair	W. J. Fisher.
St. Thomas, W. I.	29.76	755.9	29.88	758.9	80	26.7	97	sw.					8 km		sw.	0.93	0.8	cloudy	Aug. Walloe.
York Factory, B. A	30.21	767.3	30.27	768.8	27.5	— 2.5	94	n.	10	4.5		0	0			0	0		Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, N. 32° 57′, E. 122° 30′	30.34	770.6	57	13.9	.....	wsw.	.....	.....	2–3	.....	3	nw.	.....	.....	.....	3	w.	d. clouds.
H. M. S. Amethyst, Colonia, Uruguay†	30.02	762.5	65.5	18.6	91	ne.	.....	.....	5	.....	9	.....	.....	.....	.....	3	se.	d. clouds.
H. M. S. Antelope, N. 37° 26′, E. 24° 57′	30.15	765.8	62	16.7	.....	n.	.....	.....	3–5	.....	1	.....	.....	.....	.....	3	nnw.	squally.
H. M. S. Audacious, Suez Canal, Egypt	30.02	762.5	75	23.9	81	nne.	.....	.....	1	.....	1	nne.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Carysfort, N. 29° 56′ E 32° 33′	29.99	761.7	74.5	23.6	76	nnw.	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Champion, N. 31° 14′ E. 121° 38′	.....	.....	55	12.8	80	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	.....	.....	41	5.0	91	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	raining.
H. M. S. Condor, Coast of Syria	30.03	762.7	74	23.3	81	nw.	.....	.....	1	.....	5	nw.	.....	.....	.....	2	.....	d. clouds
H. M. S. Curacoa, N. 34° 28′ E.. 134° 18′	30.04	763.0	56.5	13.6	81	nnw.	.....	.....	4–5	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Diamond, S. 18° 10′, W. 178° 31′ *†	29.76	755.9	80	26.7	74	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	.....	raining.
H. M. Dock-Yard, Bermuda, W. I.	29.98	761.5	70	21.1	92	ene.	.....	.....	2–3	.....	8	ene.	.....	.....	.....	.....	.....	squally.
H. M. S. Eclipse, N. 15° 03′, E. 53° 32′	29.89	759.2	.....	.....	.....	ene.	.....	.....	3	.....	4	e.	.....	.....	.....	2	n.	d. clouds.
H. M. S. Espiegle, S. 19° 39′, E. 162° 32′	.....	.....	72	22.2	85	sse.	.....	.....	5	.....	10	.....	.....	.....	.....	5	sse.	showery.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.93	760.2	77.5	25.3	84	sw.	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Flying Fish, N. 37° 12′ E.126° 27′	30.23	767.8	48.5	9.2	74	nnw.	.....	.....	5–6	.....	7	.....	.....	.....	.....	2	nw.	misty.
H. M. S. Garnet, S. 18° 00′, W. 71° 20′	29.99	761.7	66	18.9	90	se.	.....	.....	3	.....	8	.....	.....	.....	.....	3	ssw.	d. clouds.
H. M. S. Iris, N. 31° 12′, E. 29° 50′	30.12	765.0	72	22.2	80	nw.	.....	.....	2–4	.....	1	nw.	.....	.....	.....	3	nnw.	squally.
H. M. S. Iron Duke, N. 32° 44′ E. 129° 51′	30.23	767.6	51	10.6	93	calm	.....	.....	0	.....	4	nnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Kingfisher, N. 39° 09′ W. 124° 13′	30.24	768.1	49	9.4	.....	sse.	.....	.....	2	.....	3	sse.	.....	.....	.....	sm'h	.....	d. clouds.
H. M. S. Lark, S. 10° 00′, E. 161° 54′	29.89	759.2	82.3	27.9	89	nw.	.....	.....	2	.....	8	.....	.....	.....	.....	.....	.....	showery.
H. M. S. Liffey, N. 29° 56′, W. 71° 20′	30.09	764.3	63	17.2	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Magpie, Nagasaki, Japan	30.24	768.1	52.7	11.5	79	ene.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Northampton, Halifax, Nova Scotia	30.35	770.9	36	2.2	80	nnw.	.....	.....	1	.....	10	nnw.	.....	.....	.....	.....	.....	overcast
H. M. S. Nelson, Melbourne, Australia	29.84	757.9	61	16.1	82	s.	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.82	757.4	81	27.2	84	wsw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Rocket, N. 9° 00′, W. 79° 31′	29.86	758.4	78	25.6	95	s.	.....	.....	3	.....	5	.....	.....	.....	.....	3–4	sw.	d. clouds.
H. M. S. Sappho, S. 29° 00′, W. 143° 10′	30.13	765.3	64.2	17.9	83	se.	.....	.....	6	.....	5	e.	.....	.....	.....	5	s.	d. clouds.
H. M. S. Superb N. 39° 37′, E. 19° 56′ *	30.32	770.1	75	23.9	78	ese.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sylvia, S. 53° 00′ W. 73° 35′	29.41	747.0	44.5	6.9	100	nnw.	.....	.....	3–6	.....	10	.....	.....	.....	.....	.....	.....	showery.
H. M. S. Thetis, S. 25° 02′, W. 74° 20′	30.09	764.3	63	17.2	83	sse.	.....	.....	3	.....	2	wnw.	.....	.....	.....	4	s.	d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.97	761.2	.....	.....	.....	ene.	.....	.....	2	.....	1	e.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, Bushire, Persia	30.00	762.0	78.5	25.8	57	w.	.....	.....	1	.....	2	nw.	.....	.....	.....	.....	.....	misty.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.08	764.0	42	5.6	75	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.07	763.7	80.6	27.0	84	ne.	.....	.....	2	.....	1	.....	ne.	.....	.....	1	se.	blue sky.
Tamega, Macao, China	30.15	765.9	71.6	22.0	66	ne.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.00	762.0	58	14.4	93	ne.	4	1.8	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Navy Yard, Portsmouth, N. H.	30.47	773.9	31	— 0.6	?	ne.	6	2.7	.....	.....	2	.....	ne.	0	0	.....	.....	fair.
Naval Hospital, Yokohama, Japan*	29.75	755.6	57.5	14.2	90	n.	.....	.....	1	.....	8	.....	wsw.	0.10	2.5	.....	.....	clearing.
Adams, Sitka, Alaska	.....	.....	45	7.2	60	e.	.....	.....	5	.....	10	.....	e.	.....	.....	.....	.....	cloudy.
Alaska, Lahina, Sandwich Islands	29.98	761.5	77	25.0	82	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
Alliance, Hampton Roads, Va	30.19	766.8	56	13.3	?	nne.	.....	.....	3	.....	8	.....	.....	light	light	.....	.....	cloudy.
Ashuelot, N. 35° 05′, E. 139° 43′	29.97	761.2	64	17.8	89	n.	.....	.....	2	.....	10	.....	ne.	.....	.....	.....	.....	cloudy
Brooklyn, Keel Point, Patagonia	29.56	750.8	52	11.1	66	w.	15	6.7	.....	.....	10	.....	.....	0	0	mod.	w.	clear.
Colorado, New York, N. Y.	30.51	774.9	43	6.1	58	nne.	5	2.2	.....	.....	10	.....	ne.	0	0	.....	.....	cloudy.
Enterprise, Hampton Roads, Va	30.21	767.3	57	13.9	100	ne.	.....	.....	2	.....	10	.....	ne.	.....	.....	sm'h	.....	cloudy.
Essex, Callao, Peru	29.98	761.5	63	17.2	94	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	sm'h	se.	overcast.
Franklin, Norfolk, Va	30.20	767.1	55	12.8	87	ne.	12	5.4	.....	.....	10	.....	nne.	0	0	.....	.....	overcast
Galena, Montevideo, Uruguay	29.91	759.7	60	15.6	?	e.	.....	.....	4	.....	10	.....	ene.	.....	.....	mod.	e.	cloudy.
Hartford, Montevideo, Uruguay*	29.86	758.4	60	15.6	94	e.	.....	.....	3	.....	10	.....	.....	0	0	sm'h	e.	fair.?
Independence, Mare Island, Cal.	30.28	769.1	46	7.8	100	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear.
Iroquois, Callao, Peru	30.01	762.2	63	17.2	94	se.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, Newport, R. I.	30.44	773.2	37	2.8	100	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Kearsarge, Hampton Roads, Va	30.20	767.1	56	13.3	93	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
Lackawanna, Talcahuana, Chili*	30.07	763.8	52	11.1	86	se.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Lancaster, N. 31° 43′, E. 27° 34′	30.05	763.3	72	22.2	63	nnw.	.....	.....	2	.....	5	.....	n.	0	0	mod.	nnw.	fair.
Michigan, Erie, Pa	30.36	771.1	37	2.8	62	se.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear
Minnesota, New York, N. Y	30.45	773.4	45	7.2	67	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Monocacy, Yokohama, Japan*	29.66	753.4	61	16.1	94	ne.	2	0.9	.....	.....	10	.....	.....	.....	.....	.....	.....	overcast
New Hampshire, Newport, R. I.	30.48	774.2	40	4.4	73	n.	.....	.....	1	.....	10	.....	calm	.....	.....	.....	.....	cloudy.
Nipsic, N. 38° 18′, E. 15° 03′*	30.26	768.6	09	20.6	65	nne.	.....	.....	3	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy.
Onward, Callao, Peru†	30.13	765.3	61	16.1	100	n.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear.
Palos, Nagasaki, Japan*	30.14	765.5	50	10.0	86	se.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Pensacola, Callao, Peru*	29.92	760.0	63	17.2	94	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear.
Powhatan, Boston, Mass	30.46	773.7	36	2.2	80	sse.	6	2.7	.....	.....	10	.....	.....	0	0	sm'h	.....	cloudy.
Quinnebang, Ancona, Italy*	30.28	769.1	60	15.6	82	nne.	.....	.....	1	.....	8	.....	.....	.....	.....	.....	.....	fair.
Ranger, San Francisco, Cal	30.30	769.6	54	12.2	93	nnw.	.....	.....	1	.....	2	.....	calm	.....	.....	sm'h	.....	fair.
Richmond, Yokohama, Japan*	29.81	757.2	59	15.0	94	w.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	fair.
Saratoga, N. 11° 59′, W. 85° 54′	29.75	755.6	86	26.7	82	nnw.	.....	.....	2	.....	8	.....	w.	0	0	.....	.....	fair.
St. Louis, League Island, Pa	30.61	777 5	41	5.0	82	n.	.....	.....	2	.....	8	.....	nnw.	1.3	33.	.....	.....	cloudy
Swatara, S. 0° 58 W. 20° 47′*	29.80	756.9	76	24.4	69	nne.	.....	.....	1	.....	8	.....	ne.	.....	.....	long	n.	fair.
Tennessee, Hampton Roads, Va	30.19	769.8	58	14.4	87	e.	.....	.....	3	.....	0	.....	nne.	.....	.....	.....	.....	cloudy.
Vandalia, N. 36° 57′, W. 75° 57′*	30.18	766.6	58	14.4	87	ne.	21	9.4	.....	.....	10	.....	.....	.....	.....	sm'h	.....	clear.;
Wabash, Boston, Mass	30.47	773 9	36	2.2	62	ne.	.....	.....	3	.....	10	.....	.....	0	0	.....	.....	squally.
Wachusetts, Mare Island, Calf	30.25	768.3	57	13.9	93	n.	6	2.7	.....	.....	8	.....	ne.	.....	.....	.....	.....	cloudy.
Wyandotte, Washington, D. C	30.47	773.9	52	11.1	86	se.	.....	.....	0–1	.....	2	.....	nw.	0	0	.....	.....	cloudy.
Yantic, Norfolk, Va	30.20	767.1	55	12.8	87	ne.	.....	.....	2	.....	5	.....	calm	Bl'k	Bl'k	sm'h	.....	clear.
Merchant Marine.						une.	.....	.....	2–3	.....	10	.....	ne.	.....	.....	.....	.....	threatening.
S. S. Grecian, Montevideo, Uruguay*	29.92	760.0	59	15.0	94	ese.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	overcast.
S. S. Scandinavian, N. 42° 27′ W. 67° 25′	30.46	773.7	41	5.0	.....	n.	.....	.....	3	.....	10	.....	ese.	5 h'r	5 h'r	sm'h	.....	cloudy.
S. S. Indiana, N. 39° 57′, W. 72° 43′	.....	.....	38	3.3	81	nw.	.....	.....	3	.....	4	.....	nne.	0	0	light	nne.	d. clouds.
S. S. Lord Clive, N. 43° 20′, W. 59° 10′ *†	.....	.....	.....	.....	.....	n.	.....	.....	2	.....	10	.....	nw.	.....	.....	sm'h	nw.	cloudy.
S. S. Lord Gough, N. 51° 33′ W. 15° 45′	30.22	767.6	.....	.....	.....	w.	.....	.....	6	.....	10	.....	ne.	0	0	sl't	ne.	cloudy.
S. S. Pennsylvania, St. George Channel†	29.83	757.7	52	11.1	.....	w.	.....	.....	6	.....	8	.....	w.	sh'rs	sh'rs	r'gh	w.	cloudy.
S. S. Castor, N. 50° 00′, W. 11° 30′*	29.55	750.6	53	11.7	.....	w.	.....	.....	6	.....	10	.....	w.	.....	.....	r'gh	sw.	rainy.
S. S. Jason, N. 40° 26′, W. 68° 23′	29.88	758 9	53.6	12	.....	w.	.....	.....	6	.....	4	.....	w.	.....	.....	5	wnw.	
S. S. Stella, N. 50° 18′ W. 2° 40′	30.30	769.5	.....	.....	.....	nw.	.....	.....	6	.....	7 k	.....	.....	.....	.....	6	nw.	cloudy.
S. S. Anchoria, N. 51° 52′, W. 32° 38′†	29.77	756.1	55.4	13	.....	wnw.	.....	.....	6	.....	5	.....	w.	.....	.....	6	w.	squally.
S. S. Bolivia, Glasgow, Scotland	29.76	755.9	.....	.....	.....	wsw.	.....	.....	4	.....	10	.....	wsw.	sh'rs	sh'rs	mod.	wnw.	cloudy.
S. S. Dorian, N. 37° 03, W. 9° 40′*	29.02	737.1	49	9.4	78	wuw.	.....	.....	.....	.....	.....	.....	.....	4 h'r	4 h'r	.....	.....	overcast
S. S. Ethiopia, N. 51° 48′, W. 30° 57′	30.16	766.1	64	17.8	.....	ene.	.....	.....	4	.....	0	.....	.....	0	0	mod.	nw.	clear.
S. S. Galatia, N. 19° 40′ E 87° 34′†	29.63	752.6	46.5	8.1	92	w.	.....	.....	2	.....	10	.....	w.	2 h'r	2 h'r	hv'y	wnw.	overcast.
S. S. Utopia, N. 12° 39′, E. 47° 04′	30.00	762.0	83.0	28.3	.....	wnw.	.....	.....	2	.....	2	.....	nne.	0	0	long	ssw.	fair.
S. S. Ailsa, Savanilla, U. S. C†	.....	.....	86	30.0	63	e.	.....	.....	2	.....	1	.....	w.	0	0	sm'h	e.	clear.
S. S. Alpin, Mayaguz, W. I.	29.99	761.7	79	26.1	86	nw.	.....	.....	5	.....	5	.....	nw.	0	0	light	nw.	fair.
S. S. Alvo, N. 23° 50′, W. 74° 15′	29.94	760.5	.....	.....	.....	calm	.....	.....	0	.....	.....	.....	sw.	½h'r	½h'r	sm'h	.....	
S. S. Antillas, N. 38° 04′, W. 75° 06′	.....	.....	.....	.....	.....	ne.	.....	.....	4	.....	.....	.....	ne.	2 h'r	3 h'r	5	.....	clear.
S. S. Ambrose, Para, Brazil†	.....	.....	.....	.....	.....	ne.	.....	.....	3	.....	10	.....	ne.	sh'rs	sh'rs	mod.	ne.	
British Merchant, S. 17° 06′, W. 104° 37′	29.86	758 4	.....	.....	.....	ne.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	fine.
Dynomene, S. 6° 00′ E. 88° 00′	30.13	765.3	67.3	19.6	96	ene.	.....	.....	6	.....	8	.....	.....	.....	.....	.....	.....	showery.
S. S. Gordon Castle, N. 11° 26′, E. 110° 47′	29.91	759.7	83.5	28.6	75	ese.	.....	.....	1–2	.....	6	.....	.....	.....	.....	.....	.....	d. clouds.
May Hulse, N. 13° 03, W. 25° 38′	29.85	758.2	75.9	24.4	91	ne.	.....	.....	4–6	.....	10	.....	.....	.....	.....	high	n.	showery
Markland, N. 27° 10′ W. 34° 35′	29.89	759.2	81	27.2	78	ne.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	blue sky.
	30.13	765.3	77.1	25.1	71	e.	.....	.....	3	.....	4	.....	.....	.....	.....	3	var.	d. clouds.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.91	759.7	87	30.6	51	calm			0		0							blue sky.
S. S. Seine, N. 48° 12′, W. 5° 36′	30.05	763.3	57.0	13.9	87	wnw.			6		9							misty.
Inchkeith, N. 1° 57′, W. 26° 23′	29.88	758.9	81	27.2	78	se.			5		0							blue sky.
S. S. Mertola, N. 45° 26′ W. 10° 17′	30.28	769.1	59.4	15.2	100	sw.			5		10							overcast.
S. S. Gallia, N. 41° 45′ W. 51° 52′	30.26	768.6	49	9.4	?	n.			6		5		ne.	0	0	mod.	ne.	fine.
S. S. Marathon. N. 49° 47′, W. 7° 22′			57	13.9		w.			6		4		wsw.	8 h'r	8 h'r	r'gh	wsw.	showery.
S. S. Scythia, N. 46° 12′, W. 42° 20′	30.00	762.0	48	8.9	92	w.			5		7		w.	6 h'r	6 h'r	r'gh	w.	squally.
S. S. Canada, N. 43° 20′, W. 55° 30′	30.33	770.3	42.8	6		n.			2		3		nw.	0	0	sm'h	n.	clear.
S. S. Ville de Marseilles, N. 48° 27′, W. 36° 06′ *†	29.70	754.4	55	12.8		wnw.			3		8		nw.	16 h'r	16 h'r	long	nw.	rainy.
S. S. Arizona, N. 45° 46′ W. 51° 19′	30.25	768.3	39	3.9		nnw.			3		5		n.	0	0	mod.	n.	fair.
S. S. Wisconsin, N. 47° 50′ W. 44° 00′	29.82	757.4	38	3.3		nw.			4		2		nw.	2 h'r	2 h'r	mod.	n.	fair.
S. S. Bohemia, N. 48° 16′, W. 31° 41′†	29.79	756.7				nne.			5		10		n.	12 h'r	12 h'r	long	nw.	drizzling.
S. S. Cimbria, N. 48° 14′, W. 40° 18′	29.79	756.7	46.0	7.8		w.			7		6		w.	1 h'r	1 h'r	long	w.	squally.
S. S. Silesia, Elbe river, Germany			52	11.1		wsw.			7									rainy.
S. S. Vandalia, New York, N. Y	30.48	774.2	43.5	6.4		n.			3		10		n.	0	0			cloudy.
S. S. Wieland, N. 49° 55′, W. 11° 34′	30.06	763.5	57	13.9		w.			6		2		w.	0	0	7	w.	
S. S. Hevelius, Buenos Ayres, Argentine Rep*†	30.04	763.0	68	20.0		ese.			6		8		ene.	1 h'r	1 h'r			cloudy.
S. S. Bulgarian, N. 52° 32′, W. 32° 49′ *	29.78	755.4				ssw.			1		10		nw.	5 h'r	5 h'r	mod.	nw.	cloudy.
S. S. City of San Antonio, N. 30° 45′, W. 75° 40′ †.	29.94	760.5	74	23.3		ne.			5		10		nw.	9 h'r	9 h'r	h'vy	ne.	rainy.
S. S. Colorado, N. 26° 23′, W. 87° 59′†	29.93	760.2	70	21.1		nne.			6		4		nne.	0	0	high	ne.	fair.
S. S. Rio Grande, N. 27° 30′, W. 90° 03′†	30.01	762.2	70.8	21.6		ne.			2		2		n.	0	0	small	ne.	fair.
S. S. Archimede, Palermo, Sicily *†	30.35	770.9	70	21.1	70	ne.			2		1		ne.	0	0			clear.
S. S. Hermod, N. 48° 49′ W. 15° 23′†	30.05	763.3	59.0	15		sw.			7		8		wsw.	0	0	high	w.	misty.
S. S. Glenapp, Para river, Brazil †	29.93	760.2	81	27.2		ne.			3		3 k		ne.	0	0	sm'h		fine.
S. S. Chalmette, Algiers, La †	30.06	763.5	65	18.3		e.			2		0			0	0			clear.
S. S. New York, N. 24° 30′, W. 81° 00′ †	29.85	758.2	70	24.4		n.			4		7		n.	0	0	sm'h		cloudy.
S. S. Egypt, N. 49° 32′, W. 28° 09′ *†	29.70	754.4				ne.			5		10		nne.	7 h'r	7 h'r	cross	s;nw	drizzling.
S. S. England, New York, N.Y	30.32	770.1				ne.			4		0			0	0			clear.
S. S. Erin, N. 41° 52′, W. 64° 39′	30.36	771.1	47	8.3		nnw.			3		6		ne.	4 h'r	4 h'r	sm'h		fine.
S. S. Helvetia, Liverpool Eng			55	12.8		w.			5		5		w.	0	0			fine.
S. S. The Queen, N. 40° 40′, W. 71° 38′	30.24	768.1	45	7.2		nne.			5		10		calm	0	0	sm'h		dull.
S. S. City of Alexandria, Havana, Cuba, W. I†	29.89	759.2	78	25.6		nnw.			4		5		nw.	2 h'r	2 h'r	h'vy	nnw.	squally.
S. S. City of Merida, N. 19° 40′, W. 90° 44′ *†	29.86	758.4	71.6	22		nne.			1		2		nne.	1 h'r	1 h'r	mod.	n.	squally.
S. S. City of Washington, N. 19° 52′, W. 90° 50′†	30.00	762.0	80	26.7		n.			5		8		n.	0	0	light	n.	fine.
S. S. City of Chester, N. 51° 22′, W. 11° 12′			54	12.2		wsw.			7								wsw.	clear.
S. S. Amerika, N. 49° 34′, W. 23° 49′*	29.91	759.7	55.0	12.8	90	s.			5		8		sw.	0	0	long	wsw.	cloudy.
S. S. Donau, N. 49° 43′. W. 26° 09′	29.66	753.4				ene.			2		10		s.	6 h'r	6 h'r	high	wsw.	raining.
S. S. Gen. Werder, N. 42° 55. W. 60° 28′	30.40	772.1				n.			3		3		w.	0	0	sm'h		clear.
S. S. Habsburg, N. 42° 55′, W. 54° 21′	30.33	770 4	44.6	7.0		nnw.			3		2		nw.	0	0	mod.	nnw.	fair.
S. S. Hohenstaufen, N. 53° 11′, E. 4° 20′	29.51	749.5	59.0	15.0		wsw.			6		8?		w.	5 h'r	5 h'r	7	wsw.	clear?
S. S. Koln, N. 47° 19′, W. 21° 56′	29.64	752.8	50.0	10.0	?	ene.			4		10		ne.	6 h'r	6 h'r	long	var.	drizzling.
S. S. Kronprinz F. Wilhelm, N. 36° 46′ W. 15° 08′*	30.36	771.1	64.4	18.0		wnw.			3		4?		nw.	0	0	sm'h	nw.	cloudy?
S. S. Ohio, N. 27° 28′ W. 64° 52′	29.95	760 7				ene.			3–4		4		ene.	0	0	sm'h	ene.	fair.
S. S. Salier, N. 38° 50′ W. 70° 05′	30.33	770.4	46.4	8.0		ene.			4		10		ene.	0	0	r'gh	ene.	cloudy.
S. S. Strassburg, Weser Light-ship, Germany	29.81	757.2	55.0	12.8	84	s.			8		10		s.	12 h'r	12 h'r	h'vy	s.	covered.
S. S. Belgic, N. 32° 06′, W. 133° 17′†	30.14	765.5	07	19.4	?	nw.			3		7		nw.	0	0	mod.	nw.	cloudy.
S. S. Coptic, N. 46° 23′, W. 161° 46′	30.15	765.8	47.5	5.3	61	var.			2		8		ne.	4 h'r	4 h'r	sl't	ne.	clear.
S. S. City of Augusta, New York, N. Y †	30.33	770.4				ne.			4		8			0	0			cloudy.
S. S. Mississippi, Seattle, Wash. Ter†	30.15	765.8	48	8.9	85	se.			1		3		s.					fair.
S. S. Oregon, Portland, Oregon †	30.13	765.3	37	2.8	90	calm			0		0							hazy.
S. S. Ancon, San Francisco, Cal †	30.22	767.6	51	10.6	93	n.			1		6							clear.
S. S. Orizaba, N. 33° 43′, W. 118° 15′†	30.22	767.6	01	16.1	66	nw.			6		fg.		nw.			long	w.	foggy.
S. S. Australia, Sydney, N. S. W	30.22	767.6	03	17.2	72	nw.			2		1		nnw.	0	0			clear.
S. S. City of New York, S. 1° 09′, W. 165° 33′ †	29.88	758.9	78	25.6	78	se.			3		0			0	0	sm'h		clear.
S. S. City Pekin, N. 34° 08′, E. 170° 32′†	30.47	773.9	66	18.9	68	nne.			5		10		n.	0	0	mod.	n.	cloudy.
S. S. City of Sydney, S. 34° 10′, E. 164° 42′†	30.06	763.5	59	15.0	70	ssw.			5		5?		sw.	0	0	h'vy	ssw.	cloudy?
S. S. Colima, N. 10° 22′, W. 86° 33′†	29.83	757.7	78	25.6	91	w.			3		3		w.	0.20	5.1	mod.	con.	fair.
S. S. San Jose, N. 9° 52′, W. 85° 38′*	30.02	762.5				ese.			2		10		ese.	0	0	light	s.	overcast.
S. S. Bermuda, N. 20° 02′, W. 64° 11′ †	29.83	757.7	82	27.8		sse.			1		6		sse.	sqll's	sqll's	g'tl	se.	raining.
S. S. Muriel, St. Lucia, W. I	29.86	758.4	82	27.8		ese.			2		10			0	0	sm'h		overcast
S. S. Caracas, Puerto Cabello, Venezuela†	29.92	760.0	80	26.7	91	calm			0		10			4 h'r	4 h'r	sm'h		cloudy.
S. S. Belgenland, N. 40° 35′, W. 70° 10′†	30.54	775.7	52	11.1	93	n.			4		9		n.	0	0	mod.	n.	cloudy.
S. S. Pennland, Antwerp, Belgium	29.79	759.7	54.5	12.5	97	wsw.			6		10			6 h'r	6 h'r			raining.
S. S. Rhynland, Antwerp, Belgium	29.69	754.1	53	11.7	80	wnw.			8		10		w.	12 h'r	12 h'r			heavy rain.
S. S. Switzerland, N. 40° 26′ W. 65° 30′ †	30.32	770.1				ne.			5		10		ne.	2 h'r	2 h'r	mod.	ne.	cloudy.
S. S. Waesland, N. 49° 07′ W. 33° 14′	29.78	756.4	48	8.9	85	wnw.			5		10		w.	7 h'r	7 h'r	long	w.	clearing.
S. S. Maas, N. 41° 00′, W. 66° 42′	30.25	768.3	50	10.0	84	nne.			3		5?		s.	0	0		nnw.	overcast?
S. S. P. Caland, N. 49° 37′, W. 15° 16′	29.94	760.5	58.1	14.5	86	w.			5		2		wnw.			6	w.	fair.
S. S. W. A. Scholten, N. 49° 36′, W. 24° 08′	29.85	758.2	55.4	13.0	96	s.			7		10		sw.	4 h'r	4 h'r	high	wnw.	
S. S. State of Florida, N. 41° 29′, W. 63° 38′	30.25	768.3	40	7.8		ene.			3		8		ne.	0	0	light	ne.	cloudy.
S. S. State of Georgia, N. 40° 58′, W. 67° 25′†	30.39	771.9	44	6.7		nne.			5		10		w.	0	0	sm'h		overcast.
S. S. State of Indiana, N. 50° 17′, W. 42° 20′†	29.79	756.7	42	5.6		n.			4		4		n.	6 h'r	6 h'r	r'gh	w.	showery.
S. S. State of Nevada, Larne, Ireland †	29.35	745.5	46	7.8		w.			7		5?		w.	h'vy	h'vy			clear?
S. S. Thingvalla, Copenhagen, Denmark †	29.47	748.5	49.1	9.5		s.			2		10		s.	12 h'r	12 h'r			covered.
S. S. Iowa, N. 51° 52′, W. 7° 39′*†	29.84	757.9	50	13.3		wsw.			6		1		wsw.	4 h'r	4 h'r	mod.	wsw.	clear.
S. S. Plantyn, N. 42° 50′, W. 64° 20′			53	11.7							3		nw.	0	0	cross	nw.	squally.
S. S. Adriatic, N. 41° 08′, W. 60° 50′†	30.41	772.4	54	12.2		ne.			3		4		nne.			mod.	n.	fair.
S. S. Britanic, N. 50° 43′, W. 15° 21′†	30.02	762.5	55	12.8	74	wnw.			4		8		wnw.	2 h'r	2 h'r	high	wnw.	d. clouds.
S. S. Celtic, N. 50° 55′, W. 25° 46′ †	29.81	757.2	53	11.7	80	w.			4		10			sh'rs	sh'rs	h'vy	w.	overcast.
S. S. Germanic, N. 40° 42′, W. 69° 10′ †	30.52	775.2	47	8.3		nne.			3		7		n.	0	0	sm'h	nne.	d. clouds.
S. S. Marengo, N. 49° 46′, W. 3° 40′ *†	29.86	758.4				wsw.			6		0		wsw.	2 h'r	2 h'r	light	sw.	cloudy.
S. S. Romano, Hull, England	29.35	745.5	54	12.2		wnw.			4		10		nw.	4 h'r	4 h'r			dull.
S. S. Salerno, Odessa, Russia			50	10.0		nw.			3		1		nw.	0	c			clear.
S. S. Aries, N. 40° 00′, W. 73° 40′*†	30.36	771.1				ene.			5		10		ne.	0	0	short	ene.	threatening.
S. S. Catherine Whiting, Providence, R. I †	30.40	772.1				ne.			1				ne.	0	0			
S. S. Norman, N. 39° 46′, W. 74° 01′	30.35	770.9				e.			5				ese.	0	0	sm'h		cloudy.
S. S. Saxon, Boston, Mass *†	30.50	774.7	40	4.4		ene.			6		10							
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 34° 20′, W. 75° 55′			72	22.2		e.			5		10		e.			rg'h	ne.	cloudy.
Bk. Adelaid, N. 1° 44′ W. 42° 26′ *†	29.86	758.4	84	28.9		e.			5		1		ene.	0	0	mod.	ese.	fair.
Bg. Alcira, N. 30° 45′, W. 09° 38′	30.06	763.5	71	21.7		ese.			3		0		sse.	2 h'r	2 h'r	r'gh	n;se	cloudy
Schr. Anna A. Hilton, N. 37° 22′, W. 74° 11′†	30.13	765.3	62	16.7		e.			5		5?		e.	0	0	r'gh	ene.	clear.?
S. Annie, M. Law, Kobe, Japan *†	30.01	762.2	62	16.7		nne.			2		0			12 h'r	12 h'r			fine.
Hk. Anna Thormann, S. 8° 00′, E. 114° 42′*	29.92	759.9	81.9	27.7	84	ssw.			4		7 k		s.	0	0			cloudy.
S. S. Antonio Lopez, Barcelona, Spain*	30.20	767.1	63.5	17.5	86	s.			1		4			0	0			hazy.
Bk. Aquidneck, N. 24° 15′, W. 39° 28′ *†	30.02	762.5				se.			2		4		se.			light	ene.	clear.
Bk. Aurcola, N. 44° 38′, W. 39° 50′*†	30.15	765.8	59	15.0		n.			7		5		n.	8 h'r	8 h'r	h'vy	n.	threatening.
Bk. Alba, N. 47° 44′, W. 26° 30′ *†	29.82	757.5	59.4	15.2		s.			6									raining.
Bk. Bayonnaise, N. 24° 54′, W. 54° 00′ *†	30.08	764.0				sse.			2		7?		sse	0	0	sm'h		clear?
S. S. Buiswell. Antwerp, Belgium *†	29.81	749.5	57	13.9		sw.			8		10			8 h'r	8 h'r	sm'h		heavy rain.
Bk. Champion. Rotterdam, Holland†	29.71	754.6	53.0	11.7		sw.			5		8		nw.	24 h'r	24 h'r			drizzling.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.12	765.0	61	16.1	82	ne.			3		10 s		ne.	0	0			cloudy.
Schr. C. R. Flint, N. 17° 39′, W. 78° 31′†	29.80	756.9	81	27.2		calm			0		3		ne.	1 h'r	1 h'r	sm'h		clear.
Bk. Don Quixote, S. 7° 40′, E. 112° 55′*	29.73	755.1	86	30.0		nnw.			4		3		nnw.			sm'h	nw.	clear.
Bk. David Preston, N. 38° 20′, W. 72° 45′						ne.					10		ne.	0	0	r'gh	ne.	

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.			Force.	Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. E. D. Bigelow, N. 39° 30′, W. 52° 00′*†	30.20	767.1				ne.			4		2		ne.	0	0		n.	fair.
Schr. Edith B. Seward, Wilmington, N. C*†	30.10	764.5	58	14.4		ene.			1		8		ne.	3 h'r	3 h'r			drizzling.
S. E. J. Spicer, New York, N. Y	30.45	773 4	53	11.7	86	ne.			5		10		nne.	0	0			overcast.
S. Enoch Train, N. 21° 22′, W. 43° 15′*†	30.10	764.5				se.			2		0			0	0	light	ne.	clear.
Bk. Essex, Muscat, Arabia*†	29.91	759.7	86	30.0		e.			3									
Schr. F. E. McDonald, Washington, D. C†	30.39	771.9				ne.			1									
S. S. Foscolia, Santos, Brazil*†	29.53	750.0				se.			3				se.	0	0			fine.
Bk. Freya, N. 44° 09′, W. 11° 23′			63	17.2		wsw.			3		8		w.	0	0	mod.	wnw.	cloudy.
S. Glendon, S 55° 30′, W. 79° 10′†	29.15	740.4	48	8.9		nw.			4		10		nw.	1 h'r	1 h'r	h'vy	sw.	cloudy.
S. Grecian, S. 4° 10′, W. 32° 20′†	29.92	760.0	82	27.8	79	ene.			5		3		ene.	0	0	sm'h	se.	clear.
Bk. Gronsvaer, S. 44° 17′, E. 115° 00′†	29.71	754.6	56.8	13.8	95	wnw.			6		4		wnw.	4 h'r	4 h'r	8	w.	
Bk Hattie G. McFarland, N. 36° 38′, W. 74° 30′†	30.31	769.9	67	19.4		ne.			7		10		ese.	0	0	hv'y	ene.	threatening.
Schr. Hattie Weston, Mayaro Bay, Trinidad W. I*†	29.93	760.2	82	27.8		ese.			2		2		ese.	0	0	mod.	ese.	fair.
S. Hedwig, N. 20° 13′, W. 56° 19′	29.93	760.2	79.5	26.4	92	s.			5		9		var.	7 h'r	7 h'r	2	ne.	rainy.
S. Ivy, Queenstown, Ireland			54	12.2		wnw.			7		4		wnw.	1 h'r	1 h'r			clear.
Schr. Jennie N. Huddell, Chester, Pa†	30.29	769.4				ne.			5		10		e.	light	light			threatening.
S. S. John Hopkins, Chesapeake Bay			50	10.0		ne.			7		10		n.	3 h'r	3 h'r			stormy.
Schr. John L. Thomas, Vivorilla Cays, C. A*†	29.98	761.5				nw.			2		2		nnw.	¼ h'r	¼ h'r	short	nw.	threatening.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.73	755.1				sw.			1		4		sw.	0	0			fair
Bk. Joseph A. Ropes, N. 17° 23′, E. 58° 53′*†	29.99	761.7	81	27.2	74	nne.			4		1					mod.	ne.	fair.
Light House Tender, Laurel, Key West, Florida†	29.80	756.9	76	24.4		n.			2		7		n.	2 h'r	2 h'r			fair.
Bk. Liberia, N. 28° 05′, W. 33° 20′.*..	30.12	765.0	78	25.6	73	se.			3		4		se.	0	0			fine.
Bg. Lilian, N. 13° 40′, W. 58° 10′†	29.90	759.4	84	28.9		ese.			4		4		se.	1 h'r	1 h'r	mod.	ene.	fair.
Bg. L. & W. Armstrong, N. 32° 45′, W. 73° 16′*†	30.00	762.0				ene.			9		10		ene.	rain	rain	h'vy	ne.	overcast.
S. S. Madrid, N. 49° 45′, W. 12° 00′*†	30.10	764.5	56	13.3	87	wsw.			6		7			sh'rs	sh'rs	r'gh	w.	
S. S. Malabar, S. 0° 43′, E. 92° 15′*†	29.92	760.0				var.					10		sw.	0	0	mod.	sw	cloudy.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	29.72	754.9	72	22.2		sw.			2		0			0	0			clear.
Bg. Mattie B. Russell, Matanzas, Cuba*†	30.04	763.0				calm			0		2		nne.	½h'r	½h'r	light	nne.	squally.
Schr. Moravian, N. 12° 33′, W. 81° 43′†	29.93	760.2				nne.							ne.	6 h'r	6 h'r	sm'h	n.	cloudy.
Bg. Myrtle, N. 21° 50′, W. 64° 09′†	29.90	759.4				sw.			1		2		sw.	0	0	long	ne.	fair
Bk. Norena, N. 30° 10′ W 79° 35′*†	30.05	763.3				ne.			7		10		ne.	23 h'r	23 h'r	h'vy	var.	
S. Orealla, S. 5° 26′, E. 81° 40′*	29.94	760.5				ene.			2		4		ene.	0	0	mod.	se.	fine.
S Paramita, San Francisco, Cal†	29.94	760.5	56	13.3		nw.			3				n.	0	0			fair.
S. S. Radnorshire, N. 35° 58′, W. 5° 34′*†	30.23	767.8				e.			6		0			0	0	r'gh	e.	clear.
Bk. Rebus, N. 30° 39′, W. 72° 26′	29.74	755.4	75	23.9		ese.			4		6		se.	0	0	cross	ne.	misty.
S. St. Francis, S. 45° 30′, W. 80° 30′†	29.93	760.2	48	8.9		wnw.			6		8		nw.	4 h'r	4 h'r	mod.	wnw.	squally.
Schr. S. B. Hubbard, Jacksonville, Fla†	29.91	759.7	65	18.3		ne.			5		10			hv'y	hv'y			foggy.
Bk. Southern Belle, N. 42° 15′, W. 37° 50′*†	29.85	758.2	58	14.4		n.			6		5		nne.	½ h'r	½ h'r	cross	var.	fair.
S. Sovereign of the Seas, N. 37° 10′, W. 124° 20′*†	30.11	764.8	55	12.8	93	sw.			1		1		sw.	0	0	sm'h	s.	fair.
Bg. Teneriffe, N. 32° 30′ W. 78° 20′						ne.			8				ne.	0	0	r'gh		
Bk. Truro, N. 49° 20′, W. 16° 00′*†	30.11	764.8				wsw.			3–4		9		wsw.	0	0	long	w.	cloudy.
U. S. F. C. S. S. FishHawk, Washington, D. C†.	30.42	772.7	44	6.7	92	ne.			3		10		ne.	0	0			cloudy.
Bk. Vincenzo Accame, N. 38° 40′, W. 10° 15′†	30.45	773.3	66.2	19.0		ne.			3		0			0	0	mod.	n.	clear.
Schr. Viola Reppard, Savannah, Ga†	30.03	762.7	68	20.0		n.			2		10		nne.	0	0			cloudy.
Schr. Walter L. Plummer, Mirogone, Hayti, W. I*†	29.80	756.9				sse.			3		10		sse.	0	0			threatening.
Bk. Wandering Jew, N. 4° 48′, W. 28° 59′†	29.79	756.7	81	27.2		s			4		5		sse.	2 h'r	2 h'r	long	ssw.	fair.
Bk. Warden Law S. 56° 45′, W. 77° 00′	29.45	748.0				nnw.			3		8		nnw.	2 h'r	2 h'r	cross	s.	threatening.
Bgt. Willie, S. 35° 30′, W. 22° 00′*†	30.13	765.3	60	15.6		ese.			8		10		ese.	6 h'r	6 h'r	h'vy	ese	raining.

International Chart I. November 4, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 5, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0-10	0-10	0-10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.33	770.4	66.4	19.1	92	s.	.....	.....	1	.....	3	.....	.....	0	0	pretty fair...	Malaterre.
Algiers	.....	.....	30.40	772.1	65.5	18.6	84	ne.	.....	.....	2	.....	0	.....	.....	0	0	clear.....	Thève.
La Calle	.....	.....	30.35	771.0	74.5	23.6	80	wsw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair...	Fonfréde.
Tunis	.....	.....	30.41	772.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.36	771.1	69.1	20.6	45	n.	.....	.....	2	.....	1	.....	.....	0	0	very fair.....	Pérès.
Tebessa	.....	.....	30.41	772.3	59.0	15.0	58	w.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	Dognon.
Geriville	.....	.....	.....	.....	65.5	18.6	29	ese.	.....	.....	8	.....	5	.....	.....	0	0	cloudy.....	Louchamp.
Laghount	.....	.....	30.38	771.7	65.1	18.4	45	ne.	.....	.....	6	.....	2	.....	.....	0	0	fair.....	Abraham.
Biskra	.....	.....	30.39	771.8	72.3	22.4	55	.....	.....	.....	.....	.....	0	.....	.....	0	0	clear.....	Malau.
Australian.																			
Melbourne, Victoria	29.91	759.7	30.00	762.0	60.0	15.6	71	ese.	2	0.9	.....	.....	2	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.65	753.1	30.20	767.0	61.5	16.4	51	sw.	.....	.....	3	.....	6	.....	.....	0	0	.....	Prof. Ivan Stozir.
Oracow, I. R Observatory	29.27	743.5	30.05	763.2	48.2	9 0	71	w.	11.9	5.3	.....	.....	7	.....	.....	0.291	7.4	.....	Dr. Wierzbiski.
Eperies	29.16	740.6	30.04	763.1	50.5	10.3	74	calm	.....	.....	0	.....	9 ks	.....	se.	0	0	.....	Julius Mikolik.
Gratz	28.97	735.8	30.23	767.9	51.8	11.0	67	w.	.....	.....	2	.....	5	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.66	727.9	30.11	764.8	49.6	9.8	66	nw.	.....	.....	3	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling
Kremsmunster, Obs'y	28.90	734.1	30.26	768.7	50.0	10.0	76	wsw.	.....	.....	2	.....	10	.....	.....	0.197	5.0	gloomy.....	The Staff.
Lemberg	28.97	735.7	29.96	761.0	48.7	9.3	79	nw.	.....	.....	2	.....	8	.....	.....	0.055	1.4	.....	Dr. T. Stanecki.
Pola	30.16	766.1	30.28	769.0	58.6	14.8	84	wnw.	.....	.....	1	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.59	751.5	30.05	763.3	50.2	10.1	77	w.	.....	.....	2	.....	10	.....	.....	0.165	4.2	.....	Joseph Midlinszky, S. J.
Szegedin	29.89	759.2	30.17	766.3	56.1	13.4	53	w.	.....	.....	3	.....	0	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.19	766.8	30.29	769.4	58.3	14.6	81	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Royal Academy.
Vienna	29.49	749.0	30.21	767.4	54.0	12.2	68	w.	.....	.....	4	.....	8	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.29	744.0	29.39	746.5	44.5	6.9	89	sse.	4	1.8	.....	.....	10	.....	.....	0.280	7.1	raining.....	W. Boswell
Armagh, Observatory	29.17	740.9	29.40	746.7	55.0	12.8	93	ssw.	30	13.4	.....	.....	10	.....	.....	.....	.....	raining.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.55	750.6	56.2	13.4	92	sw.	46	20.6	.....	.....	10	.....	.....	.....	.....	raining.....	John Hartnup.
Bolton, Sharples	29.07	738.4	29.60	751.8	54.6	12.6	84	sw.	14	6.3	.....	.....	10	.....	.....	.....	.....	raining.....	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.58	14.7	.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.87	758.7	29.90	759.4	83.0	28.3	78	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds....	Corpl. J. Surgenor, A. H.C.
Cardington	29.67	753.6	29.79	756.7	01.0	16.1	72	sw.	.....	.....	5.0	.....	8	.....	.....	.....	.....	overcast.....	John McLaren.
Chatham, School M. E	29.80	750.9	29.92	760.0	59.0	15.0	80	sw.	.....	.....	2	.....	9	.....	.....	.....	.....	gloomy.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.78	756.4	30.01	762.2	58.4	14.7	79	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	squally.....	The Staff.
Fort Napier, Natal	27.50	698.5	29.71	754.6	89.0	31.7	35	e.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	85.0	29.4	64	w.	.....	.....	1	.....	4	.....	.....	.....	.....	blue sky.....	Sergt. John Robinson.
Gibraltar, Mediterranean	30.27	768.8	30.33	770.4	62.4	16.9	91	e.	.....	.....	4	.....	8	.....	.....	.....	.....	d. clouds.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.09	738.9	29.29	744.0	44.2	6.8	97	n.	.....	.....	4	.....	fg	.....	.....	.....	.....	foggy.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.74	755.4	29.90	759.4	59.9	15.5	77	sw.	.....	.....	6	.....	8	.....	.....	.....	.....	d. clouds.....	The Staff.
Guernsey	29.84	757.9	30.13	765.3	58.0	14.4	84	w.	.....	.....	5	.....	10	.....	.....	.....	.....	overcast.....	A. Collenette, F. M. S.
Kew, Observatory	29.88	758.9	29.91	759.7	59.4	15.2	74	sw.	30	13.4	.....	.....	10	.....	.....	.....	.....	threatening.	The Staff.
Leicester, Museum	29.64	752.8	29.90	759.4	57.8	14.3	78	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	30.10	764.5	30.18	766.6	71.0	21.7	91	ne.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.74	755.4	29.79	756.7	79.5	26.4	73	sw.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds.....	C. S. Duncombe.
Oscott, St. Mary's College	29.21	741.9	29.72	754.9	57.8	14.3	74	ssw.	.....	.....	6	.....	10	.....	.....	.....	.....	threatening.	Warren Middleton.
Oxford, Radcliffe Obs'y	29.64	752.8	29.87	758.7	58.4	14.7	84	wsw.	.....	.....	6	.....	10	.....	.....	.....	.....	threatening.	The Staff.
Plymouth	29.94	764.5	30.01	762.2	58.5	14.7	84	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	overcast.....	John Merrifield.
Sandwick Manse, Orkneys	29.19	741.4	29.29	744.0	46.2	7.9	73	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky.....	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.06	763.5	30.13	765.3	61.2	16.2	66	sw.	.....	.....	1	.....	2	.....	.....	.....	.....	d. clouds.....	W. H. Lyne.
Sheffield	29.34	745.2	29.59	751.6	56.9	13.8	91	sw.	.....	.....	6	.....	10	.....	.....	0.46	11.7	raining.....	W. F. Cooper.
Silloth Rectory	29.37	746.0	29.40	746.7	53.8	12.1	96	sw.	.....	.....	7	.....	10	.....	.....	0.126	3.2	threatening	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.60	751.8	53.7	12.1	93	sw.	.....	.....	.....	.....	10	.....	.....	.....	.....	raining.....	I. New.
Stratfield Turgiss	29.71	754.6	29.93	760.2	59.2	15.1	74	sw.	24	10.7	.....	.....	7	.....	.....	.....	.....	squally.....	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.93	760.2	30.00	762.0	59	15.0	81	sw.	.....	.....	3-4	.....	7	.....	.....	.....	.....	gloomy.....	W. Newcombe.
Valencia, Observatory	29.67	753.6	29.70	754.4	53.9	12.2	84	wsw.	.....	.....	7	.....	10	.....	.....	.....	.....	d. clouds.....	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	nw.	44	19.7	.....	.....	10	.....	.....	blank	blank	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.47	773.9	30.52	775.2	32	0.0	70	nw.	8	3.6	.....	0	2 s	.....	calm	0	0	fair.....	H. J. Cundall, C. E.
Chatham, N. B*	30.52	775.2	30.58	776.7	23	— 5.0	88	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	G. A. Blair.
Father Point, Quebec*	30.53	775.4	30.55	776.0	31.0	— 0.6	92	nw.	15	6.7	.....	0	hz.	.....	.....	0	0	clear.....	J. McWilliams.
Fort Garry, Manitoba*	29.09	738.9	29.94	760.5	34	1.1	96	ne.	2	0.9	.....	.....	10 n	.....	ne.	0.33	8.4	raining.....	James Stewart.
Halifax, N. S*	30.37	771.4	30.51	774.9	29.	— 1.7	92	n.	6.0	2.7	.....	2 cs	0	.....	.....	0	0	fair.....	A. Allison.
Kingston, Ontario*	30.17	766.3	30.54	775.7	24	— 4.4	84	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	A. P. Knight, M. A.
Montreal, Quebec*	30.38	771.6	30.61	777.5	23	— 5.0	80	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	C. H. McLeod, C. F.
Parry Sound, Ontario*	29.77	756.1	30.51	774.9	25	— 3.9	88	e	10	4.5	.....	0	0	.....	.....	0	0	clear.....	Rev. R. Mosley.
Port Dover, Ontario	29.70	754.4	30.43	772.9	30	— 1.1	100	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	H. Morgan.
Port Stanley, Ontario	29.71	754.6	30.39	771.9	32.	0.0	92	e.	10	4.5	.....	5 ck	5 k	e.	e.	0	0	cloudy.....	M. Payne.
Quebec, Quebec*	30.25	768.3	30.63	778.0	20	— 6.7	70	e.	.....	.....	1	0	1	.....	ne.	0	0	clear.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.10	764.5	30.60	777.2	19	— 7.2	91	calm	0	0	.....	.....	fg	.....	.....	0	0	foggy.....	W. H. McIntyre.
Saugeen, Ontario*	29.68	753.9	30.44	773.2	27.	— 2.8	96	e.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	
St. Andrews, N. B	30.51	774.9	30.56	776.2	27.	— 2.8	73	ne.	6	2.7	.....	2 k	2 s	n.	.....	0	0	fair.....	
Sydney, C. B*	30.43	772 9	30.49	774.4	35	1.7	66	nw.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy.....	T. C. Hill, C. E
Toronto, Ontario*	30.09	764.3	30.50	774.7	29.	— 1.7	77	ne.	11	4.9	.....	0	8 ks	.....	se.	0	0	cloudy.....	Magnetic Observatory.
Yarmouth, N. S*	30.43	772.9	30.50	774.7	29	—1.7	84	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.96	735.6	30.42	772.7	28.0	— 2.2	77	sse.	.....	.....	3	0	3 ks	.....	.....	0	0	clear.....	Wm. Wylie.
St. Johns, Newfoundland	30.14	765.5	30.40	772.1	32	0.0	100	nw.	1	0.4	.....	2 k	2 s	.....	.....	0	0	fair.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.69	754.1	29.72	754.9	71.0	21.7	75	s.	4.1	1.8	.....	0	2 s	.....	.....	0	0	clear.....	John Duthie.
Cape Town, U. G. H. Obs'y	29.88	758.9	29.92	760.0	69.0	20.6	71	nnw.	16	7.2	.....	6	8	.....	.....	0	0	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	29.76	755.9	54.7	12.6	65	sw.	4.5	2.0	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.24	768.0	30.26	768.6	49.1	9.5	86	se.	5.6	2.5	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.64	752.8	29.69	754.0	51.1	10.6	70	wnw.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	
Fanöe	29.66	753.3	29.68	753.9	50.7	10.4	82	wsw.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	Oversergent Fischer.
Godthaab, Greenland	29.45	747.9	29.49	749.0	14.7	— 9.6	71	ene.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Ivigtut	29.41	746.9	29.43	747.4	19.4	— 7.0	.....	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	S. Kleinschmidt.
Stykkisholm, Iceland	29.26	743.3	29.31	744.4	29.4	— 1.4	90	e.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	
Thorshavn	29.20	741.6	29.23	742.5	41.2	5.1	82	nw.	13	6	.....	.....	7	.....	.....	.....	.....	.....	A. O. Thorlacius.
Vestervig	29.46	748.2	29.55	750.6	49.5	9.7	80	wsw.	.....	.....	6	.....	9	.....	.....	.....	.....	raining	Overloerer Bergh. Loerer Oesterboi.
French.																			
Agen, Normal School	29.83	757.6	30.49	774.4	56.8	13.8	82	calm	.....	.....	0	.....	k	.....	w.	0.012	0.3	.....	M. Labroue, Director.
Alençon, Normal School	29.75	755.6	30.30	769.6	56.8	13.8	93	s.	.....	.....	1	.....	n	.....	n.	0.079	2.0	.....	M. Nicot, Director.
Arras, Engineer School	29.82	757.3	30.07	763.8	55.4	13.0	93	wsw.	.....	.....	4	.....	10 kn	.....	.....	0.161	4.1	covered	M. Fénéon, Command't.
Avignon, Normal School	30.24	768.0	30.32	770.0	67.3	19.6	58	nw.	.....	.....	3	.....	.....	.....	.....	0	0	.....	M. Giraud, Director.
Bar-sur-Seine	29.76	756.0	30.33	770.3	55.2	12.9	79	s.	.....	.....	1	.....	10	.....	w.	0.110	2.8	covered	M. Saillard, Director.
Beauvais, Normal School	29.94	760.5	30.21	767.2	57.2	14	82	w.	.....	.....	2	.....	10	.....	w.	0.055	1.4	covered	M. Frère Eugène Marie.
Besançon, Normal School	29.43	747.4	30.33	770.3	62.6	17	70	ssw.	.....	.....	1	.....	10	.....	ssw.	0.008	0.2	.....	M. Gobin, Director.
Bordeaux, Observatory	30.15	765.8	30.41	772.5	59.0	15.0	76	sse.	.....	.....	1	.....	10	.....	.....	0.031	0.8	covered	M. Rayet, Director.
Bourges, Normal School	29.78	756.5	30.34	770.6	57.2	14	76	calm	.....	.....	0	.....	kn	.....	.....	0.004	0.1	.....	M. Mulet, Director.
Brest, Naval Observatory	29.98	761.4	30.22	767.6	58.6	14.8	89	sw.	.....	.....	2	.....	10	.....	sw.	0	0	.....	M. de Kermaree, Dir.
Caen, Normal School	30.07	763.7	30.14	765.6	60.4	15.8	65	sw.	.....	.....	1	.....	10	.....	.....	0.028	0.7	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.94	760.4	30.26	768.7	52.3	11.3	95	sw.	.....	.....	4	.....	10	.....	.....	0.181	4.6	covered	M. Jadot, Director.
Charleville, Normal School	29.69	754.2	30.21	767.4	48.9	9.4	86	nw.	.....	.....	3	.....	10	.....	.....	0.71	18.	raining	M. Grimard, Director
Clermont-Ferrand Obs'y	29.03	737.3	30.37	771.3	66.6	19.2	46	se.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Allnard, Director.
Cluny, Normal School	29 55	750.0	30.42	772.6	58.6	14.8	61	w.	.....	.....	1	.....	3	.....	w.	0.016	0.4	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.44	747.8	30.32	770.1	54.3	12.4	68	wsw.	.....	.....	4	.....	10	wsw.	wsw.	0.413	10.5	covered	Dr. Coulet, Director.
Gap, Normal School	27.75	704.9	30.30	769 5	59.0	15	48	.....	.....	.....	.....	.....	2	.....	n.	0	0	.....	M. Jeangirard, Director.
Grésque, du Rhone	29.17	741.0	30.29	769.4	62.2	16.8	58	nw.	.....	.....	3	.....	2	.....	nw.	0	0	.....	M. Klun, Director.
Grenoble, Normal School	29.62	752.3	30.40	772.1	52.5	11.4	63	s.	.....	.....	1	cs	0	.....	.....	0	0	.....	M. Ablard, Director.
Guéret	28.81	731.7	30.39	771.8	55.9	13.3	77	nw.	.....	.....	1	.....	2	.....	e.	0.063	1.6	slightly cl'dy	M. Delorme, Dir.
Lamballe, Normal School	30.04	763.1	30.32	770.1	59.7	15.4	96	se.	.....	.....	4	0	5 k	.....	se.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.80	757.0	30.37	771.4	64.0	17.8	57	w.	.....	.....	1	0	2 k	.....	.....	0	0	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	30.19	766.8	30.29	769.4	59.9	15.5	93	sw.	.....	.....	3	.....	8	.....	sw.	0	0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.33	745.0	30.36	771.1	59.9	15.5	63	se.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. André, Director.
Mans, Normal School	30.00	762.0	30.30	769.5	57.7	14.3	85	sw.	.....	.....	3	.....	.....	.....	.....	0.047	1.2	.....	M. Piboen, Director.
Marseille, Observatory	30.01	762.2	30.28	769.0	67.1	19.5	54	nw.	.....	.....	3	.....	4	.....	nne.	0	0	.....	M. Stephan, Director.
Mt. Louis	25.12	638.0	29.96	761.0	52.7	11.5	57	sw.	5.6	2.5	.....	.....	0	.....	.....	0	0	.....	M Caré for Dr. Fines.
Montpellier, Normal School	30.20	767.0	30.33	770.4	70.5	21.4	65	w.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.43	747.5	30.22	767.7	53.2	11.8	69	s.	.....	.....	1	.....	kn	.....	sw.	0	0	.....	M. Hasse, Director
Nantes, Observatory	30.20	767.0	30.36	771.1	61.5	16.4	80	wsw.	.....	.....	2–3	.....	10 n; kn	.....	wsw.	0.181	4.6	.....	M. Larocque, Director.
Perpignan, Observatory	30.28	769.2	30.39	772.0	68.0	20.0	48	w.	1.8	0.8	.....	.....	3	.....	.....	0	0	.....	Dr. Flues, Director.
Pic-du-Midi, Summit	21.54	547.1	.....	.....	40.1	4.5	.....	w.	.....	.....	1	.....	1	.....	w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.21	742.0	30.28	769.2	63.3	17.4	57	ne.	.....	.....	1	.....	1	ne.	ne.	0	0	clear	M. Taillen.
Puy de Dôme Obs'y, Summit	25 47	646.8	.....	.....	42.8	6.0	92	wsw.	.....	.....	2	.....	0	.....	.....	0.110	2.8	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.37	771.4	30.40	772.2	60.4	15.8	83	wsw.	.....	.....	1	.....	10	.....	.....	0.51	13.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.11	764.7	30.32	770.2	59.7	15.4	73	sw.	.....	.....	3	.....	5	.....	sw.	0.185	4.7	cloudy	M. Brotier, Director.
Rodez, Normal School	28.20	716.2	30.37	771.4	54.0	12.2	97	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Seger, Director.
Rouen, Normal School	30.15	765.7	30.19	766.9	60.4	15.8	78	ssw.	.....	.....	2	.....	5	ssw.	.....	0.047	1.2	cloudy	M. Moutiflot.
Saint Lô	.....	.....	.....	.....	59.2	15.1	76	w.	.....	.....	2	.....	.....	w.	w	0.08	2.	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	30.09	764.2	30.25	768.4	56.8	13.8	84	sw.	.....	.....	2	.....	10	.....	sw.	0.224	5.7	.....	M. Renou, Director.
Toulouse, Observatory	29.75	755.7	30.48	774.3	53.8	12.1	70	e.	.....	.....	1	.....	8	.....	.....	0	0	very cloudy	M. Baillaud, Director.
Tours	30.14	765.6	30.32	770.1	58.3	14.6	84	sw.	.....	.....	1	.....	10	.....	sw.	0.063	1.6	rainy	M. de Tastes.
Versailles, Observatory	29.75	755.7	30.24	768.2	55.0	12.8	93	sw.	.....	.....	2	.....	0	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.78	731.0	30.25	768.3	50.6	10.4	65	w.	.....	.....	6	.....	5	w.	.....	0.181	4.6	.....	Prof. Jnedt.
Bamberg	29.33	745.0	30.18	766.5	52.2	11.2	70	w.	.....	.....	3	0	7 ks	.....	w.	0.197	5.0	.....	Prof. Dr. Hoh.
Breslau	29.75	755.7	29.93	760.2	52.0	11.1	72	w.	.....	.....	2	.....	8	.....	.....	0.583	14.8	.....	Prof. Dr. Arndt.
Carlsruhe	29.53	750.0	30.06	763.5	48.4	9.1	83	wnw.	.....	.....	2	.....	9	.....	.....	0.378	9.6	showery	Royal University Obs'y.
Cassel	29.82	757.5	30.27	768.8	55.0	12.8	66	w.	.....	.....	4	.....	9	w.	.....	0	0	.....	Albert Senz.
Frankfort-on-the-Main	29.31	744.4	30.02	762.5	54.0	12.2	75	sw.	.....	.....	4	.....	8	sw.	.....	0.066	15.4	.....	Dr. H. Möhl.
Friedrichshafen	29.83	757.6	30.20	767.0	54.5	12.5	71	sw.	.....	.....	3	.....	7	.....	.....	0.472	12.0	.....	Physical Society.
Hamburg	28.85	732.8	30.29	769.4	56.1	13.4	61	sw.	.....	.....	4	.....	0	.....	.....	0	0	.....	Wilhelm, Chief Tel.
Kiel	29.80	757.0	29.89	759 3	50.5	10.3	81	wsw.	.....	.....	6	.....	9	wnw.	.....	0.067	1.7	.....	E. Preller.
Leipsic, Astrom'l Obs'y	29.76	756.0	29.78	756.4	50.0	10.0	88	ww.	.....	.....	5	.....	10	.....	.....	0.130	3.3	.....	Prof. Dr. G. Karsten.
Magdeburg	29.68	753.8	30.07	763.8	50.7	10.4	73	wsw.	.....	.....	4	.....	10	.....	.....	0.303	7.7	.....	H. Leppig, Asst.
Memel	29.82	757.3	30.01	762.2	52.7	11.5	77	w.	.....	.....	5	.....	10 ks	.....	wsw.	0.185	4.7	.....	Weather Observatory.
Munich	29.62	752.3	29.71	754 5	47.5	8.6	93	w.	.....	.....	6	.....	10	.....	.....	.....	.....	showery	Issermann.
Neufahrwasser	28.44	722.4	30.32	770.2	52.9	11.6	66	w.	.....	.....	5	.....	8	nw.	.....	0.256	6.5	.....	Central Station.
Neustadt, Palatinate	29.76	756.0	29.78	756.4	49.8	9.9	78	w.	.....	.....	3	.....	10	.....	.....	0.098	2.5	.....	A. Lothes.
Stuttgart	29.70	754.3	30.11	764.8	54.3	12.4	72	w.	.....	.....	5	.....	8	w.	.....	0	0	.....	Dicknether
Wustrow	29.30	744.3	30.20	767.1	56.1	13.4	52	w.	.....	.....	1	.....	3	w.	.....	0	0	.....	Prof. Dr. Schoder.
Greek.																			
Athens	29.82	757.4	30.20	767.0	67.3	19.6	.....	sw.	.....	.....	1.0	1 c	0	.....	.....	0	0	.....	Profs. Brandes & Reimer.
Indian.																			
Kurrachee	29.92	760.0	29.97	761.2	80.1	26.7	64	wsw.	14.0	6.3	.....	.....	0	.....	.....	0	0	.....	Schmidt & Wourlisch.
Deesa	29.39	746.4	29.86	758.3	85.7	29.8	17	nnw.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.80	756.9	29.84	757.9	80.0	26.7	64	nnw.	22.0	9.8	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	27.96	710.3	29.79	756.8	85.2	29.6	22	w.	7.0	3.1	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.54	750.4	29.82	757.5	86.3	30.2	58	w.	1.0	0.4	.....	.....	1	.....	.....	0	0	d. clouds	
Bellary	28.30	718.7	29.75	755.5	85.5	29.7	57	s.	4.0	1.8	.....	.....	6	.....	.....	0.69	17.5	d. clouds	
Belgaum	27.29	693.1	29.83	757.6	75.1	23.9	67	sw.	3.0	1.3	.....	.....	8	.....	.....	0	0	gloomy	
Lahore	29.15	740.4	29.91	759.7	70.9	21.6	53	calm	0	0	.....	.....	3	ne.	.....	0	0	d. clouds	
Roorkee	28.95	735.4	29.87	758.6	73.8	23.2	48	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Agra	29.31	744.5	29.88	759.0	78.2	25.7	28	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28 77	730.6	29.81	757.1	79.7	26.5	76	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.50	723.9	29.86	758.5	77.0	25.0	47	e.	6.0	2.7	.....	.....	8	.....	ne.	0	0	d. clouds	
Lucknow	29.48	748.7	29.85	758.3	78.2	25.7	41	calm	0	0	.....	.....	6	.....	e.	0	0	d. clouds	
Allahabad	29.54	750.3	29.86	758.4	72.8	22.7	66	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.70	754.3	29.89	759.1	75.9	24.4	70	s.	2.4	1.1	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.85	707.3	29.91	759 6	66.1	18.9	88	e.	4.4	2.0	.....	.....	6	s.	s.	0	0	d. clouds	
Cuttack	29.76	755.8	29.84	757.9	78.6	25.9	89	calm	0	0	.....	.....	10	.....	w.	0.02	0.5	drizzling	
Calcutta, Alipore	29.82	757.4	29.84	758 0	82.3	27.9	61	n.	4.0	1.8	.....	.....	10	.....	.....	1.04	26.4	showery	
Dhubri	29.72	754.8	29.84	757.8	77.4	25.2	75	calm	1.6	0.7	.....	.....	4	.....	.....	0	0	d. clouds	
Chittagong	29.76	755.9	29.85	758.2	75.6	24.2	97	e.	1.8	0.8	.....	.....	9	sw.	.....	0	0	gloomy	
Sibsagar	29.50	749 4	29.84	758.0	76.1	24.5	82	ne.	2.0	0.9	.....	.....	5	.....	s.	0	0	d. clouds	
Zanzibar, Africa	29.93	760.2	29.95	760.7	78.5	25.8	76	e.	3.9	1.7	.....	.....	5	e.	e.	0	0	d. clouds	
Jeypore	28.45	722.5	29.90	759.3	78.7	25.9	28	ne.	4.0	1.8	.....	.....	9	.....	.....	0	0	d. clouds	
Italian.																			
Udine	29.86	758.4	30.27	768.9	55.9	13.3	75	ne.	0.7	0.3	.....	.....	0	.....	.....	0	0	blue sky	
Milan	29.77	756.2	30.30	769.5	52.2	11.2	83	sw.	1.3	0.6	.....	.....	8	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Padua	30.17	766.4	30.28	769.2	52.7	11.5	84	wnw.	0.7	0.3	.....	.....	8	wnw.	.....	0	0	.....	Prof. Schiapparelli.
Moncalieri	29.37	745.9	30.28	769.2	49.1	9.5	88	ene.	1.8	0.8	.....	.....	10	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
													6	n.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	WEATHER.	OBSERVERS.
ITALIAN.—Continued.																			
Genoa	30.11	764.9	30.31	769.8	61.9	16.6	74	e.	3.8	1.7			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.34	719.8	30.28	769.0	52.5	11.4	73	w.			4		2			0	0		Prof. D. C. Bruno
Pesaro	30.27	768.9	30.32	770.1	60.1	15.6	75	nnw.	0	0			7			0	0		Prof. Luigi Guidi.
Florence	30.07	763.8	30.33	770.3	61.7	16.5	64	sw.			2		10	w.		0	0		Prof. Costantino Pittier.
Leghorn	30.18	766.6	30.27	768.8	63.7	17.6	73	sw.	8.1	3.6			10			0	0		Prof. P. Monte.
Rome	30.15	765.9	30.33	770.3	62.4	16.9	66	nnw.	0	0			9			0	0		Prof. P. Tachini.
Lecce	30.04	763.1	30.30	769.5	0458	18.2	90	nne.	7.4	3.3			2	ne.		0	0		Prof. C. de Giorgi
Cosenza	29.44	747.7	30.33	770.4	61.9	16.6	70	wsw.	2.5	1.1			2	sw.		0	0		Prof. D. Conti.
Cagliari	30.13	765.3	30.32	770.2	66.6	19.2	48	nnw.			4		1			0	0		Prof. A. Pacinotti.
Palermo	30.13	765.2	30.38	771.6	67.1	19.5	52	ne.	8.7	3.9			3	wsw.		0	0		Prof. G. Cacciatore.
Syracuse	30.26	768.7	30.31	769.8	65.1	18.4	67	wsw.	2.5	1.1			1	w.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.80	757.0	30.33	770.3	63.3	17.4	69	w.	1.8	0.8			4	nw.		0	0		Prof. F. Brioschi.
Stelvio	22.38	568.5			36.1	2.3	60	se.			2		3			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.43	569.6			37.9	3.3	66	se.			2		3			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.31	770.0	30.35	770.8	36.9	2.7	92	calm			0	0	0			0.012	0.3	clear	Hattori.
Awomori	30.29	769.3	30.32	770.1	34.9	1.6	85	sw.	0.1	0.0		0	0			0	0	clear	K. Ogawa.
Hakodate	30.28	769.1	30.29	769.4	34.2	1.2	70	e.	4.2	1.9		0	0			0	0	clear	
Hiroshima					46.9	8.3	87	nne.	8.0	3.6		0	0			0	0	clear	Y. Miwa.
Kanazawa	30.21	767.4	30.32	770.1	46.5	8.1	89	se.	7.0	3.1		0	0			0.120	3.0	clear	S. Endo.
Kioto	30.14	765.5	30.32	770.1	44.8	7.1	90	nnw.	0.7	0.3		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.09	764.4	30.30	769.7	49.0	9.4	83	calm	0	0		0	0			0	0	clear	S. Takehayashi.
Nemuro	30.21	767.3	30.27	768.8	37.5	3.1	69	s.	3.3	1.4		0	0			0	0	clear	
Niigata	30.29	769.3	30.32	770.1	49.4	9.7	90	sse.	2.7	1.2		0	0			0.075	1.9	clear	M. Morita.
Nobira	30.34	770.5	30.35	770.9	42.1	5.6	96	nnw.	3.1	1.4		0	0			0	0	clear	H. Midzushina.
Osaka	30.30	769 5	30.31	769.9	48.0	8.9	84	n.	4.4	2.0		0	0			0	0	clear	
Supporo					34.0	1.1	81	s.	10.8	4.8		0	0			0	0	clear	
Tokei Obs'y, Yeddo	30.27	768.8	30.35	770.8	47.9	8.8	94	e.	3.0	1.3		0	0			0	0	clear	The Staff.
Wanayama	30.26	768.6	30.32	770.0	48.3	9.1	85	ene.	3.3	1.5		0	0			0	0	clear	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.92	760.0	30.11	764.8	77.0	25.0	63	ese.	22.0	9.8		3 c	4 k	wnw.	ese.	0.16	4.1	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.66	601.0	29.88	759.0	49.8	9.9	83	nnw.	lmap.	lmap.		0	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.35	618.5	30.18	766.6	46.4	8.0	86	ese.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.59	751.6	29.85	758.2	72.5	22.5	95	e.	1.6	0.8		0	0			0	0	foggy	F. Quijano, C. E.
Mexico, Central Obs'y	23.08	586 3	30.24	768.1	42.8	6.0	81	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.26	616.2	30 10	764.6	50.5	10.3	72	ne.	0.9	0.4		0	0			0	0	fine	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascalientes	23.93	607.8	30.02	762.5	47.1	8.4	72	calm	0	0		0	0			0	0	clear	M. V.de Leon, M. E.
Puebla, Catholic Institute	23.41	594.5	30.32	770.0	44.1	6.7	52	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.63	574.8	30.35	770.9	50.1	10.2	67	wsw.	4.9	2.2		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.02	762.5	30.02	762.5	53.8	12.1		ssw.			5					0.161	4.2		
Groningen	29.87	758 7	29.93	760.1	50.9	10.5		sw.			5					0.055	1.4		
Helder	29.85	758.2	29.85	758.2	52.7	11.5		sw.			5					0.035	0.9		
Hellevoetsluis	29.98	761.5	29.98	761.5	53.4	11.9	83	sw.			4					0	0		
Utrecht	29.93	760.3	29.98	761.5	53.1	11.7	87	sw.			4		8			0.004	0.1	very cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.21	741.8	29.27	743.4	47.5	8.6	78	ssw.	25	11			10			0.669	17.0	raining	
Brono	29.04	737.7	29.08	738.7	39.4	4.1	52	ne.	29	13			4			0	0		
Christiania	29.09	738.9	29.24	742.6	48.7	9.3	72	ssw.	9	4			2			0.024	0 6		
Gjæsvær	29.54	750.4	29.57	751.0	21.0	— 6.1		sse.			8		7						
Lodingen	29 27	743.4	29.32	744.6	34.7	1.5	57	se.			4		7			0	0		
PORTUGUESE.																			
Angra, Azores	30.12	765.0	30.27	768.9	68.7	20.4	80	sw.	9.8	4.4			6			0	0		Dr. J. A. Sampal
Campo Major	29.42	747.2	30.42	772.6	64.9	18.3	48	ene.	9.4	4.2			0			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.13	765.4	30.22	767.6	73.8	23.2	40	ene.	8.1	3.6			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.03	762.8	30.39	772.0	60.8	16.0	54	ne.	8.1	3.6			0			0	0		The Staff.
Ponta Delgada, Azores	30.24	768.2	30.32	770.0	71.6	22.0	61	s.	8.7	3.9			4	wnw.		0	0		
Saint Paul de Loando	29.67	753.5	29.86	758.5	80.8	27.1	85	wsw.	1.8	0.8			8			0.039	1.0		
Serra da Estrella	25.60	650 3	30.41	772.3	47.3	8.5	70	se.	21.0	9.4			0			0	0		
RUSSIAN.																			
Akmolinski	28.91	734.3	30.03	762.7	31.8	— 0.1	94	e.	7	3		9 ck	0			0	0		Major K. Lasarew.
Archangel	30.13	765.2	30.15	765.7	1.4	—17.0	68	ene.	4	2			8 ks			0	0		Capt. Sselliwerstow.
Astrakhan	30.40	772.1	30.32	770.0	32.7	0.4	49	nw.	2	1			10 s			0	0		Capt. Wisganow.
Barnaul	29.98	761.0	30.55	775.9	3.4	—15.9	67	ne.	4	2			2			0	0		Meteorological Obs'y.
Dorpat	29.35	745.5	29.60	751.9	25.5	— 3.6	100	ese.	11	5			10 n			0.236	6.0	snowing	Observatory.
Ekaterinburg	29.13	739.9	30.20	767.1	1.9	—16.7	82	se.	7	3			10			0.189	4.8	snowing	Meteorological Obs'y.
Kasan	29.69	754.1	29.98	761.6	8.8	—12.9	71	sw.	4	2			10			0.010	0.4		Observatory.
Kertch	30.13	765.2	30.15	765.7	44.4	6.9	69	calm	0	0		0	8 n			0	0		Lagorio & Sastyrez.
Kieff	29.21	741.9	29.86	758.5	36.7	2.6	96	s.	20	9			10ks;n					raining	Observatory.
Lugan	30.00	762.0	30.22	767.5	29.1	— 1.6	50	sw.	4	2			2			0	0		Meteorological Obs'y.
Nikolaiev	30.05	763.2	30.12	765.0	43.2	6.2	79	s.	22	10			10 n			0.051	1.3		Capt. Kurdakow.
Pekin, China	29.73	755.1	29.87	758.7	43.3	6.3	74	calm	0	0		0	0			0	0		Physical Obse: vatory.
St. Petersburg	29.77	756.2	29.79	756.6	15.3	— 9.3	66	ese.	18	8			10			0	0		Central Physical Obs'y.
Semipalatinsk	29.61	752.2	30 32	770 0	26.2	— 3 2	74	ne.	9	4			2			0	0		Major Lasarew.
Tashkend, Laboratory	28.50	724.0	30.07	763.8	59.0	15.0	44	calm	0	0			1						Teich, A. M.
Tiflis	28.81	731.7	30.24	768.0	54.9	12.7	51	nw.	9	4		0	4 k			0.004	0.1		Physical Observatory.
Tomsk																			
Vladivostock	29.93	760 2	30.00	751.9	53.2	11.8		sw.	7	3		3 c	0			0	0		
Warsaw	29.47	748.5	29.90	759.4	46.9	8.3	88	wnw.	20	9			10 kn					heavy clouds	Astronomical Obs'y.
Wilna	29.27	743.5	29.70	754.3	43.9	6.6	98	w.	11	5			10			0.150	3.8	raining	Berg, Assistant.
Yeniseisk	30.59	777.0	30.93	785.6	—14.3	—25.7	79	nw.	2	1			6			0	0		M. O. Marks.
SCOTTISH.																			
Monach Lt			29.39	746.5	50	10.0	93	nw.			6		10			0.2	5.	overcast	J. Youngclause
North Unst			28.85	732.8				w.			7								Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.25	768.3	30.35	771.0	62.1	16.7	65	sw.	2.5	1.1		0	0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.30	769.7	30.36	771.2	68.9	20.5	60	se.	2.2	1.0		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.41	696.3	30.39	771.9	58.6	14.8	51	w.	4.9	2.2		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.19	716.1	30.45	773.4	59.0	15.0	58	calm	0.9	0.4		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.22	767.7	30.36	771.2	68.0	20.0	77	w.	1.8	0.8		2	5	sw.		0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.52	749.9	30.40	772.1	59.7	15.4	76	se.	6.5	2.9		0	0			0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.43	747.5	30.32	770.1	64.3	17.9	70	sw.	1.8	0.8			0			0.004	0.1	clear	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.52	749.8	29.58	751.2	76.0	24.4	89	ese.	26.4	11.8		0	5 ks			2.046	67.2	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.22	767.6	30.32	770.1	69.3	20.7	51	e.	26.5	11.8		0	5		e.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.79	756.6	29.88	758.9	81.3	27.4	91	se.	2.2	1.0		2 cs	2 k	se.	se.	0	0		Manuel Maese.
Tuguegarao, Philippine Id's	29.59	751.5	29.72	754.8	75.0	23.9	94	nnw.	0.5	0.2			10 kn		ese.	0.70	17.8	covered	José L. Yraeterza.
SWEDISH																			
Haparanda	29.71	754.5	29.74	755.5	19.8	— 6.8	94	se.			4		8			0	0		
Umea	29.47	748.4	29.52	749.7	27.7	— 2.4	96	sse.			2		10			0.028	0.7		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	29.28	743.7	29.33	745.0	41	5.0	97	sse.	.....	.....	6	.....	10	.....	.....	0.409	10.4	.....	
Stockholm	29.19	741.3	29.36	745.8	45.7	7.6	94	ssw.	.....	.....	2	.....	10	.....	.....	0.343	8.7	raining	
Wisby	29.40	746.7	29.46	748.2	49.3	9.6	82	wsw.	.....	.....	6	.....	7	.....	.....	0.437	11.1	.....	
Sub-series.																			
Upsala	29.21	741.9	29.30	744.1	45.5	7.5	96	s.	12.1	5.4	.....	.....	10	.....	sw.	0.193	4.9	.....	S. G. Fineman.
Swiss.																			
Geneva	28.94	735.0	30.33	770.4	65.8	18.8	46	s.	.....	.....	2	.....	0	.....	.....	0	0	clear	**The Observatory.**
Turkish.																			
Constantinople	.....	.....	30.22	767.5	59.0	15.0	65	se.	6	2.5	.....	.....	5	.....	n.	0.020	0.5	.....	The Observatory.
Valona	.....	.....	30.31	769.9	64.9	18.3	.....	nw.	.....	.....	1	.....	2	.....	.....	0	0	slightly cl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.07	763.7	72.9	22.7	53	nnw.	.....	.....	1	1 c	.....	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.48	774.2	30.56	776.2	30	— 1.1	56	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. O. Barnes.
Alpena, Michigan	29.68	753.9	30.38	771.6	42	5.6	83	se.	19	8.5	.....	3 k	2 ks	s.	s.	0	0	fair	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.09	637.3	30.19	766.8	34	1.1	61	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	27.21	691.1	30.19	766.8	38	3.3	46	sw.	16	7.2	.....	.....	10 s	.....	sw.	0.07	1.8	cloudy	B. O. Lenoir.
Atlanta, Georgia	29.00	736.6	30.22	767.6	44	6.7	83	ne.	18	8.0	.....	.....	10 k	.....	ne.	0	0	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.35	770.9	30.36	771.1	39	3.9	82	n.	16	7.2	.....	.....	9 ks	.....	n.	0.29	7.4	cloudy	Jas. M. Watson.
Augusta, Georgia	30.05	763 3	30.25	768.3	52	11.1	62	ne.	18	8.0	.....	.....	10 s	.....	ne.	0	0	cloudy	John Healy.
Baltimore, Maryland	30.40	772.1	30.45	773.4	37	2.8	61	ne.	7	3.1	.....	0	0	.....	.....	inap.	inap.	clear	Geo W Felger.
Barnegat, New Jersey	30.36	771.1	30.38	771.6	44.0	6.7	68	e.	30	13.4	.....	.....	10 k	.....	e.	inap.	inap.	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.31	719.1	30.00	762.0	38	3.3	92	nw.	30	13.4	.....	.....	10 n	.....	nw	0.37	9.4	light rain	A. Pritchard.
Benton, Fort, Montana	27.20	692.4	30.22	767.6	35	1.7	72	calm	0	0	.....	0	9 ks	.....	.....	0	0	cloudy	S. Wheaton.
Bismarck, Dakota	28.06	712.7	29.98	761.5	34	1.1	100	nw.	17	7.6	.....	.....	10 n	.....	.....	0.18	4.6	light rain	Cyrus Cramer
Block Island, Rhode Island	30.38	771.6	30.40	772.1	40	4.4	82	ne.	37	16.5	.....	.....	10 ks	.....	e.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.39	695.7	30.33	770.4	34	1.1	80	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	B. E. Light.
Boston, Massachusetts	30.37	771.4	30.53	775.4	31.0	— 0.6	68	n.	14	6.3	.....	.....	10 s	.....	n.	0	0	cloudy	O. B. Cole.
Brownsville, Texas	29.89	759.2	29.94	760.5	69.7	20.9	90	calm	0	0	.....	0	2 s	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.67	753.6	30.45	773.4	28	— 2.2	86	ne.	7	3.1	.....	0	sk.	.....	.....	0	0	clear	W. Finn.
Buford, Fort, Dakota	28.28	718.3	30.26	768.6	35	1.7	82	nw.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	F. A. Mellen.
Burlington, Vermont	30.28	769.1	30.59	777.0	23.7	— 4.6	100	e.	5	2.2	.....	0	0	.....	.....	0	0	clear	W. B Gates.
Cairo, Illinois	29.67	753.6	30.09	764.3	53.6	12.0	75	s.	6	2.7	.....	.....	10 s	.....	s.	0.02	0.5	threatening	W. H. Ray.
Cape Henry, Virginia	30.23	767.8	30.25	768.3	53	11.7	66	ne.	32	14.3	.....	0	7 s	.....	e.	0	0	fair	A. K. Alderson.
Cape May, New Jersey	30.32	770.1	30.35	770.9	39.0	3.9	82	n.	24	10.7	.....	0	3 s	.....	n.	0.41	10.4	clear	W. E. Smith.
Cape Mendocino, California	29.55	750.6	30.08	764.0	58	14.4	70	se.	18	8.0	.....	.....	10 ks	.....	se.	0	0	cloudy	J. J. McLean.
Cedar Keys, Florida	29.98	761.5	30.00	762.0	60	15.6	75	n.	20	8.9	.....	0	7 ks	.....	ne.	0	0	fair	F. W. Mixer.
Champaign, Illinois	29.23	742.4	30.09	764.3	44.5	6.9	55	e.	16	7.2	.....	.....	10 s	.....	s.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.07	763.8	30.13	765.3	54	12.2	74	ne.	20	8.9	.....	4 ck	4 s	.....	ne.	0	0	cloudy	J. H. Smith.
Charlotte, N. Carolina	29.38	746.2	30.26	768.6	45.0	7.2	76	ne.	10	4.5	.....	4 k	0	e.	.....	0	0	fair	D. O'Donoghue.
Chattanooga, Tennessee	29.36	745.7	30.21	767.3	45.0	7.2	96	e.	4	1.8	.....	.....	fg.	.....	.....	0	0	dense fog	B. L. Goulding.
Cheyenne, Wyoming	24.11	612.4	30.32	770.1	27.7	— 2.4	52	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.36	745.7	30.10	764.5	45.0	7.2	68	se.	16	7.2	.....	6 ck	0	se.	.....	0	0	fair	J. Mitchell.
Chincoteague, Virginia	30.27	768.8	30.29	769.4	45	7.2	83	n.	25	11.2	.....	.....	9 n	.....	n.	0.33	8.4	light rain	C. F. Dickens.
Cincinnati, Ohio	29.56	750.8	30.25	768.3	40	4.4	82	ne.	5	2.2	.....	3 c	0	e.	.....	0	0	clear	R. B. Watkins.
Cleveland, Ohio	29.60	751.8	30.37	771.4	34.3	1.3	73	se.	6	2.7	.....	2 c	0	.....	.....	0	0	clear	J. B. Newlin.
Coleman City, Texas	28.14	714.7	30.03	762.7	56	13.3	93	sw.	1	0.4	.....	6 c	0	.....	.....	0	0	fair	L. Dorman.
Columbus, Ohio	29.42	747.3	30.31	769.9	36	2.2	69	e.	8	3.6	.....	0	0	.....	.....	0	0	clear	D. Cuthbertson.
Concho, Fort, Texas	27.99	710.9	30.00	762.0	58.0	14.4	51	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.96	684.8	30.28	769.1	26	— 3.3	84	s.	5	2.2	.....	0	6 s	.....	.....	0	0	fair	W. B. Lamar.
Davenport, Iowa	29.28	743.7	29.97	761.2	48	8.9	86	se.	9	4.0	.....	.....	10 s	.....	se.	0.14	3.6	cloudy	R. R. Martin.
Davis, Fort, Texas	25.23	640.8	30.13	765.3	59	15.0	54	se.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.34	719.8	30.12	765.0	47.5	8.6	70	s.	1	0.4	.....	3 k	0	.....	.....	0	0	clear	H. Clifford.
Deadwood, Dakota	25.39	644.9	30.22	767.6	35.5	1.9	69	sw.	2	0.9	.....	0	0	.....	.....	0.26	6.6	clear	G. W. Scott.
Delaware Breakwater, Del	30.32	770.1	30.34	770.6	44	6.7	83	ne.	37	16.5	.....	0	4 k	.....	ne.	0.35	8.9	fair	T. S. Townsend.
Denison, Texas	29.17	740.9	30.01	762.2	62.0	16.7	100	s.	3	1.3	.....	.....	10 n	.....	.....	0.05	1.3	light rain	J. W. Byram.
Denver, Colorado	24.82	630.4	30.32	770.1	32.0	0.0	60	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	28.99	736.3	29.94	760.5	44	6.7	83	nw.	3	1.3	.....	0	0	.....	.....	0.91	23.1	clear	F. W. Conrad.
Detroit, Michigan	29.61	752.1	30.35	770.9	46.0	7.8	76	e.	8	3.6	.....	0	0	.....	.....	0	0	clear	C. F. R. Wappenhans.
Dodge City, Kansas	27.52	699.0	30.20	768.6	37	2.8	51	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.21	741.9	29.96	761.0	45.3	7.4	93	se.	10	4.5	.....	.....	10 s	.....	se	0.33	8.4	threatening	J. Harvey Smith.
Duluth, Minnesota	29.16	740.7	29.95	760.7	43	6.1	83	ne.	18	8.0	.....	.....	10 s	.....	ne.	0.60	15.2	cloudy	N. B. Conger.
Eagle Pass, Texas	29.15	740.4	29.98	761.5	65.1	18.4	90	se.	1	0.4	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.51	647.9	30.37	771.4	21	— 6.1	87	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	30.48	774.2	30.55	776.0	30.0	— 1.1	68	ne.	17	7.6	.....	8 k	0	e.	.....	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.31	693.7	30.24	768.1	45	7.2	36	n.	16	7.2	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.27	667.2	30.12	765.0	42	5.6	47	nw.	1	0.4	.....	2 c	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.63	752.6	30.39	771.9	35	1.7	69	se.	12	5.4	.....	0	0	.....	.....	0	0	clear	Peter Wood.
Escanaba, Michigan	29.50	749.3	30.20	767.1	45.0	7.2	76	se.	24	10.7	.....	0	5 ks	.....	se.	0	0	fair	George Heathcote.
Fredericksburg, Texas	28.21	716.5	30.03	762.7	65	18.3	84	sw.	5	2.2	.....	.....	10 s	.....	s.	0	0	cloudy	Frank Halwegler.
Galveston, Texas	29.95	760.7	30.00	762.0	72	22.2	82	s.	4	1.8	.....	0	8 ks	.....	se.	0	0	cloudy	E. O'C. Macinerney.
Grand Haven, Michigan	29.49	749 0	30.19	766.8	37.0	2.8	77	e.	13	5.8	.....	.....	10 s	.....	w.	0	0	cloudy	J. Mueller.
Grant, Fort, Arizona	25.24	641.1	30.08	764.0	51	10.6	52	ne.	4	1.8	.....	2 c	0	.....	.....	0	0	clear	Robert C. Lord.
Hatteras, North Carolina	30.10	764.5	30.12	765.0	55	12.8	80	ne.	44	19.7	.....	hz.	7 k	.....	ne.	inap.	inap.	fair	R. M. Crawford.
Helena, Montana	25.94	658.9	30.32	770.1	31	— 0.6	81	calm	0	0	.....	0	0	.....	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	28.94	735.1	29.98	761.5	60	15.6	87	ne.	10	4.5	.....	.....	10 ks	.....	ne.	0	0	cloudy	J. P. Sherry.
Huron, Dakota	28.29	718.6	29.77	756.1	38.3	3.5	96	nw.	32	14.3	.....	.....	10 n	.....	.....	0.20	5.1	light rain	S. W. Glenn.
Indianapolis, Indiana	29.32	744.7	30.16	766.1	42	5.6	65	se.	1	0.4	.....	5 k	0	se.	.....	0	0	fair	O. Schutze
Indianola, Texas	29.93	760.2	29.96	761.0	71.0	21.7	82	se.	7	3.1	.....	0	1 k	.....	s.	0	0	clear	I. A. Reed.
Jacksboro, Texas	28.75	730.2	29.97	761.2	63	17.2	78	se.	1	0.4	.....	6 ck	0	nw.	.....	0	0	fair	D. J. Carr.
Jacksonville, Florida	30.00	762.0	30.05	763.3	56	13.3	93	n.	12	5.4	.....	.....	10 s	.....	n.	0.03	0.8	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.60	701.0	30.27	768.8	32	0.0	71	sw.	8	3.6	.....	0	0	.....	.....	0.04	1.0	clear	A. Schneider.
Keokuk, Iowa	29.26	743.2	29.94	760.5	55.0	12.8	80	s.	9	4.0	.....	.....	10 s	.....	sw.	0.05	1.3	cloudy	F. Z. Gosewisch.
Key West, Florida	29.78	756.4	29.80	756.9	73.0	22.8	82	n.	15	6.7	.....	3 ck	5 ks	w.	n.	0.54	13.7	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	30.18	766.6	30.20	767.1	54	12.2	74	ne.	48	21.5	.....	0	8 ks	.....	ne.	0.15	3.8	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.16	740.7	30.23	767.8	43.6	6.4	87	ne.	7	3.1	.....	0	0	.....	.....	0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.10	739.1	29.92	760.0	47	8.3	77	se.	16	7.2	.....	.....	10 n	.....	.....	0.12	3.0	light rain	S. C. Emery.
Leavenworth, Kansas	29.10	739.1	30.04	763.0	45	7.2	83	nw.	3	1.3	.....	c	0	.....	.....	0.36	9.1	clear	A. W. Browne.
Lewiston, Idaho	29.33	745.0	30.20	767.1	43.0	6.1	74	e.	4	1.8	.....	0	2 s	.....	w.	0	0	clear	W. Bell.
Little Rock, Arkansas	29.72	754.9	30.05	763.3	61	16.1	100	s	3	1.3	.....	.....	10 n	.....	.....	0.02	0.5	thund'rst'm	W. U. Simons.
Los Angeles, California	29.56	750.8	29.96	761.0	47	8.3	77	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.57	751.1	30.16	766.1	44	6.7	68	ne.	4	1.8	.....	10 cs	0	.....	.....	0	0	cloudy	L. M. Dey.
Lynchburg, Virginia	29.67	753.6	30.39	771.9	41	5.0	73	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.62	752.3	30.31	769.9	36.0	2.2	89	se.	15	6.7	.....	5 cs	0	.....	.....	0	0	fair	F. R. Day.
Macon, Fort, North Carolina	30.11	764.8	30.12	765.0	54	12.2	93	ne.	30	13.4	.....	4 cs	4 k	sw.	ne.	0.02	0.5	cloudy	F. P. Chaffee.
Madison, Wisconsin	28.99	736.3	30.06	763.5	43	6.1	93	s.	10	4.5	.....	.....	10 n	.....	.....	0.67	17.0	light rain	C. A. Shaw.
Maginnis, Fort, Montana	25.62	650.7	30.12	765.0	40	4.4	42	nw.	10	4.5	.....	.....	10 s	.....	nw.	inap.	inap.	cloudy	F. Burke.
McKavett, Fort, Texas	27.74	704.6	30.12	765.0	61	16.1	90	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.40	746.7	30.17	766.3	42	5.6	74	se.	8	3.6	.....	0	8 s	.....	se.	0	0	cloudy	J. Gilligan.
Memphis, Tennessee	29.73	755.1	30.08	764.0	58	14.4	80	e.	2	0.9	.....	0	8 s	.....	e.	0	0	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.30	744.2	30.09	764.3	47	8.3	77	se.	25	11.2	.....	.....	10 s	.....	sw.	0	0	threatening	W. Line.
Missoula, Fort, Montana	26.91	683.5	30.32	770.1	28	— 2.2	59	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. H. Young.
Mobile, Alabama	30.03	762.7	30.07	763.8	58.5	14.7	77	e.	2	0.9	.....	0	0	.....	.....	0	0	clear	C. A. Read.
Montgomery, Alabama	29.91	759.7	30.15	765.8	50	10 0	74	ne.	11	4.9	.....	1 k	0	w.	.....	0	0	clear	J. B. McLaughlin.

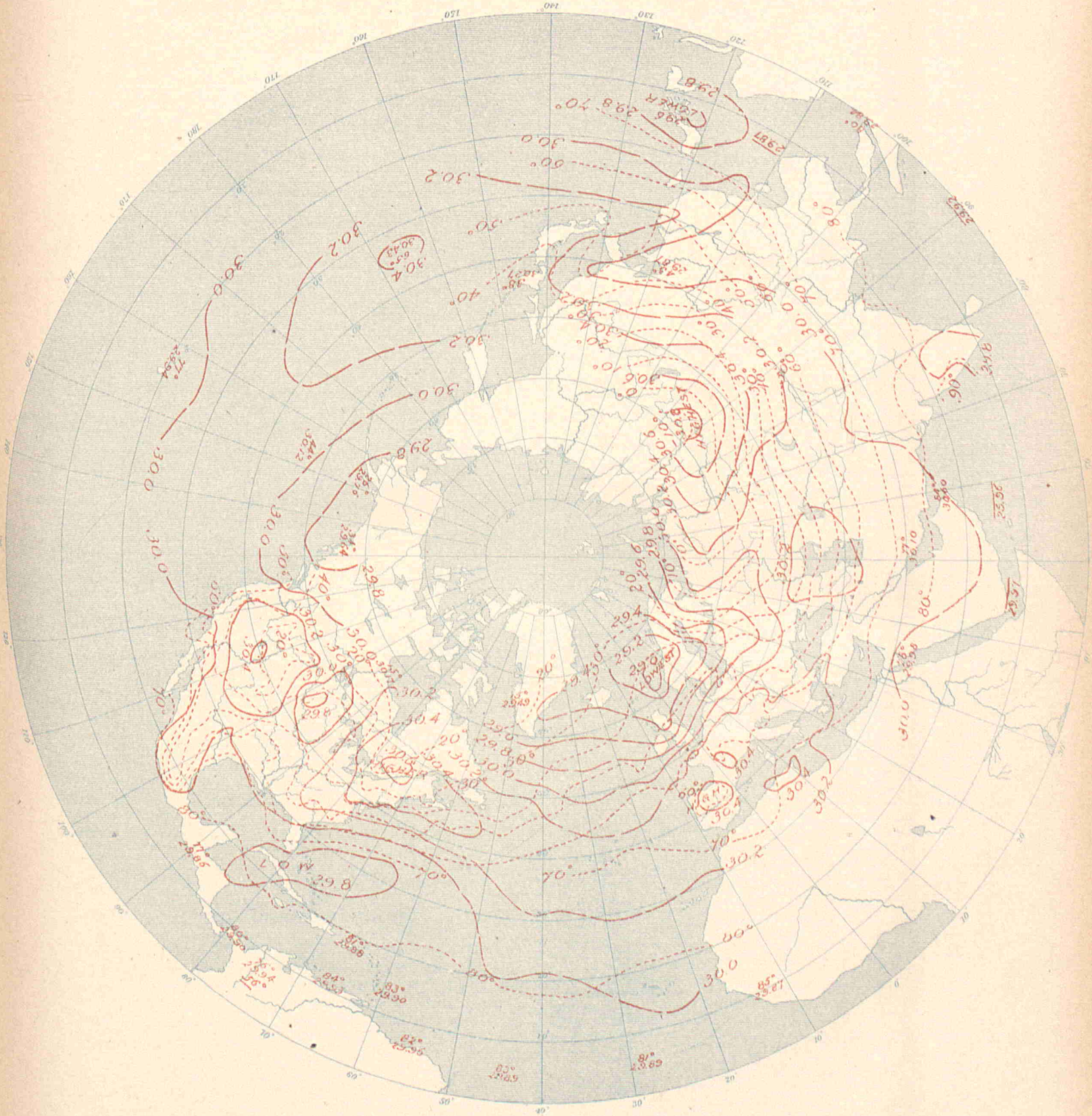
STATIONS	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	28.72	729.5	29.78	756.4	44	6.7	93	e.	12	5.4			10 n		e.	0.80	20.3	light rain	H. Bessant.
Morgantown, W. Virginia	29.33	745.0	30.39	771.9	41.0	5.0	70	se.	8	3.6		0	0			0	0	clear	J. C. Sprigg, jr
Mt. Washington, N. H.	23.98	609.1	30.54	775.7	14.0	—10.0	53	ne.	15	6.7		0	0			0	0	clear	J. G. Linsley.
Nashville, Tennessee	29.53	750.0	30.13	765.3	45.0	7.2	83	e.	5	2.2		5 cs	0	nw.		0	0	fair	L. N. Jesunofsky.
New Haven, Connecticut	30.36	771.1	30.48	774.2	28.5	— 1.9	69	n.	19	8.5		0	0			0	0	clear	J. H. Sherman.
New London, Connecticut	30.43	772.9	30.48	774.2	34	1.1	60	ne.	10	4.5		0	0			0	0	clear	J. G. Lynch.
New Orleans, Louisiana	29.97	761.2	30.03	762.7	64.5	18.1	74	e.	5	2.2		0	2 s		e.	0	0	clear	L. Dunne.
Newport, Rhode Island	30.41	772.4	30.46	773.7	36.3	2.4	68	n.	12	5.4			10 s		e.	0	0	cloudy	W. McGillivray.
New York, New York	30.29	769.4	30.47	773.9	35	1.7	69	ne.	12	5.4		0	0			0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.24	768.1	30.27	768.8	49	9.4	71	ne.	18	8.0		0	7 ks		e.	0.04	1.0	fair	Wm. Davis.
North Platte, Nebraska	27.10	688.3	30.18	766.6	39.6	4.2	47	nw.	12	5.4		0	0			0.01	0.3	clear	E. F. Brady.
Olympia, Washington T'y.	29.90	759.4	29.94	760.5	50.0	10.0	93	s.	5	2.2			10 n			0.54	13.7	light rain	J. Dascomb.
Omaha, Nebraska	28.74	730.0	29.98	761.5	44.0	6.7	76	sw.	6	2.7		0	0			0.51	13.0	clear	A. Pollak.
Oswego, New York	30.17	766.3	30.51	774.9	32.0	0.0	60	se.	10	4.5		0	0			0	0	clear	S. W. Beall.
Palestine, Texas	29.47	748.5	30.04	763.0	62.5	16.9	92	s.	6	2.7			fg.			0	0	dense fog	L. M. Pindell.
Pensacola, Florida	30.03	762.7	30.06	763.5	57.8	14.3	74	ne.	10	4.5		2 cs	0			0	0	clear	M. McGauran.
Philadelphia, Pa	30.37	771.4	30.47	773.9	35	1.7	69	ne.	14	6.3		0	0			inap.	inap.	clear	T. T. Townsend.
Pike's Peak, Colorado	17.82	452.6	30.48	774.2	19	— 7.2	80	ne.	26	11.6		0	0			0	0	clear	H. Hall.
Pioche, Nevada	24 15	613.4	30.29	769.4	35	1.7	58	nw.	7	3.1		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.54	750.3	30.39	771.9	35.0	1.7	75	ne.	3	1.3		0	0			0	0	clear	W. Daly.
Poplar River, Montana	27.94	709.7	30.23	767.8				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.01	762.2	30.02	762.5	69.4	20.8	77	ne.	12	5.4		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.66	753.4	30.38	771.6	33.1	0.6	88	e.	10	4.5		0	0			0	0	clear	W. O. Bailey.
Portland, Maine	30.52	775.2	30.58	776.7	27.0	— 2.8	77	n.	8	3.6		0	0			0	0	clear	W. W. Eichelberger.
Portland, Oregon	29.96	761.0	30.03	762.7	49.5	9.7	91	s.	2	0.9			10 s		s.	0.27	6.9	cloudy	M. L. Hearne.
Portsmouth, N. C.					56	13.3	93	ne.	44	19.7			10 s		ne.	0.10	2.5	cloudy	F. S. Coburn.
Prescott, Arizona	24.80	629.9	30.14	765.5	33.3	0.7	65	s.	3	1.3		3 c	0	w.		0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.43	772.9	30.46	773.7	38	3.3	61	ne.	16	7.2			10 s		ne.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	29.82	757.4	29.83	757.7	67	19.4	81	n.	14	6.3		1 c	1 ks		n.	inap.	inap.	clear	W. J. Evans.
Red Bluff, California	29.74	755.4	30.14	765.5	44.0	6.7	93	nw.	4	1.8		0	0			0	0	clear	E. van Dyk.
Rochester, New York	29.78	756.4	30.48	774.2	26	— 3.3	76	s.	5	2.2		0	sk.			0	0	clear	E. W. McGann
Roseburg, Oregon	29.50	749 3	30.07	763.8	55	12.8	70	se.	5	2.2			10 n		s.	0.03	0.8	light rain	J. J. Nanry.
Sacramento, California	30.05	763.3	30.13	765.3	47.0	8.3	93	calm	0	0		0	0			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.42	747.3	30.05	763.3	51.5	10.8	92	s.	9	4.0			9 s		s.	0.16	4.1	cloudy	J. H. Weber.
St. Paul, Minnesota	28.92	734.6	29.84	757.9	44.0	6.7	93	se.	21	9.4			10 n		se.	0.42	10.7	light rain	P. F. Lyons.
St. Vincent, Minnesota	28.99	736.3	29.92	760.0	37	2.8	100	ne.	8	3.6			10 n			0.49	12.4	light rain	O. B Dilley.
Salt Lake City, Utah	25.86	656.8	30.43	772.9	35	1.7	49	e.	2	0.9		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.26	743.2	29.98	761.5	66.0	18.9	90	e.	2	0.9		0	6 ks		se.	0	0	fair	T. J. Kenan.
San Diego, California	29.86	758.4	29.92	760.0	59.3	10.2	88	n.	3	1.3		1 cs	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.61	752.1	30.33	770.4	36	2.2	69	se.	7	3.1		0	0			0	0	clear	M. H. Perry.
Sandy Hook, New Jersey	30.42	772.7	30.45	773.4	40.0	4.4	89	ne.	24	10.7		8 k	0	ne.		0	0	cloudy	B. A. Blundon.
San Francisco, California	30.08	764.0	30.15	765.8	51	10.6	86	w.	5	2.2		0	fg.			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.31	592.1	30.35	770.9	37	2.8	33	ne.	4	1.8		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.05	763.3	30.14	765.5	53	11.7	64	ne.	18	8.0			10 ks		ne.	0	0	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.42	671.1	30.24	768.1	43	6.1	53	sw.	22	9.8		10 k	0			0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	29.78	756.4	30.03	763.7	61	16.1	93	ne.	3	1.3			10 s			0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.75	730.2	30.06	763.5	59	15.0	48	n.	14	6.3			10 ks			0	0	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.33	618.0	30.17	766.3	40.5	4.7	40	calm	0	0		5 c	0			0	0	fair	N. D. Lane.
Sitka, Alaska	29.57	751.1	29.64	752 8	33.5	0.8	83	ne.	3	1.3		0	4 ks		ne.	0.34	8.6	fair	F. W. Fickett.
Smith, Fort, Arkansas	29.54	750.3	30.03	762.7	61.0	16.1	87	e.	2	0.9			10 s			0.14	3.6	cloudy	J. B. Campbell.
Smithville, North Carolina	30.09	764.3	30.13	765.3	49	9.4	77	n.	13	5.8		1 c	6 s		ne.	0	0	fair	O. Parker.
Spokane Falls, Wash. Ter.	28.07	713.0	30.15	765.8	41	5.0	100	ne.	1	0.4			10 n			0.01	0.3	light rain	D. Moore.
Springfield, Illinois	29.32	744.7	30.04	763.0	48	8.9	71	se.	14	6.3			10 s		sw.	0.05	1.3	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.40	772.1	30.54	775.7	29.3	— 1.5	66	n.			2	0	0			0	0	clear	Charles Mayr.
Springfield, Mo	28.56	725 4	30.07	763.8	58	14.4	93	s.	4	1.8			10 ks		s.	0.03	0.8	cloudy	J. B. Marbury.
Starkville, Miss	29.61	752.1	30.11	764.8	57	13.9	80	se.	11	4.9		0	0			0	0	clear	C. Dill.
Stevenson, Fort, Dakota	28.09	713.5	30.06	763.5	34	1.1	100	w.	18	8.0			10 s			0.30	7.6	cloudy	W. Burrows
Stockton, Fort, Texas	26.96	684.8	30.08	764.0	52.0	11.1	38	w.	4	1.8		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	30.46	773.7	30.52	775.2	36.5	2.5	75	ne.	26	11.6			10 s		ne.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.23	691.6	30.07	763.8	36.5	2.5	57	e.			1	0	2 k			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.58	751.3	30.31	769.9	38	3.3	73	e.	8	3.6		4 cs	0	w.		0	0	fair	A. Buell.
Tucson, Arizona	27.52	699.0	29.98	761.5	44	6.7	56	s.	2	0.9		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.70	754.4	30.08	764.0	46	7.8	93	sw.	1	0.4			10 n			0.03	0.8	light rain	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					36.4	2.4	64	n.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.82	757.4	30.09	764.3	55.7	13.2	95	ne.	1	0.4			fg.			0	0	dense fog	James Kenealy.
Visalia, California	29.74	755.4	30.12	765.0	42.0	5.6	92	calm	0	0		2 cs	0			0	0	clear	G. D. Stewart
Washakie, Fort, Wyoming	24.59	624.0	30.33	770.4	17.1	— 8.3	67	w.	2	0.9		1 c	0			0	0	clear	T. M. Ambler.
Washington, D. C.	30.32	770.1	30.44	773.2	36.5	2.5	77	n.	9	4.0		0	0			0.01	0.3	clear	B. M. Purssell.
West Las Animas, Colorado	26.19	665.2	30.31	769.9	23	— 5.0	80	w.	5	2.2		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.88	758.9	30.51	774.9	29	— 1.7	88	calm	0	0		0	hz.			0	0	clear	B. F. Hough.
Wilmington, N. Carolina	30.12	765 0	30.18	766.6	49	9.4	86	ne.	13	5.8		2 c	5 s		ne.	0	0	fair	Samuel A. Haney.
Winnemucca, Nevada	25.74	653.8	30.26	768.6	33	0.6	81	ne.	10	4.5		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.52	724.4	29.90	759.4	41	5.0	92	w.	2	0.9			10 n			0.03	0.8	light rain	J. H. Atfield.
Yuma, Arizona	29.76	755.9	29.91	759.7	62.0	16.7	46	calm	0	0		0	9 s		sw.	0	0	cloudy	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8			56.0	13.3	72	se.	2	0.9		1 k	6 ks; k	se.	w.	0.68	17.3	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.72	754 9	29.78	756.4	73.8	23.2	76	n.	2	0.9		10; cs	4 k	w.	nw.	0.13	3.3	fair	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.85	758.2	29.86	758.4	74	23 3	93	calm	0	0		10 cs	0	sw.		0.26	6.6	cloudy	Robert Johnston.
Navassa, W. I.	29.72	754.9	29.80	756.9	80.5	26.9	80	ne.	7	3.1		6 ks	3 k	e.	ne.	1.76	44.7	cloudy	F. M. Everett.
Paramaribo, S. A.	29.96	761.0	29.96	761.0	82	27.8	75	s.			2	5 k	2 s	e.		0.080	2.0		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.94	760 5	76	24.4	89	calm			0		10 ks		calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75	23.9	98	nw.			2	0	1 ks		nw.	0.68	17.3	clear	Earl Flint.
Santiago de Cuba, W. I.	29.88	758.9	29.90	759.4	75	23.9	76	n.	3.6	1.6		3 c	0			0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.70	754.4	29.76	755.9	26	— 3.3	76	n.			5	0	4 s			0	0	fair	W. J. Fisher.
St. Thomas, W. I.	29.82	756.4	29.94	760.5	81	27.2	88	sw.				2 c	3 ks	s.	sw.	1.05	26.7	fair	Aug. Walloe.
York Factory, B. A.	30.12	765.0	30.17	766.3	14.5	— 9.7	91	nw.	8	3.6		1 c	2 s	nw.	nw.	0	0	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Woo-Sung Bar, China	30.25	768.3	58	14.4		sse.			2		2	se.						d. clouds.
H. M. S. Amethyst, Colonia, Uruguay †	30.04	763.0	66	18.9	91	se.			5		10					2	se.	drizzling.
H. M. S. Antelope, N. 35° 06′, E. 26° 38′	30.16	766.1	64	17.8		nnw.			3–4		3	nnw.				2	nnw.	d. clouds.
H. M. S. Audacious, N. 28° 08′, E 33° 24′	29.98	761.5	78	25.6	73	wnw.			2		2	nne.						d. clouds.
H. M. S. Carfsford, N. 29° 56′, E. 32° 33′	30.00	762.0	76.5	24.7	60	nnw.			2		1							blue sky.
H. M. S. Champion, N. 31° 14′, E. 121° 38′			57	13.9	81	calm			0		0							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C.	29.82	757.4	42	5.6	83	calm			0		10							overcast.
H. M. S. Condor, coast of Syria	30.08	764.0	75	23.9	72	var.			1		0					2		d. clouds.
H. M. S Curacoa, N. 34° 41′, E. 135° 12′	30.18	766.6	58.5	14.7	76	n.			1		0							blue sky.
H. M. S. Diamond, S. 18° 10′, E. 178° 31′*†	29.79	756.7	79	26.1	73	calm			0		2							d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	29.78	756.4	74	23.3	83	ese.			1–2		6	ese.						d. clouds.
H. M. S. Eclipse, N. 15° 22′, E. 56° 22′	29.86	758.4				ese.			1		6	e.				2	n.	d. clouds.
H. M. S. Espiegle, S. 16° 52′, E. 162° 31′			78	25.6	61	e.			1		10					2	se.	overcast.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.91	759.7	77.5	25.3	77	ssw.			2		5							d. clouds.
H. M. S. Flamingo, N. 17° 50′ W. 75 15′	29.74	755.4	84	28.9	96	sse.			1–2		1	se.				sm'h		blue sky.
H. M. S. Flying Fish, N. 37° 14′, E. 126° 37′	30.19	766.8	54	12.2	67	sse.			3		8							misty.
H. M. S. Gannet, S. 18° 28′, W. 70° 21′	29.97	761.2	63	17.2	88	calm			0		7					3	ssw.	d. clouds.
H. M. S. Iris, N. 31° 40′ E. 28° 00′	30.17	766.3	70	21.1	75	nnw.			3–5		2	nnw.				3	nnw.	squally.
H. M. S. Iron Duke, N. 32° 44′, E. 129° 51′	30.30	769.6	49	9.4	93	calm			0		0							blue sky.
H. M. S. Kingfisher, N. 37° 48′ W. 122° 24′	30.13	765.3	52	11.1		ene.			2		2	calm				sm'h		d. clouds.
H. M. S. Lark, S. 10° 01′, E. 161° 53′	29.89	759.2	80.3	26.8	98	calm			0		6							misty.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	30.09	764.3	63	17.2		calm			0		0							blue sky.
H. M. S. Magpie, Nagasaki, Japan	30.29	769.4	53	11.7	83	calm			0		0							blue sky.
H. M. S. Northampton, Halifax, N. S	30.42	772.7	31	— 0.6	94	nw.			1		2							d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.77	756.1	66	18.9	84	calm			0									blue sky.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.84	757.9	80	26.7	88	w.			1		2							d. clouds.
H. M. S. Rocket, N. 9° 00′ W. 79° 31′	29.90	759.4	80	26.7	95	s.			1		5					3–4	sw.	d. clouds.
H. M. S. Sappho, S. 31° 20′, W. 144° 30′	30.24	768.1	61.2	16.2	66	ese.			5–6		10					5	s.	squally.
H. M. S. Superb, N. 39° 37′, E. 19° 56′*	30.29	769.4	66	18.9	73	nne.			1		1	nw.						blue sky.
H. M. S. Sylvia, S. 53° 00′ W. 73° 35′	29.37	746.0	44.5	6.9	87	n.			2–4		10							raining.
H. M. S. Thetis, S. 27° 00,′ W. 73° 48′	30.15	765.8	61	16.1	70	sse.			4		7					5	s.	d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.97	761.2				e.			1		0							blue sky.
H. M. S. Woodlark, Bushire, Persia	30.00	762.0	76.5	24.7	60	wnw.			3–4		0					1	w.	misty.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.31	769.9	48	8.9	92	calm			0		0							blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.03	762 8	82.8	28.2	69	ne.			3		2		ne.			1	se.	d. clouds.
Tamega, Macao, China	30.06	763.4	68.0	20.0	67	n.			2		0							blue sky.
Swedish Naval.																		
Vanadis, N. 49° 37′, W. 4° 55′	30.02	762.4	57.7	14.3	89	sw.			5		8							misty.
United States Naval.																		
Navy Yard, Pensacola, Fla	29.94	760.5	60	15.6	70	ne.	8	3.6			5		ne.	0	0			fair.
Navy Yard, Portsmouth, N. H	30.55	776.0	26	— 3.3	?	ne.	12	5.4			2		ne.	0	0			fair.
Naval Hospital, Yokohama, Japan*	30.17	766.3	52	11.1	86	calm			0		0			sli't	sli't			clear.
Adams, Sitka, Alaska			35	1.7	70	calm			0		2							fair.
Alaska, Lahina, Sandwich Islands	29.94	760.5	77	25.0	77	sse.			1		5			0	0	sm'h		fair.
Alliance, Hampton Roads, Va	30.24	768.1	51	10.6	93	nne.			5–6		5			h'vy	h'vy			fair.
Ashuelot, N. 34° 08′ E. 136° 53′	30.30	769.6	61	16.1	77	nnw.			4		1			0	0			clear.
Brooklyn, Keel Point, Patagonia	29.41	747.0	53	11.7	73	wsw.	18	8.0			10		w.	0	0	sm'h		cloudy.
Colorado, New York, N. Y.	30.54	775.7	36	2.2	?	n.	8	3.6			0							clear.
Enterprise, Norfolk, Va	30.30	769.6	50	10.0	86	nne.			5		5		ne.					fair.
Essex, Callao, Peru	29.94	760.5	63	17.2	94	sse.			1		5		sse.			sm'h	sse.	fair.
Franklin, Norfolk, Va	30.26	768.6	49	9.4	100	ne.	22	9.8			5		nne.	0.3	8.			fair.
Galena, Montevideo, Uruguay	29.92	760.0	62	16.7	100	e.			3		10					mod.		cloudy.
Hartford, Montevideo, Uruguay*	29.87	758.7	63	17.2	94	ese.			3		10			light	light	sm'h	s.	fair.?
Independence, Mare Island, Cal	30.18	766.6	45	7.2	92	calm			0		0							clear.
Iroquois, Callao, Peru	29.99	761.7	62	16.7	94	sse.			1		10							overcast.
Jamestown, Newport, R. I	30.44	773.2	39	3.9	91	n.			6		10		n.					cloudy.
Kearsarge, Hampton Roads, Va	30.24	768.1	51	10.6	72	nne.			4–6		2		ne.			mod.		clear.
Lackawanna, Talcahuana, Chili*	30.26	768.6	55	12.8	73	calm			0		0							clear.
Lancaster, N. 32° 29′ E. 24° 40′*	30.12	765.0	70	21.1	56	nnw.			4		2		n.	0	0	mod.	nw.	fair.
Michigan, Erie, Pa	30.37	771.4	37	2.8	62	s.			2		10							cloudy.
Minnesota, New York, N. Y.	30.48	774.2	45	7.2	67	ne.	5	2.2			2							clear.
Monocacy, Yokohama, Japan *	30.10	764.5	55	12.8	87	nw.			1		2		calm					fair.
New Hampshire, Newport, R. I	30.49	774.4	40	4.4	82	nne.			6		10		calm			mod.	nne.	cloudy
Nipsic, Palermo, Sicily*	30.33	770.4	70	21.1	52	n.			2		5					sm'h		fair.
Onward, Callao, Peru	30.11	764.8	62	16.7	94	sse.			1		10		n.			long	w.	misty.
Palos, Nagasaki, Japan*	30.20	767.1	51	10.6	86	nne.			1		0							clear.
Pensacola, Callao, Peru*	29.95	760.7	61	16.1	100	sse.	2	0.9			10			0	0	sm'h		misty.
Powhatan, Boston, Mass	30.51	774.9	33	0.6	79	n.			3		8		n.					clear?
Quinnebaug, N. 42° 00′, E. 16° 30′*	30.26	768.6	64	17.8	72	s.			2		5		calm					hazy.
Ranger, N. 36° 00′, W. 122° 02′	30.10	764.5	56	13.3	87	nne.			2		0			0	0	mod.		clear.
Richmond, Yokohama, Japan*	30.21	767.3	56	13.3	80	nnw.			1		0			0	0			clear.
Saratoga, N. 22° 46′ W. 86° 10′	29.72	754.9	78	25.6	86	n.			4–5		5		n.			mod.	ne.	fair.
St. Louis, League Island, Pa	30.66	778.7	35	1.7	70	n.			2		5							clear.
Swatara, S. 5° 41′, W. 22° 29 *	29.81	757.2	79	26.1	78	se.			3		5		ne.			long	ese.	fair.
Tennessee, Hampton Roads, Va	30.23	767.8	55	12.8	76	ne.	27	12.1			2			0.41	10.4	mod.	ne.	squally.
Vandalia, Hampton Roads, Va*	30.25	768.3	51	10.6	78	ne.			5		2		ne.					fair.
Wabash, Boston, Mass	30.51	774.9	33	0.6	69	n.	10	4.5			8		n.	0	0			cloudy.
Wachusetts, Mare Island, Cal	30.16	766.1	44	6.7	?	var.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.47	773.9	54	12.2	79	ne.			2		5		ne.					fair.
Yantic, Norfolk, Va	30.26	768.6	52	11.1	72	nne.			3–4		8							cloudy.
Merchant Marine.																		
S. S. Grecian, Montevideo, Uruguay*	29.91	759.7	65	18.3	89	ese.			1		10		ese.	0	0	sm'h		cloudy.
S. S. Polynesian, N. 55° 30′, W. 7° 32′	29.46	748.3	48	8.9		se.			2		10		W.	12 h'r	12 h'r	long	wsw.	squally.
S. S. Scandinavian, N. 42° 53′, W. 62° 12′	30.43	772.9	43	6.1		ene.			5		10		ene.			mod	ene.	showery.
S. S. Indiana, Philadelphia, Pa			48	8.9	92	e.			4		9		e.			mod.	e.	cloudy.
S. S. Lord Clive, N. 45° 10′ W. 53° 55′*†	30.20	767.1				nnw.			4		7		nnw.	0	0	sli't	nne.	cloudy.
S. S. Lord Gough, N. 51° 28′, W 21° 15′	29.78	756.4	56	13.3		w.			5		5		w.	0	0	mod.	w.	fair.
S. S. Ohio, N. 39° 36′, W. 72° 07′	30.25	768.3	49	9.4	93	nne.			6		4		ne.			r'gh	ne.	cloudy.
S. S. Pennsylvania, Liverpool, Eng.†	29.61	752.1	57	13.9		wnw.			6		10		w.			r'gh	sw.	rainy.
S. S. Stella, N. 49° 59′ W. 5° 45′	29.94	760.5	60.8	16		sw.			6		6		sw.			5	wsw.	foggy.
S. S. Anchoria, N. 50° 18′, W. 38° 46′†	30.03	762.7				wsw.			3		10		wsw.	shr's	sh'rs	mod.	nw.	overcast.
S. S. Bolivia, Greenock, Scotland	29.14	740.1	54	12.2	?	wnw.			10		10		nw.	18 h'r	18h'r			stormy.
S. S. Dorian, N. 38° 05′, W. 14° 12′*	30.21	767.3	66	18.9		ne.			4		0			0	0	h'vy	nw.	clear.
S. S. Ethiopia, N. 53° 57′, W. 23° 46′	29.79	756.7	43	6.1	72	nw.			3		7		nw.	2 h'r	2 h'r	h'vy	nw.	cloudy.
S. S. Galatia, N. 22° 19′, E. 88° 11′	30.00	762 0	83	28.3		wnw.			2		1		nne.	0	0	mod	n.	clear.
S. S. Ailsa, Savanilla, U. S. Cl	29.99	761.7	84	28.9	83	sw.			1		8		sw.	2 h'r	2 h'r			cloudy.
S. S. Alpin, Ponce, Porto Rico, W. I.	29.94	760.5				s.			1				sse.	0	0	sm'h		
S. S. Alvo, N. 27° 15′, W. 74° 10′						ne.			4				ne.	h'vy	h'vy	3	ne.	cloudy.
S. S. Antillas, Newport News, Va†	29.98	761.5				ne.			4		5		ne.	0	0			
S. S. Ambrose, Para, Brazil†	29.91	759.7				ne.			3		6			0	0			fine.
British Merchant, S. 14° 02′, W. 107° 05′	30.02	762.5	70	21.1	85	ene.			5		6							d. clouds.
Dynomene, S. 5° 14′, E. 88° 30′	29.91	759.7	83.5	28.6	75	s.			1		2							blue sky.
S. S. Gordon Castle, N. 13° 31′, E. 111° 41′	29.87	758.7				nne.			5–6		6					high	ne.	d. clouds.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.			
MERCHANT MARINE—Continued.																		
May Hulse, N. 10° 49′, W. 25° 05′	29.90	759.4	81.5	27.5	81	ne.			3		8							d. clouds.
Markland, N. 29° 42′, W. 34° 18′	30.20	767.1	74.0	23.3	81	e.			4		9					4	ene.	d. clouds.
S. S. Olympus, N. 30° 37′ E 32° 18′	29.84	757.9	92.2	33.4	48	n.			2		1							blue sky
S. S. Mertola, N. 45° 17′, W. 11° 05′	30.32	770.1	60.0	15.6	90	sw.			5		10							overcast.
S. S. Gallia, N. 44° 00′, W. 44° 30′	30.28	769.1	51	10.6	79	nw.			4		10			0	0	mod.	ne.	fair.
S. S. Marathon, N. 46° 23′, W. 8° 32′			62	16.7		sw.			5		6		sw.	2 h'r	2 h'r	mod.	wsw.	cloudy.
S. S. Pavonia, N. 42° 20′, W. 66° 57′*	30.39	771.9	43	6.1	83	ne			5		8		ene.	0	0	sl'it	ne.	cloudy.
S. S. Scythia, N. 43° 30′, W. 49° 10′	30.30	769.6	47	8.3	92	w.			1		3		w.	1 h'r	1 h'r	sm'h	wnw.	clear.
S. S. Canada, N. 45° 20′ W. 49° 35′	30.36	771.2	39.2	4		n.			4		2		w.	0	0	h'vy	nw.	clear.
S. S. Labradore, N. 49° 38′ W. 2° 12′			57.2	14		sw.			6		8		wsw.	rain	rain	h'vy	sw.	
S. S. Ville de Marseilles, N. 49° 19′, W. 29° 36′*†	30.95	786.1	54	12.2		nne.			4		7?		nw.	6 h'r	6 h'r	long	nw.	covered.?
S. S. Arizona, N. 48° 03′, W. 43° 46′	30.16	766.1	39	3.9		nw			4		8		nw.	snow	snow	mod.	nw.	cloudy.
S. S. Wisconsin, N. 45° 50′, W. 50° 52′	30.18	766.6	39	3.9		wnw.			3		5?		wnw.	2 h'r	2 h'r	sm'h		cloudy?
S. S. Bohemia, N. 48° 49′, W. 24° 32′†	30.10	764.5				wnw.			5		5		nw.	5 h'r	5 h'r	r'gh	nw.	fair.
S. S. Cimbria, N. 46° 58′, W. 46° 20′	30.27	768.8	36.5	2.5		w.			5		10		w.	½ h'r	½ h'r	sm'h	nw.	covered.
S. S. Gellert, N. 49° 56′ W 1° 30′	30.12	765.0	57	13.9		sw.			8		9		ssw.	0	0	r'gh	sw.	stormy.
S. S. Silesia, Elbe River, Germany†	29.85	758.2	51.2	10.7		wsw.			7		10		w.	0	0			overcast.
S. S. Vandalia, N. 40° 30′, W. 71° 14′	30.38	771.6	48.9	9.4		nne.			7		10		ne.	0	0	r'gh	ne.	squally.
S. S. City of Berlin, N 40° 40′, W. 69° 30′	30.30	769.6				ne.			6		10					high	ene.	cloudy.
S. S. Nessmore, Barrow, England *	29.30	744.2	57	13.9	97	w.			7		10							raining.
S. S. Archimedes, N. 40° 29′, W. 71° 21′	30.25	768.3				nne.			0		10		ne.	¼ h'r	¼ h'r	long	ne.	overcast.
S. S. Hevelius, Buenos Ayres, Agentine Rep*†	30.06	763.5	68	20.0		ese.			4		9		e.	1 h'r	1 h'r			cloudy.
S. S. Bulgarian, N. 51° 06′, W. 25° 27′*	29.98	761.5				wnw			1		1		nw.	3 h'r	3 h'r	mod.	nw.	clear.
S. S. City of San Antonio, N. 28° 29′, W. 76° 20′†	29.76	755.9	76	24.4		wsw.			1		2		sw.	20 h'r	20 h'r	h'vy	ene.	fair.
S. S. Colorado, N. 24° 30′, W. 83° 38′†	29.80	756.9	73	22.8		n.			6		7		n.	light	light	high	n.	cloudy.
S. S. Rio Grande, Galveston, Texas†	30.02	762.5	78	25.6		se.			1		1		se.	0	0	sl't	e.	clear.
S. S. San Marcos, N. 38° 09′ W. 74° 06′			61	16.1		ne.			6		2?		ne.			h'vy	ne.	cloudy?
S. S. Archimede, Palermo, Sicily*†	30.38	771.6	70	21.1	70	ne.			2		1		ne.	0	0			clear.
S. S. Hermod, N. 48° 40′, W. 18° 55′†	30.02	762.5	59.0	15		w.			6		6		w.	0	0	r'gh	wnw.	clearing.
S. S. Glenapp, Para River, Brazil †	29.91	759.7	81	27.2		ne.			2		4 k		ne.	0	0	sm'h		fine.
S. S. Chalmette, Algiers, La †	30.02	762.5	66	18.9		e.			2		0			0	0			clear.
S. S. New York, N. 25° 10′, W. 79° 35′ †	29.91	759.7	76	24.4		nne.			9		10		n.			h'vy	n	cloudy.
S. S. Denmark, N. 40° 26′, W. 71° 12′			45	7.2		nne.			6		10		ne	0	0	r'gh	ene.	cloudy.
S. S. Egypt, N. 50° 18′, W. 20° 24′ *†	30.00	762.0				wnw.			4		2		nw.	5 h'r	5 h'r	mod.	wnw.	clear.
S. S. England, N. 40° 27′ W. 69° 48′	30.24	768.1				nne.			6		10		ne.	0	0	h'vy	ese.	cloudy.
S. S. Erin, N. 40° 28′ W. 71° 35′	30.32	770.1	47	8.3		ne.			7		10		ene.	2 h'r	2 h'r	r'gh	ne.	gloomy.
S. S. Helvetia, Liverpool, Eng	29.76	755.9	56	13.3		nw.			6		8		nw.	6 h'r	6 h'r			raining.
S. S. City of Alexandria, N. 25° 12′, W. 79° 55′ †	29.88	758.9	75	23.9		nnw.			6		6?		nne.	0	0	h'vy	nnw.	clear?
S. S. City of Merida, N. 19° 24′, W. 95° 09′* †	29.88	758.9	78.8	26		n.			1		2		n.	2 h'r	2 h'r	cross	n.	squally.
S. S. City of Washington, N. 19° 52′, W. 90° 50′ *†	30.00	762.0	80	26.7		e.			4		5		e.	0	0	sm'h		fine.
S. S. City of Chester, N. 51° 13′, W. 17° 40′			50	10.0		w.			6								w.	cloudy.
S. S. Knickerbocker, N. 37° 40′, W. 74° 57′ *†	30.16	766.1	54	12.2		nne.			6								sw.	
S. S. Amerika, N. 49° 46′, W. 12° 37′ *	29.92	760.0	56.0	13.3	87	w.			6		10		w.	5 h'r	5 h'r	h'vy	var.	covered.
S. S. Donau, N. 49° 58′, W. 17° 38′	29.98	761.5				w.			5		5		w.	15 h'r	15 h'r	cross		fair.
S. S. Gen. Werder, N. 41° 35′, W. 66° 25′	30.30	769.6				nne.			6		9		nne.	6 h'r	6 h'r	cross	ne.	cloudy.
S. S. Habsburg, N. 41° 51′, W. 60° 22′	30.31	770.1	51.8	11.0		ne.			6		10		ne.	5 h'r	5 h'r	rg'h	ne.	overcast.
S. S. Koln, N 46° 30′, W. 36° 40′	30.12	765.0	50.0	10.0	65	nw.			2–3		8		sw.	12 h'r	12 h'r	light	n.	fair.
S. S. Kronprinz F. Wilhelm, N. 39° 28′, W. 13° 07′*	30.35	770.9	66.2	19.0		nw.			1		0			0	0	mod.	nnw.	clear.
S. S. Ohio, N. 27° 07′, W. 69° 29′	29.75	755.6				w.			4		4		w.	2 h'r	2 h'r	mod.	ne.	cloudy.
S. S. Saller, N. 40° 15′ W. 65° 33′	30.17	766.3	46.4	8.0		nne.			8		10		nne.	6 h'r	6 h'r	h'vy	nne.	light rain
S. S. Belgic, N. 30° 23′, E. 129° 29′†	30.30	769.6	69	20.6	65	sse.			1		3		ne.	0	0	light	nw.	clear.
S. S. Coptic, N. 46° 15′, W. 155° 05′	30.12	765.0	44.0	6.7	72	var.			2		9		ne.	0	0	high	nnw.	overcast.
S. S. City of Augusta, N. 37° 11′, W. 74° 57′	30.24	768 1				ne.			7		6			0	0	h'vy	ne.	cloudy.
S. S. Mississippi, Seattle, Washington Territory†	30.03	762.7	50	10.0	86	se.			2		10		s.					cloudy.
S. S. Oregon, Portland, Oregon†	29.93	760.2	50	10.0	93	calm			0									misty.
S. S. Ancon, San Francisco, Cal†	30.10	764.5	51	10.6	93	calm			0		0							clear.
S. S. Orizaba, N. 34° 26′ W. 120° 24′†	30.22	767.6	61	16.1	55	nw.			6		fg.		nw.			long.	nw.	foggy.
S. S. Australia, Sydney, N. S. W.	30.12	765.0	64	17.8	78	n.			4		1		nw.	0	0			clear.
S. S. City of New York, S. 5° 57′, W. 167° 04′ †	29.88	758.9	81	27.2	74	se.			3		0			0	0	mod.	se.	clear.
S. S. City of Pekin, N. 33° 53′, E. 165° 30′ †	30.53	775.4	65	18.3	73	e.			3		20		e.	0	0	light	e.	cloudy.
S. S. City of Sydney, S. 34° 15′, E. 170° 32′†	30.17	766.3	60	15.6	55	sse.			4		5?		sw.	0	0	long	sw.	cloudy?
S. S. Colima, Libertad, San Salvador †	29.86	758.4	77	25.0	86	nnw.			3		7		calm	0	0	mod.	sw.	cloudy.
S. S. Grenada, N. 34° 55′, W. 121° 34′ †	30.03	762.7	59	15.0	82	nw.			2		0			0	0	small	nw.	clear.
S. S. San Jose, N. 7° 50′, W. 82° 28′ *†	29.99	761.7				var.			3		8		se.	0	0	h'vy	sse.	squally.
S. S. Bermuda, Saba Island, W. I†	29.91	759.7	82	27.8		se.			2		7		se.	s hr's	shr's	gentle	se.	cloudy.
S. S. Muriel, Martinique, W. I	29.93	760.2	84	28.9		e.			2		10			0	0	sm'h		overcast.
S. S. Caracas, La Guayra, Venezuela †	29.93	760 2	84	28.9	79	calm			0		5			0	0	mod	e.	fine.
S. S. Belgenland, New York, N. Y †	30.54	775 7	40	4.4	100	une.			7		0			0	0			fine.
S. S. Pennland, Antwerp, Belgium	30.07	763.8	53	11.7	96	sw.			6		10			½ h'r	½ h'r			overcast.
S. S. Rhynland, N. 50° 20′, W. 3° 00′	30.04	763.0	54	12.2	87	sw.			7		10		sw.	2 h'r	2 h'r	high	wsw.	overcast.
S. S. Switzerland, N. 42° 50′, W. 61° 01′†	30.37	771.4				ene.			4		10		ene.	0	0	r'gh	ene.	cloudy.
S. S. Wuesland, N. 47° 49′, W. 39° 02′	30.15	765.8	47	8.3	77	wnw.			6		8		w.	hail	rain	r'gh	wnw.	hailing.
S. S. Maas, N. 40° 48′, W. 71° 27′	30.25	768.3	47.1	8.4	86	ne.			3		6?		ssw.	1 h'r	1 h'r		nnw.	clear.?
S. S. P. Caland, N. 49° 40′, W. 7° 26′	29.97	761.2	58.8	14.9	91	sw.			0		6		sw.			6	wsw.	cloudy.
S. S. W. A. Scholten, N. 49° 15′, W. 28° 05′	30.22	767.6	49.7	9.8	89	nw.			4		8		wsw.	0	0	mod.	w.	
S. S. State of Florida, N. 43° 05′, W. 58° 04′	30.32	770.1	46	7.8		ne.			5		10		ene.	3 h'r	3 h'r	sm'h		overcast.
S. S. State of Indiana, N. 48° 13′, W. 47° 50′†	30.25	768.3	38	3.3		wsw.			4		3		wnw.	4 h'r	4 h'r	mod	n.	showery.
S. S. State of Nevada, N. 55° 32′, W. 7° 15′†	29.50	749.3	47	8.3		nw.			0		10		wnw.	h'vy	h'vy	long	w.	squally.
S. S. Thingvalla, Copenhagen, Denmark†	29.66	753.4	48.2	9.0		sw.			5		3		ssw.	0	0			clear.
S. S. Iowa, Liverpool, Eng *†	29.73	755.1																
S. S. Phartyn, N. 40° 01′, W. 68° 44′			54.5	12.5					6		6		ene.	0	0	r'gh	ne.	
S. S. Adriatic, N. 41° 49′, W. 53° 26′ †	30.41	772.4	54	12.2		ene.			4		9		ne.			mod.	ene.	hazy.
S. S. Britannic, N. 50° 07′ W. 6° 45′†	29.82	757.4	56	13.3	100	nnw.			6		10			5 h'r	5 h'r	r'gh	ssw.	raining.
S. S. Celtic, N. 50° 05′, W. 33° 10′†	30.01	762.3	52	11.1	86	wsw.			3		10		sw.	sh'rs	sh'rs	h'vy	nw.	cloudy.
S. S. Marengo, N. 50° 28′, W. 1° 38′* †	29.94	760.5				ssw.			0		8		sw.	4 h'r	4 h'r	r'gh	sw.	cloudy.
S. S. Salerno, Odessa, Russia			50	10.0		calm			0					0	0			clear.
S. S. Catherine Whiting, Fire Island, N. Y †	30.40	772.1				ne.			5				ene.	0	0	large	ne.	
S. S. Norman, N. 41° 33′, W. 69° 59′	30.36	771.1				ne.			0				ne.	0	0	r'gh		cloudy.
S. S. Saxon, N. 40° 50′, W. 71° 50′*†	30.48	774.2	45	7.2		ne.			0		7		ne.			sm'h		threatening.
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 33° 35′, W. 75° 48′			68	20.0		ne.			7		8		ne.	2 h'r	2 h'r	h'vy	ne.	
Bk. Adelaid, N. 3° 33′, W. 44° 32′ *†	29.89	759.2	83	28.3		e.			4		1		se.	10 h'r	10 h'r	mod.	ese.	hazy.
Bg. Alcira, N. 28° 35′, W. 69° 44′	29.79	756.7	75	23.9		ene.			4		0		ne.	3 h'r	3 h'r	r'gh	e.	cloudy.
Schr. Anna A. Holton, N. 36° 46′, W. 74° 26′†	30.15	765.8	60	15.6		ne.			0		2		ne.	½ h'r	½ h'r	h'vy	ne.	clear.
S. Annie M. Law, Kobe, Japan*†	30.02	762.5	64	17.8		ene.			1		0			0	0			clear.
Bk. Anna Thormann, S. 8° 12′, E. 114° 24′*	29.92	759.9	81.9	27.7	81	sse.			2		3 k		se.	0	0			clear.
S. S. Antonio Lopez, N. 37° 15′, W. 1° 06′ *	30.40	772.1	66	18.9	84	ene.			5		3			0	0	mod.	ene.	fair.
Bk. Aquidneck, N. 23° 04′, W. 39° 43′ *†	30.02	762.5				se.			2				se.			light	se.	cloudy.
Bk. Aureola, N. 45° 04′, W. 37° 05′*†	30.40	772.1	57	13.9		w.			2		10		w.	1 h'r	1 h'r	h'vy	nw.	overcast.
Bk. Alba, N. 48° 17′, W. 22° 49′*†	30.12	765.0	53.0	12.0		w.			4									cloudy.
Bk. Bayonnaise, N. 24° 39′, W. 53° 45′*†	30.08	764.0				ssw.			2		7		s.	12 h'r	12 h'r	r'gh	se.	overcast.
S. S. Burswell, Antwerp, Belgium*†	30.00	762.0	54	12.2		wsw.			5		7		wsw.	4 h'r	4 h'r	sm'h		threatening.
Bk. Champion, Rotterdam, Holland†	29.86	758.4	54.0	12.2		wsw.			4		5		wsw.	4 h'r	4 h'r			drizzling.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.06	763.5	58	14.4	78	ne.			3		10 8		ne.	0	0			cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.			Force.	Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.			Amount and kind.		Direction.						
										Upper	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Schr. C. R. Flint, N. 17° 45′, W. 78° 29′†	29.82	757.4	81	27.2	.....	calm	.....	.....	0	.....	2	.....	.....	0	0	sm'h	.....	clear.
S. Don Quixote, Pasoeroen Roads, Java*	29.77	756.1	86	30.0	.....	e.	.....	.....	3	.....	3	.....	e.	0	0	sm'h	.....	clear.
Bkt. David Preston, N. 35° 20′, W. 74° 34′*†	30.00	762.0	71	21.7	.....	nne.	.....	.....	.....	.....	2	.....	nw.	.....	.....	long	ne.	
Bk. E. D. Bigelow, N. 38° 53′ W. 50° 32′*†	30.15	765.8	.....	.....	.....	ne.	.....	.....	6	.....	8	.....	ne.	0	0	.....	nne.	cloudy.
Bk. Edith R. Seward, Wilmington, N. C*†	30.20	767.1	50	10.0	.....	n.	.....	.....	3	.....	4	.....	sw.	1 h'r	1 h'r	.....	.....	clear.
S. E. J. Spicer, New York. N. Y.	30.45	773.4	53	11.7	100	ne.	.....	.....	6	.....	2	.....	ene.	0	0	.....	.....	clear.
S. Enoch Train, N. 20° 58′, W. 45° 00′*†	30.12	765.0	.....	.....	.....	se.	.....	.....	3	.....	3	.....	se.	0	0	light	ne.	clear.
Bk. Essex, Muscat, Arabia*†	29.90	759.4	84	28.9	.....	ene.	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	
Schr. F. E. McDonald, Washington, D. C†	30.43	772.9	.....	.....	.....	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	fine.
S. S. Foscolia, Santos, Brazil*†	29.57	751.1	.....	.....	.....	calm	.....	.....	0	.....	.....	.....	se.	0	0	.....	.....	fine.
Bk. Freya, N. 43° 43′, W. 12° 09′	.....	.....	63.2	17.3	.....	w.	.....	.....	2	.....	5	.....	sw	0	0	high	nw.	fair
S. Glendon, S. 54° 12′ W. 80° 30′†	29.41	747.0	45	7.2	.....	nw.	.....	.....	5	.....	10	.....	nw.	4 h'r	4 h'r	hv'y	sw.	cloudy
S. Grecian, S. 2° 18′, W. 35° 07′†	29.92	760.0	83	28.3	79	ne.	.....	.....	5	.....	3	.....	ne.	0	0	long	n.	clear.
Bk. Gronsvaer, S. 44° 04′ E. 119° 10′†	29.99	761.7	60.0	15.6	97	w.	.....	.....	5	.....	2	.....	w.	0	0	8	w.	fair.
Bk. Hattie G. McFarland, N. 36° 00′, W. 74° 20′†	30.16	766.1	64	17.8	.....	nne.	.....	.....	8	.....	8	.....	ne.	8 h'r	8 h'r	hv'y	ene.	squally.
Schr. Hattie Weston, Mayaro Bay, W. I*†	29.96	761.0	84	28.9	.....	ene.	.....	.....	2	.....	2	.....	ene.	0	0	mod.	e.	fair.
S. Hedwig, N. 20° 17′, W. 58° 44′	29.93	760.2	81.7	27.6	92	ssw.	.....	.....	4	.....	10	.....	ssw.	4 h'r	4 h'r	2	se.	overcast.
S. Ivy, Queenstown, Ireland†	29.95	760.7	56	13.3	.....	sw.	.....	.....	8	.....	10	.....	sw.	3 h'r	3 h'r	.....	.....	raining.
Schr. Jennie N. Huddell, Philadelphia, Pa†	30.29	769.4	.....	.....	.....	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear.
S. S. John Hopkins, Baltimore, Md	.....	.....	34	1.1	.....	n.	.....	.....	5	.....	0	.....	.....	0	0	.....	.....	clear.
Schr. John L. Thomas, Off Vivorilla Cays, C. A *†	29.88	758.9	.....	.....	.....	wnw.	.....	.....	3	.....	3	.....	n.	0	0	short	wnw.	squally
Bg. John Wesley, Cardenas, Cuba, W. I†	29.80	756.9	.....	.....	.....	w.	.....	.....	1	.....	6	.....	wnw.	½ h'r	½ h'r	.....	.....	sprinkling.
Bk. Joseph A. Ropes, N. 18° 26′. E. 58° 02′*†	29.99	761.7	82	27.8	79	w.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	fair.
Light House Tender, Laurel, Key West, Fla.†	29.79	756.7	74	23.3	.....	n.	.....	.....	2	.....	8	.....	n.	2 h'r	2 h'r	.....	.....	cloudy.
Bk. Liberia, N. 25° 58′. W. 33° 14′*	30.07	763.8	77	25.0	69	ese.	.....	.....	3	.....	5	.....	e.	0	0	.....	.....	fine.
Bg. Lilian, N. 10° 45′ W. 58° 00′†	29.93	760.2	83	28.3	.....	ese.	.....	.....	4	.....	9	.....	se.	1 h'r	1 h'r	mod.	e.	squally
Bg. L. & W. Armstrong, N. 32° 54′, W. 73° 35′*†	29.84	757.9	.....	.....	.....	nne.	.....	.....	9	.....	3	.....	ne.	0	0	h'vy	ne.	h'y gale.
S. S. Madrid, N. 48° 36′, W. 14° 30′*†	30.04	763.0	55	12.8	93	w.	.....	.....	5	.....	8	.....	.....	4 h'r	4 h'r	rg'h	w.	clearing.
S. S. Malabar, N. 0° 48′ E. 89° 26′*†	29.92	760.0	.....	.....	.....	sw.	.....	.....	1	.....	10	.....	sw.	0	0	mod.	sw.	cloudy.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	29.72	754.9	72	22.2	.....	w	.....	.....	3	.....	3	.....	nw.	0	0	.....	.....	fair.
Bg. Mattie B. Russell, Matanzas, Cuba*†	29.96	761.0	.....	.....	.....	sw.	.....	.....	1	.....	2	.....	n.	light	light	light	nne.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	29.88	758.9	.....	.....	.....	n.	.....	.....	.....	.....	.....	.....	n.	12 h'r	12 h'r	sm'h	n.	cloudy.
Bg. Myrtle, N. 23° 11′, W. 64° 44′†	29.97	761.2	.....	.....	.....	wsw.	.....	.....	3	.....	1	.....	wsw.	0	0	long	se.	clear.
S. Orealla, S. 4° 00′, E. 81° 45′*	29.95	760.7	.....	.....	.....	nnw.	.....	.....	3	.....	8	.....	var.	4 h'r	4 h'r	mod	se.	squally.
S. Paramita, San Francisco, Cal†	29.99	761.7	57	13.9	.....	nne.	.....	.....	4	.....	.....	.....	n.	0	0	.....	.....	fair.
S. S. Radnorshire, N. 36° 44′, W. 1° 00′*†	30.36	771.1	.....	.....	.....	ne.	.....	.....	6	.....	0	.....	.....	0	0	mod	ne.	clear.
Bk. Rebus, N. 31° 44′, W. 73° 39	29.66	753.4	70	21.1	.....	ne.	.....	.....	8	.....	6	.....	ne.	2 h'r	2 h'r	cross	ne.	light rain.
S. St. Francis, S. 44° 10′ W. 79° 25′†	30.06	763.5	51	10.6	.....	wnw.	.....	.....	7	.....	7	.....	nw.	6 h'r	6 h'r	mod.	wnw.	hazy
Schr. S. B. Hubbard, Jacksonville, Fla†	29.97	761.2	65	18.3	.....	ne.	.....	.....	4	.....	10	.....	.....	h'vy	h'vy	.....	.....	stormy.
Bk. Southern Belle, N. 42° 42′ W. 35° 30′*†	30.22	767.6	58	14.4	.....	wsw.	.....	.....	3	.....	.....	.....	.....	0	0	long	nw.	clear.
Bg. Teneriffe, N. 31° 20′, W. 78° 00′	29.88	758.9	.....	.....	.....	ne.	.....	.....	8	.....	.....	.....	ne.	0	0	r'gh	.....	
Bk. Truro, N. 49° 30′ W. 17° 00′*†	30.00	762.0	.....	.....	.....	w.	.....	.....	3–4	.....	4	.....	w.	4 h'r	4 h'r	long	w.	fair.
U.S. F. C. S. S. Fish Hawk, Washington, D. C†	30.48	774.2	38	3.3	81	nne.	.....	.....	2	.....	1	.....	calm	.....	.....	.....	.....	clear.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.42	772.7	66.2	19.0	.....	e.	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	clear.
Schr. Viola Reppard, Savannah, Ga†	30.11	764.8	66	18.9	.....	nne.	.....	.....	4	.....	10	.....	nne.	0	0	.....	.....	cloudy.
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†.	29.90	759.4	.....	.....	.....	ssw.	.....	.....	3	.....	1	.....	ssw.	0	0	.....	.....	fine.
Bk. Wandering Jew, N. 3° 48′, W. 28° 48′†	29.79	756.7	81	27.2	.....	se.	.....	.....	4	.....	8	.....	se.	0	0	long	s.	fair.
Bk. Warden Law, S. 56° 18′, W. 78° 51′†	29.24	742.7	.....	.....	.....	w.	.....	.....	2	.....	6	.....	w.	12 h'r	12 h'r	sm'l.	nnw.	cloudy.
Bgt. Willie, S. 36° 00′, W. 22° 30′*†	30.08	764.0	60	15.6	.....	e.	.....	.....	7	.....	10	.....	e.	12 h'r	12 h'r	h'vy	e.	light rain.

International Chart I. November 5, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 6, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0-10	0-10	0-10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.29	769.3	57.9	14.4	81	n.	.....	.....	1	.....	4	.....	.....	0.047	1.2	cloudy	Malaterre.
Algiers	.....	.....	30.32	770.1	67.3	19.6	61	wsw.	.....	.....	1	.....	4	.....	.....	0	0	cloudy	Thève.
La Calle	.....	.....	30.34	770.6	66.2	19.0	63	se.	.....	.....	3	.....	1	.....	.....	0	0	very fair.....	Fonfrède.
Tunis	.....	.....	30.37	771.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.33	770.3	71.6	22.0	61	sw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair...	Pérès.
Tebessa	.....	.....	30.37	771.4	63.0	17.2	63	w.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	Dognon.
Geriville	.....	.....	.....	.....	56.1	13.4	50	ese.	.....	.....	5	.....	9	.....	.....	0	0	covered.....	Louchamp.
Laghouat	.....	.....	30.37	771.5	62.6	17.0	61	e.	.....	.....	1	.....	4	.....	.....	0	0	cloudy.....	Abraham.
Biskra	.....	.....	30.38	771.6	74.8	23.8	43	n.	.....	.....	1	.....	5	.....	.....	0	0	cloudy.....	Malau.
Australian.																			
Melbourne, Victoria	30.18	76 .6	30.27	768.8	53.0	11.7	75	sse.	5	2.2	.....	.....	2	.....	.....	0	0	very fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.59	751.5	30.13	765.4	60.8	16.0	61	sw.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.14	740.2	29.91	759.6	54.9	12.7	66	wsw.	18.6	8.3	.....	.....	10	.....	.....	0.220	5.6	.....	Dr. Wierzbiski.
Eperies	29.07	738.3	29.95	760.7	51.1	10.6	82	calm	.....	.....	0	.....	10 ks	.....	e.	0	0	.....	Julius Mikolik.
Gratz	28.89	733.9	30.14	765.5	56.3	13.5	72	s.	.....	.....	1	.....	3	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.69	728.6	30.13	765.2	52.2	11.2	71	nw.	.....	.....	3	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling
Kremsmunster, Obs'y	28.83	732.3	30.18	766.5	54.5	12.5	69	w.	.....	.....	3	.....	10	.....	.....	0.063	1.6	gloomy.....	The Staff.
Lemberg	28.89	733.7	29.87	758.8	49.5	9.7	78	w.	.....	.....	3	.....	10	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	30.15	765.8	30.26	768.7	57.7	14.3	81	wnw.	.....	.....	1	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.57	751.1	30.04	762.9	51.4	10.8	81	w.	.....	.....	3	.....	10	.....	.....	0	0	.....	Joseph Midlinszay, S. J.
Szegedin	29.84	758.0	30.12	765.1	56.5	13.6	60	sw.	.....	.....	2	.....	4	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.10	764.4	30.20	767.0	55.2	12.9	86	calm	.....	.....	0	.....	10; fg	.....	.....	0	0	.....	Royal Academy.
Vienna	29.41	747.1	30.13	765.2	57.2	14.0	61	w.	.....	.....	3	.....	8	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.76	755.9	29.86	758.4	45.3	7.4	67	sw.	7	3.1	.....	.....	7	.....	.....	0	0	misty.....	W. Boswell
Armagh, Observatory	29.71	754.6	29.96	761.0	45.0	7.2	89	s.	9	4.0	.....	.....	10	.....	.....	.....	.....	overcast.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.01	762.2	46.9	8.3	86	s.	9	4.0	.....	.....	10	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	29.48	748.8	30.02	762.5	44.1	6.7	91	sswv.	3	1.3	.....	.....	10	.....	.....	.....	.....	misty.....	Thomas Mackereth.
Bradford, Yorkshire	29.66	751.8	29.99	761.7	47.1	8.4	80	sw.	.....	.....	2	.....	10	.....	.....	0.03	0.8	overcast.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.90	759.4	29.93	760.2	84.0	28.9	71	ne.	.....	.....	1	.....	2	.....	.....	.....	.....	d. clouds.....	Corpl. J. Surgenor, A. H. C.
Cardington	29.86	758.4	29.98	761.5	50.0	10.0	82	sw.	.....	.....	3.0	.....	8	.....	.....	.....	.....	overcast.....	John McLaren.
Chatham, School M. E.	29.98	761.5	30.11	764.8	50.1	13.4	65	sw.	.....	.....	1	.....	6	.....	.....	blank	blank	d. clouds.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.79	756.7	30.02	762.5	49.7	9.8	95	ene.	.....	.....	2	.....	10	.....	.....	.....	.....	raining.....	The Staff.
Fort Napier, Natal	27.57	700.3	29.79	756.7	65.0	18.3	100	e.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	80.0	30.0	65	nw	.....	.....	1	.....	5	.....	.....	.....	.....	d. clouds.....	Sergt. John Robinson.
Gibraltar, Mediterranean	30.23	767.8	30.28	769.1	62.8	17.1	91	e.	.....	.....	3	.....	8	.....	.....	.....	.....	d. clouds.....	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.69	754.1	29.89	759.2	48.3	9.1	74	sw.	.....	.....	4	c	10 k	.....	.....	blank	blank	d. clouds.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.92	760.0	30.09	764.3	54.2	12.3	93	sw.	.....	.....	1	.....	9	.....	.....	.....	.....	d. clouds.....	The Staff.
Guernsey	29.77	756.1	30.07	763.8	55.5	13.1	97	sswv.	.....	.....	1	.....	10	.....	.....	blank	blank	overcast.....	A. Collenette, F. M. S.
Kew, Observatory	30.07	763.8	30.11	764.8	53.7	12.1	94	sw.	6	2.7	.....	.....	8	.....	.....	.....	.....	d. clouds.....	The Staff.
Leicester, Museum	29.80	756 9	30.06	763.5	49.8	9.9	74	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	30.21	767.3	30.28	769.1	68.2	20.1	97	ne.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.81	757.2	29.80	758.4	75.5	24.2	88	sw.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast.....	C. S. Duncombe.
Oscott, St. Mary's College	29.53	750.0	30.00	763.5	48.0	8.9	82	sswv.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	Warren Middleton.
Oxford, Radcliffe Obs'y	29.80	758.4	30.09	764.3	51.9	11.1	80	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Plymouth	29.94	760.5	30.02	762.5	49.0	9.4	98	ene.	.....	.....	1	.....	10	.....	.....	.....	.....	drizzling	John Merrifield.
Sandwick Manse, Orkneys	29.60	751.8	29.70	754.4	42.3	5.7	79	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.09	764 3	30.10	766.1	57.6	14.2	57	ne.	.....	.....	2	.....	4	.....	.....	blank	blank	d. clouds.....	W. H. Lyne.
Sheffield	29.74	755.4	30.02	762.5	47.2	8.4	87	sw.	.....	.....	1	.....	10	.....	.....	0.22	5.6	overcast.....	W. F. Cooper.
Silloth Rectory	29.91	759.7	29.94	760.5	49.9	9.9	80	wsw.	.....	.....	2	.....	4	.....	.....	0.015	0.4	d. clouds.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.01	762.2	46.0	7.8	85	sw.	5	2.2	.....	.....	10	.....	.....	.....	.....	misty.....	I. New.
Strathfield Turgiss	29.89	759.2	30.10	764.5	53.8	12.1	74	sw.	.....	.....	2	.....	8	.....	.....	.....	.....	d. clouds.....	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.86	758.4	29.92	760.0	53	11.7	100	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining.....	W. Newcombe.
Valencia, Observatory	29.90	759.4	29.93	760.2	49.7	9.8	90	e.	8	3.6	.....	.....	10	.....	.....	blank	blank	d. clouds	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.24	768.1	30.28	769.1	38	3.3	100	ne.	13	5.8	.....	.....	10 s	.....	ne.	0	0	cloudy.....	H. J. Cundall, C. E.
Chatham, N. B*	30.43	772.9	30.50	774.7	33	0.6	78	n.	8	3.6	.....	1 k	8 ks	n.	n.	0	0	cloudy	G. A. Blair.
Father Point, Quebec*	30.52	775.2	30.54	775.7	23	— 5.0	100	s.	5	2.2	.....	5 k	2 s	ne.	calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.05	737.9	29.90	759.4	33	0.6	100	sw.	2	0.9	.....	.....	10 s	.....	sw.	0	0	cloudy	James Stewart.
Halifax, N. S*	30.18	766.0	30.32	770.1	34	1.1	85	n.	8	3.6	.....	2 ks	0	n.	.....	0	0	clear.....	A. Allison.
Kingston, Ontario*	30.03	762.7	30.39	771.9	25	— 3.9	84	ne.	8	3.6	.....	8 ck	0	sw.	.....	0	0	fair.....	A. P. Knight, M. A.
Montreal, Quebec*	30.24	768.1	30.40	773.7	24	— 4.4	84	se.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.55	750.6	30.28	769.1	32	0.0	78	e.	18	8.0	.....	2 cs	0	w.	.....	0	0	fair.....	Rev. R. Mosley.
Port Dover, Ontario	29.49	749.0	30.20	767.1	43	6.1	100	se.	5	2.2	.....	10 c	0	sw.	.....	0	0	fair.....	H. Morgan.
Port Stanley, Ontario	29.49	749 0	30.15	765.8	44	6.7	76	e.	16	7.2	.....	.....	10 ks	.....	sw.	0	0	cloudy.....	M. Payne.
Quebec, Quebec*	30.21	767.3	30.55	776.0	26	— 3.3	88	calm	.....	.....	0	0	hz	.....	.....	0	0	hazy.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.93	760.2	30.42	772.7	23	— 5.0	88	e.	3	1.3	.....	5 c	0	sw.	.....	0	0	fair.....	W. H. McIntyre.
Saugeen, Ontario*	29.43	747.5	30.17	766.3	35	1 7	09	e.	24	10.7	.....	10 cs	0	.....	.....	0	0	cloudy	
St. Andrews, N. B	30.31	769 9	30.37	771.4	29	— 1.7	74	ne.	0	2.7	.....	0	0	.....	.....	0	0	clear.....	
Sydney, C. B*	30.30	769.6	30.30	771.1	37	2.8	66	ne.	13	5.8	.....	2 c	10 ks	.....	ne.	0.01	0.3	cloudy.....	T. C. Hill, C. E
Toronto, Ontario*	29.86	758.4	30.25	768.3	40	4.4	54	se.	10	4.5	.....	5 cs	2 s	sw.	sw.	0	0	fair.....	Magnetic Observatory.
Yarmouth, N. S*	30.22	767.6	30.29	769.4	34	1.1	75	ne.	0	2.7	.....	5 k	0	ne.	.....	0	0	fair.....	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.74	730.0	30.20	767.1	32.0	0.0	90	sse.	.....	.....	4	10cs;k	0	sse.	.....	0	0	cloudy.....	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	33	0.0	90	ne.	1	0.4	.....	2 k	2 s	.....	.....	0	0	fair.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.13	765.3	30.16	766.1	61.0	16.1	72	sw.	18.8	8.4	.....	0	4 ks	.....	.....	0.200	5.1	showery.....	John Duthie.
Cape Town, C. G. H. Obs'y	30.29	769.4	30.33	770.4	71.2	21.8	46	sse.	15	6.7	.....	.....	10	.....	.....	0.175	4.4	.....	The Staff, for D. GR.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.39	772.0	38.3	3.5	41	ne.	11.6	5.2	.....	.....	10 ck	.....	se.	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.21	767.0	30.22	767.7	55.8	13.2	98	ese.	5.1	2.3	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.55	750.5	29.60	751.7	49.3	9.6	67	nw.	.....	.....	8	.....	9	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	29.82	757.3	29.84	757.9	48.9	9.4	72	wnw.	.....	.....	7	.....	5	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.80	756.9	29.84	758 0	14.5	— 9.7	81	ene.	.....	.....	4	.....	3	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.64	752.9	29.66	753 4	23.4	— 4.8	.....	n.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.34	745.1	29.38	746.2	29.1	— 1.6	92	e.	.....	.....	8	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.49	749.0	29.52	749.9	42.1	5.6	71	nw.	16	7	.....	.....	3	.....	.....	.....	.....	raining	Overloerer Bergh.
Vestervig	29.62	752.3	29.71	754.7	48.0	8.9	87	w.	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	Loerer Oesterboi.
French.																			
Agen, Normal School	29.70	754.4	30.35	771.0	56.6	13.6	84	calm	.....	.....	0	.....	kn	.....	.....	0	0	.....	M. Labroue, Director.
Alençon, Normal School	29.68	753 9	30.23	767.9	58.6	14.8	91	sw.	.....	.....	1	.....	kn	ne.	ne.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.87	758 8	30.13	765.4	54.0	12.2	83	sw.	.....	.....	1	.....	10 n	.....	.....	0.075	1.9	covered	M. Fénéon, Command't.
Avignon, Normal School	30.17	766.2	30.24	768.2	63.3	17.4	63	nnw.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.71	754.6	30.27	768.8	56.8	13.8	74	wsw.	.....	.....	1	.....	10	.....	w.	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.93	760.3	30.21	767.2	53.4	11.9	90	wnw.	.....	.....	1	.....	10	.....	s.	0.051	1.3	hazy	M. Frère Eugène Marie.
Besançon, Normal School	29.34	745.1	30.23	767.8	60.1	15.6	66	s.	.....	.....	1	.....	n	.....	s.	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	30.00	762.0	30.26	768.7	55.8	13.2	74	se.	.....	.....	1	.....	8	.....	.....	0	0	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.67	753.7	30.23	767.8	59.8	13.8	80	calm	.....	.....	0	.....	kn	.....	.....	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.88	759.0	30.13	765.2	57.6	14.2	89	ssw.	.....	.....	2	.....	10	.....	ssw.	0.008	0.2	.....	M. de Kermaree, Dir.
Caen, Normal School	30.05	763.3	30.13	765.2	53.6	12	90	s.	.....	.....	1	.....	10	.....	.....	0.098	2.5	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.87	758.8	30.20	767.0	54.3	12.4	100	sw.	.....	.....	1	.....	10	.....	.....	0.067	1.7	covered	M. Jadot, Director.
Charleville, Normal School	29.65	753.1	30.17	766.3	53.4	11.9	73	nw.	.....	.....	1	.....	10	.....	.....	0.59	15.	light rain	M. Grimard, Director
Clermont-Ferrand Obs'y	28.90	734.1	30.25	768.4	61.2	16.2	59	e.	.....	.....	1	1 c	0	.....	.....	0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.46	748.2	30.31	769.9	60.6	15.9	55	sw.	.....	.....	1	.....	4	.....	sw.	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.39	746.4	30.26	768.5	52.5	11.4	93	wsw.	.....	.....	3	.....	10	wsw.	wsw.	0.126	3.2	covered	Dr. Coulet, Director.
Gap, Normal School	27.69	703.3	30.21	767.3	60.8	16	69	.....	.....	.....	.....	.....	0	.....	.....	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	29.11	739.4	30.22	767.5	67.1	19.5	45	w.	.....	.....	1	.....	1	.....	sw.	0	0	.....	M. Klun, Director.
Grenoble, Normal School	29.52	749 9	30.30	769.7	57.2	14	67	sse.	.....	.....	1	2 c	0	.....	.....	0	0	slightly cld'y	M. Ablard, Director.
Guéret	28.69	728.8	30.27	768.9	56.3	13.5	77	se.	.....	.....	1	.....	5	.....	ne.	0	0	cloudy	M. Delorme, Dir.
Lamballe, Normal School	29.73	755.1	30.00	762 1	59.0	15	78	s.	.....	.....	1	0	5 k	.....	s.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.67	753.6	30.25	768.3	54.7	12.6	93	wsw.	.....	.....	1	0	0	.....	.....	0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.08	764.0	30.18	766.6	59.0	15.0	89	ssw.	.....	.....	1	.....	10	.....	calm	0.217	5.5	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.24	742.7	30.30	769 7	58.3	14.6	54	ne.	.....	.....	1	.....	0	.....	.....	0	0	hazy	M. André, Director.
Mans, Normal School	29.87	758.7	30.17	766.2	58.1	14.5	81	sw.	.....	.....	3	.....	.....	.....	sw.	0	0	.....	M. Piboen, Director.
Marseille, Observatory	29.96	761.0	30.23	767.8	63.0	17.2	78	wsw.	.....	.....	0.1	.....	0	.....	.....	0	0	hazy	M. Stephan, Director.
Mt. Louis	25.08	636.9	29.92	759.9	55.4	13.0	45	sw.	9.4	4.2	.....	.....	0	.....	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	30.10	764.6	30.24	768.0	66.2	19	72	ssw.	.....	.....	2	.....	1	.....	ne.	0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.39	746.6	30.19	766.8	53.6	12.0	80	sw.	.....	.....	1	.....	.....	.....	w.	0	0	.....	M. Hasse, Director
Nantes, Observatory	30.10	764.4	30.26	768.5	58.8	14.9	80	sw.	.....	.....	1–2	.....	10 n	.....	sw.	0	0	.....	M. Larocque, Director.
Perpignan, Observatory	30.16	766.1	30.27	768.9	61.7	16.5	75	se.	5.6	2.5	.....	.....	0	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.44	544.6	.....	.....	41.9	5.5	.....	sw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.18	741.2	30.24	768.2	60.4	15.8	59	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.38	644.6	.....	.....	46.8	8.2	63	wsw.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.26	768.5	30.29	769.3	58.3	14.6	91	calm	.....	.....	0	.....	10	.....	.....	0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.02	762.4	30.23	767.8	60.1	15.6	76	s.	.....	.....	3	.....	5	.....	s.	0	0	cloudy	M. Brotier, Director.
Rodez, Normal School	28.21	716.6	30.37	771.3	57.6	14.2	77	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Seger, Director.
Rouen, Normal School	30.11	764.7	30.15	765.9	53.2	11.8	93	nw.	.....	.....	1	.....	10	sw.	.....	0.063	1.6	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	56.8	13.8	98	sw.	.....	.....	1	.....	10	.....	sw.	0.169	4.3	light rain	M. Delaplanche, Dir.
Saint Maur, Observatory	30.03	762.8	30.20	767.0	56.7	13.7	86	sww.	.....	.....	1	.....	10	.....	w.	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.63	752.7	30.37	771.3	49.3	9.6	100	n.	.....	.....	1	.....	10	.....	.....	0	c	foggy	M. Baillaud, Director.
Tours	30.07	763.8	30.25	768.3	59.4	15.2	70	sw.	.....	.....	2	.....	8	wsw.	sw.	0.008	0.2	cloudy	M. de Tastes.
Versailles, Observatory	29.70	754.3	30.19	766.8	56.8	13.8	82	w.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.73	729.7	30.19	766 9	51.1	10.6	87	w.	.....	.....	6	.....	10	w.	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.26	743.2	30.11	764.7	52.0	11.1	63	w.	.....	.....	2	.....	8 ks	.....	w.	0.020	0.5	.....	Prof. Dr. Hoh.
Berlin	29.72	754.8	29.89	759.3	52.7	11.5	55	nw.	.....	.....	5	.....	8	.....	.....	0.031	0.8	.....	Prof. Dr. Arndt.
Breslau	29.41	746.9	29.93	760.3	53.4	11.9	57	wnw.	.....	.....	6	.....	3	.....	.....	0.004	0.1	.....	Royal University Obs'y.
Carlsruhe	29.78	756.4	30.22	767.7	54.7	12.6	87	sw.	.....	.....	5	.....	10	sw.	.....	0.031	0.8	light rain	Albert Senz.
Cassel	29.34	745.3	30.06	763 4	52.9	11.6	59	w.	.....	.....	7	.....	5	sw.	.....	0.047	1.2	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.80	756.8	30.17	766 2	56.1	13.4	67	wsw.	.....	.....	2	.....	5	.....	.....	0.043	1.1	.....	Physical Society.
Friedrichshafen	28.80	731.5	30.24	768.0	56.8	13.8	68	sw.	.....	.....	3	.....	5	wsw.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.85	758.1	29.94	760.4	51.6	10.9	60	w.	.....	.....	7	.....	4	sw.	.....	0.291	7.4	.....	E. Preller.
Kiel	29.83	757.7	29.85	758.1	49.5	9.7	72	wsw.	.....	.....	6	.....	5	.....	.....	0.366	9.3	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.63	752.7	30.00	763 4	54.0	12.2	56	w.	.....	.....	7	.....	7	wnw.	.....	0	0	stormy	H. Leppig, Asst.
Magdeburg	29.80	756.9	29.99	761.8	53.4	11.9	68	w.	.....	.....	6	0	2 k	.....	wnw.	0.087	2.2	.....	Weather Observatory.
Memel	29.01	736.9	29.06	738.0	46.2	7.9	54	w.	.....	.....	8	.....	10	.....	.....	.....	.....	raining	Issermann.
Munich	28.38	720.8	30.26	768.5	55.2	12.9	58	nw.	.....	.....	4	.....	5	nw.	.....	0.004	0.1	.....	Central Station.
Neufahrwasser	29.45	748.0	29.47	748.4	50.0	10.0	61	w.	.....	.....	8	.....	9	.....	.....	0.110	2.8	sprinkling	A. Lothes.
Neustadt, Palatinate	29.66	753.4	30.19	766.8	54.9	12.7	86	w.	.....	.....	4	.....	10	w.	.....	0.236	6.0	.....	Dicknether
Stuttgart	29.26	743.1	30.15	765.8	56.3	13.5	69	w.	.....	.....	3	.....	9	w.	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	29.75	755.7	29.78	756.4	50.0	10.0	62	wnw.	.....	.....	7	.....	5 k	.....	.....	0	0	.....	Profs. Brandes & Reimer.
Greek.																			
Athens	29.84	757.8	30.21	767.4	67.6	19.8	.....	ne.	.....	.....	1.5	0	2 k	.....	.....	0	0	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.95	760.6	30.00	761.9	78.9	26.1	78	wsw.	14.0	6.3	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.43	747.6	29.96	759.5	86.3	30.2	30	ssw.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.84	757.8	29.87	758.8	79.5	26.4	70	nnw.	16.0	7.2	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	27.98	710.6	29.81	757.1	86.1	30.1	24	w.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.57	751.1	29.85	758.2	83.1	28.4	75	calm	0	0	.....	.....	8	.....	.....	1.26	32.0	d. clouds	
Bellary	28.32	719.2	29.76	755 9	87.6	30.9	42	n.	2.0	0.9	.....	.....	5	.....	.....	0	0	d. clouds	
Belgaum	27.30	693.5	29.85	758.2	73.6	23.1	71	sw.	9.0	4.0	.....	.....	2	.....	ne.	0	0	hazy	
Lahore	29.20	741.6	29.96	760.9	70.7	21.5	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.02	737.0	29.93	760 3	73.4	23.0	51	w.	.....	.....	.....	.....	0	.....	.....	0	0	.....	
Agra	29.37	745.9	29.94	760 4	77.2	25.1	30	w.	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.82	732.1	29.86	758.5	81.2	27.3	56	calm	0	0	.....	.....	4	.....	ne.	0	0	d. clouds	
Jubbulpore	28.55	725.3	29.92	759.8	78.8	26.0	35	ene.	6.0	2.7	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.53	750.1	29.91	759.8	77.2	25.1	42	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.60	751.9	29.92	760.0	71.8	22.1	57	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.74	755.3	29.92	760.0	77.3	25.2	61	n.	2.3	1.0	.....	.....	4	n.	n.	0	0	d. clouds	
Hazaribagh	27.87	707.9	29.91	759.6	72.6	22.6	75	e.	4.1	1.8	.....	.....	10	.....	.....	0	0	overcast	
Cuttack	29.79	756.8	29.88	759.8	78.4	25.8	78	ne.	2.0	0.9	.....	.....	4	.....	.....	0.48	12.2	d. clouds	
Calcutta, Alipore	29.87	758.8	29.90	759.3	75.6	24.2	76	ne.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.78	756.4	29.90	759.4	76.1	24.5	80	calm	1.1	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.80	757.0	29.90	759.3	76.7	24.8	96	calm	1.9	0.8	.....	.....	10	.....	.....	0	0	overcast	
Sibsagar	29.56	750.8	29.90	759.4	75.1	23.9	89	e.	2.0	0.9	.....	.....	10	e.	e.	0	0	d. clouds	
Zanzibar, Africa	29.87	758.7	29.89	759.3	74.4	23.6	93	se.	7.4	3.3	.....	.....	10	.....	.....	2.98	75.7	raining	
Jeypore	28.51	724.1	29.96	761.0	79.7	26.5	26	nnw.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.85	758.2	30.26	768.7	54.3	12.4	83	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.73	755.2	30.26	768.5	55.0	12.8	77	sw.	3.8	1.7	.....	.....	3	nw.	.....	0	0	.....	Prof. Schiapparelli.
Padua	30.15	765.9	30.26	768.7	51.6	10.9	96	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.33	745.0	30.25	768.3	53.4	11.9	83	se.	0.7	0.3	.....	.....	5	sse.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Genoa	30.07	763.7	30.26	768.6	59.7	15.4	86	calm	0	0			10	s.		0.020	0.5		Prof. G. M. Garibaldi.
Mondovi	28.31	719.1	30.25	768.3	48.6	9.2	89	w.			2		0			0	0		Prof. D. C. Bruno
Pesaro	30.13	765.3	30.18	766.5	54.7	12.6	98	ne.					4			0	0		Prof. Luigi Guidi.
Florence	30.02	762.5	30.28	769.0	60.3	15.7	82	sw.			2		10			0	0		Prof. Costantino Pitter.
Leghorn	30.14	765.5	30.22	767.7	62.1	16.7	83	wsw.	0	0			10			0	0		Prof. P. Monte.
Rome	30.10	764.5	30.27	768.9	63.1	17.3	67	nnw.	2.5	1.1			1			0	0		Prof. P. Tachini.
Lecce	30.02	762.4	30.27	768.8	64.4	18.0	71	nne.	4.9	2.2			3			0	0		Prof. C. de Giorgi.
Cosenza	29.40	746.7	30.29	769.4	63.0	17.2	70	ssw.	2.5	1.1			3	sw.		0	0		Prof. D. Conti.
Cagliari	30.07	763.8	30.26	768.7	66.9	19.4	50	nw.			2		0			0	0		Prof. A. Pacinotti.
Palermo	30.06	763.4	30.31	769.8	65.1	18.5	60	ne.	3.1	1.4			0			0	0		Prof. G. Caccinatore.
Syracuse	30.23	767.8	30.27	768.9	64.2	17.9	70	ne.	3.8	1.7			0			0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.75	755.7	30.28	769.0	64.4	18.0	74	s.	0	0			10	w.		0	0		Prof. F. Brioschi.
Stelvio	22.35	567.7			34.5	1.4	34	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.39	568.8			38.7	3.7	50	s.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.14	765.6	30.17	766.4	50.5	10.3	81	calm			0		9 ck;s		sw.	0.185	4.7	cloudy	Hattori.
Awomori	30.02	762.5	30.05	763.3	57.0	13.9	81	s.	20.5	9.2			9 ks		s.	0.090	2.3	cloudy	K. Ogawa.
Hakodate	29.99	761.8	30.00	762.1	50.5	13.6	66	wsw.	18.0	8.0		0	3		wnw.	0.325	8.3	clear	
Hiroshima					53.2	11.8	80	nne.	5.8	2.6		0	0			0	0	clear	Y. Miwa.
Kanazawa	30.13	765.4	30.24	768.0	53.6	12.0	89	se.	7.0	3.1		0	0			0	0	clear	S. Endo.
Kioto	30.07	763.8	30.25	768.3	51.6	10.9	96	sw.	0.2	0.1		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.04	763.0	30.25	768.3	54.1	12.3	93	calm	0	0		0	0			0	0	clear	S. Takehayashi.
Nemuro	30.02	762.5	30.09	764.3	52.5	11.4	86	ssw.	18.0	8.0		0	0			0	0	clear	
Niigata	30.16	766.0	30.20	767.1	53.5	11.9	86	sse.	1.1	0.4		0	0			0	0	clear	M. Morita.
Nobiru	30.16	766.2	30.18	766.6	45.4	7.4	99	nnw.	4.3	2.0		0	0			0	0	clear	H. Midzushima.
Osaka	30.22	767.6	30.24	768.0	53.3	11.8	90	ne.	2.1	0.9		0	0			0	0	clear	
Sapporo					51.0	10.6	56	sw.	10.2	4.6		2	0			0	0	clear	
Tokei Obs'y, Yeddo	30.16	766.0	30.23	767.9	54.6	12.6	85	n.	5.4	2.4		0	1 s			0	0	clear	The Staff.
Wakayama	30.19	766.8	30.25	768.3	52.9	11.6	81	ne.	0.8	0.4		0	0			0	0	clear	Y. Kuwamnea.
MAURITIUS.																			
Mauritius Observatory	29.92	760.0	30.11	764.8	76.1	24.5	72	ene.	17.5	7.8		0	4 k;ks		e.	0.05	1.3	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23 59	599.1	29.77	756.1	48.9	9.4	73	e.	inap.	inap.		0	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.30	617.2	30.16	766.1	43.9	6.6	81	ne.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.63	752.6	29.89	759.2	73.0	22.8	93	ene.	1.6	0.8		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.6	30.26	768.6	42.3	5.7	74	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.29	617.0	30.13	765.2	50.4	10.2	68	e.	1.8	0.8		0	0			0	0	fine	M. Tena, M. D.
Orizaba																			Prof. M. M. Cházaro.
Pabellon, Aguascallentes	23.90	607.1	30.98	761.6	47.3	8.5	95	calm	0.	0						0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.3	30.27	768.7	44.8	7.0	88	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.64	575.1	30.38	771.7	48.5	9.0	67	w.	10.0	4.4		4 c	0	n.		0	0	½ cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.13	765.4	30.13	765.4	54.7	12.6		wsw.			2					0.047	1.2		
Groningen	30.00	762.0	30.06	763.4	50.5	10.3		nw.			4					0.110	2.8	raining	
Helder	30.06	763.6	30.06	763.6	51.4	10.8		w.			4					0.532	13.5		
Hellevoetsluis	30.12	765.1	30.12	765.1	53.6	12.0	75	w.			2					0.012	0.3		
Utrecht	30.08	763.9	30.12	765.1	55.0	12.8	68	w.			2		5			0.035	0.9	cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.52	749.8	29.58	751.4	46.4	8.0	52	nnw.	18	8			5			0.378	9.6		
Brono	29.12	739.6	29.16	740.6	37.4	3.0	73	se.	18	8			10			0.551	14.0	raining	
Christiania	29.21	741.9	29.35	745.6	40.2	7.9	57	w.	4	2			6			0	0		
Glaesvær	29.48	748.9	29.51	749.5	20.7	— 6.3		ese.			6		3						
Lodingen	29.21	741.9	29.26	743.1	33.4	0.8	54	e.			4		9			0	0		
PORTUGUESE.																			
Angra, Azores	30.14	765.6	30.30	769.5	65.5	18.6	96	calm	0	0			5			0.354	9.0		Dr. J. A. Stampalia
Campo Major	29.27	743.5	30.26	768.7	66.2	19.0	45	e.	4.3	1.9			1			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.19	766.8	30.28	769.0	71.2	21.8	51	sw.	4.9	2.2			3	nne.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.97	761.3	30.34	770.5	61.2	16.2	61	ne.	8.7	3.9			0			0	0		The Staff.
Ponta Delgada, Azores	30.27	768.9	30.34	770.7	70.5	21.4	73	sw.	0.3	2.8			3			0	0		
Saint Paul de Loando	29.04	752.9	29.84	757.9	80.6	27.0	83	wsw.	2.5	1.8			2	sse.		0	0		
Serra da Estrella	25.52	648.1	30.30	769.5	47.8	8.8	62	sse.	1.6	0.8			0			0	0		
RUSSIAN.																			
Akmolinski	28.90	734.1	30.04	763.0	25.7	— 3.5	98	w.	10	7			10 n			0	0		Major K. Lasarew.
Archangel	29.84	758.0	29.86	758.5	2.8	—16.2	83	e.	4	2			9 k			0	0		Capt. Sseliwerstow.
Astrakhan	30.34	770.7	30.26	768.6	41.9	5.5	50	sse.	7	3			9 s			0	0		Capt. Wisganow.
Barnaul	29.75	755.7	30.30	769.7	8.8	—12.9	67	ne.	4	2			3			0	0		Meteorological Obs'y.
Dorpat	28.81	731.7	29.05	737.9	37.9	3.3	100	se.	13	6			10 n			0.331	8.4	raining	Observatory.
Ekaterinburg	29.10	739.2	30.15	765.9	8.8	—12.9	76	calm	0	0			10			0.020	0.5	light clouds	Metecrological Obs'y.
Kasan	29.66	753.3	29.95	760.8	12.4	—10.9	79	se.	4	2			10			0.051	1.3	snowing	Observatory.
Kertch	29.98	761.6	30.00	762.1	53.1	11.7	69	calm	0	0			0 n			0	0		Lagorio & Sastyrez.
Kieff	29.16	740.6	29.80	756.8	46.8	8.2	83	sw.	16	7			10ks;n						Observatory.
Lugan	29.80	756.8	30.00	762.1	41.0	5.0	81	sw.	4	2			10			0.130	3.3		Meteorological Obs'y.
Nikolaiev	30.00	761.9	30.07	763.7	50.9	10.5	79	calm	0	0		0	0			0	0		Capt. Kurdukow.
Pekin, China	30.36	771.2	30.50	774.8	37.9	3.3	20	nw.	11	5		0	1 k			c	0		Physical Observatory.
St. Petersburg	29.33	744.9	29.34	745.3	20.8	— 6.2	87	ese.	16	7			10			0.043	1.1		Central Physical Obs'y.
Semipalatinsk					35.2	1.8	76	sse.	13	6			7			0	0		Major Lasarew.
Tashkend, Laboratory	28.65	727.7	30.24	768.0	53.6	12.0	57	calm	0	0			3						Teich, A. M.
Tiflis	28.80	731.4	30.24	768.0	51.6	10.9	66	se.	2	1		0	4 k			0	0		Physical Observatory.
Tomsk																			
Vladivostock	29.87	758.6	29.93	760.3	30.9	— 0.6		nw.	13	6		0	0			0	0		
Warsaw	29.28	743.7	29.70	754.4	53.2	11.8	61	wnw.	38	17		0	4 k						Astronomical Obs'y.
Wilna	28.87	733.4	29.29	743.9	48.6	9.2	83	w.	22	10			10			0.118	3.0		Berg, Assistant.
Yeniseisk	30.39	771.9	30.71	780.1	7.0	—13.9	85	w.	2	1			10			0	0		M. C. Marks.
SCOTTISH.																			
Monach Lt			29.76	755.9	49	9.4	93	w.			6		10			0.2	5.	showery	J. Youngclause
North Unst			29.58	751.3				w.			6	3	4	w.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.13	765.3	30.24	768.0	62.6	17	63	sw.	4.5	2.0		0	0			0	0	clear	Antonio Reve, Director.
Bilbao, Met. Obs'y	30.19	766.9	30.25	768.4	64.4	18.0	64	nw.	1.6	0.7		0	0			0	0	clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.34	694.4	30.33	770.5	55.4	13.0	61	sw.	5.8	2.6		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.09	713.4	30.34	770.6	57.7	14.3	64	calm	0.2	0.1		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.15	765.7	30.27	768.9	66.9	19.4	70	s.	1.6	0.7		3	4	nw.		0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.37	745.9	30.24	768.0	60.4	15.8	76	se.	5.4	2.4		0	0			0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.32	744.8	30.22	767.6	60.3	15.7	75	w.	0.7	0.3			6			0.004	0.1	cloudy	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.78	756.5	29.84	758.0	75.5	24.2	93	e.	9.0	4.0		0	2 ks		s.	0.976	24.8	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.15	765.9	30.25	768.4	69.6	20.9	58	e.	13.8	6.2		0	0		e.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.87	758.8	29.97	761.1	79.5	26.4	84	calm	0	0		2s	4 k	sw.	s.	0.177	4.5		Manuel Maese.
Tuguegarao, Philippine Id's	29.75	755.7	29.88	759.0	78.2	25.7	88	sw.	0	0		0	1 k			0.02	0.5	clear	José L. Yrastorza.
SWEDISH																			
Haparanda	29.53	750.1	29.57	751.1	10.8	—11.8	100	ne.			2		10			0.094	2.4	snowing	
Umea	29.31	744.4	29.36	745.7	28.8	— 1.8		e.			2		10			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	29.22	742.2	29.27	743.5	33.1	0.6	96	nne.			4		10			0.433	11.0		
Stockholm	28.88	733.6	29.06	738.1	43.2	6.2	90	n.			6		10			0.402	10.2	raining	
Wisby	28.86	733.1	28.92	734.6	43.9	6.6	94	nnw.			8		10			0.445	11.3	raining	
Sub-series.																			
Upsala	29.01	736.8	29.10	739.0	42.4	5.8	96	nnw.	16.1	7.2			10			0.205	5.2		S. G. Fineman.
Swiss.																			
Geneva	28.87	733.2	30.28	769.0	60.4	15.8	59	sse.			1		1			0	0	clear	The Observatory.
Turkish.																			
Constantinople			30.20	767.1	56.7	13.7	55	nnw.	10	4.5			6		nnw.	0	0	clear	The Observatory.
Valona			30.26	768.7	67.1	19.5		w.			1		2			0	0	slightly cl'y	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			29.91	759.7	71.2	21.8	64	sw.			1		9 n		sw.	0.245	6.2		Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.36	771.1	30.44	773.2	27	— 2.8	80	n.	1	0.4		0	0			0	0	clear	J. O. Barnes.
Alpena, Michigan	29.44	747.8	30.14	765.5	45	7.2	76	se.	24	10.7		6 k	3 ks	s.	s.	0	0	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.01	635.2	30.11	764.8	27	— 2.8	61	ne.	2	0.9			10 s			0	0	cloudy	W. O. Barnes.
Assinnaboine, Ft., Montana	26.88	682.7	29.86	758.4	34	1.1	72	sw.	4	1.8		0	0			0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29 05	737 9	30.27	768.8	37	2.8	85	ne.	10	4.5		3 cs	0			0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.29	769.4	30.30	769.6	37	2.8	77	n.	13	5.8			10 ks		n.	0	0	cloudy	Jas. M. Watson.
Augusta, Georgia	30.08	764.0	30.28	769.1	42	5.6	88	ne.	12	5.4		1 c	0			0	0	clear	John Healy.
Baltimore, Maryland	30.35	770.9	30.40	772.1	34	1.1	61	ne.	4	1.8		3 cs	hz.	w.		0	0	clear	Geo W Felger.
Barnegat, New Jersey	30.28	769.1	30.30	769.6	41.0	5.0	73	ne.	23	10.3		0	9 k		ne.	0	0	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.38	720.8	30.08	764.0	25	— 3.9	88	calm	0	0		hz	hz.			0.01	0.3	light haze	A. Pritchard.
Benton, Fort, Montana	26.93	684.0	29.89	759.2	45	7.2	49	sw.	8	3.6		0	1 8			0	0	clear	S. Wheaton.
Bismarck, Dakota	28.07	713.0	29.99	761.7	30	— 1.1	88	e.	6	2.7		1 c	0			0.01	0.3	clear	Cyrus Cramer
Block Island, Rhode Island	30.28	769.1	30.31	769.9	38	3.3	82	n.	30	13.4		0	9 ks		e.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.14	689.3	30.08	764.0	35	1.7	89	ne.	1	0.4			10 s		calm	lnap.	lnap.	cloudy	B. E. Light.
Boston, Massachusetts	30.22	767.6	30.38	771.6	31.0	— 0.6	57	n.	17	7.6		0	8 s		n.	0	0	cloudy	O. B. Cole.
Brownsville, Texas	29.94	760.5	29.99	761.7	66.1	18.9	93	calm	0	0		0	2 s			0	0	clear	M. McCarty.
Buffalo, New York	29.48	748.8	30.20	768.6	35.8	2.1	57	e.	6	2.7		4 ck	sk.	sw.		0	0	fair	W. Finn.
Buford, Fort, Dakota	27.97	710.4	29.95	760.7	32	0.0	81	s.	4	1.8		0	0			0	0	clear	F. A. Mellen.
Burlington, Vermont	30.14	765.5	30.45	773.4	25.0	— 3.9	73	ne.	9	4.0		0	0			0	0	clear	W. B Gates.
Cairo, Illinois	29.66	753.4	30.03	764.0	57.6	14.2	92	sw.	4	1.8		hz	1 s		sw.	0.11	2.8	clear	W. H. Ray.
Cape Henry, Virginia	30.26	768.6	30.26	769.1	48	8.9	86	n.	12	5.4			10 s			0.02	0.5	cloudy	A. K. Alderson.
Cape May, New Jersey	30.30	769.6	30.32	770.1	40.0	4.4	73	n.	18	8.0			10 s		n.	0	0	cloudy	W. E. Smith.
Cape Mendocino, California	29.40	746 7	29.93	760.2	52	11.1	100	se.	10	4.5			fg.		se.	0	0	dense fog	J. J. McLean.
Cedar Keys, Florida	30.04	763.0	30.00	763.5	54	12.2	86	n.	20	8.9		2 cs	0			0	0	clear	F. W. Mixer.
Champaign, Illinois	29 10	739.1	29.96	761.0	43.5	6.4	78	sw.	7	3.1		0	3 s		sw.	0.34	8.6	clear	L. A. Welsh.
Charleston, S. Carolina	30.14	765.5	30.20	767.1	46	7.8	83	n.	14	6.3			10 s		n.	0	0	threatening	J. H. Smith.
Charlotte, N. Carolina	29.40	746.7	30.28	769.1	37.0	2.8	82	ne.	6	2.7		4 c	fg.			0	0	fair	D. O'Donoghue.
Chattanooga, Tennessee	29.40	746.7	30.25	768.3	45.0	7.2	68	s.	8	3.6		3 cs	0	s.		0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	24.00	609.6	30.21	767.3	30.2	— 1.0	45	w.	6	2.7		0	0			0	0	clear	E. McGovern.
Chicago, Illinois	29.15	740.4	29.89	759.2	50.9	10.5	93	sw.	3	1.3			10 n			0.45	11.4	light rain	J. Mitchell.
Chincoteague, Virginia	30.29	768.6	30.28	769.1	41	5.0	82	n.	22	9.8			10 ks		e.	0.05	1.3	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.40	746.7	30.09	764.3	54	12.2	86	se.	6	2.7			10 n		se.	0.19	4.8	light rain	R. B. Watkins.
Cleveland, Ohio	29.37	746.0	30.14	765.5	39	3.9	61	se.	15	6.7			10 s		se.	0	0	cloudy	J. B Newlin.
Coleman City, Texas	28.31	719.1	30.20	767.1	54	12.2	86	ne.	6	2.7		0	6 s		ne.	0	0	fair	L. Dorman.
Columbus, Ohio	29.23	742.4	30.12	765.0	46	7.8	83	s.	8	3.6			10 n		s.	0.03	0.8	light rain	D. Cuthbertson.
Concho, Fort, Texas	28.15	715.0	30.16	766.1	55.4	13.0	86	ne.	7	3.1			10 s			0	0	cloudy	J. McGlone.
Custer, Fort, Montana	26.67	677.4	29.99	761.7	28	— 2.2	88	e.	4	1.8		0	3 s		calm	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.22	742.2	29.91	759.7	46	7.8	83	w.	8	3.6			10 ks		w.	0.02	0.5	cloudy	R. R. Martin.
Davis, Fort, Texas	25.23	640.8	30.13	765 3	58	14.4	36	nw.	4	1.8		0	0			0	0	clear	J. Williams.
Dayton, Washington T'y	28.23	717.0	30.01	762.2	45.3	7.4	70	sw	16	7.2		0	3 k		sw.	0.38	9.7	clear	H. Clifford.
Deadwood, Dakota	25.18	639.6	30.01	762.2	40	4.4	54	calm	0	0		0	0			0	0	clear	G. W. Scott.
Delaware Breakwater, Del	30.29	769.4	30.31	769.9	43	6.1	93	ne.	29	13.0			10 s		ne.	0	0	cloudy	T. S. Townsend.
Denison, Texas	29.30	744.2	30.14	765.5	47.0	8.3	86	n.	2	0.9		0	0			0.24	6.1	clear	J. W. Byram.
Denver, Colorado	24.71	627.6	30.21	767.3	30.4	— 0.9	59	s.	6	2.7		0	0			0	0	clear	F. M. Neal.
Des Moines, Iowa	29.04	737.6	29.99	761.7	44	6.7	83	nw.	10	4.5			10 n		nw.	0.01	0.3	light rain	F. W. Conrad.
Detroit, Michigan	29.35	745.5	30.09	764.3	49.3	9.6	71	se.	14	6.3			10 n		se.	0.04	1.0	light rain	C. F. R. Wappenhans.
Dodge City, Kansas	27.45	697.2	30.19	766.8	29	— 1.7	59	nw.	2	0.9		0	0			0	0	clear	V. P. Temple.
Dubuque, Iowa	29.13	739 9	29.88	758.9	45	7.2	93	s.	1	0.4			10 n			0.18	4.6	light rain	J. Harvey Smith.
Duluth, Minnesota	29.17	740.9	29.96	761.0	44	6.7	83	ne.	60	26.8			10 s		ne.	0.15	3.8	cloudy	N. B. Conger.
Eagle Pass, Texas	29.25	742 9	30.08	764.0	61.0	16.1	72	nw.	3	1.3		0	0			0	0	clear	F. Belford.
Eagle Rock, Idaho	25.28	642.1	30.14	765.5	22	— 5.6	92	w.	4	1.8		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	30.32	770.1	30.39	771.9	33.0	0.6	73	ne.	20	8.9		3 k	7 s	ne.	ne.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.34	694 4	30.20	768 6	38	3.3	56	w.	4	1.8		0	0			0	0	clear	W. J. Cundall.
El Paso, Texas	26.29	667.8	30.14	765.5	52	11.1	50	sw.	5	2.2		6 c	0	sw.		0	0	fair	J. O'Dowd.
Erie, Pennsylvania	29.43	747 5	30.19	766.8	39	3.9	54	s.	22	9.8			9 k		s.	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.30	744.2	30.00	762.0	47.0	8.3	71	e.	6	2.7			10 s		se.	0.01	0.3	cloudy	George Heathcote.
Fredericksburg, Texas	28.36	720.3	30.18	766.6	66	18.9	93	ne.	6	2.7			10 s			0	0	cloudy	Frank Hallwegler.
Galveston, Texas	30.00	762.0	30.05	763 3	72	22.2	76	s.	4	1.8		2 cs	hz.			0	0	clear	E. O'C. MacInerney.
Grand Haven, Michigan	29.23	742.4	29.93	760.2	44.5	6.9	88	e.	9	4.0			10 n		se.	0.12	3.0	light rain	J. Mueller.
Grant, Fort, Arizona	25.17	639.3	30.01	762.2	57 9	14.4	29	e.	10	4.5		0	4 s			0	0	fair	Robert O. Lord.
Hatteras, North Carolina	30.15	765.8	30.17	766 3	54	12.2	80	ne.	30	13.4		3 c	4 k	ne.	ne.	0	0	fair	R. M. Crawford.
Helena, Montana	25.61	650 5	29.99	761.7	39	3.9	57	calm	0	0			10 s			0	0	cloudy	N. C. Smith.
Henrietta, Texas	29.02	737.1	30.06	763.5	40	4.4	82	n.	3	1.3		0	0			lnap.	lnap.	clear	J. P. Sherry.
Huron, Dakota	28.59	726.2	30.07	763.8	39	3.9	89	nw.	4	1.8			10 ks		nw.	0.09	2.3	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.14	740.1	29.98	761.5	54.5	12.5	85	s.	5	2.2			10s;fg		sw.	0.22	5.6	cloudy	O. Schutze
Indianola, Texas	30.09	762.0	30.03	762 7	71.2	21.8	84	se.	8	3.6		0	0			0	0	clear	I. A. Reed.
Jacksboro, Texas	28.92	734.6	30.14	765.5	56	13.3	57	calm	0	0		0	0			0	0	clear	D. J. Carr.
Jacksonville, Florida	30.04	763.0	30.09	764.3	54	12.2	73	n.	3	1.3		0	fg.			0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.30	693.4	29.96	761.0	30	— 1.1	70	w.	3	1.3		0	0			0	0	clear	A. Schneider.
Keokuk, Iowa	29.27	758.4	29.90	761.0	47.0	8.3	83	w.	4	1.8			9 s			0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	29.86	758.4	29.88	758.9	73.9	22.8	84	n.	20	8.9		0	5 k		n.	0.33	8.4	fair	R. H. Paxton.
Kittyhawk, North Carolina	30.21	767.3	30.23	767.8	54	12.2	70	ne.	29	13.0			10 ks		ne.	0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.16	740.7	30.23	767.8	44	6.7	83	ne.	1	0.4		0	8 s		w.	0	0	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.06	738.1	29.88	758.9	44	6.7	93	se.	1	0.4			10 s			0.39	9.9	cloudy	S. C. Emery.
Leavenworth, Kansas	29.18	741.2	30.12	765 0	41	5.0	82	nw.	2	0.9		0	0			0	0	clear	A. W. Browne.
Lewiston, Idaho	29.11	739 4	29.98	761.5	41.5	5.3	92	e.	1	0.4		3 k	0	w.		0.21	5.3	clear	W. Bell.
Little Rock, Arkansas	29.76	755.9	30.08	764.0	58	14.4	100	nw.	4	1.8			fg.			0.80	20.3	dense fog	W. U. Simons.
Los Angeles, California	29.48	748.8	29.88	758.9	47	8.3	76	ne.	4	1.8		0	0			0	0	clear	T. S. Collins.
Louisville, Kentucky	29.46	748.3	30.05	763.3	54	12.2	86	s.	8	3.6			10ks		s.	0.14	3.6	cloudy	L. M. Doy.
Lynchburg, Virginia	29.62	752.3	30.34	770.6	33	0.6	78	ne.	1	0.4		3 c	0			0	0	clear	Lewis Dunne.
Mackinaw City, Michigan	29.41	747.0	30.10	764.5	45.0	7.2	76	se.	26	11.6			10 n		se.	0.23	5.8	light rain	F. R. Day.
Macon, Fort, North Carolina	30.16	766 1	30.17	766.3	47	8.3	93	nw.	21	9.4		8 cs	0	s.		0	0	cloudy	F. P. Chaffee.
Madison, Wisconsin	28.84	732.5	29.91	759 7	47	8.3	93	s.	4	1.8			10 s		s.	0.45	11.4	cloudy	C. A. Shaw.
Maginnis, Fort, Montana	25.33	643.4	29.84	757.9	48	8.9	38	w.	13	5.8		0	0			0	0	clear	F. Burke.
McKavett, Fort, Texas	27.84	707.1	30.22	767.6	61	16.1	90	ne.	7	3.1			10 s			0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.25	742.9	30.02	762.5	44	6.7	83	se.	12	5.4			10 k		se.	lnap.	lnap.	cloudy	J. Gilligan.
Memphis, Tennessee	29.76	755.9	30.11	764.8	57	13.9	93	se.	4	1.8			10 n			0.51	13.0	light rain	D. T. Flannery.
Milwaukee, Wisconsin	29.10	739.1	29.88	758.9	49	9.4	93	s.	1	0.4			10n;fog			0.49	12.4	light rain	W. Line.
Missoula, Fort, Montana	26.60	675.6	30.01	762.2	38	3.3	73	nw.	2	0.9			9 s		w.	0.06	1.5	cloudy	J. H. Young.
Mobile, Alabama	30.11	764.8	30.15	765.8	52.5	11.4	76	ne.	5	2.2		1 c	0			0	0	clear	C. A. Read.
Montgomery, Alabama	29.98	761.5	30.22	767.6	45	7.2	76	e.	7	3.1		0	0			0	0	clear	J. B. McLaughlin.

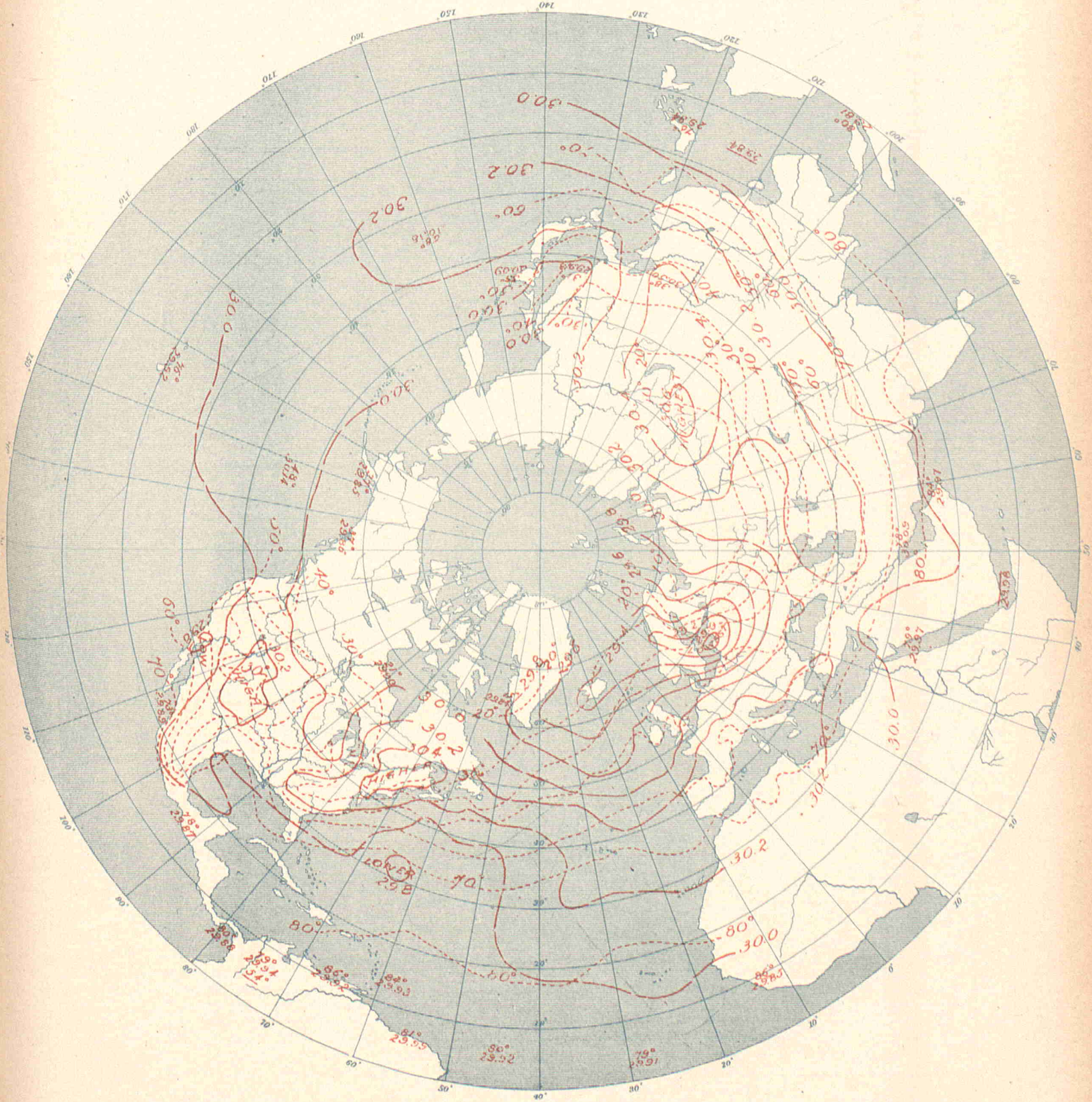
STATIONS	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	28.95	735.3	30.01	762.2	39	3.9	89	calm	0	0			10 s			0 52	13.2	cloudy	H. Bessant.
Morgantown, W. Virginia	29.17	740.9	30.23	767.8	36.5	2.5	79	e.	1	0.4		5 k	3 s	sw.	sw.	0	0	cloudy	J. C. Sprigg, jr
Mt. Washington, N. H.	23.95	608.3	30.51	774.9	26.0	— 3.3	46	ne.	22	9.8		0	0			0	0	clear	J. G. Linsley.
Nashville, Tennessee	29.55	750.6	30.15	765.8	50.5	10.3	75	se.	6	2.7			10 n	s.		0.04	1.0	light rain	L. N. Jesunofsky.
New Haven, Connecticut	30.24	768.1	30.36	771.1	29	— 1.7	61	ne.	7	3.1		0	0			0	0	clear	J. H. Sherman.
New London, Connecticut	30.32	770.1	30.37	771.4	34	1.1	61	calm	0	0		0	0			0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.04	763.0	30.10	764.5	63.8	17.7	62	se.	1	0.4		0	slt.			0	0	dense smoke	L. Dunne.
Newport, Rhode Island	30.27	768.8	30.32	770.1	34.0	1.1	74	n	12	5.4			10 ks	ne.		inap	inap	cloudy	W. McGillivray.
New York, New York	30.19	766.8	30.37	771.4	33.5	0.8	60	ne.	10	4.5		0	fg.			0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.24	768.1	30.27	768.8	48	8.9	77	ne	10	4.5			10 s	ne.		0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.08	687.8	30.16	766.1	26.6	— 3.0	78	calm	0	0		0	2 s			0	0	clear	E. F. Brady.
Olympia, Washington T'y.	30.01	762.2	30.05	763.3	42.0	5.6	82	sw.	10	4.5		0	0			0.12	3.0	clear	J. Dascomb.
Omaha, Nebraska	28.86	733.0	30.10	764.5	43.8	6.6	80	w.	7	3.1			10 s			0	0	cloudy	A. Pollak.
Oswego, New York	30.02	762.5	30.36	771.1	31.8	— 0.1	66	se.	11	4.9		1 cs	0			0	0	clear	S. W. Beall.
Palestine, Texas	29.52	749.8	30.09	764.3	62.5	16.9	96	ne.	9	4.0			10 n	ne.		1.22	31.0	thund'r st'm	L. M. Pindell.
Pensacola, Florida	30.12	765.0	30.15	765.8	51.2	10.7	83	ne.	9	4.0		3 c	0	w.		0	0	clear	M. McGauran.
Philadelphia, Pa.	30.38	771.6	30.48	774.2	34	1.1	60	ne.	10	4.5		2 c	0	sw.		0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.84	453 1	30.50	774.7	18	— 7.8	70	w.	23	10.3		0	0			0	0	clear	H. Hall.
Pioche, Nevada	24.00	609.6	30.14	765.5	40.2	4.6	43	nw.	5	2.2		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.38	746.2	30.23	767.8	38.5	3.6	54	ne.	5	2.2		7 ck	0	w.		0	0	fair	W. Daly.
Poplar River, Montana	27.54	699.5	29.82	757.4				sw.			4		10 s			0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.08	764.0	30.09	764.3	66.1	18.9	73	ne.	12	5.4		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.42	747.3	30.14	765.5	40.1	4.5	82	se.	4	1.8			10 s	se.		0	0	cloudy	W. O. Bailey.
Portland, Maine	30.36	771.1	30.40	772.1	32.0	0.0	60	ne.	15	6.7		0	0			0	0	clear	W. W. Elchelberger.
Portland, Oregon	30.04	763.0	30.11	764.8	46.0	7.8	93	calm	0	0		0	4 s			0.99	25.1	fair	M. L. Hearne.
Portsmouth, N. C.					52	11.1	93	ne.	32	14.3		6 cs	hz.	ne.		0	0	fair	F. S. Coburn.
Prescott, Arizona	24.69	627.1	30.03	762.7	36.8	2.7	58	s.	2	0.9		4 ck	0	w.		0	0	fair	W. H. Clendenon.
Provincetown, Mass.	30.27	768.8	30.30	769.6	43	6.1	68	ne.	18	8.0			10 s	ne.		inap.	inap.	cloudy	P. T. Jenkins.
Punta Rassa, Florida	29.92	760.0	29.93	760.2	66	18.9	90	n.	6	2.7		0	hz.			0	0	clear	W. J. Evans.
Red Bluff, California	29.55	750.6	29.96	761.0	47	8.3	86	n.	4	1.8		fg.	1 s	n.		0	0	light fog	E. van Dyk.
Rochester, New York	29.62	752.3	30.32	770.1	27	— 2.8	77	se.	11	4.9		7c;ck	sk.	w.		0	0	fair	E. W. McGann
Roseburg, Oregon	29.52	749.8	30.08	764.0	48.4	9.1	86	nw.	1	0.4		0	8 s	s.		0.18	4.6	cloudy	J. J. Nanry.
Sacramento, California	29.86	758.4	29.94	760.5	44.8	7.1	93	calm	0	0		0	0			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.42	747.3	30.05	763.3	45.7	7.6	94	w.	9	4.0		0	0			0	0	clear	J. H. Weber.
St. Paul, Minnesota	29.00	736 6	29.92	760.0	44.0	6.7	83	n.	9	4.0			10 s	n.		0.23	5.8	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.03	737.3	29.96	761.0	35	1.7	89	w.	4	1.8			10 s			0.01	0.3	cloudy	C. B Dilley.
Salt Lake City, Utah	25.64	651.2	30.21	767.3	34	1.1	56	calm	0	0		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.34	745.2	30.06	763.5	68.5	20.3	90	calm	0	0		0	8 ks			0	0	clear	T. J. Kenan.
San Diego, California	29.76	755.9	29.83	757.7	51.2	10.7	93	e.	1	0.4		0	0			0.02	0.5	clear	A. C. Dobbins.
Sandusky, Ohio	29.37	746.0	30.09	764.3	45	7.2	60	s.	8	3.6			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.34	770.6	30.37	771.4	35.5	1.9	69	ne.	24	10.7		1 k	hz.	ne.		0	0	clear	B. A. Blundon.
San Francisco, California	29.86	758.4	29.93	760.2	52	11.1	90	w.	3	1.3		0	fg.			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.26	590.8	30.30	769.6	40	4.4	35	nw.	7	3.1		2 c	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.10	764.5	30.19	766.8	45	7.2	74	n.	10	4.5		0	0			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.10	662.9	29.92	760 0	48	8.9	52	sw.	23	10.3		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.81	757.2	30.06	763.5	63	17.2	100	se.	2	0.9			10 s			0.30	7.6	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.86	733.0	30.18	766.6	37	2.8	69	n.	4	1.8		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.31	617.5	30.15	765.8	41.5	5.3	51	calm	0	0		3 c	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.78	756.4	29.86	758.4	37.1	2.8	76	e.	6	2.7			10 ks	e.		0	0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.62	752.3	30.11	764.8	50.2	10.1	93	w.	2	0.9			10 s			0.12	3.0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.16	766.1	30.20	767.1	44	6.7	83	n.	12	5.4		1 c	1 k			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	27.84	707.1	29.92	760.0	43	6.1	83	sw.	11	4.9		0	0			0.23	5.8	clear	D. Moore.
Springfield, Illinois	29.28	743.7	30.00	762.0	47	8.3	77	w.	6	2.7		0	0			0	0	clear	T. B. Jennings.
Springfield, Massachusetts	30.27	768.8	30.41	772.4	30.5	—0.8	52	n.			4	0	0			0	0	clear	Charles Mayr.
Springfield, Mo.	28.63	727.2	30.14	765.5	42	5.6	73	nw.	4	1.8		0	0			0	0	clear	J. B. Marbury.
Starkville, Miss.	29.68	753.9	30.18	766.0	53	11.7	72	se.	10	4.5		6 c	2 s	w.		0	0	cloudy	C. Dill.
Stevenson, Fort, Dakota	28.00	711.2	29.97	761.2	27	— 2.8	77	e.	4	1.8		0	0			0	0	clear	W. Burrows
Stockton, Fort, Texas	27.08	687.8	30.20	767.1	40.5	4.7	92	s.	4	1.8		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	30.34	770.6	30.38	771.6	40.5	4.7	73	ne.	31	13.9			10 s	ne.		0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.15	689.6	29.99	761.7	53.5	11.9	45	calm			0	0	5 k	w.		0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.31	745.0	30.06	763.5	43	6.1	83	se.	6	2.7			10 n	se.		0.78	19.8	heavy rain	A. Buell.
Tucson, Arizona	27.42	696.5	29.88	758.9	53	11.7	50	se.	4	1.8		1 c	0	sw.		0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.67	753.6	30.05	763.3	44	6.7	83	sw.	8	3.6		0	0			0.15	3.8	clear	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					42.2	5.7	47	nw.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.81	757.2	30.08	764.0	58.0	14.4	87	se.	2	0.9		2 ck	4 s	w.		0.15	3.8	fair	James Kenealy.
Visalia, California	29.55	750.6	29.93	760.2	44.0	6.7	89	se.	1	0.4		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.40	619.7	30.14	765.5	25.1	— 3.8	70	sw.	1	0.4		0	4 ks	sw.		0	0	fair	T. M. Ambler.
Washington, D. C.	30.27	768.8	30.39	771.9	39.5	— 0.8	83	ne.	3	1.3		3 c	0			0	0	clear	B. M. Purssell.
West Las Animas, Colorado	26.06	661.9	30.18	766.6	21	— 6.1	67	w.	4	1.8		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.78	756.4	30.41	772.4	27	— 2.8	88	se.	1	0.4		5 cs	fg.			0	0	fair	B. F. Hough.
Wilmington, N. Carolina	30.17	766.3	30.23	767.8	44	6.7	83	ne.	8	3.6		0	hz.			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.59	650.0	30.12	765 0	27	— 2.8	82	ne.	8	3.6		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.72	729.5	30.10	764.5	39	3.9	82	nw.	2	0.9			10 s			0.15	3.8	cloudy	J. H. Atfield.
Yuma, Arizona	29.62	752.3	29.77	756.1	53.0	11.7	61	ne.	1	0.4		1 cs	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3			54.0	12.2	79	calm	0	0		3 k	5ks;8	nw.	se.	0	0	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.80	756.9	29.86	758.4	74.7	23.7	79	n.	14	6.3		0	4 ks	n	n	0.50	12.7	fair	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.91	759.7	29.92	760.0	74	23.3	94	n.	1	0.4			10 s	e.		0.90	22.9	cloudy	Robert Johnston.
Navassa, W. I.	29.81	757.2	29.89	759.2	75	23.9	88	e.	5	2.2			10			2.90	73.7	raining	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	81	27.2	78	se.			1	5 k	4 s	e.		0.010	0.3	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Colombia	29.38	746.2	29.94	760.5	79	26.1	89	calm			0		10 ks		n.	0.07	1.8	raining	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					72.2	22.3	97	nw.			1	0	1 ks		nw.	0.03	0.8	clear	Earl Flint.
Santiago de Cuba, W. I.	29.89	759.2	29.92	760.0	76	24.4	86	calm	0	0		3 ck	7 s			0.30	7.6	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.79	756.7	29.85	758.2	27	— 2.8	77	n.			3	5 cs	0			0	0	fair	W. J. Fisher.
St. Thomas, W. I.	29.88	758.9	30.00	762.0	80	26.7	91	e.				0	0 k	e.		0.03	0.8		Aug. Walloe.
York Factory, B. A.	29.84	757.9	29.90	759.4	20.5	— 6.4	93	sw.	7	3.1		3 k	3 s	sw.	sw.	0	0	fair	For[illegible]ue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																	
H. M. S. Amethyst, Colonia, Uruguay†	30.05	763.3	64.8	18.2	81	w.			3		1						blue sky.
H. M. S. Antelope, N. 32° 33′, E. 28° 38′	30.04	763.0	74	23.3		nw.			4		1	nw.			2	nw.	blue sky.
H. M. S. Audacious, N. 25° 47′, E. 35° 17′	29.87	758.7	79	26.1	82	wnw.			3		2	wnw.					d. clouds.
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	29.99	761.7	75.5	24.2	69	nw.			2		2	nnw.					d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island	29.91	759.7	42	5.6	87	calm			0		8	nw.					drizzling.
H. M. S. Condor, coast of Syria	30.04	763.0	71.5	21.9	87	wsw.			1–2		8	w.			1–2	sw.	d. clouds.
H. M. S. Crocodile, N. 25° 55′, E. 35° 15′	29.91	759.7	76	24.4	69	nw.			2–3		2				1	nnw.	d. clouds.
H. M. S. Curacoa, Kobe Japan	30.20	767.1	59.5	15.3	76	nw.			1		0						blue sky.
H. M. S. Diamond, S. 18° 10′ E. 178° 31′ *†	29.78	756.4	77	25.0	82	ese.			1–2		3						d. clouds.
H. M. Dock Yard, Bermuda, W. I.	29.74	755.4	71	21.7	75	wnw.			3–4		4	wnw.					d. clouds.
H. M. S. Eclipse, N. 16° 03′ E. 58° 18′	29.84	757.9				ne.			1		7	ne.			1	n.	d. clouds.
H. M. S. Espiegle, S. 14° 50′ E. 163° 01′			80	26.7	82	e.			3		6				2	se.	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.87	758.7	79	26.1	76	ssw.			2		1	nne.					blue sky.
H. M. S. Flamingo, N. 17° 50′, W. 73° 10′	29.90	759.4	79	26.1	?	ene.			1		5	se.			sm'h		d. clouds.
H. M. S. Flying Fish, N. 37° 27′, E. 126° 33′	30.18	766.6	58	14.4	55	w.			2		8						misty.
H. M. S. Gannet, S. 18° 28′, W. 70° 21′	29.97	761.2	62	16.7	80	e.			2		3						d. clouds.
H. M. S. Iris, N. 33° 45′, E. 21° 50′	30.22	767.6	70	21.1	79	nnw.			3–4		4	nnw.			2	nnw.	d. clouds.
H. M. S. Iron Duke, N. 32° 44′, E. 129° 51′	30.25	768.3	54	12.2	93	calm			0		0						blue sky.
H. M. S. Kingfisher, N. 37° 48′, W. 122° 24′	29.92	760.0	54	12.2		ene.			1		2	calm			sm'h		d clouds.
H. M. S. Lark, S. 10° 14′, E. 161° 42′	29.87	758.7	80.3	26.8	93	calm			0		4						d clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20.′	29.89	759.2	62	16.7		n.			2		10				2	n.	d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.24	768.1	58.8	14.9	87	nne.			2		0						blue sky
H. M. S. Northampton, Halifax, N. S.	30.26	768.6	36	2.2	85	ene.			2		4	ene.					d. clouds.
H. M. S. Nelson, Melbourne, Australia	30.00	762.0	59	15.0	81	sw.			1								d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.81	757.2	80	26.7	93	calm			0		0						blue sky.
H. M. S Rocket, N. 6° 20′, W. 79° 30′	29.38	758.9	80	26.7	95	s.			1		4				3–4	sw.	d. clouds.
H. M. S. Sappho, S. 33° 20′, W. 145° 30′	30.20	767.1	58.2	14.6	81	ese.			2–4		10				3	s.	squally.
H. M. S Superb, N. 39° 37′ E. 19° 56′*	30.28	769.1	72	22.2	63	ese.			1								d. clouds.
H. M. S. Sylvia, S. 53° 00′, W. 73° 35′	29.37	746.0	43.2	6.2	80	n.			3–6		10						raining
H. M. S. Thetis, S. 27° 29′ W. 72° 31′	30.00	762.0	60	15.6	88	s.			3		10				4	s.	overcast.
H. M. S. Tourmaline, Aden, Arabia	29.98	761.5				e.			1		0						blue sky.
H. M. S. Woodlark, Bushire, Persia	29.99	761.7	77.5	25.3	77	nw.			3–5		0				2	nw.	misty.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.43	772 9	40	4.4	73	calm			0		0						blue sky.
Portuguese Naval.																	
Rio Lima, Porto Praya, Cape Verd Islands	30.13	765.2	83.7	28.7	80	ne.			1		4		ne.			2	se.	d. clouds.
Tamega, Macao, China	29.99	761.7	76.1	24.5	50	n.			1		3						blue sky.
Swedish Naval.																	
Vanadis, N. 49° 05′, W. 5° 47′	29.97	761.1	57.0	13.9	91	nw.			4		9						hy. squalls
United States Naval.																	
Navy Yard, Pensacola, Fla	29.97	761.2	56	13.3	93	ne.	10	4.5			5		ne.	o	o		fair.
Navy Yard, Portsmouth, N. H.	30.39	771.9	31	— 0.6	?	ne.	10	4.5			0			o	o		clear.
Naval Hospital, Yokohama, Japan*	30.13	795.3	56.5	13.6	80	calm			0		2			sli't	sli't		hazy.
Adams, Sitka, Alaska			36	2.2	80	e.			1		5		e.				fair.
Alaska, Lahina, Sandwich Islands	29.92	760.0	76	24.4	81	se.			1		5		s.	o	o	sm'h	fair.
Alliance, Hampton Roads, Va	30.25	768.3	51	10.6	93	ne.			3–4		10			o	o		cloudy.
Ashuelot, N. 34° 26′, E. 135° 04′	30.25	768.3	64	17.8	73	nnw.			2		2		calm				clear.
Brooklyn, Keel Point, Patagonia	29.40	746 7	54	12.2	55	sw.	18	8.0			2		calm	o	o	sm'h	fair.
Colorado, New York, N. Y.	30.47	773.9	35	1.7	52	nne.	10	4.5			0			o	o		clear.
Enterprise, Norfolk, Va.	30.27	768.8	50	10.0	86	n.			3		5		n.				fair.
Essex, Callao, Peru	29.93	760.2	62	16.7	83	calm			0		10					sm'h	overcast.
Franklin, Norfolk, Va.	30.20	768.6	49	9.4	100	nne.	9.6	4.3			10		ne.	o	o		cloudy.
Galena, Montevideo, Uruguay	29.87	758.7	64	17.8	94	w.			2		2					sm'h	s.	clear.
Hartford, Montevideo, Uruguay*	29.81	757.2	64	17.8	94	wsw.			3		2		w.	light	light	sm'h	w.	clear.
Independence, Mare Island, Cal.	30.00	762.0	50	10.0	93	calm			0									foggy.
Iroquois, Callao, Peru	29.98	761.5	62	16.7	94	nnw.			1		10							overcast.
Jamestown, Newport, R. I.	30.30	769.6	38	3.3	100	n.			5		10		n.					cloudy.
Kearsarge, Hamton Roads, Va.	30.24	768.1	52	11.1	79	n.			4		10		nne.			sm'h		cloudy.
Lackawanna, Talcahuano, Chili*	30.11	764.8	57	13.9	75	s.			2		0							clear.
Lancaster, N. 33° 02′, E. 21° 47 *	30.09	764.3	74	23.3	55	nnw.			5		5		n.	o	o	mod.	nw.	fair.
Michigan, Erie, Pennsylvania	30.16	766.1	40	4.4	63	s.			0		10							cloudy.
Minnesota, New York, N. Y.	30.40	772.1	35	1.7	61	nne.	12	5.4			0							squally.
Monocacy, Yokohama, Japan*	30.00	763.5	60	15.6	88	nw.			1		2		calm					fair.
New Hampshire, Newport, R. I.	30.33	770.4	38	3.3	72	nne.			5		10		nne.			sm'h		cloudy.
Nipsic, Palerma, Sicily*	30.29	769.4	69	20.6	65	ne.			2		0					sm'h		clear.
Onward, Callao, Peru†	30.09	764.3	61	16.1	100	n.			2		10		n.			long	w.	foggy.
Palos, Nagasaki, Japan*	30.18	766.6	56	13.3	93	ne.			1		0							clear.
Pensacola, Callao, Peru*	29.95	760 7	61	16.1	94	n.	4	1.8			10			driz'l	driz'l	sm'h		misty.
Powhatan, Boston, Mass	30.33	770.4	32	0.0	79	n.			2		8							cloudy.
Quinnebang, N. 39° 16′, E. 18° 10′*	30.26	768.6	65	18.3	73	nw.			3		0					sm'h		clear.
Ranger, N. 32° 43′, W. 120° 05′	29.89	759.2	61	16.1	88	wnw.			2		2			o	o	long		fair.
Richmond, Yokohama, Japan*	30.24	768.1	60	15.6	82	calm			0		0			o	o			clear.
Saratoga, N. 24° 16′, W. 87° 29′	29.77	756.1	76	24.4	86	n.			4–5		5		n.			mod.	ne.	fair.
St. Louis, League Island, Pa.	30.00	777.2	32	0.0	69	n.			2		2							clear.
Swatara, S. 4° 07′, W. 24° 42′ *	29.80	756.9	78	25.6	82	ese.			3		0					sm'h		clear.
Tennessee, Hampton Roads, Va.	30.23	767.8	51	10.6	93	n.	7	3.1			10			o	o			cloudy.
Vandalia, Hampton Roads, Va*	30.25	768.3	49	9.4	85	nne.			4		10		ne.					cloudy.
Wabash, Boston, Mass	30.27	768.8	31	— 0.6	60	nne.	12	5.4			8		ne.	o	o			cloudy.
Wachusetts, Mare Island, Cal†	30.01	762.2	50	10.0	86	calm			0		1		calm	o	o	sm'h		clear.
Wyandotte, Washington, D. C	30.39	771.9	53	11.7	99	sw.			1		5		se.					fair.
Yantic, Norfolk, Va.	30.26	768.6	51	10.6	72	nne.			2–3		10							squally.
Merchant Marine.																	
S. S. Grecian, Montevideo, Uruguay*	29.85	758.2	65	18.3	84	wsw.			2		1		wsw.	6 h'r	6 h'r	sm'h		clear.
S. S. Polynesian, Liverpool, Eng.	30.07	763.8	50	10.0		w.			1		10		sw.	5 h'r	5 h'r			hazy.
S. S. Scandinavian, N. 43° 37′, W. 58° 34′	30.14	765.5	45	7.2		ne.			7		10		ne.	driz.	driz.	high	ne.	showery.
S. S. Indiana, Philadelphia, Pa.			49	9.4	85	ne.			6		10		ne.			r'gh	ne.	overcast.
S. S. Lord Clive, N. 46° 40′, W. 47° 30′*†	30.20	767.1				n.			3		10		nne.	o	c	light	ne	cloudy.
S. S. Lord Gough, N. 50° 53′. W. 27° 21′	29.77	756.1	52	11.1		ssw.			4		8		sw.	4 h'r	4 h'r	mod.	w.	cloudy.
S. S. Ohio, N. 40° 21′, W 69° 46′	30.12	765.0	47	8.3	100	nne.			0		10		nne.			r'gh	nne.	cloudy.
S. S. Pennsylvania, Liverpool, Eng †	29.94	760.5	52	11.1		sw.			2		10		sw.					smoky.
S. S. Stella, N. 50° 22′, W. 10° 01′	29.88	758.9	50.0	10		s.			3		9		sw.			3	ssw.	drizzling.
S. S. Anchoria, N. 48° 23′ W. 43° 04′†	30.06	763.5				wnw.			7		1		nnw.	sh's	sh's	hv'y	nnw.	squally.
S. S. Bolivia, Moville, Ireland				11.7		wnw.			6		8		nw.	o	o	cross	var.	overcast.
S. S. Dorian, N. 39° 02′, W. 19° 00′*	30.15	765.8	66	18.9		sw.			6		6		wsw.	o	o	mod.	w.	fine.
S. S. Ethiopia, N. 54° 54′ W. 16° 05′	29.74	755 4	48.5	9.2	89	sw.			2		10		w.	2 h'r	2 h'r	h'vy	nw.	cloudy.
S. S. Galatia, Calcutta, India†	30.00	762.0	80	26.7		n.			3		0			o	o	sm'h	n.	clear.
S. S. Utopia, N. 13° 45′, E. 42° 58′			83	28.3	79	s.			4		1		ssw.	o	o	mod.	s.	clear.
S. S. Ailsa, Cartagena, U. S. C.	29.99	761.7	82	27.8	83	calm			0		2		calm	1 h'r	1 h'r			fair.
S. S. Alpin, Ponce, W. I.	29.94	760.5				se.			1				e.	o	o	sm'h		
S. S. Alvo, N. 30° 03′, W. 74° 17′						nne.			4				ne.	h'vy	h'vy	7	nne.	cloudy.
S. S. Antillas, Newport News, Va†	29.98	761.5				ne.			2		5?		ne.	o	o			clear. ?
S. S. Ambrose, Para, Brazil†	29.96	761.0				ne.			1		0			o	o			fine.
British Merchant, S. 10° 54′ W. 109° 15′	29.95	760.7	71.5	21.9	85	ene.			5		6							d. clouds.
Dynomene, S. 4° 20′ E. 88° 40′	29.90	759.4	83.5	28.6	71	ne.			1		4							d. clouds.
S. S. Gordon Castle, N. 15° 41′, E. 113° 00′	29.74	755.4				nw.			6–7		10					high		showery.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. May Hulse, N. 8° 26′, W 24° 33′	29.87	758.7	83	28.3	75	e.			2		9					overcast.		
Markland, N. 32° 10′, W. 34° 19′	30.27	768.8	75.9	24.4	73	e.			3		2					4	ne.	d. clouds.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.84	757.9	89.4	31.9	55	n.			3		3							d. clouds.
Inchkeith, S. 3° 50′, W. 28° 43′	29.94	760.5	79.8	26.6	80	ese.			5		6							d clouds.
S. Meriola, N. 45° 32′ W. 12° 46′	30.03	762.7	58.4	14.7	94	ssw.			7		10							drizzling.
S. S. Bothnia, N. 51° 10′, W. 13° 56′	29.87	758.7	61	16.1	88	w.			2		7		calm	0	0	mod.	con.	cloudy.
S. S. Gallia, N. 46° 31′ W. 36° 55′	30.11	764.8	55	12.8	68	w.			6		8		wnw.	sh'rs	sh'rs	mod.	nw.	showery.
S. S. Marathon, N. 42° 31′, W. 9° 31′	30.33	770.4	65	18.3		sw.			2		7		sw.	1 h'r	1 h'r	mod.	w.	cloudy.
S. S. Pavon a, N. 42° 19′, W. 62° 34′*	29.98	761.5	49	9.4	100	ne.			8		10		ene.	sleet	sleet	h'vy	ene.	overcast.
S. S. Scythia, N. 43° 10′, W. 54° 52′	30.06	763.5	50	10.0	93	ne.			6–8		10		ne.	6 h'r	6 h'r	mod.	ne.	squally.
S. S. Canada, N. 47° 11′, W. 42° 15′	30.31	769.9	39.2	4		nnw.			6		5?		nw.	o	o	sm'h	nw.	clear?
S. S. Labradore, N. 49° 44′, W. 10° 05′			57.2	14		e.			8		8		sw.	o	o	h'vy	sw.	fair.
S. S. Ville de Marseilles, N. 50° 02′, W. 23° 10′ *†	29.70	754.4	54	12.2		e.			6		6?		wnw.	8 h'r	8 h'r	h'vy	wnw.	covered.?
S. S. Arizona, N. 50° 22′ W. 34° 23′	29.77	756.1	46	7.8		wsw.			6		10		wnw.	snow	snow	high	nw.	hail squalls.
S. S. Wisconsin, N. 43° 50′ W. 57° 46′	30.12	765.0	43	6.1		ene.			6		10		ene.	o	o	h'vy	e.	cloudy.
S. S. Bohemia, N. 49° 09′, W. 17° 32′†	29.94	760.5				w.			5		5		w.	3 h'r	3 h'r	long	sw.	clearing.
S. S. Cimbria, N. 45° 10′, W. 53° 03′	30.23	767.8	39.2	4.0		ne.			5		10		e.	o	o	sm'h	nw.	covered.
S. S. Gellert N. 49° 54′, W. 8° 30′	29.91	759.7	58	14.4		ne.			5		10			8 h'r	8 h'r	long	wnw.	rainy.
S. S. Silesia, N. 52° 51′, E. 4° 10′†	30.10	764.5	51.2	10.7		w.			5		6		w.	8 h'r	8 h'r			cloudy.
S. S. Vandalia, N. 41° 20′, W. 67° 40′	30.11	764.8	49.1	9.5		ne.			7–8		10		ne.	o	o	h'vy	ne.	stormy.
S. S. City of Berlin, N. 41° 30′, W. 65° –	29.97	761.2				ne.			8		10					h'vy	ene.	cloudy.
S. S. Nessmore, Barrow, England			52	11.1	93	sw.			2		2		sw.	o	o			fine.
S. S. Archimedes, N. 40° 47′, W. 68° 55	30.03	762.7				nne.			7		9		nne.	o	o	h'vy	ne.	squally.
S. S. Hevelius, Buenos Ayres, Argentine Rep*†	30.05	763.3	68	20.0		wsw.			5		2		sw.	12 h'r	12 h'r			clear.
S. S. Plolmey, S. 22° 15′, W. 40° 30′	29.81	757.2	75.7	24.3	81	ene.			4		4			o	o	2	con.	d clouds.
S. S. Bulgarian, N. 51° 35′, W. 18° 01′ *	29.90	759.4				se.			4		7		ese.	4 h'r	4 h'r	mod.	nw.	cloudy.
S. S. City of San Antonio, Nassau, Bahamas, W. I†	29.86	758.4	77	25.0		s.			3		2		s.	4 h'r	4 h'r			fair.
S. S. Colorado, Key West, Florida†	29.82	757.4	70	21.1		n.			5		5		n.	light	light			fair.
S. S. Rio Grande, Galveston, Texas†	30.04	763.0	76	24.4		calm			0		3		s.	o	o			clear.
S. S. San Marcos, N. 34° 18′, W. 77° 02′			58	14.4		n.			5		2		n.			long	n.	fine.
S. S. Archimede, Palermo, Sicily *†	30.38	771.6	74	23.3	72	ne.			1		1		ne.	o	o			clear.
S. S. Hermod, N. 30° 49′ W. 23° 00′†	29.94	760.5	59.0	15		w.			7		6		w.	o	o	r'gh	wnw.	stormy.
S. S. Glenapp, S. 0° 13′, W. 48° 00′†	29.95	760.7	81	27.2		ene.			2		4 ks		ene.	o	o	sm'h		fine.
S. S. Chalmette, Algiers, La †	30.08	764.0	63	17.2		e.			1		0			o	o			clear.
S. S. New York, N. 30° 52′, W. 79° 25′ †	30.09	764.3	70	21.1		nne.			9		10		nne.	sqll's	sqll's	h'vy	nne.	cloudy.
S. S. Denmark, N. 40° 32′, W. 68° 08′	30.08	764.0	43	6.1		nne.			7		10		ene.	o	o	r'gh	ese.	cloudy.
S. S. Egypt, N. 51° 19′, W. 12° 12′ *†	29.90	759.4				ese.			1		10		ese.	o	o	long	wnw.	cloudy.
S. S. England, N. 40° 27′, W. 66° 35′	29.93	760.2				nne.			9		10		ne.	o	o	h'vy	ene.	cloudy.
S. S. Erin, New York, N. Y	30.17	766.3	47	8.3		ne.			8		10		ne.	o	o	r'gh	ne.	overcast.
S. S. Helvetia, Liverpool Eng	29.75	755.6	57	13.9		sw.			1		1		wsw.	o	o			clear.
S. S. City of Alexandria, N. 28° 33′, W. 79° 49′†	30.00	762.0	76	24.4		ne.			7		8		ne.	12 h'r	12 h'r	h'vy	nne.	rainy.
S. S. City of Merida, N. 19° 10′, W. 97° 08′ *†	29.90	759.4	75.2	24		calm			0		0			3 h'r	3 h'r	cross	n.	squally.
S. S. City of Washington, N. 21° 20′, W. 89° 38′*†	30.12	765.0	81	27.2		e.			4		2		ne.	o	o	light	ne.	fine.
S. S. City of Chester, N. 50° 51′, W. 25° 50′			47	8.3		ese.			3							w.		squally.
S. S. Knickerbocker, N. 33° 07′ W. 75° 53′*†	30.05	763.3	68	20.0		nne.			6								ssw.	
S. S. Amerika, Lizard Point, Eng*	29.99	761.7	53.0	11.7	90	e.			3		10			4 h'r	4 h'r	sm'h	wsw.	rainy.
S. S. Donau, N. 49° 43′. W. 9° 24′	29.92	760.0				ene.			2		10		nè.	6 h'r	6 h'r	mod.	wsw.	raining.
S. S. Gen. Werder, N. 40° 25. W. 72° 40′	30.32	770.1				ne.			0		3		nne.	o	o	mod.	ne.	fair.
S. S. Habsburg, N. 41° 19′, W. 64° 28′	29.89	759.2	50.0	10.0		nne.			9		10		nne.	20 h'r	20 h'r	h'vy	nne.	rainy.
S. S. Hohenstaufen, Bremerhaven, Germany	29.95	760.7	57.2	14.0		w.			6		8			8 h'r	8 h'r			fair.
S. S. Koln, N. 45° 38′, W. 41° 13′	30.18	766.6	55.0	12.8	87	wsw.			4–5		8		sw.	3 h'r	3 h'r	long	n.	fair.
S. S. Kronprinz F. Wilhelm, N. 42° 21′ W. 10° 50′*	30.22	767.6	69.8	21.0		var.			1		2		sw.	o	o	long	nw.	fair.
S. S. Oder, N. 53° 52′, E. 6° 52′	29.95	760.7	52.7	11.5		wnw.			6		4		w.	o	o	high	wnw.	fair.
S. S. Ohio, N. 26° 19′ W. 73° 56′	29.93	760.2				sse.			2		4		se.	o	o	mod.	var.	fair.
S. S. Salier, N. 40° 37′ W. 63° 19′	29.76	755.9	50.0	10.0		nne.			8		10		nne.	22 h'r	22 h'r	h'vy	nne.	light rain
S. S. Belgic, N. 28° 22′, E. 125° 28′ †	30.19	766.8	71	21.7	95	ne.			3		7		ne.	o	o	mod.	ne.	cloudy.
S. S. Coptic, N 45° 37′, W. 147° 28′	30.14	765.5	48.0	8.9	74	var.			2		9		ne.	6 h'r	6 h'r	sl't	nnw.	overcast.
S. S. City of Augusta, N. 33° 09′, W. 78° 34′†	30.20	768.6				ne.			7		8			o	o	chop	ne.	cloudy.
S. S. Mississippi, Seattle, Wash. Ter†	30.15	765.8	45	7.2	84	sse.			2		8		w.					fair.
S. S. Oregon, Portland, Oregon †	30.09	764.3	43	6.1	92	calm			0		0							clear.
S. S. Aucon, N. 35° 17′, W. 121° 05′†	29.82	757.4	50	13.3	87	ene.			2		0					sm'h		clear.
S. S. Orizaba, N. 37° 12′, W. 122° 27′†	30.06	763.5	57	13.9	58	nw.			7		fg.		nw.			h'vy	nw.	foggy.
S. S. Australia, Sydney, N. S. W	30.06	763.5	64	17.8	89	nw.			4		1		nw.	o	o			clear.
S. S. City of New York, S. 11° 02′, W. 168° 38′ †	29.84	757.9	82	27.8	67	se.			3		0			o	o	mod.	se.	clear.
S. S. City of Pekin, N. 33° 48′, E. 159° 48′ †	30.48	774.2	68	20.0	74	ne.			4		8		ne.	o	o	light	e.	cloudy
S. S. City of Sydney, S. 36° 27′, E. 174° 59′†	30.23	767.8	60	15.6	70	se.			4		5?		sw.	o	o	mod.	se.	cloudy?
S. S. Colima, N. 14° 44′, W. 92° 48′ †	29.87	758.7	78	25.6	82	n.			3		3		nw.	o	o	mod.	sw.	clear.
S. S. Grenada, N. 31° 10′, W. 119° 02′†	29.81	757.2	64	17.8	78	nw.			2		0			o	o	sm'h	nw.	clear.
S. S. San Jose, N. 8° 44′, W. 79° 30′*†	30.02	762.5				nnw.			2		2		nw.	o	o	light	sse.	
S. S. Bermuda, Basseterre, W. I †	29.95	760.7	84	28.9		ne.			1		5		one.	o	o	g'tl	e.	fine.
S. S. Muriel, Martinique, W. I	29.95	760.7	83	28.3		e.			2		8			light	light	sm'h		drizzling.
S. S. Caracas, La Guayra, Venezuela†	30.02	762.5	80	30.0	70	ne.			1		2			o	o	mod.	ne.	fair.
S. S. Belgenland, New York, N. Y†	30.51	774.9	41	5.0	91	nne.			5		0			o	o			fine.
S. S. Pennland, Antwerp, Belgium	30.12	765.0	57.5	14.2	78	wsw.			2		7		sw.	3 h'r	3 h'r			hazy.
S. S. Rhynland, N. 50° 00′, W. 7° 30′	29.97	761.2	52	11.1	86	se.			5		10		sse.	8 h'r	8 h'r	long	nnw.	drizzling.
S. S. Switzerland, N. 44° 27′ W. 50° 13′ †	30.20	767.1				ene.			4		10		ene.	o	o	r'gh	ene.	cloudy.
S. S. Waesland, N. 46° 24′ W. 45° 16′	30.33	770.4	41	5.0	82	nw.			6		10		nnw.	rain	rain	r'gh	nw.	cloudy.
S. S. Maas, N. 40° 42′, W. 74° —	30.22	767.5	48.2	9.0	92													
S. S. P. Culand, N. 50° 34′, W. 1° 02′	30.10	764.5	56.7	13.7	82	ssw.			1		8		ssw.			sm'h		cloudy.
S. S. Schiedam, N 50° 40′ E. 0° 30′	30.09	764.3	57.2	14.0	93	sw.			3		3		sw.	o	o	mod.		fair.
S. S. W. A. Scholten, N. 48° 59′, W. 32° 40′	30.06	763.5	49.4	9.7	89	wsw.			5–7		5		nw.	24 h'r	24 h'r	con.	wnw.	squally.
S. S. State of Florida, N. 44° 50′, W. 52° 28′	30.15	765.8	44	6.7		ene.			5		10		ene.	1 h'r	1 h'r	mod.	ene.	cloudy.
S. S. State of Indiana, N. 45° 55′, W. 53° 30′†	30.46	773.7	38	3.3		ene.			5		4		ene.	o	o	sm'h		fair.
S. S. State of Nevada, N. 55° 27′, W. 13° 45′ †	29.83	757.7	50	10.0		w.			5		5		w.	sh'rs	sh'rs	long	w.	squally.
S. S. Thingvalla, Copenhagen, Denmark †	29.56	750.8	49.1	9.5		sw.			3		10		sw.	3 h'r	3 h'r			covered.
S. S. Plantyn N. 39° 29′, W. 69° 01′			54	12.2					4		4		ne.	o	o	h'vy	n.	
S. S. Adriatic, N. 43° 53′, W. 46° 00′†	30.31	769.9	52	11.1		nne.			4		10		ne.			mod	ne.	gloomy.
S. S. Celtic, N. 48° 44′, W. 40° 02′ †	29.96	761.0	48	8.9	?	wnw.			7		8		wnw.	hail	hail	cross	nnw.	hailing.
S. S. Marengo, N. 52° 48′, E. 1° 45′*†	30.00	762.0				wsw.			4		2		wsw.	o	o	mod.	w.	fine.
S. S. Romano, Hull, England	30.09	764.3	50	10.0		w.			2		10		w.	o	o			dull.
S. S. Salerno, Odessa, Russia			54	12.2		s.			2					o	o			clear.
S. S. Catherine Whiting, Delaware River†	30.34	770.6				nne.			1		0			o	o			
S. S. Norman, N. 42° 23′, W. 71° 05′	30.41	772.4				n.			6				n.	o	o			cloudy.
S. S. Saxon, Cross Ledge, Delaware Bay*†	30.50	774.7	38	3.3		ne.			9		8		ne.					
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 32° 55′, W. 76° 17′						ne.			4		0		ne.	¾ h'r	¾ h'r	h'vy	ne.	
Bk. Adelaid, N. 5° 05′ W. 45° 20′ *†	29.92	760.0	80	26.7		e.			4		4		ene.	4 h'r	4 h'r	mod.	e.	clearing.
Bg. Aletra, N. 27° 40′, W. 69° 00′	30.04	760.5	77	25 0		ne.			2		10		ne.	o	o	long	n.	cloudy
Schr. Anna A. Hilton, N. 35° 50′, W. 74° 20′†	30.13	765.3	62	16.7		ne.			5		8		ne.	o	o	h'vy	ne.	cloudy.
Bk. Annie M Law, Kobe, Japan *†	30.18	766.0	63	17.2		ne.			1		0			o	o			fine.
Bk. Anna Thormann, S. 8° 18′, E. 114° 24′*	29.91	759.7	82.9	28.3	80	s.			1		3 k		se.	o	o			clear.
S. S. Antonio Lopez, Cadiz, Spain*	30.22	767.0	69	20.6	72	ese.			5		3			o	o	mod.		clear.
Bk. Aquidneck, N. 21° 23′, W. 39° 39′ *†	30.02	762.5				se.			2				se.			light	se.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Force.	Upper 0-10	Lower 0-10	Upper. From.	Lower. From.	Inch.	Mill.	Character.	Direction from.	
MISCELLANEOUS.—Continued.																		
Bk. Aureola. N. 46° 04′, W 33° 00′*†	30.36	771.1	59	15.0		sw.			6		9		sw.	½ h'r	½ h'r	h'vy	sw.	rainy.
Bk. Alba, N. 48° 40′, W. 20° 00′ *†	29.96	761.0	51.8	11		wsw.			5									raining.
Bk. Bayonnaise, N. 24° 34′, W. 52° 10′ *†	30.06	763.5				ssw.			2		5?		ssw.	0	0	r'gh	sse.	clear.?
S. S. Burswell, N. 51° 52′, E. 3° 05′*†	30.09	764.3	54	12.2		nw.			3		4		nw.	0	0	con.		fine.
Bk. Champion, Rotterdam. Holland†	29.91	759.7	58.0	14.4		wsw.			7		5		wsw.	0	0			fair.
Schr. Chas. F Heyer, Apalachicola, Fla.	30.14	765.5	53	11.7	73	nne.			2	0	1 8			0	0			clear.
Schr. C. R. Flint, N. 17° 48′ W. 78° 30′†	29.95	760.7	79	26.1		calm			0		5?		sw.	1 h'r	1 h'r	sm'h		cloudy.°
S. S. D. J. Foley, N. 35° 56′, W. 75° 00′						nne.			6					0	0	long	nne.	clear.
Bkt. David Preston, N. 32° 15′ W. 74° 20′ *†..	30.10	764 5	66	18.9		n.					10		n.	0	0	long	nne.	
Bk. Don Quixote, Pasoeroen Roads, Java*	29.75	755.6	88	31.1		ese.			5		2		ese.	0	0	sm'h		clear.
Bk. E. D. Bigelow, N. 39° 24′, W. 49° 18′*†.	29.90	759.4				se.			5		10		sse.	0	0		ese.	gloomy.
Schr. Edith R. Seward, Wilmington, N. C.*†	30.32	770.1	47	8.3		nne.			1		1		calm	0	0			clear.
S. E. J. Spicer. New York, N. Y.	30.36	771.1	49	9.4	85	ne.			6		3		ene.	0	0			clear.
Bk. Eliza Barss, N 38° 25′ W. 72° 10′†	30.23	767.8				ne.			7		10		ne.	0	0	h'vy	e.	cloudy.
S. Enoch Train, N. 20° 42′ W. 45° 30′*†	30.10	764.8				e.			2		2		e.	0	0	light	ne.	clear.
Bk. Essex, Muscat, Arabia*†	29.87	758.7	84	28.9		e.			3									
S. S. Foscolia, Santos, Brazil*†	29.59	751.6				se.			1		0			0	0			fine.
Bk. Freya, N. 43° 27′ W. 12° 28′			63	17.2		w.			5		10			1 h'r	1 h'r	high	nw.	cloudy.
S. Glendon, S. 52° 30′ W. 81° 35′†	29.51	749.5	52	11.1		w.			6		9		w.			hv'y	sw.	rainy.
S. Grecian, S. 0° 43′, W. 37° 06′†	29.92	760.0	82	27.8	83	ese.			4		4		se.	0	0	long	n.	clear.
Bk. Gronsvaer, S. 44° 02′ E. 123° 00′†	29.90	759.5	59.5	15.3	91	n.			5		5		n.	0	0	5	w.	fair.
Bk. Hattie G. McFarland, N. 35° 10′, W. 74° 00′†	30.17	766.3	62	16.7		ne.			8		10		ne.	8 h'r	8 h'r	h'vy	ne.	squally.
Schr. Hattie Weston, Mayaro Bay, Trinidad,. W. I*†.	29.95	760.7	83	28.3		e.			2		8		ese.	½ hr	¾ hr	mod.	ese.	cloudy.
S. Hedwig, N. 21° 07′, W. 59° 53′	30.00	762.0	81.1	27.3	90	sw.			1		4		var.	½h'r	½h'r	3	se.	
Schr. Jennie N. Huddell, Philadelphia, Pa†	30.22	767.6				ne.			1		0			0	0			clear.
S. S. John Hopkins, Baltimore, Md			36	2.2		nne.			3		0			0	0			clear.
Schr. John L. Thomas, Off Vivorilla Cays, C. A*†.	29.98	761.5				nw.			3		2		nne.	0	0	short	nw.	clear.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.92	760.0				nne.			4		2		nne.	2 h'r	2 h'r			clear.
Bk. Joseph A. Ropes, N. 18° 35′, E. 58° 00′ *†	29.98	761.5	83	28.3	79	w.			1		0					sm'h		fair.
Light House Tender, Laurel, Key West, Fla†	29.87	758.7	75	23.9		n.			2-3		7		nne.	½h'r	½h'r			fair.
Bk. Liberia, N. 23° 58′, W. 32° 45′*	30.06	763.5	79	26.1	74	e.			4		5		e.	0	0			fine.
Bg. Lilian, N. 9° 20′, W. 57° 48′†	29.95	760.7	85	29.4		e.			4		4		se.	2 h'r	2 h'r	sm'h	e.	
Bg. L. & W. Armstrong, N. 32° 22′, W. 73° 32′*†	29.92	760 0				nne.			8		3		ne.	0	0	h'vy	ne.	heavy gale.
S. S. Madrid, N. 46° 47′, W. 17° 12′*†	30.12	765.0	56	13.3	87	wnw.			6		2			sh'rs	sh'rs	mod.	nw.	clear.
S. S. Malabar, N. 3° 04′, E. 86° 08′*†	29.85	758.2				sw.			6		10		sw.	shr's	shr's	str'g	sw.	raining.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	29.81	757.2	73	22.8		sw.			3		0			0	0			clear.
Bk. Mattie B. Russell, Matanzas, Cuba, W. I *†	29.96	761.0				sw.			2		1		n.	light	light	light	nne.	
Schr. Moravian, N. 12° 33′, W. 81° 43†	29.83	757.7				n.							n.	12 h'r	12 h'r	sm'h	n.	cloudy
Bg. Myrtle, N. 25° 22′, W. 65° 54′†	30.02	762.5				nw.			2		10		w.	0	0	long	ne.	hazy.
S. Orealla, S. 3° 33′, E. 81° 55′*	29.93	760.2				var.			3		7		var.	3 h'r	3 h'r	long	se.	squally.
Bk Orpheus, N. 39° 28′, W. 72° 53′	30.37	771.4	54	12.2		ene.			4		10					mod.	se.	drizzling.
S.Paramita, San Francisco, Cal†	30.04	763.0	56	13.3		nw.			2				nw.	0	0			fair.
S. S. Radnorshire, N. 37° 19′, E. 3° 54′†*	30.30	769.6				ese.			2		0			0	0	sm'h		clear.
Bk. Rebus, N. 32° 26′, W. 75° 33′	29.85	758.2	69	20.6		ne.			6		2		ne.	0	0	cross	ne.	fair.
S. St. Francis, S. 40° 27′, W. 79° 45′†	30.36	771.1	54	12.2		wsw.			4		7		sw.			sm'h	wnw.	misty.
Schr. S. B. Hubbard, Jacksonville, Fla†	30.02	762.5	63	17.2		nne.			1		5		ne.	0	0			clearing.
Bk. Southern Belle, N. 43° 53′, W. 32° 30′*†	30.20	767.1	56	13.3		w.			4		5		wnw.	⅛h'r	⅛h'r	long	wnw.	fair.
Bg. Teneriffe, N. 31° 00′, W. 77° 30′	29.93	760.2				ne.			6				ne.	0	0	rg'h		
Bk. Truro, N. 49° 00′, W. 17° 00′†*	30.02	762.5				wsw.			2-3		6		w.	0	0	mod.	nw.	threatening
U.S.F.C.S.S. Fish Hawk, Washington, D. C†	30.42	772.7	37	2.8	71	ne.			1		5		calm					fair.
Bk. Vincenzo Accame Lisbon, Portugal†	30.41	772.4	73.4	23		wnw.			3		0			0	0			clear.
Schr Viola Reppard, Savannah, Ga†	30.12	765.0	70	21.1		n.			2		2		n.	0	0			
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762.0				ssw.			1		10		ssw.	6 h'r	6 h'r			drizzling
Bk. Wandering Jew, N. 2° 30′, W. 28° 55′†.	29.81	757.2	79	26.1		se.			6		7		se.	hv'y	h'vy	mod.	se.	squally.
Bk.Warden Law, S. 55° 05′, W. 79° 56′ *†	29.54	750.3				sw.			7		4		sw.	14 h'r	14 h'r	h'vy	w.	clearing.
Bgt. Willie, S. 37° 20′, W. 21° 20′*†	29.86	758.4	65	18.3		n.			5		5		n.	12 h'r	12 h'r	cross	ene.	fair.

International Chart I. November 6, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

SIGNAL SERVICE U.S. ARMY

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 7, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0-10	0-10	0-10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.23	767.8	58.3	14.6	76	s	.....	.....	1	.....	2	.....	.....	0	0	fair	Malaterre.
Algiers	.....	.....	30.23	767.8	72.3	22.4	60	w.	.....	.....	2	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.22	767.5	64.0	17.8	82	sw.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair	Fonfrède.
Tunis	.....	.....	30.25	768.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.26	768.6	68.0	20.0	83	nnw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Pérès.
Tebessa	.....	.....	30.29	769.4	63.0	17.2	52	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	64.4	18.0	34	nnw.	.....	.....	2	.....	7	.....	.....	0.039	1.0	very cloudy	Louchamp.
Laghouat	.....	.....	30.32	770.1	64.4	18.0	53	ne.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.31	769.8	73.4	23.0	41	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	30.15	765.8	30.24	768.1	53.7	12.1	92	ssw.	4	1.8	.....	.....	1	.....	.....	0	0	very fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.56	750.7	30.11	764 8	52.2	11.2	76	sw.	.....	.....	5	.....	8	.....	.....	0	0	.....	Prof. Ivan Stozir.
Oracow, I. R Observatory	29.22	742.1	29.99	761.7	51.4	10.8	71	sw.	2.5	1.1	.....	.....	6	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.20	741.7	30.09	764.3	50.0	10.0	64	s.	.....	.....	2	5 cs	0	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.79	731 2	30.04	763.1	52.2	11.2	85	s.	.....	.....	1	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.69	728.7	30.13	765.2	56.1	13.4	61	nw.	.....	.....	2	.....	1	.....	.....	0	0	.....	Prof. A. Gottschling
Kremsmunster, Obs'y	28.68	728.4	30.03	762.7	49.5	9.7	88	ne.	.....	.....	1	.....	5	.....	.....	0	0	fair	The Staff.
Lemberg	29.05	737.9	30.05	763.3	48.6	9.2	63	nw.	.....	.....	3	.....	1	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	30.04	763.0	30.15	765.8	61.5	16.4	82	ese.	.....	.....	1	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29 64	752.9	30.11	764.8	53.6	12.0	65	w.	.....	.....	1	.....	3	.....	.....	0	0	.....	Joseph Midlinszay, S. J.
Szegedin	29.84	757.8	30.11	764.9	59.4	15.2	60	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.07	763.7	30.17	766.3	59.4	15.2	73	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Royal Academy.
Vienna	29.33	744.9	30.05	763.2	53.1	11.7	81	calm	.....	.....	0	.....	1	.....	.....	0	0	.....	I. R. Central Met. Obs'y
British.																			
Aberdeen	29.52	749.8	29.62	752.3	41.1	5.1	87	s.	9	4.0	.....	.....	7	.....	.....	0.270	5.1	misty	W. Boswell
Armagh, Observatory	29.23	742.4	29.47	748.5	46.2	7.9	83	sse.	23	10.3	.....	.....	8	.....	.....	.....	.....	squally	S. Oall.
Bidston, Liverpool Obs'y	.....	.....	29.68	753.9	43.0	6.1	88	se.	20	8.9	.....	.....	8	.....	.....	.....	.....	overcast	John Harmup.
Bolton, Sharples	29.17	740.9	29.71	754.6	42.7	5.9	87	s.	12	5.4	.....	.....	10	.....	.....	.....	.....	overcast	Thomas Mackereth.
Bradford, Yorkshire	29.33	745.0	29.72	754.9	45.6	7.6	82	se.	.....	.....	2	.....	10	.....	.....	0.15	3.8	overcast	McLandsborough&Preston
Bridgetown, Barbadoes	29.88	758.9	29.91	759.7	85.0	29 4	71	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	29.66	753 4	29.78	756.4	45.0	7.2	85	sw.	.....	.....	0.4	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E	29.72	754 9	29.86	758.4	46.1	7.8	82	calm	.....	.....	0	.....	10	.....	.....	blank	blank	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.58	751.3	29.81	757.2	49.3	9.6	89	ssw.	.....	.....	4	.....	10	.....	.....	.....	.....	overcast	The Staff.
Fort Napier, Natal	27.87	707.9	30.08	764.0	68.0	20.0	60	e.	.....	.....	1	.....	9	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	88.0	31.1	55	nw.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.27	768.8	30.32	770.1	68.5	20.3	87	calm	.....	.....	0	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.37	746.0	29.57	751.1	43.9	6.6	77	sse.	.....	.....	4	.....	10 k	.....	.....	.....	.....	foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.08	753.9	29.86	758.4	45.3	7.4	80	wsw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.59	751.6	29.89	759.2	53.0	11.7	79	wsw.	.....	.....	3	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	29.82	757.4	29.80	758.4	45.8	7.7	77	w.	6	2.7	.....	.....	10	.....	.....	.....	.....	threatening	The Staff.
Leicester, Museum	29.54	750.3	29.80	756.9	42.2	5.7	91	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	30.12	765 0	30.20	767.1	68.4	20.2	93	nw.	.....	.....	3	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.93	760 2	29.98	761.5	77.5	25.3	75	n.	.....	.....	4	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.26	743.2	29.79	756.7	42.7	5 9	91	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	Warren Middleton.
Oxford, Radcliffe Obs'y	29.61	752.1	29.84	757.9	44.1	6.7	90	s.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	The Staff.
Plymouth	29.73	755.1	29.81	757.2	51.4	10.8	87	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	John Merrifield.
Sandwick Manse, Orkneys	29.40	746.7	29.50	749.3	43.8	6.6	81	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.11	764.8	30.17	766.3	61.0	16.1	65	sw.	.....	.....	1	.....	1	.....	.....	.....	.....	blue sky	W. H. Lyne.
Sheffield	29.48	748.8	29.76	755 9	45.0	7.2	88	sw.	.....	.....	1	.....	10	.....	.....	0.17	4.3	overcast	W. F. Cooper.
Silloth Rectory	29.58	751.3	29.61	752.1	43.0	6.1	92	se.	.....	.....	2	.....	10	.....	.....	0.730	18.5	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.73	755.1	44.0	6.7	79	sse.	14	6.3	.....	.....	10	.....	.....	.....	.....	foggy	I. New.
Stratfield Turgiss	29.64	752.8	29.80	758.4	46.6	8.1	81	s.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.66	753.4	29.72	754.9	53	11.7	79	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	gloomy	W. Newcombe.
Valencia, Observatory	29.39	746.5	29.42	747.3	45.7	7.6	84	wsw.	40	17.9	.....	.....	10	.....	.....	.....	.....	raining	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.39	771.9	30.43	772.9	37	2.8	79	ne.	8	3.6	.....	o	8 s	.....	ne.	o	o	.....	H. J. Cundall, C. E.
Chatham, N. B*	30.46	773.7	30.52	775.2	34	1.1	78	ne.	1	0.4	.....	.....	10 s	.....	ne.	o	o	cloudy	G. A. Blair.
Father Point, Quebec*	30.45	773.4	30.48	774.2	25	— 3.9	96	s.	12	5.4	.....	5 c	2 s	calm	calm	o	o	fair	J. McWilliams.
Fort Garry, Manitoba*	28.95	735.3	29.79	756.7	36	2.2	82	sw.	13	5.8	.....	o	2 s	.....	sw.	o	o	fair	James Stewart.
Halifax, N. S*	30.26	768.6	30.39	771.9	36	2.2	79	ne.	9	4.0	.....	10 k	o	e.	.....	o	o	cloudy	A. Allison.
Kingston, Ontario*	29.94	760.5	30.28	769.1	40	4.4	79	se.	10	4.5	.....	.....	10 s	.....	s.	o	o	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	30.15	765.8	30.37	771.4	29	— 1.7	88	w.	5	2.2	.....	5 cs	5 s	sw.	.....	o	o	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.46	748.3	30.18	766.6	38	3.3	82	e.	11	4.9	.....	2 k	8 ks	sw.	sw.	o	o	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.44	747 8	30.14	765.5	45	7.2	100	s.	5	2.2	.....	.....	10 n	.....	s.	inap.	inap.	threatning	H. Morgan.
Port Stanley, Ontario	29.44	747.8	30.09	764.3	48	8.9	93	se.	16	7.2	.....	.....	10 n	.....	s.	0.17	4.3	cloudy	M. Payne.
Quebec, Quebec*	30.12	765 0	30.40	773.7	31	— 0.6	78	e.	.....	.....	3	o	5	.....	e.	o	o	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.81	757 2	30.29	769.4	32	0.0	85	e.	4	1.8	.....	5 cs	o	w.	.....	o	o	fair	W. H. McIntyre.
Saugeen, Ontario*	29.37	746.0	30.10	764.5	41	5.0	92	se.	7	3.1	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	
St. Andrews, N. B	30.36	771.1	30.41	772.4	35	1.7	77	ne.	8	3.6	.....	.....	10 n	.....	.....	o	o	cloudy	
Sydney, C. B*	30.36	771.1	30.43	772.9	37	2.8	69	ne.	9	4.0	.....	o	8 ks	.....	ne.	o	o	fair	T. C. Hill, C. E.
Toronto, Ontario*	29.79	756.7	30.18	766.6	43	6.1	86	s.	6	2.7	.....	.....	10 n	.....	.....	0.08	2.0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	30.30	769.6	30.37	771.4	35	1.7	79	e.	6	2.7	.....	10 k	o	e.	.....	o	o	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.70	729.0	30.13	765.3	40.0	4.4	100	s.	.....	.....	4	.....	10	.....	s.	0.037	0.9	raining	Wm. Wylie.
St. Johns, Newfoundland	29.21	741.9	29.47	748.5	33	0.6	89	ne.	2	0.9	.....	2 k	2 s	.....	.....	o	o	fair	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.30	769.6	30.33	770.4	65.0	18.3	73	wsw.	19.0	8.5	.....	.....	4 ks	.....	.....	0.080	2.0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	30.33	770.4	30.37	771.4	74.0	23.3	45	sse.	30	13.4	.....	o	2	.....	.....	o	o	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
Chinese (Sub-series).																			
Tchang-kia-tchouang	.....	.....	30.41	772.4	33.8	1.0	100	ne.	2.0	0.9	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.35	771.0	30.38	771.6	54.9	12.7	77	nne.	9.6	4.3	.....	.....	7	.....	.....	0	0	very cloudy	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.65	753.1	29.70	754.3	43.7	6.5	88	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	Oversergeant Fischer.
Fanöe	29.62	752.3	29.64	752.9	41.9	5.5	94	ene.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	Overloerer Lauridsen.
Godthaab, Greenland	29.84	757.8	29.88	758.9	23.0	— 5.0	88	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.80	756.9	29.82	757.4	25.3	— 3.7	.....	nw.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.40	746.8	29.45	747.9	25.9	— 3.4	85	e.	.....	.....	6	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.43	747.5	29.47	748.4	40.5	4.7	87	se.	18	8	.....	.....	5	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.60	751.9	29.70	754.3	45.5	7.5	91	calm	.....	.....	0	.....	3	.....	.....	.....	.....	.....	Loerer Oesterboi.
French.																			
Agen, Normal School	29.58	751.2	30.24	768.0	49.3	9.6	97	calm	.....	.....	0	.....	.....	.....	.....	0	0	.....	M. Labroue, Director.
Alençon, Normal School	29.46	748.2	30.01	762.2	53.2	11.8	90	sw.	.....	.....	1	.....	kn	ne.	ne.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.41	747.0	29.67	753.6	53.6	12.0	90	.....	.....	.....	2	ck	0	.....	.....	0	0	.....	M. Fénéon, Command't.
Avignon, Normal School	30.11	764.7	30.19	766.7	59.0	15	76	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.49	749.0	30.04	763.1	54.7	12.6	81	ssw.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.68	753.8	29.94	760.5	55.2	12.9	64	wsw.	.....	.....	2	.....	2	.....	wnw.	0.024	0.6	slightly cl'dy	M. Frère Eugène Marie.
Besançon, Normal School	29.17	741.0	30.07	763.7	55 0	12.8	99	s.	.....	.....	2	.....	cn	.....	sw.	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.89	759.2	30.15	765.9	52.2	11.2	86	sse.	.....	.....	1	.....	10	.....	.....	0.004	0.1	covered	M. Rayet, Director.
Bourges, Normal School	29.48	748.9	30.04	763.0	56.3	13.5	78	sse.	.....	.....	2	.....	sn	e.	sse.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.70	754.3	29.94	760.5	55.4	13.0	83	w.	.....	.....	2	.....	10	.....	w.	0.177	4.5	.....	M. de Kermaree, Dir.
Caen, Normal School	29.83	757.6	29.90	759.5	56.8	13.8	63	wsw.	.....	.....	1	.....	5	.....	wsw.	0.031	0.8	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.82	757.4	30.14	765.5	52.9	11.6	96	sw.	.....	.....	4	.....	10	.....	.....	0.118	3.0	covered	M. Jadot, Director.
Charleville, Normal School	29.40	746.7	29.92	759.9	54.7	12.6	78	w.	.....	.....	1	.....	5	.....	.....	0.31	8.	½ covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.76	736.5	30.12	765.0	55.4	13.0	66	s.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Allnard, Director.
Cluny, Normal School	29.29	743.9	30.15	765.8	57.2	14	53	wsw.	.....	.....	3	.....	4	.....	w.	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.16	740.6	30.02	762.4	51.4	10.8	95	sw.	.....	.....	4	.....	10	sw.	sw.	0.024	0.6	covered	Dr. Goulet, Director.
Gap, Normal School	27.61	701.4	30.14	765.5	55.4	13	45	.....	.....	.....	.....	.....	0	.....	.....	0	0	.....	M. Jeanginard, Director.
Gréasque, du Rhone	29.04	737.5	30.15	765.8	62.8	17.1	61	s.	.....	.....	3	.....	3	.....	s.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.38	746.3	30.16	766.0	55.8	13.2	64	wsw.	.....	.....	1	c	0	.....	.....	0	0	.....	M. Ablard, Director.
Guéret	28.53	724.7	30.13	765.3	51.8	11	82	sw.	.....	.....	3	.....	5	.....	e.	0.008	0.2	cloudy	M. Delorme, Dir.
Lamballe, Normal School	29.63	752.7	29.91	759.7	54.7	12.6	74	sw.	.....	.....	4	o	5 n	.....	sw.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29 55	750.6	30.11	764.8	63.5	17.5	64	wsw.	.....	.....	1	o	1 s	.....	.....	0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.99	759.1	29.99	761.7	65.8	18.8	56	sw.	.....	.....	3	.....	10	.....	.....	0.591	15.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.13	740.0	30.20	767.1	54.3	12.4	77	n.	.....	.....	1	c	hz	.....	.....	0	0	dense haze	M. André, Director.
Mans, Normal School	29.64	752.9	29.93	760.3	55.6	13.1	86	w.	.....	.....	3	.....	.....	.....	w.	0.035	0.9	.....	M. Piboen, Director.
Marseille, Observatory	29.87	758.7	30.14	765.5	65.1	18.4	52	s.	.....	.....	2	.....	6	.....	se.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.93	633.3	29.78	756.3	50.9	10.5	39	sw.	7.4	3.3	.....	.....	0	.....	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	30.03	762.7	30.16	766.0	62.2	16.8	78	e.	.....	.....	2	.....	2	.....	n.	0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.15	740.5	29.94	760.5	53.2	11.8	78	sw.	.....	.....	2	.....	kn	.....	sw.	0	0	.....	M. Hasse, Director
Nantes, Observatory	29.88	759.0	30.04	763.1	60.3	15.7	68	sw.	.....	.....	0-1	0	9k;kn	.....	w.	0.110	2.8	.....	M. Larocque, Director.
Perpignan, Observatory	30.06	763.6	30.18	766.5	61.2	16.2	72	se.	5.6	2 5	.....	.....	1	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.32	541.5	.....	.....	34.5	1.4	.....	sw.	.....	.....	1	.....	1	.....	sw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.07	738.4	30.13	765.4	59.0	15	72	s.	.....	.....	1	.....	2	s.	s.	0	0	slightly cl'dy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.21	640.4	.....	.....	36.3	2.4	100	w.	.....	.....	4	.....	10	.....	.....	0.004	0.1	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	30.10	764.4	30.13	765.2	56.5	13.6	95	sw.	.....	.....	2	.....	10	.....	.....	2.60	66.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.75	755.7	29.97	761.2	57.4	14.1	95	ssw.	.....	.....	1	.....	5	.....	ssw.	0.55	14.	cloudy	M. Brotier, Director.
Rodez, Normal School	27.93	709.3	30.08	764.0	52.3	11.3	85	nw.	.....	.....	1	o	1 k	.....	nw.	0	0	clear	M. Seger, Director.
Rouen, Normal School	29.83	757.7	29.88	758.9	57 6	14.2	64	wsw.	.....	.....	1	.....	5	wnw.	.....	0.004	0.1	cloudy	M. Moullot.
Saint Lô	.....	.....	.....	.....	55.8	13.2	64	sw.	.....	.....	1	.....	.....	sw.	sw.	0.020	0.5	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.80	757.0	29.97	761.2	55.6	13.1	76	sw.	.....	.....	1	.....	10	.....	.....	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.52	749.8	30.25	768.3	48.7	9.3	100	e.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Baillaud, Director.
Tours	29.84	758.0	30.02	762.4	57.9	14.4	89	sw.	.....	.....	2	.....	10	.....	sw.	.....	.....	rainy	M. de Tastes.
Versailles, Observatory	29.48	748.8	29.97	761.3	55.8	13.2	75	w.	.....	.....	1	.....	.....	.....	.....	0.047	1.2	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.55	725.2	30.00	761.9	53.2	11.8	68	sw.	.....	.....	4	.....	9	sw.	.....	0.020	0.5	.....	Prof. Jnedt.
Bamberg	29.14	740.2	29.98	761.6	52.5	11.4	73	w.	.....	.....	2	o	6 k	.....	w.	0	0	.....	Prof. Dr. Hoh.
Berlin	29.59	751.5	29.76	756.0	52.9	11.6	82	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.41	747.0	29.94	760.4	53.8	12.1	69	s.	.....	.....	2	.....	5	w.	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.55	750.5	29.98	761.6	56.5	13.6	69	sw.	.....	.....	4	.....	10	sw.	.....	0	0	.....	Albert Senz.
Cassel	29.05	737.9	29.76	756.0	53.2	11.8	77	sw.	.....	.....	4	.....	8	sw.	.....	0.043	1.1	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.54	750.3	29.91	759.6	54.9	12.7	77	sw.	.....	.....	2	.....	10	.....	.....	0.004	0.1	.....	Physical Society.
Friedrichshafen	28.64	727.5	30.10	764.6	46.9	8.3	88	s.	.....	.....	2	.....	3	nw.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.54	750.2	29.63	752.5	51.6	10.9	94	ssw.	.....	.....	5	.....	8	.....	.....	0.378	9.6	raining	E. Preller.
Kiel	29.57	751.1	29.59	751.5	49.6	9.8	93	sw.	.....	.....	2	.....	9	.....	.....	0.378	9.6	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.44	747.7	29.86	758.4	54.7	12.6	74	ssw.	.....	.....	5	.....	9	w.	.....	0.059	1.5	.....	H. Leppig, Asst.
Magdeburg	29.58	751.2	29.76	756.0	54.3	12.4	79	s.	.....	.....	4	.....	10 ks	.....	wsw.	0.024	0.6	.....	Weather Observatory.
Memel	29.80	756.8	29.84	758.0	45.7	7.6	76	wnw.	.....	.....	3	o	6 ks	.....	.....	.....	.....	.....	Issermann.
Munich	28.20	716.2	30.06	763.5	57.7	14.3	50	nw.	.....	.....	4	.....	2	.....	.....	0	0	.....	Central Station.
Neufahrwasser	29.48?	748.7?	29.49?	749.1?	49.1	9.5	72	ne.	.....	.....	2	.....	10	.....	.....	0.138	3.4	.....	A. Lothes.
Neustadt, Palatinate	29.43	747.4	29.95	760.7	54.3	12.4	87	sw.	.....	.....	3	.....	10	.....	.....	0.035	0.9	light rain	Dicknether
Stuttgart	29.22	742.3	30.11	764.9	58.3	14.6	58	w.	.....	.....	3	.....	7	w.	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	29.69	754.1	29.72	754.8	44.2	6.8	98	se.	.....	.....	1	.....	10	.....	.....	0.496	12.6	.....	Profs. Brandes & Reimer.
Greek.																			
Athens	29.82	757.4	30.20	767.0	68.2	20.1	.....	ne.	.....	.....	0.5	o	o	.....	.....	0	0	clear	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.98	761.5	30.03	762.8	82.4	28.0	60	wsw.	11.0	4.9	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.47	748.4	29.94	760.4	85.8	29.9	25	ne.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.84	757.9	29.88	758.9	80.9	27.2	68	nnw.	19.0	8.5	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.00	711.2	29.83	757.6	86.6	30.3	27	n.	7.0	3.1	.....	.....	2	.....	e.	0	0	d. clouds	
Trichinopoly	29.37	751.0	29.85	758.1	83.5	28.6	74	calm	0	0	.....	.....	6	.....	.....	4.11	104.4	d. clouds	
Bellary	28.36	720.3	29.81	757.3	85.0	29.4	48	e.	2.0	0.9	.....	.....	5	.....	.....	0	0	d. clouds	
Belgaum	27.31	693.8	29.84	757.8	79.4	26.3	63	ssw.	5.0	2.2	.....	.....	5	se.	ne	0	0	d. clouds	
Lahore	29.20	741.5	29.96	761.0	67.7	19.8	60	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.03	737.4	29.94	760.5	72.2	22.3	57	w.	2.0	0.9	.....	.....	0	.....	.....	0	0	.....	
Agra	29.39	746.5	29.96	761.0	78.2	25.7	29	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.85	732.9	29.90	759.4	80.2	26.8	40	calm	1.0	0.4	.....	.....	1	.....	.....	0	0	blue sky	
Jubbulpore	28.59	726.2	29.96	760.9	77.3	25.2	24	e.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.55	750.6	29.94	760.4	73.2	22.9	41	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.62	752.2	29.94	760.4	68.8	20.4	56	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.74	755 3	29.92	760.0	76.5	24.7	55	nw.	1.6	0.7	.....	.....	4	nw.	nw.	0	0	d. clouds	
Hazaribagh	27 88	708.0	29.92	759.9	70.6	21.4	71	n.	3.3	1.5	.....	.....	5	.....	.....	0	0	d. clouds	
Cuttack	29.80	756.9	29.88	759.0	79.2	26.2	79	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.86	758 5	29.88	759.0	78.5	25.8	74	nnw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.75	755.6	29.87	758.6	76.2	24.6	78	calm	1.2	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.78	756 3	29.87	758.6	77.7	25.4	90	sw.	1.8	0.8	.....	.....	8	.....	.....	0	0	d. clouds	
Sibsagar	29.55	750.7	29.90	759.3	73.5	23.1	90	ne.	2.0	0.9	.....	.....	6	e.	e.	0	0	d. clouds	
Zanzibar, Africa	29.88	759.0	29.91	759.6	81.5	27.5	73	ese.	6.0	2.7	.....	.....	9	.....	e.	0.20	5.1	gloomy	
Jeypore	28.52	724.4	29.98	761.4	76.8	24.9	33	ne.	0.5	0.2	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.77	756.1	30.18	766.6	56.3	13.5	59	calm	0	0	.....	.....	9	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.68	753.8	30.20	767.1	55.0	12.8	88	s.	0.7	0.3	.....	.....	9	w.	.....	0	0	.....	Prof. Schiapparelli.
Padya	30.07	763 7	30.18	766.5	56.8	13.8	73	calm	0	0	.....	.....	10	w.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.26	743.2	30.18	766.5	55.4	13.0	88	s.	1.3	0.6	.....	.....	8	se.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.98	761.5	30.17	766.4	63.5	17.5	70	se.	1.8	0.8			6	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.24	717.4	30.18	766.6	53.8	12.1	64	n.			2		0			0	0		Prof. D. C. Bruno
Pesaro	30.17	766.3	30.22	767.5	56.8	13.8	91	n.					9			0	0		Prof. Luigi Guidi.
Florence	29.94	760.4	30.19	766.9	62.6	17.0	72	sw.			2		7	sw.		0	0		Prof. Costantino Pitter.
Leghorn	30.06	763.5	30.15	765.7	63.5	17.5	73	wnw.	1.3	0.6			10			0.008	0.2		Prof. P. Monte.
Rome	30.04	762.9	30.21	767.3	61.9	16.6	66	nnw.	0	0			9			0	0		Prof. P. Tachini.
Lecce	29.95	760.8	30.21	767.2	64.2	17.9	58	ene.	9.4	4.2			2			0	0		Prof. C. de Giorgi.
Cosenza	29.35	745.4	30.24	768.1	61.2	16.2	69	wsw.	1.3	0.6			10	sw.		0.008	0.2		Prof. D. Conti.
Cagliari	29.98	761.4	30.17	766.3	65.5	18.6	59	calm			0		3			0	0		Prof. A. Pacinotti.
Palermo	29.97	761.3	30.22	767.7	65.3	18.5	62	ne.	3.8	1.7			2			0	0		Prof. G. Cacciatore.
Syracuse	30.17	766.4	30.22	767.5	64.0	17.8	71	se.	7.4	3.3			6	sw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.67	753.6	30.19	766.9	64.8	18.2	72	wnw.	0	0			7	ne.		0	0		Prof. F. Brioschi.
Stelvio	22.21	564.2			28.2	— 2.1	69	sw.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.26	565.6			34.3	1.3	56	se.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.00	762.1	30.03	762.9	44.5	6.9	81	calm			0	0	5 ck;s		w.	0.213	5.4	fair	Hattori.
Awomori	29.96	761.0	30.00	762.0	41.5	5.3	74	ssw.	7.9	3.5			10 ks	a.	sw.	0.328	8.3	overcast	K. Ogawa.
Hakodate	29.94	760.4	29.95	760.6	38.0	3.3	72	w.	21.0	9.4		0	4		w.	0	0	fair	
Hiroshima					57.2	14.0	87	n.	2.1	0.9			9 ck			0	0	cloudy	Y. Miwa.
Kanazawa	29.98	761.6	30.09	764.2	54.7	12.6	89	n.	2.0	0.9			10			0.310	7.9	overcast	S. Endo.
Kioto	29.89	759.2	30.07	763.8	54.7	12.6	89	ssw.	0.2	0.1			10 s			0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.95	760.7	30.15	765.9	59.6	15.3	78	n.	1.2	0.5			10 s			0	0	overcast	S. Takehayashi.
Nemuro	29.69	754.1	29.75	755.6	44.0	6.7	82	nne.	12.0	5.4		0	0			0	0	clear	
Niigata	30.03	762.7	30.06	763.5	51.8	11.0	78	n.	1.1	0.4			10 n			0.300	7.6	light rain	M. Morita.
Nobiru	29.90	759.4	29.92	759.8	55.0	12.8	71	nnw.	22.3	9.9			10 s			0	0	overcast	H. Midzushima.
Osaka	30.05	763.4	30.07	763.7	57.8	14.3	81	s.	3.8	1.7			10 s			0	0		
Supporo					31.9	— 0.1	85	nw.	9.6	4.3		1	0			0.020	0.5	clear	
Tokei Obs'y, Yeddo	29.84	757.9	29.91	759.8	55.6	13.1	90	nne.	6.8	3.0			10 s			0.100	2.5	cloudy	The Staff.
Wanayama	30.02	762.6	30.08	764.1	57.9	14.4	78	ene.	2.4	1.1			10			0	0	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.90	759.4	30.10	764.5	76.6	24.8	67	ene.	17.0	7.6		4 ck	4 k;ks	e.	e.	0.01	0.3	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.74	602.9	29.96	760.9	49.1	9.5	94	wsw.	lnap.	lnap.		0	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.35	618.5	30.23	767.8	42.8	6.0	82	se.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.73	755.1	29.99	761.7	75.0	23.9	95	ne.	0.9	0.4		0	1 s			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.15	587.9	30.29	769.4	46.2	7.9		calm	0	0			10 k			0	0	foggy	The Staff.
Morelia	24.23	615.3	30.07	763.8	50.7	10.4	64	e.	0.9	0.4		0	0			0	0	fine	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascallientes	23.95	608.4	30.05	763.2	46.6	8.1	77	n.			1					0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.387	770.17	43.5	6.4	81	calm	0	0		0	0			0	0		Prof. P. Spina.
Zacatecas	22.63	574.7	30.36	771.0	49.6	9.8	49	nnw.	5.2	2.6		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.83	757.7	29.83	757.7	51.1	10.6		w.			4					0.020	0.5		
Gronlugen	29.48	748.7	29.53	750.1	52.2	11.2		wsw.			5					0.280	7.1		
Helder	29.67	753.5	29.67	753.5	49.8	9.9		wnw.			5					0.154	3.9		
Hellevoetsluis	29.78	756.3	29.78	756.3	50.5	10.3	76	w.			4					0.059	1.5		
Utrecht	29.71	754 7	29.76	755.9	53.1	11.7	74	wsw.			4		8			0.071	1.8	very cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.58	751.3	29.64	752.9	42.4	5.8	88	sse.	13	6			10			0.256	6.5	raining	
Brono	29.52	749.7	29.56	750.7	39.6	4.2	77	sse.	18	8			8			0.047	1.2		
Christiania	29.54	750.3	29.69	754.1	38.1	3.4	73	w.	2	1			2			0	0		
Gjæsvær	29.43	747.4	29.45	748.0	23.7	— 4.6		se.			6		5						
Lodingen	29.46	748.2	29.50	749.4	36.5	2.5	86	calm			0		5			0.663	1.6		
PORTUGUESE.																			
Angra, Azores	30.04	763.1	30.20	767.0	67.6	19.8	77	w.	6.9	3.1			4			0	0		Dr. J. A. Sampaio
Campo Major	29.27	743.4	30.26	768.5	68.7	20.4	35	wsw.	3.1	1.4			4			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.22	767.6	30.31	769.8	70.9	21.6	51	ne.	9.4	4.2			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.99	761.7	30.35	770.8	64.2	17.9	52	ssw.	9.4	4.2			6	nnw.		0	0		The Staff.
Ponta Delgada, Azores	30.21	767.1	30.27	768.9	68.4	20.2	65	sw.	13.0	5.8			3			0	0		
Saint Paul de Lomdo	29.65	753.1	29.85	758.2	80.4	26.9	84	w.	1.8	0.8			4	sse.		0	0		
Serra da Estrella	25.48	647.2	30.27	768.9	45.9	7.7	69	w.	19.2	8.6			0			0	0		
RUSSIAN.																			
Akmolinski	29.31	744.4	30.47	774.0	18.7	— 7.4	75	calm	0	0		7 ck	0			0.008	0.2		Major K. Lusarew.
Archangel	29.78	756.5	29.80	757.0	5.0	—15.0	82	e.	2	1			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.22	767.6	30.14	765.5	51.6	10.9	68	s.	7	3		0	2 s			c	0		Capt. Wisganow.
Barnaul	29.88	759.0	30.43	772.8	19.8	— 6.8	89	wsw.	9	4			10			0.039	1.0		Meteorological Obs'y.
Dorpat	29.46	748.3	29.71	754.7	31.6	— 0.2	100	wnw.	7	3			10 n			0.031	0.8		Observatory.
Ekaterinburg	29.10	739.1	30.13	765.3	17.6	— 8.0	91	se.	9	4			10			0.004	0.1	light clouds	Meteorological Obs'y.
Kasan	29.40	746.7	29.67	753.7	34.2	1.2	89	sse.	20	9			10			0.063	1.6	light rain	Observatory.
Kertch	30.00	762.0	30.02	762.5	54.9	12.7	66	calm	0	0		0	6 n			0	0		Lagorio & Sastyrez.
Kieff	29.16	740.6	29.80	756.8	47.7	8.7	51	w.	34	15			9 ks						Observatory.
Lugan	29.63	752.5	29.83	757.7	50.2	10.1	60	wnw.	18	8			4			0.004	0.1		Meteorological Obs'y.
Nikolaiev	30.02	762.4	30.09	764.2	53.2	11.8	56	w.	18	8		0	0			0	0		Capt. Kurdakow.
Pekin, China	30.28	769.2	30.43	772.8	32.2	0.1	46	sw.	11	5		0	0			0	0		Physical Observatory.
St. Petersburg	29.61	752.1	29.63	752.5	27.1	— 2.7	87	nne.	7	3			10 n			0.020	0.5		Central Physical Obs'y.
Semipalatinsk	29.86	758.4	30.56	776.3	26.2	— 3.2	76	nw.	9	4			8			lnap.	lnap.		Major Lasarew.
Tashkend, Laboratory	28.76	730.5	30.37	771.3	50.2	10.1	62	calm	0	0			0						Teich, A. M.
Tiflis	28.70	728.9	30.11	764.7	61.0	16.1	53	calm	0	0		3 s	0			0	0		Physical Observatory.
Tomsk																			
Vladivostock	30.12	765.1	30.19	766.8	24.4	— 4.2		nw.	4	2		0	0			0	0		Astronomical Obs'y.
Warsaw	29.55	750.6	29.98	761.5	46.4	8.0	76	sw.	11	5			10					heavy clouds	Berg, Assistant.
Wilna	29.39	746.6	29.82	757.4	44.1	6.7	78	wnw.	11	5			10			0.299	7.6		M. C. Marks.
Yeniseisk	30.37	771.4	30.69	779.5	9.9	—12.3	84	e.	7	3			10			0.016	0.4		
SCOTTISH.																			
Monach Lt			29.51	749.5	49	9.4	93	s.			7		10			0.1	3.	showery	J. Youngclause
North Unst			29.59	751.6				sw.			6	2	5	sw.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.05	763 2	30.15	765.9	62.2	16.8	68	sw.	4.3	1.9		0	0			0	0	clear	Antonio Reve, Director.
Bilbao, Met. Obs'y	30.11	764.7	30.17	766.2	68.0	20.0	53	se.	2.0	0.9		0	0			0	0	clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.26	692.4	30.26	768.6	52.5	11.4	74	s.	7.8	3.5		0	1			0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.02	711.6	30.26	768.7	57.0	13.9	67	s.	6.9	3.1		1	0	nw.		0	0	light clouds	The Staff.
Murcia, Met. Obs'y	30.07	763.8	30.20	767.1	72.0	22.2	64	sw.	3.1	1.4		0	0			0	0	clear	Olayo Diaz, Director.
Oviedo	29.27	743.4	30.15	765.8	53.6	12.0	89	se.	5.1	2.3		0	6 n		s.	0	0	cloudy	Prof. L. G. Fradee.
Santiago, Met. Obs'y	29.24	742.8	30.14	765.6	57.0	13.9	87	sw.	6.9	3.1			10			0.169	4.3	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.84	757.9	29.89	759.3	80.0	26.7	82	se.	1.1	0.5		0	2 ks			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.19	766.9	30.29	769.4	67.8	19.9	64	wnw.	1.2	0.5		0	1			0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.88	759.0	29.97	761.3	78.0	25.6	87	calm	0	0		0	6 k		sw.	0	0		Manuel Maese.
Tuguegarao, Philippine Id's	29.78	756.4	29.91	759.8	78.0	25.6	90	wnw.	1.0	0.4		0	2 k		w.	0	0	fair	José L. Yrastorza.
SWEDISH.																			
Haparanda	29.69	754.0	29.72	755.0	15.8	— 9.0	100	ne.			2		10			0	0		
Umea	29.61	752.1	29.66	753.4	25.9	— 3.4	91	calm			0		6			0	0		

STATIONS.	BAROMETER. Corrected for instrumental error and for temperature.		BAROMETER. Reduced to sea-level.		Temperature of the air.		Relative humidity.	WIND. Direction	WIND. Velocity.		WIND. Force.	CLOUDS. Amount and kind. Upper.	CLOUDS. Amount and kind. Lower.	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
SWEDISH—Continued.																			
Hernosand	29.62	752.3	29.67	753.6	35.2	1.8	96	calm	.....	.....	0	.....	8	.....	.....	0.079	2.0	....	.....
Stockholm	29.54	750.4	29.72	754.9	41.0	5.0	84	calm	.....	.....	0	.....	2	.....	.....	0.346	8.8	.....	.....
Wisby	29.66	753.4	29.72	754.9	43.5	6.4	83	w.	.....	.....	2	.....	3	.....	.....	0.031	0.8	.....	.....
Sub-series.																			
Upsala	29.61	752.2	29.70	754.4	39.9	4.4	90	wsw.	4.3	1.9	.....	.....	7	wsw.	w.	0	0	.....	S. G. Fineman.
SWISS.																			
Geneva	28.69	728.8	30.10	764.5	61.2	16.2	48	sw.	.....	.....	5	.....	2	.....	.....	0	0	clear	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.24	768.0	58.1	14.5	67	sw.	3	1.5	.....	.....	0	.....	.....	0	0	The Observatory.	
Valona	.....	.....	30.23	767.9	64.9	18.3	.....	sw.	.....	.....	1	.....	2	.....	.....	0	0	slightly cl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.93	760.1	63.0	17.2	71	nw.	.....	.....	3	.....	10 n	.....	nw.	1.84	46.7	thund'r st'm	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.32	770.1	30.40	772.1	36	2.2	61	ne.	5	2.2	.....	.....	10 s	.....	e.	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.42	747.3	30.12	765.0	46	7.8	100	ne.	2	0.9	.....	.....	fg.	.....	.....	0.08	2.0	light fog	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.93	633.2	30.03	762.7	34	1.1	61	e.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	W. C. Barnes.
Assinnaboine, Ft., Montana	27.36	694.9	30.34	770.6	25	— 3.9	76	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	B. C. Lenoir.
Atlanta, Georgia	29.08	738.6	30.30	769.6	44	6.7	80	ne.	5	2.2	.....	.....	10 k	.....	w.	0	0	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.28	769.1	30.29	769.4	42.2	5.7	92	n.	9	4.0	.....	.....	10 s	.....	n.	inap.	inap.	cloudy	Jas. M. Watson.
Augusta, Georgia	30.13	765.3	30.33	770.4	42	5.6	88	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	John Healy.
Baltimore, Maryland	30.29	769.4	30.34	770.6	43	6.1	68	n.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	Geo W Felger.
Barnegat, New Jersey	30.27	768.8	30.29	769.4	44.0	6.7	96	n.	9	4.0	.....	.....	10 s	.....	.....	0.03	0.8	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.46	722.9	30.15	765.8	41	5.0	67	nw.	18	8.0	.....	0	1 s	.....	nw.	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.38	695.4	30.34	770.6	20	— 6.7	73	calm	0	0	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.19	716.0	30.11	764.8	39	3.9	57	nw.	15	6.7	.....	2 cs	0	.....	.....	0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	30.29	769.4	30.32	770.1	44	6.7	83	ne.	25	11.2	.....	.....	10 ks	.....	ne.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.15	689.6	30.09	764.3	33	0.6	88	nw.	1	0.4	.....	0	4 s	.....	calm	0	0	fair	B. E. Light.
Boston, Massachusetts	30.22	767.6	30.38	771.6	37.0	2.8	89	nw.	11	4.9	.....	.....	10n;fog	.....	ne.	inap.	inap.	light rain	O. B. Cole.
Brownsville, Texas	30.03	762.7	30.08	764.0	70.8	21.6	84	calm	0	0	.....	0	3 s	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.42	747.3	30.20	767.1	40.2	4.6	77	se.	6	2.7	.....	.....	10 n	.....	sw.	0.12	3.0	light rain	W. Finn.
Buford, Fort, Dakota	28.28	718.3	30.26	768.6	28	— 2.2	77	w.	24	10.7	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	30.08	764.0	30.39	771.9	35.6	2.0	59	s.	8	3.6	.....	3 cs	7 s	sw.	sw.	0	0	cloudy	W. B Gates.
Cairo, Illinois	29.83	757.7	30.25	768.3	49.7	9.8	91	calm	0	0	.....	1 c	fg.	.....	.....	0	0	clear	W. H. Ray.
Cape Henry, Virginia	30.22	767.6	30.24	768.1	50	10.0	71	n.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.26	768.6	30.29	769.4	47.0	8.3	86	n.	10	4.5	.....	.....	10 s	.....	ne.	0	0	cloudy	W. E. Smith.
Cape Mendocino, California	29.28	743.7	29.81	757.2	47	8.3	100	nw.	12	5.4	.....	.....	fg.	.....	nw.	0	0	dense fog	J. J. McLean.
Cedar Keys, Florida	30.18	766.6	30.20	767.1	59	15.0	81	n.	12	5.4	.....	0	7 ks	.....	.....	0	0	fair	F. W. Mixer.
Champaign, Illinois	29.33	745.0	30.19	766.8	42.8	6.0	74	sw.	5	2.2	.....	3 c	fg.	w.	.....	0	0	light fog	L. A. Welsh.
Charleston, S. Carolina	30.17	766.3	30.23	767.8	50	10.0	93	n.	8	3.6	.....	.....	fg.	.....	.....	0	0	dense fog	J. H. Smith.
Charlotte, N. Carolina	29.40	746.7	30.28	769.1	37.0	2.8	89	n.	4	1.8	.....	0	fg.	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.45	748.0	30.30	769 6	46.0	7.8	83	s.	3	1.3	.....	0	1s;fg	.....	.....	0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	24.04	610.6	30.26	768.6	32.8	0.4	45	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.39	746.5	30.13	765.3	45.4	7.4	96	w.	5	2.2	.....	.....	10 s	.....	.....	0.09	2.3	cloudy	J. Mitchell.
Chincoteague, Virginia	30.20	767.1	30.22	767.6	47	8.3	93	n.	16	7.2	.....	.....	9 ks	.....	n.	0	0	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.52	749.8	30.21	767.3	49	9.4	86	w.	3	1.3	.....	0	hz	.....	.....	0.01	0.3	clear	R. B. Watkins.
Cleveland, Ohio	29.37	746.0	30.14	765.5	45.5	7.5	93	s.	7	3.1	.....	.....	10 n	.....	s.	0.11	2.8	light rain	J. B. Newlin.
Coleman City, Texas	28.20	717.8	30.14	765.5	56	13.3	100	s.	3	1.3	.....	.....	fg.	.....	.....	0	0	dense fog	L. Dorman.
Columbus, Ohio	29.25	742.9	30.14	765.5	47	8.3	86	sw.	7	3.1	.....	.....	10 s	.....	sw.	0.32	8.1	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.10	713.7	30.12	765.0	60.0	15.6	87	s.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	J. McGlone.
Custer, Fort, Montana	26.99	685.5	30.31	769.9	37	2.8	51	n.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	W. B. Lamar.
Davenport, Iowa	29.48	748.8	30.16	766.1	43	6.1	96	sw.	4	1.8	.....	5 ck	fg.	w.	.....	0	0	fair	R. R. Martin.
Davis, Fort, Texas	25.22	740.6	30.12	765.0	58	14.4	62	sw.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.31	719.1	30.09	764.3	31.7	— 0.2	86	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	H. Clifford.
Deadwood, Dakota	25 44	646.2	30.27	768.8	31	— 0.6	74	calm	0	0	.....	0	0	.....	.....	0	0	clear	G. W. Scott.
Delaware Breakwater, Del	30.26	768.6	30.28	769.1	47	8.3	93	ne.	17	7.6	.....	.....	10 s	.....	ne.	0	0	cloudy	T. S. Townsend.
Denison, Texas	29.28	743 7	30.12	765.0	60.0	15.6	100	s.	8	3.6	.....	0	5 s	.....	.....	0	0	fair	J. W. Byram.
Denver, Colorado	24.74	628.4	30.24	768.1	34.0	1.1	50	s.	8	3.6	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.12	739.6	30.07	763.8	41	5.0	82	se.	6	2.7	.....	0	3 s	.....	.....	0.01	0.3	clear	F. W. Conrad.
Detroit, Michigan	29.39	746 5	30.13	765.3	50.3	10.2	86	sw.	4	1.8	.....	.....	10 n	.....	se.	0.36	9.1	light rain	C. F. R. Wappenhans.
Dodge City, Kansas	27.29	693.2	30.03	762.7	44	6.7	76	s.	2	0.9	.....	0	8 s	.....	w.	0	0	cloudy	V. P. Temple.
Dubuque, Iowa	29.39	746.5	30.14	765.5	42.3	5.7	93	calm	0	0	.....	.....	10 s	.....	nw.	0.01	0.3	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.26	743.2	30.04	763.0	45	7.2	93	e.	3	1.3	.....	.....	10s;fg	.....	.....	0.01	0.3	cloudy	N. B. Conger.
Eagle Pass, Texas	29.27	743.4	30.10	764.5	63.0	17.2	90	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.28	642.1	30.14	765.5	24	— 4.4	76	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	30.35	770.9	30.42	772.7	37.0	2.8	72	ne.	20	8.9	.....	.....	10 s	.....	ne.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.20	690.9	30.13	765.3	52	11.1	74	se.	4	1.8	.....	.....	10 s	.....	se.	0	0	cloudy	W. J. Cundall.
El Paso, Texas	26.29	667.8	30.14	765.5	43	6.1	68	calm	0	0	.....	3 c	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.39	746.5	30.15	765.8	41	5.0	73	se.	18	8.0	.....	.....	10 n	.....	se.	0.62	15.7	light rain	Peter Wood.
Escanaba, Michigan	29.42	747.3	30.12	765.0	45.0	7.2	93	calm	0	0	.....	.....	10 s	.....	.....	0.08	2.0	cloudy	George Heathcote.
Fredericksburg, Texas	28.34	719.8	30.16	766.1	66	18.9	90	sw.	14	6.3	.....	.....	10 s	.....	w.	0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.08	764.0	30.13	765.3	72	22.2	82	s.	6	2.7	.....	2 ck	7 ks	s.	.....	inap.	inap.	cloudy	E. O'C. MacInerney.
Grand Haven, Michigan	29.42	747.3	30.12	765.0	44.5	6.9	93	ne.	2	0.9	.....	.....	fg.	.....	.....	0.50	12.7	dense fog	J. Mueller.
Grant, Fort, Arizona	25.28	642.1	30.12	765.0	56	13.3	45	ne.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	Robert G. Lord.
Hatteras, North Carolina	30.17	766.3	30.19	766.8	53	11.7	93	n.	14	6.3	.....	hz.	0	.....	.....	0	0	clear	R. M. Crawford.
Helena, Montana	25.77	654.5	30.15	765.8	30	— 1.1	81	calm	0	0	.....	0	0	.....	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	29.02	737.1	30.06	763.5	58	14.4	87	se.	9	4.0	.....	.....	10 ks	.....	se.	0	0	cloudy	J. P. Sherry.
Huron, Dakota	28.55	725.2	30.03	762.7	34	1.1	85	nw.	9	4.0	.....	0	0	.....	.....	0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.35	745.5	30.19	766.8	47	8.3	86	sw.	1	0.4	.....	.....	10 s	.....	sw.	0.09	2.3	cloudy	O. Schutze
Indianola, Texas	30.08	764.0	30.11	764.8	70.3	21.3	79	se.	8	3.6	.....	0	0	.....	.....	inap.	inap.	clear	I. A. Reed.
Jacksboro, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. J. Carr.
Jacksonville, Florida	30.16	766.1	30.20	767.1	56	13.3	86	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.65	702.3	30.32	770.1	35	1.7	66	nw.	5	2.2	.....	0	4 s	.....	.....	0	0	fair	A. Schneider.
Keokuk, Iowa	29.46	748.3	30.15	765.8	41.0	5.0	89	calm	0	0	.....	2 cs	0	calm	.....	0	0	clear	F. Z. Gosewisch
Key West, Florida	30.03	762.7	30.05	763.3	73.0	22.8	83	n.	16	7.2	.....	0	4 k	.....	n.	0	0	fair	R. H. Paxton.
Kittyhawk, North Carolina	30.20	767.1	30.22	767.6	51	10.6	80	n.	14	6.3	.....	0	4 k	.....	ne.	0	0	fair	H. Mc P. Baldwin.
Knoxville, Tennessee	29.22	742.2	30.28	769.1	47	8.3	84	w.	4	1.8	.....	0	6 s	.....	w.	0	0	fair	J. A. Cody.
La Crosse, Wisconsin	29.27	743.4	30.09	764.3	46	7.8	76	s.	8	3.6	.....	.....	10 s	.....	.....	0.05	1.3	cloudy	S. C. Emery.
Leavenworth, Kansas	29.13	739.9	30.07	763.8	43	6.1	83	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.30	744.2	30.17	766.3	31.5	— 0.3	82	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. Bell.
Little Rock, Arkansas	29.85	758.2	30.18	766.6	57	13.9	100	sw.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog	W. U. Simons.
Los Angeles, California	29.51	749.5	29.91	759.7	56	13.3	86	ne.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	T. S. Collins.
Louisville, Kentucky	29.60	751 8	30.19	766.8	48	8.9	77	w.	4	1.8	.....	2 cs	0	.....	.....	inap.	inap.	clear	L. M. Dey.
Lynchburg, Virginia	29.57	751.1	30.29	769.4	42	5.6	79	e.	1	0.4	.....	0	8 ks	.....	se.	0	0	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.42	747.3	30.11	764.8	47.0	8.3	93	calm	0	0	.....	.....	10s;fg	.....	.....	0.11	2.8	cloudy	F. H. Day.
Macon, Fort, North Carolina	30.20	767.1	30.21	767.3	48	8.9	93	nw.	19	8.5	.....	0	3k;fg	.....	nw.	0	0	clear	F. P. Chaffee.
Madison, Wisconsin	29.08	738.6	30.15	765 8	46	7.8	93	w.	4	1.8	.....	.....	10 s	.....	w.	0.05	1.3	cloudy	O. A. Shaw.
Maginnis, Fort, Montana	25.65	651.5	30.16	766.1	22	— 5.6	48	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	F. Burke.
McKavett, Fort, Texas	27.82	706.6	30.20	767.1	63	17.2	90	s.	9	4.0	.....	0	5 ks	.....	s.	0	0	fair	J. E. Thatcher.
Marquette, Michigan	29.34	745.2	30.11	764.8	44	6.7	93	calm	0	0	.....	7 k	0	.....	.....	0	0	fair	J. Gilligan.
Memphis, Tennessee	29 86	758.4	30.21	767.3	55	12.8	93	s.	1	0.4	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.33	745.0	30.12	765.0	46	7.8	83	w.	6	2.7	.....	.....	10s;fg	.....	.....	0.12	3.0	cloudy	W. Line.
Missoula, Fort, Montana	26.82	681.2	30.23	767.8	26	— 3.3	34	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. H. Young.
Mobile, Alabama	30.20	767.1	30.24	768.1	55	12.8	77	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	C. A. Read.
Montgomery, Alabama	30.04	763.0	30.28	769.1	50.7	10.4	70	e.	3	1.3	.....	.....	10 s	.....	w.	0	0	cloudy	J. B. McLaughlin.

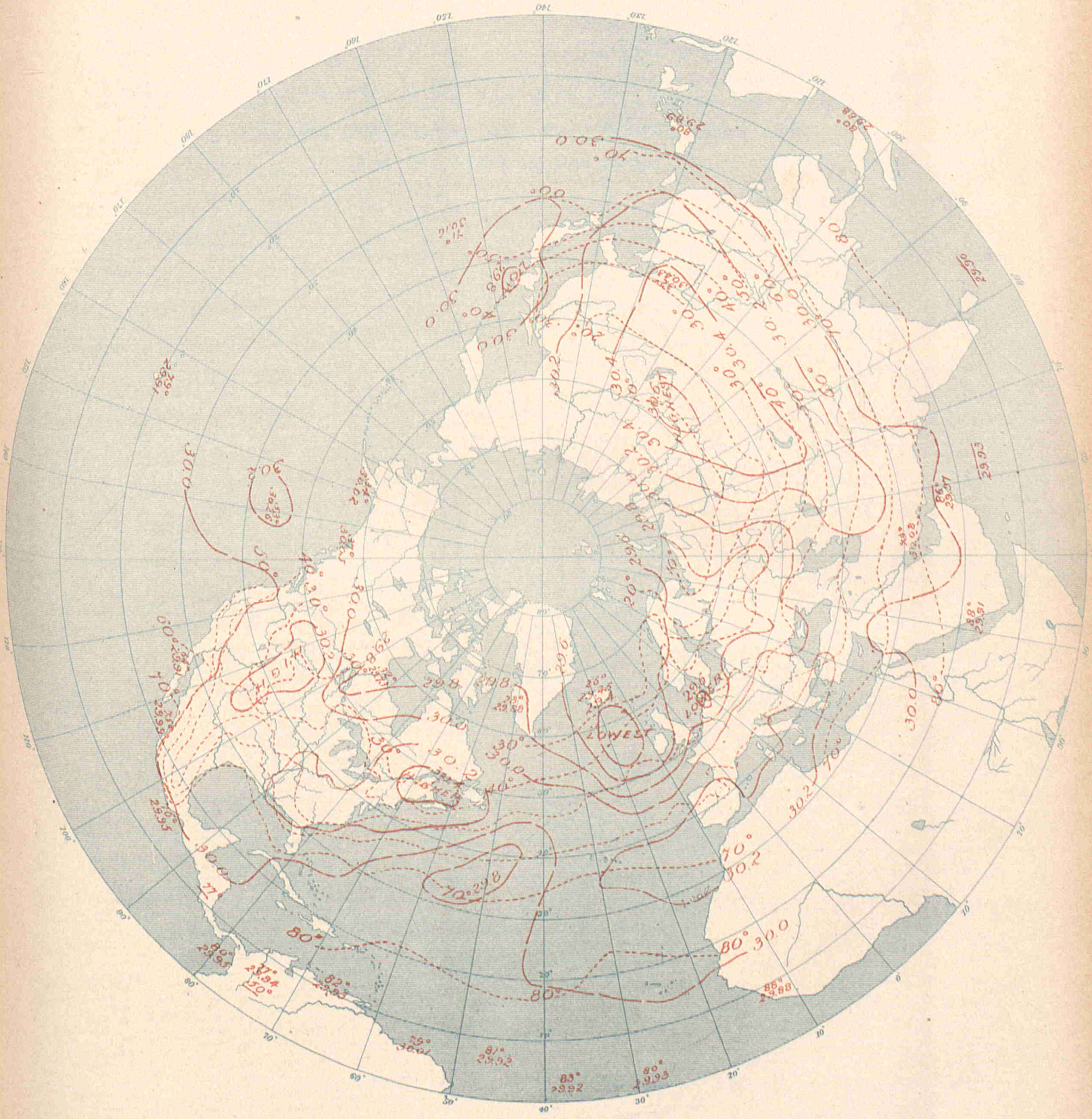
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	WEATHER.	OBSERVERS.
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	28.93	734.8	29.99	761.7	36	2.2	89	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	H. Bessant.
Morgantown, W. Virginia	29.14	740.1	30.20	767.1	46.5	8.1	71	calm	0	0	.....	.....	10 n	.....	sw.	0.04	1.0	light rain	J. C. Sprigg, jr
Mt. Washington, N. H.	23.98	609.1	30.54	775.7	32.0	0.0	74	ne.	8	3.6	.....	6 cs	4 ks	.....	ne.	0	0	cloudy	J. G. Linsley.
Nashville, Tennessee	29.65	753.1	30.25	768.3	44.0	6.7	83	e.	2	0.9	.....	.....	10 ks	.....	w.	inap.	inap.	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.24	768.1	30.36	771.1	38	3.3	66	ne.	12	5.4	.....	.....	10 s	.....	ne.	0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.33	770.4	30.38	771.6	41	5.0	73	ne.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.13	765.3	30.19	766.8	64.2	17.9	80	se.	1	0.4	.....	0	sk.	.....	.....	0	0	clear	L. Dunne.
Newport, Rhode Island	30.30	769.6	30.35	770.9	40.3	4.6	85	n.	9	4.0	.....	.....	10 s	.....	ne.	0	0	cloudy	W. McGillivray.
New York, New York	30.17	766.3	30.35	770.9	42.4	5.8	73	ne.	10	4.5	.....	.....	10 s	.....	ne.	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.22	767.6	30.25	768.3	49	9.4	86	n.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.04	686.8	30.12	765.0	31.6	— 0.2	68	calm	0	0	.....	0	0	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y	29.99	761.7	30.03	762.7	38.0	3.3	89	nw.	4	1.8	.....	0	0	.....	.....	0.01	0.3	clear	J. Dascomb.
Omaha, Nebraska	28.79	731.3	30.03	762.7	45.1	7.3	74	s.	6	2.7	.....	0	sk.	.....	.....	0	0	clear	A. Pollak.
Oswego, New York	29.93	760.2	30.27	768.8	39.6	4.2	60	se	12	5.4	.....	7 cs	0	sw.	.....	0	0	fair	S. W. Beall.
Palestine, Texas	29.58	751.3	30.15	765.8	62.5	16.9	92	se.	5	2.2	.....	0	0	.....	.....	0.03	0.8	clear	L. M. Pindell.
Pensacola, Florida	30.20	767.1	30.23	767.8	52.1	11.2	86	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	M. McGauran.
Philadelphia, Pa	30.25	768.3	30.35	770.9	43	6.1	74	ne.	8	3.6	.....	.....	10 s	.....	ne.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.83	452.9	30.49	774.4	19	— 7.2	51	n.	14	6.3	.....	0	0	.....	.....	0	0	clear	H. Hall.
Ploche, Nevada	23.96	608.6	30.10	764.5	36	2.2	53	s.	1	0.4	.....	5 c	0	.....	.....	0	0	fair	C. N. Kitchel.
Pittsburg, Pennsylvania	29.34	745.2	30.19	766.8	44.5	6.9	65	e.	4	1.8	.....	.....	10 s	.....	e.	0.08	2.0	cloudy	W. Daly.
Poplar River, Montana	27.91	708.9	30.20	767.1	.....	.....	.....	nw.	.....	.....	4	0	0	.....	.....	0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.20	767.1	30.20	767.1	66.6	19.2	79	ne.	11	4.9	.....	0	0	.....	.....	0	0	clear	M. Herman.
Port Huron, Michigan	29.42	747.3	30.14	765.5	46.3	7.9	96	calm	0	0	.....	.....	10 s	.....	.....	0.14	3.6	cloudy	W. O. Bailey.
Portland, Maine	30.35	770.9	30.40	772.1	39	3.9	68	ne.	11	4.9	.....	.....	10 s	.....	e.	c	0	cloudy	W. W. Eichelberger.
Portland, Oregon	29.92	760.0	29.99	761.7	39.0	3.9	89	w.	4	1.8	.....	0	5 s	.....	sw.	0	0	fair	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	53	11.7	93	n.	23	10.3	.....	hz.	0	.....	.....	0	0	clear	F. S. Coburn.
Prescott, Arizona	24.72	627.9	30.06	763.5	34	1.1	60	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.31	769.9	30.34	770.6	45	7.2	68	ne.	8	3.6	.....	.....	10 s	.....	ne.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.07	763.8	30.08	764.0	62	16.7	90	n.	9	4.0	.....	0	0	.....	.....	0	0	clear	W. J. Evans.
Red Bluff, California	29.46	748.3	29.88	758.9	51	10.6	100	nw.	2	0.9	.....	4 cs	3 s	w.	w.	0	0	fair	E. van Dyk.
Rochester, New York	29.53	750.0	30.23	767.8	39	3.9	65	s.	12	5.4	.....	10 k	hz.	sw.	.....	0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.35	745.5	29.92	760.0	43.5	6.4	86	n.	2	0.9	.....	.....	10 s	.....	.....	0	0	threatening	J. J. Nanry.
Sacramento, California	29.77	756.1	29.85	758.2	48.0	8.9	93	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. A. Barwick
St. Louis, Missouri	29.59	751.6	30.22	767.6	42.1	5.6	100	s.	6	2.7	.....	3 cs	fg.	sw.	.....	0	0	clear	J. H. Weber.
St. Paul, Minnesota	29.12	739 6	30.04	763.0	39.0	3.0	89	se.	10	4.5	.....	6 cs	0	nw.	.....	0	0	fair	P. F. Lyons.
St. Vincent, Minnesota	28.99	736.3	29.92	760.0	37	2.8	82	nw.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25 59	650.0	30.16	766.1	37	2.8	56	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Craig.
San Antonio, Texas	29.40	746.7	30.12	765.0	61.0	16.1	87	e.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog	T. J. Kenan.
San Diego, California	29.84	757.9	29.91	759.7	54.6	12.6	94	e.	5	2.2	.....	.....	fg.	.....	.....	0	0	dense fog	A. C. Dobbins.
Sandusky, Ohio	29.41	747.0	30.13	765.3	47	8.3	86	nw.	7	3.1	.....	.....	10 s	.....	.....	0.54	13.7	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.31	769.9	30.34	770.6	46.0	7.8	83	ne.	21	9.4	.....	.....	10 s	.....	ne.	0	0	cloudy	B. A. Blundon.
San Francisco, California	29.76	755.9	29.84	757.9	52	11.1	90	w.	3	1.3	.....	0	fg.	.....	.....	0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.25	590.5	30.29	769.4	44	6.7	47	e.	1	0.4	.....	0	0	.....	.....	0	0	clear	H. U. Jones.
Savannah, Georgia	30.15	765.8	30.24	768.1	45	7.2	80	n.	7	3.1	.....	0	0	.....	.....	0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.53	673.8	30.35	770.9	15	— 9.4	83	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.92	760.0	30.17	766.3	59	15.0	100	calm	0	0	.....	0	0	.....	.....	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.79	731.3	30.10	764.5	56.5	13.6	27	nw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.29	617.0	30.13	765.3	43.0	6.1	38	se.	4	1.8	.....	0	3 s	.....	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	29.98	761.5	30.05	763.3	36.5	2.5	85	e.	2	0.9	.....	.....	9 s	.....	e.	0.33	8.4	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.66	753.4	30.15	765.8	46.0	7.8	76	e.	3	1.3	.....	0	4 s	.....	.....	0	0	rain	J. B. Campbell.
Smithville, North Carolina	30.19	766.8	30.23	767.8	43	6.1	93	n.	6	2.7	.....	0	1 s	.....	w.	0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.09	713.5	30.17	766.3	27	— 2.8	80	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear	D. Moore.
Springfield, Illinois	29.49	749.0	30.21	767.3	42	5.6	82	sw.	5	2.2	.....	0	1s;sk	.....	w.	inap.	inap.	clear	T. B. Jennings.
Springfield, Massachusetts	30.36	771.1	30.50	774.7	38.0	3.3	45	n.	.....	.....	1	.....	10 n	.....	e.	0	0	cloudy	Charles Mayr.
Springfield, Mo	28.66	728.0	30.17	766.3	46	7.8	68	s.	10	4.5	.....	1 c	2 s	s.	se.	0	0	clear	J. B. Marbury.
Starkville, Miss	29.74	755.4	30.24	768.1	55	12.8	80	s.	8	3.6	.....	4 c	3 s	sw.	s.	0	0	fair	O. Dill.
Stevenson, Fort, Dakota	28.16	715.3	30.13	765.3	31	— 0.6	81	nw.	22	9.8	.....	0	0	.....	.....	0	0	clear	W. Burrows
Stockton, Fort, Texas	26.99	685.5	30.11	764.8	50.0	10.0	93	s.	4	1.8	.....	0	3 s	.....	s.	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	30.33	770.4	30.38	771.6	45.5	7.5	83	ne.	19	8.5	.....	.....	10 s	.....	ne.	0.06	1.5	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.18	690.4	30.02	762.5	55	12.8	47	se.	.....	.....	1	.....	10 ks	.....	.....	0	0	cloudy	J. T. Fitzgerald.
Toledo, Ohio	29.39	746.5	30.12	765.0	47	8.3	86	sw.	4	1.8	..	0	5s;fg	.....	sw.	0.55	14.0	clearing	A. Buell.
Tucson, Arizona	27.50	698.5	29.96	761.0	61	16.1	67	s.	4	1.8	.....	.....	10 ks	.....	.....	0	0	cloudy	J. L. Whiteside.
Umatilla, Oregon	29.75	756.6	30.13	765.3	31	— 0.6	94	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. Daly.
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. C. Imlay.
Verde, Fort, Arizona	.....	.....	.....	.....	38.4	3.6	47	nw.	.....	.....	1	0	1 s	.....	n.	0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.93	760.2	30.20	767.1	57.5	14.2	93	se.	8	3.6	.....	1 ck	0	sw.	.....	0	0	clear	James Kenealy.
Visalia, California	29.47	748.5	29.85	758.2	44.2	6.8	85	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.49	622.0	30.23	767.8	21.0	— 6.1	64	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	T. M. Ambler.
Washington, D. C.	30.21	767.3	30.33	770 4	42.0	5.6	74	ne.	3	1.3	.....	.....	10 s	.....	se.	0	0	cloudy	B. M. Purssell.
West Las Animas, Colorado	26.00	660.4	30.12	765.0	28	— 2.2	59	nw.	8	3.6	.....	0	1 s	.....	.....	0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.70	754.4	30.33	770.4	40.3	4.6	69	se.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.18	766.6	30.24	768.1	45	7.2	83	n.	5	2.2	.....	0	fg.	.....	.....	0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.63	651.0	30.16	766.1	30	— 1.1	80	ne.	10	4.5	.....	0	3 s	.....	sw.	0	0	clear	J. Grover.
Yankton, Dakota	28.68	728.5	30.06	763.5	32	0.0	68	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. H. Atfield.
Yuma, Arizona	29.66	753.4	29.81	757.2	57.0	13.9	61	ne.	4	1.8	.....	3 cs	0	sw.	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.04	559.8	.....	.....	50.0	10.0	72	s.	1	0.4	.....	2 c	1 s	nw.	nw.	0	0	foggy	Joaquin Gomez.
Havana, Cuba, W. I.	29.94	760.5	30.00	762.0	74.7	23.7	64	n.	10	4.5	.....	0	2 k	.....	n.	0.01	0.3	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.96	761.0	29.97	761.2	74	23.3	95	calm	0	0	.....	1 cs	3 s	.....	e.	0	0	.....	Robert Johnston.
Navassa, W. I.	29.84	757.9	29.92	760.0	75	23.9	88	ne.	5	2.2	.....	.....	10	.....	.....	2.50	63.5	cloudy	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	79	26.1	87	e.	.....	.....	3	5 ck	3 s	e.	calm	0.64	16.3	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.94	760.5	77	25.0	89	calm	.....	.....	0	4 ck	4 ks	calm	calm	0.64	16.3	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	77	25.0	96	ne.	.....	.....	1	0	5 ck	.....	ne.	0	0	fair	Earl Flint.
Santiago de Cuba, W. I.	29.96	761.0	29.98	761.5	75	23.9	85	calm	0	0	.....	3 ck	0	.....	.....	0.60	15.2	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.96	761.0	30.02	762.5	34	1.1	78	sw.	.....	.....	2	7 cs	0	.....	.....	0	0	fair	W. J. Fisher.
St. Thomas, W. I.	29.89	759.2	30.01	762.2	81	27.2	91	e.	.....	.....	.....	1 c	2 k	.....	e.	0	0	.....	Aug. Walloe.
York Factory, B. A.	29.67	753.6	29.73	755.1	31.5	— 0.3	100	ne.	16	7.2	.....	.....	10 n	.....	ne.	0.02	0.5	snowing	Forres ue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Colonia, Uruguay†	29.77	756.1	67.5	19.7	79	wsw.			4–5		1							blue sky.
H. M. S. Audacious, N. 23° 26′, E. 36° 43′	29.91	759.7	81	27.2	78	nw.			2		3	nw.						d. clouds.
H. M. S. Carysfort, N. 29° 56′ E 32° 33′	30.05	763.3	74.5	23.6	72	nnw.			2		5	nnw.						d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	30.08	764 0	36	2.2	90	calm			0		6	nne.						d. clouds.
H. M. S. Condor, Coast of Syria	29.95	760.7	62	16.7	78	nnw.			2		9	nw.				5	nnw.	showery.
H. M. S. Crocodile, N. 22° 17′, E. 37° 23′	29.93	760.2	80	26.7	70	ne.			1–2		1	e.				1	nne.	blue sky.
H. M. S. Curacoa, Kobe, Japan	30.17	766.3	61.5	16.4	83	calm			0		10							misty.
H. M. S. Diamond, S. 18° 10′, E. 178° 31′ *†	29.65	753.1	78	25.6	86	se.			1–5		5							squally.
H. M. Dock-Yard, Bermuda, W. I.	29.85	758.2	71.5	21.9	77	nw.			2–3		3	wnw.						d. clouds.
H. M. S. Eclipse, N. 16° 46′, E. 61° 51′	29.83	757.7				nne.			2		4	n.				2	n.	d. clouds.
H. M. S. Espiegle, S. 13° 10′, E. 163° 12′			82	27.8	87	ne.			1		0					1	ne.	blue sky.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.90	759.4	80.5	26.9	74	sw.			2		3							d. clouds.
H. M. S. Flamingo, N. 17° 30′, W. 71° 05′	29.95	760.7	84	28.9	100	e.			1–2		1	se.				sm'h		blue sky.
H. M. S. Flying Fish, N. 37° 27′ E. 126° 33′	30.33	770.4	37	2.8	71	n.			3		0					1	n.	misty.
H. M. S. Gannet, S. 18° 28′, W. 70° 21′	29.91	759.7	63.5	17.5	80	sw.			2		10							d. clouds.
H. M. S. Iris, N. 35° 50′, E. 14° 50′	30.19	766.8	70	21.1	75	calm			0		0							blue sky.
H. M. S. Iron Duke, N. 32° 44′ E. 129° 51′	30.14	765.5	62	16.7	94	calm			0		10	ne.						d. clouds
H. M. S. Kingfisher, N. 37° 48′ W. 122° 24′	29.88	758 9	54	12.2		nnw.			1							sm'h		foggy
H. M. S. Lark, S. 10° 14′, E. 161° 42′	29.86	758.4	76.3	24.6	88	calm			0		5							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.81	757.2	60	15.6		nw.			1		10							d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.23	767.8	62.3	16.8	81	e.			2		10							misty.
H. M. S. Northampton, Halifax, Nova Scotia	30.29	769.4	38.5	3.6	76	ne.			3		6	ne.						d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.99	761.7	63	17.2	83	calm			0									d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.88	758.9	80	26.7	93	calm			0		7							d. clouds.
H. M. S. Rocket, N. 5° 00′, W. 79° 40′	29.95	760.7	80	26.7	100	w.			2		2					3-4	sw.	d. clouds.
H. M. S. Sappho, S. 35° 10′, W. 146° 30′	30.08	764.0	58.2	14.6	69	ese.			2–3		10					3	s.	overcast
H. M. S. Superb N. 39° 37′, E. 19° 56′ *	30.26	768.6	70	21.1	61	se.			2		1	ssw.				1	e.	blue sky.
H. M. S. Sylvia, Port Tamar, Patagonia	29.71	754.6	43.7	6.5	94	nnw.			3		10							misty.
H. M. S. Thetis, S. 27° 25′, W. 71° 13′	29.94	760.5	60	15.6	82	calm			0		10					2	ssw.	overcast.
H. M. S. Tourmaline, Aden, Arabia	29.96	761.0				e.			3		1	e.						blue sky.
H. M. S. Woodlark, Bushire, Persia	29.98	761.5	78.5	25.8	69	wnw.			3		3	wsw.						d. clouds.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.54	775.7	31	— 0.6	?	calm			0		0							blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.04	763.0	83.3	28.5	81	ne.			1		1		ne.			1	se.	blue sky.
Tamega, Macao, China	29.99	761.8	77.0	25.0	72	calm			0		10							overcast
Swedish Naval.																		
Vanadis, N. 48° 59′, W. 7° 26′	29.74	755.5	53.2	11.8	86	wsw.			4		10							hy. squalls.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.00	762.0	58	14.4	87	ne.	4	1.8			0			0	0			clear.
Navy Yard, Portsmouth, N. H.	30.39	771.9	36	2.2	80	ne.	11	4.9			10		ne.	0	0			misty.
Naval Hospital, Yokohama, Japan*	29.83	757.7	57.5	14.2	90	calm			0		10			0	0			gloomy.
Adams, Sitka, Alaska			36	2.2	90	calm			0		8							fair.
Alaska, Mikina, Sandwich Islands	29.91	759 7	79	26.1	82	nnw.			1		5		n.	0	0	sm'h		fair.
Alliance, Hampton Roads, Va	30.23	767.8	51	10.6	100	nw.			2-3		10			0	0			cloudy.
Ashuelot, Kobe, Japan	30.08	764.0	65	18.3	83	calm			0		10		calm					cloudy.
Brooklyn, Keel Point, Patagonia	29.78	756.4	52	11.1	72	sw.	13	5.8			2		sw.-	0	0	sm'h		fair.
Colorado, New York, N. Y.	30.43	772.9	43	6.1	83	nne.	7	3.1			10		ene.	0	0			overcast.
Enterprise, Norfolk, Va	30.25	768.3	52	11.1	78	ne.			2		8		calm					cloudy.
Essex, Callao, Peru	29.95	760.7	64	17.8	89	calm			0		10		se.			sm'h	sse.	overcast
Franklin, Norfolk, Va	30.25	768.3	49	9.4	100	n.	8.4	3.8			10		n.	0	0			cloudy.
Galena, Montevideo, Uruguay	29.66	753.4	67	19.4	84	sse.			3		8		s.			mod.	s.	cloudy.
Hartford, Montevideo, Uruguay*	29.61	752.1	64	17.8	83	se.			2		8		s;e	light	light	mod.	s.	cloudy.
Independence, Mare Island, Cal.	29.89	759.2	49	9.4	93	se.			1									clear.
Iroquois, Callao, Peru	29.95	760.7	63	17.2	94	calm			0		10							overcast.
Jamestown, Newport, R. I.	30.32	770.1	43	6.1	100	n.			4		10		n.					cloudy.
Kearsarge, Hampton Roads, Va	30.23	767.8	51	10.6	86	nw.			3		10					sm'h		cloudy.
Lackawanna, Talcahuana, Chili*	29.92	760.0	55	12.8	80	s.			4		0							clear.
Lancaster, N. 32° 56′, E. 17° 52′*	30.13	765.3	72	22.2	75	n.			3		10		n.	0	0	sm'h	n	cloudy.
Michigan, Erie, Pa.	30.01	762.2	43	6.1	75	sse.			4		10							cloudy.
Minnesota, New York, N. Y.	30.38	771.6	48	8.9	71	ne.	5	2.2			10							misty.
Monocacy, Yokohama, Japan*	29.72	754.9	60	15.6	100	calm			0		10		calm					cloudy.
New Hampshire, Newport, R. I.	30.38	771.6	43	6.1	92	nne.			3		10		nne.			sm'h		cloudy.
Nipsic, Palermo, Sicily*	30.18	766.6	70	21.1	66	ne.			3		2					sm'h		clear.
Onward, Callao, Peru†	30.06	763.5	61	16.1	100	calm			0		10					long	w.	misty.
Palos, Nagasaki, Japan*	30.07	763.8	62	16.7	83	calm			0		10		calm					cloudy.
Pensacola, Callao, Peru*	29.89	759.2	62	16.7	100	calm	0	0			10			0	0			misty.
Powhatan, Boston, Mass	30.34	770.6	38	3.3	100	nw.			2		10							cloudy.
Quinnebaug, N. 37° 07′, E. 15° 25′*	30.18	766.6	69	20.6	79	s.			1		2		s.			sm'h		clear.
Ranger, N. 30° 11′, W. 117° 26′	29.92	760.0	61	16.1	?	s.			2		10			0	0	mod.		overcast
Richmond, Yokohama, Japan*	29.83	757.7	59	15.0	94	calm			0		10		nw.	0.2	5.			cloudy.
Saratoga, N. 25° 03′, W. 87° 08′	29.98	761.5	77	25.0	86	ne.			4-5		5		ne.			mod.	ne.	fair.
St. Louis, League Island, Pa.	30.56	776.2	41	5.0	82	n.			2		10							cloudy.
Swatara, S. 2° 30 W. 26° 29′*	29.81	757.2	80	26.7	82	se.			4		8		se.			long	se.	fair.
Tennessee, Hampton Roads, Va.	30.23	767.8	53	11.7	86	nnw.	7	3.1			10			0	0			cloudy.
Vandalia, Hampton Roads, Va*	30.23	767.8	50	10.0	93	nw.			3		10		n.					cloudy.
Wabash, Boston, Mass	30.37	771.4	40	4.4	73	nne.	4	1.8			10		ne.	0.02	0.5			cloudy
Wachusetts, Mare Island, Cal†	29.90	759.4	49	9.4	100	calm			0		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C.	30.35	770.9	49	9.4	?	ne.			1		10		ne.					cloudy.
Yantic, Norfolk, Va	30.27	768.8	51	10.6	86	n.			2-3		10							cloudy.
Merchant Marine.																		
S. S. Grecian, Buenos Ayres, Argentine Rep.*	29.61	752.1	74	23.3	76	ene.			3		4		w.	0	0	sm'h		clear.
S. S. Polynesian, Liverpool, Eng.	29.77	756.1	48	8.9		s.			2		10		ssw.	6 h'r	6 h'r			hazy.
S. S. Scandinavian, N. 43° 56′ W. 58° 04′	30.23	767.8	44	6.7		ne.			8		8		ne.	0	0	short	ne.	d. clouds.
S. S. Indiana, Philadelphia, Pa			50°	10.0	86	ne.			4		8		ne.			sm'h	ne.	cloudy.
S. S. Lord Clive, N. 48° 17′, W. 41° 42′ *†	30.10	764.5				n.			3		3		n.	0	0	str'g	nnw.	cloudy.
S. S. Lord Gough, N. 50° 25′ W. 31° 46′	29.83	757.7	42	5.6		wnw.			6		5		wnw.	hail	hail	r'gh	nw.	fair.
S. S. Ohio, N. 41° 13′, W. 66° 05′	30.19	766.8	47	8.3	100	ne.			6		6		ne.			r'gh	ene.	overcast.
S. S. Pennsylvania, Liverpool, England†	29.68	753.9	45	7.2		se.			4		10		sw.					overcast.
S. S. Stella, N. 50° 45′ W. 13° 36′	29.41	747.1	51.8	11		wsw.			6		6		sw.			7	sw.	squally.
S. S. Anchoria, N. 46° 04′, W. 48° 51′†	30.21	767.3				ne.			4		1?		ne.	0	0	sli't	ne.	cloudy.†
S. S. Bolivia, N. 55° 02′, W. 19° 27′			44	6.7	68	nw.			5		8		nw.	4 h'r	4 h'r	r'gh		stormy.
S. S. Dorian, N. 39° 56, W. 23° 30′*	30.03	762.7	65	18.3		wsw.			6		6		w.	0	0	r'gh	wnw.	fine.
S. S. Ethiopia, N. 55° 17′, W. 7° 42′			47.5	8.6	96	ssw.			7		10		sw.	6 h'r	6 h'r	hv'y	w.	overcast.
S. S. Galatia, Calcutta, India†	29.85	758.2	77.0	25.0		n.			1		0			0	0			fair.
S. S. Utopia, N. 17° 06′, E. 40° 43′			88	31.1	76	se.			3		1		se.	0	0	mod.	se.	clear.
S. S. Ailsa, Cartagena, U. S. Cf	29.99	761.7	83	28.3	91	calm			0		0			0	0			fair.
S. S. Alpin, Ponce, Porto Rico, W. I.	29.95	760.7				calm			0				e.	½h'r	½h'r	sm'h		
S. S. Alvo, N. 33° 15′, W. 74° 18′						ne.			4				nne.	0	0	6	nne.	clear.
S. S. Antillas, N. 34° 25′, W. 74° 20′			68	20.0		ne.			2		2		ne.	0	0	h'vy	ne.	clear.
S. S. Ambrose, Para, Brazil†	29.93	760.2				calm			0		0			0	0			fine.
British Merchant, S. 8° 08′, W. 111° 25′	29.93	760 2	72.4	22.4	85	ese.			4		3							d. clouds.
Dynomene, S. 3° 34′ E. 87° 56′	29.91	759.7	81.5	27.5	83	nne.			1		4							misty.
S. S. Gordon Castle, N. 15° 13′, E. 114° 00′						w.			8-9		10					high		raining.
May Hulse, N. 7° 05, W. 24° 25′	29.91	759 7	81	27.2	79	e.			2		10							overcast.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
Markland, N. 33° 58′ W. 34° 31′	30.16	766.1	75.0	23.9	70	s.			4		5					3	nne.	d. clouds.
S. S. Olympus. N. 30° 37′, E. 32° 18′	29.82	757.4	87.6	30.9	52	nw.			1		2							d. clouds.
Inchkeith, S. 7° 19′ W. 29° 32′	29.94	760.5	79.4	26.3	86	ese.			5		4							d. clouds.
S. S. Merton, N 43° 52′, W. 12° 28′	30.08	764.0	59.2	15.1	91	sw.			6		10							overcast.
S. S. Mexico, N. 35° 52′, W. 121° 42′ †	29.88	758.9	54.6	12.6	90	s.			2		10		s.			mod.	nw.	cloudy.
S. S. Bothnia, N. 50° 42′, W. 19° 49′	29.52	749.8	52	11.1	93	nnw.			6		7		nw.	rain	hail	r'gh	wnw.	squally.
S. S. Gallia, N. 48° 36′, W. 28° 36′	29.91	759.7	53	11.7	67	wnw.			7		5		wnw.	sh'rs	sh'rs	high	nw.	squally.
S. S. Marathon, N. 38° 13′, W. 9° 23′	30.28	769.1	67	19.4		sw.			1		3		sw.	o	o	sm'h	w.	clear.
S. S. Pavonia, N. 41° 53′, W. 59° 26′*	30.02	762.5	54	12.2	93	ne.			7		10		ne.	2 h'r	2 h'r	h'vy	ne.	overcast.
S. S. Scythia, N. 41° 16′ W. 63° 00′	30.11	764.8	54	12.2	97	n.			7		10		n.	8 h'r	8 h'r	h'vy	var.	cloudy.
S. S. Canada, N. 48° 15′ W. 35° 00′	30.13	765.4	46.4	8		nw.			5		3		nw.	o	o	sm'h	nw.	clear.
S. S. Labradore, N. 49° 24′, W. 16° 44′*†	29.72	755.0	57.2	1.4		wsw.			6		9		wsw.	rain	rain	h'vy	w.	
S. S. Ville de Marseilles, N. 50° 20′ W. 16° 16′*†	29.40	746.7	59	15.0		wnw.			6		7		w.	h'vy	h'vy	high	wsw.	cloudy.
S. S. Arizona, N. 51° 01′, W. 24° 12′	29.57	751.1	45	7.2		w.			7		5		wnw.	hail	hail	high	nw.	fair
S. S. Wisconsin, N. 41° 40′ W. 64° 46′	30.08	764.0	47	8.3		ene.			6		10		e.	o	o	r'gh	e.	cloudy.
S. S. Bohemia, N. 49° 25′, W. 10° 01′†	29.75	755.6				wsw.			7		8		wsw.	sqll's	sqll's	high	wsw.	stormy.
S. S. Cimbria, N. 43° 04′, W. 60° 58′	30.16	766.1	45.7	7.6		ne.			7		6		ene.	o	o	h'vy	e.	cloudy.
S. S. Gellert. N. 50° 50′, W. 14° 46′			53	11.7		wsw.			9		9		w.	4 h'r	4 h'r	h'vy	wsw.	stormy.
S. S. Silesia, N. 51° 22′, E. 1° 16′†	29.85	758.2	55	12.8		w.			5		5		w.	2 h'r	2 h'r.	4	w.	d. clouds.
S. S. Vandalia, N. 40° 40′, W. 64° 45′	30.26	768.6	55.2	12.9		ne.			7–8		10		ne.	o	o	h'vy	ene.	cloudy.
S. S. City of Berlin, N. 42° 30′, W. 62° —′	30.19	766.8				ne.			8		10					h'vy	ene.	cloudy.
S. S. Nessmore, Barrow, Eng			50	10.0	93	sw.			5		10							
S. S. Archimedes, N. 41° 18′, W. 66° 33′						ene.			6		10		e.	o	o	h'vy	ene.	overcast.
S. S. Hevelius, Buenos Ayres, Argentine Rep*†	29.85	758.2	70	21.1		s.			7		3		ene.	o	o			clear.
S. S. Ptolmey, S. 20° —′, W. 37° 30′	29.84	757.9	80.2	26.8	87	s.			1–4		8		nne.	7 h'r	7 h'r	4	nne.	d. clouds.
S. S. Bulgarian, N. 51° 20′, W. 10° 17′ *	29.51	749.5				w.			7		10		w.	9 h'r	9 h'r	high	wsw.	
S. S. City of San Antonio, Nassau, Bahamas, W. I†	30.10	764.5	78	25.6		n.			5		2		n.	o	o			fair
S. S. Colorado, N. 26° 15′, W. 79° 55′†	29.92	760.0	68	20.0		nnw.			6		8		n.	2 h'r	2 h'r	long	n.	cloudy.
S. S. Rio Grande, Galveston, Texas†	30.10	764.5	80	26.7		ese.			1		1		sw.	1 h'r	1 h'r			clear.
S. S. San Marcos, N. 31° 13′, W. 80° 45′	30.38	771.6				n.			1		0					mod.	n.	fine.
S. S. Archimede, Palermo, Sicily *†	30.25	768.3	74	23.3	72	ne			2		3		ne.	o	o			fair.
S. S. Hermod, N. 48° 22′, W. 25° 20′†	29.82	757.4	53.6	1.2		w.			8		4		w.	o	o	high	w.	stormy.
S. S. Glenapp, S. 1° 13′, W. 43° 00′ †	29.96	761.0	81	27.2		e.			2		4 ks		e.	o	o	sm'h		fine.
S. S. Chalmette, Algiers, La†	30.19	766.8	66	18.9		e.			1		0			o	o			hazy.
S. S. New York, N. 33° 15′, W. 77° 38′†	30.11	764.8	62	16.7		nne.			6		8		ne.	o	o	h'vy	ne.	cloudy.
S. S. Denmark, N 40° 50′, W. 65° 33′	30.16	766.1	47	8.3		ene.			6		10		ene.	o	o	long	ene.	dull.
S. S. Egypt, N. 52° 12′, W. 6° 12′						ssw.			6		10		ssw.	5 h'r	5 h'r	mod.	ssw.	squally.
S. S. England, N. 40° 47′, W. 63° 52′	30.11	764.8				nne.			7		10		ne.	o	o	h'vy	e.	cloudy.
S. S. Erin, New York, N. Y	30.33	770.4	52	11.1		nne.			6		8		ne.	o	o			cloudy.
S. S. Helvetia, Liverpool, Eng.	29.69	754.1	53	11.7		sw.			1		1?		wsw.	7 h'r	7 h'r			overcast
S. S. City of Alexandria, N. 31° 41′, W. 78° 26′†...	30.20	767.1	73	22.8		nne.			7		7		nw.	10 h'r	10 h'r	h'vy	ne.	rainy.
S. S. City of Merida, N. 19° 10′, W. 96° 08′*†	30.00	762.9	77.0	25		nw.			1		2		nw.	o	o	light	nw.	fine.
S. S. City of Washington, N. 21° 58′, W. 87° 40′ *†	30.26	768.6	80	26.7		ne.			4		2		ne.	o	o	light	ne.	fine.
S. S. City of Chester, N. 50° 23′, W. 31° 30′			44	6.7		wnw.			8									wnw. hail squalls.
S. S. Knickerbocker, N. 28° 53′, W. 78° 34′ *†	30.09	764.3	77	25.0		ne.			3								sw.	clear
S. S. Amerika, South Foreland, Eng*	29.82	757.4	52.5	11.4	83	nw.			5		10		nw.	o	o	mod.	nw.	cloudy,
S. S. Donau, Needles, Eng	29.89	759.2				ssw			2		10		ssw.	6 h'r	6 h'r	sm'h	ssw.	cloudy
S. S. Habsburg, N. 40° 42′, W. 70° 32′	30.26	768.6	48.2	9.0		nne.			4		10		nne.	o	o	mod.	nne.	overcast.
S. S. Koln, N. 44° 45′, W. 47° 24′	29.84	757.9	58.0	14.4	82	ene.			6–7		10		e.	3 h'r	3 h'r	r'gh	var.	
S. S. Kronprinz F. Wilhelm, N. 45° 19′, W. 8° 20′ *	30.04	763.0	58.1	14.5		wsw.			5		7		sw.	4 h'r	4 h'r	h'vy	wsw.	cloudy,
S. S. Oder, N. 50° 59′, E. 1° 13′	29.86	758.4	59.0	10.0		wnw.			4		9		wnw.	o	o	mod.	wnw.	overcast.
S. S. Ohio, N. 26° 01′, W. 78° 30′	30.03	762.7				n.			4		3		n.	3 h'r	3 h'r	sm'h	n.	fair.
S. S. Salier, N 41° 28′, W. 61° 37′	30.03	762.7	48.2	9.0		ne.			7		10		ne.	2 h'r	2 h'r	h'vy	ne.	cloudy.
S. S. Belgic, N. 26° 10′, E. 121° 44′†	30.19	766.8	70	21.1	80	ne.			5		10		ne.	o	o	mod.	n.	overcast.
S. S. Coptic, N. 44° 24′, W. 140° 24′	30.26	768.6	52.5	11.4	86	var.			2		7		ne.	3 h'r	3 h'r	sl't	nw.	d. clouds.
S. S. City of Augusta, Savannah, Ga †	30.17	766.3				n.			1		2			o	o			clear.
S. S. Mississippi, Seattle, Wash. Ter †	30.14	765.5	40	4.4	82	ne.			1		2		ne.					fair,
S. S. Oregon, N. 42° 27′, W. 124° 41′†	29.91	759.7	52.5	11.4	66	n.			2		0					light	nw.	clear.
S. S. Ancon, N. 34° 07′ W. 119° 13′†	29.85	758.2	56	13.3	87	se.			3		10		se.			sm'h		cloudy.
S. S. Australia, Sydney, N. S. W	30.17	766.3	66	18.9	74	nw.			2		1		nw.	o	o			clear.
S. S. City of New York, S. 15° 36′, W. 170° 25′†	29.89	759.2	81	27.2	78	ne.			1		0			o	o	mo t.	se.	clear.
S. S. City of Pekin, N. 33° 36′, E. 154° 21′†	30.26	768.6	71	21.7	80	sse.			5		2		sse.	o	o	light	s.	fair.
S. S. City of Sydney, S. 35° 40′ E. 175° 47′†	30.15	765.8	60	15.6	71	nw.			3		2		sw.	o	o	sm'h		fair.
S. S. Colima, N. 15° 38′ W. 96° 14′†	29.95	760.7	76	24.4	77	wnw.			4		10		calm	o	o	mod.	e.	gloomy.
S. S. Grenada, N. 27° 46′, W. 115° 30′ †	29.91	759.7	64	17.8	83	se.			1		10		se.	o	o	sm'h	nw.	cloudy.
S. S. San Jose, N. 8° 54′ W. 79° 30′ †	30.02	762.5				nw.			2		2		nw.	o	o			
S. S. Bermuda, St. Johns, Antigua W. I †	30.00	762.0	83	28.3		ese.			2		3		ene.	o	o	gentle	ese.	fine.
S. S. Muriel, Dominica, W. I	29.97	761.2	81	27.2		e.			3		10			o	o	sm'h		overcast.
S. S. Caracas, La Guayra, Venezuela †	29.93	760.2	82	27.8	83	calm			0		8			½ h'r	½ h'r	mod	nne.	fair.
S. S. Belgenland, New York, N. Y †	30.49	774.4	40	4.4	100	ne.			4		7		e.	2 h'r	2 h'r			drizzling.
S. S. Pennland, Antwerp, Belgium	29.84	757.9	51.5	10.8	86	wsw.			3		10		sw.	3 h'r	3 h'r			overcast.
S. S. Rhynland, N. 50° 10′, W. 14° 00′	29.56	750.8	50	10.0	79	sw.			7		4		sw.	4 h'r	4 h'r	high	sw.	squally.
S. S. Switzerland, N. 45° 24′, W. 52° 53′†	30.24	768.1				ne.			4		10		ne.	o	o	h'vy	ene.	cloudy,
S. S. Waesland, N. 44° 30′, W. 52° 31′	30.18	766.6	45	7.2	92	ne.			6		9		e.	o	o	high	ne.	cloudy.
S. S. Maas, New York. N. Y	30.19	766.9	48.9	9.4	89													drizzling.
S. S. P. Oaland, Flushing, Netherlands	29.82	757.4	53.4	11.9	87	wsw.			7		10		wsw.					
S. S. Schiedam, N. 50° 00′, W. 4° 15′	29.83	757.7	56.3	13.5	88	ssw.			7		10		sw.	5 h'r	5 h'r	h'vy	sw.	cloudy.
S. S. W. A. Scholten, N. 48° 36′, W. 35° 34′..	30.19	766.8	46.5	8.1	78	nw.			5		7		nw.	o	o	mod	wnw.	
S. S. State of Florida, N. 45° 55′, W. 47° 34′	30.05	763 3	42	5.6		no.			5		10		ne.	o	o	n.od.	ene.	cloudy.
S. S. State of Indiana, N. 43° 28′, W. 60° 06′†	30.34	770.6	43	6.1		ene.			6		4		ene.	o	o	r'gh	e.	fine.
S. S. State of Nevada, N. 54° 55′, W. 20° 05′†	29.15	740.4	43	6.1		wnw.			9		2		w.	hail	hail	high	wnw.	squally,
S. S. Thingvalla, Copenhagen, Denmark †..	29.53	750.0	40.4	8.0		ssw.			2		10		ssw.	10 h'r	10 h'r			covered.
S. S. Iowa, Liverpool, Eng *†	29.77	750.1																
S. S. Adriatic, N. 46° 26′, W. 38° 40′†	30.14	765.5	50	10.0		ne.			3		9		ne.			cross	wnw.	gloomy.
S. S. Celtic, N. 46° 53′, W. 47° 32′†	30.21	767.3	50	10.0	100	nne.			5		10		ne.	o	o	mod	nne.	cloudy.
S. S. Salerno, Odessa, Russia*	29.85	758.2	52	11.1		ne.			5					o	o			clear.
S. S. Catherine Whiting, Philadelphia, Pa †	30.30	769 6				ne.			1					o	o			
S. S. Norman, N. 42° 23′, W. 71° 05′	30.37	771.4				nne.			6				nne.	3 h'r	3 h'r			cloudy.
S. S. Saxon, Philadelphia, Pa*†	30.42	772.7	42	5.6		nne.			5		10		ne.					
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 33° 56′, W. 76° 50′			73	22.8		n.			4		2		n.	½ h'r	½ h'r	mod	ne.	
Bk. Adelaid, N. 6° 28′, W. 46° 26′ *†	29.92	760.0	81	27.2		ne.			3				ne.	2 h'r	2 h'r	mod	ene.	fair.
Bg. Alcira. N. 26° 05′, W. 67° 11′	29.97	761.2	78	25.6		s.w.			4		10		sw.	2 h'r	2 h'r	ong	n.	cloudy.
Sch. Anna A. Holton, N. 36° 31′, W. 73° 06′†	30.13	765.3	60	18.9		nne.			4		5?		ne	o	o	h'vy	ne.	clear?
S. Annie M. Law, Kobe, Japan *†	30.08	764.0	63	17.2		nne.			4		0			o	o			fine.
S. S. Antonio Lopez, Cadiz, Spain *	30.26	768.6	66	18.9	81	w.			1		0			o	o			hazy.
Bk. Aquidneck, N. 20° 32′ W. 39° 19′*†	30.02	762 5				s. to sw			1				sw.			light	ene	clear.
Bk. Aureola, N. 47° 05′, W. 28° 20′*†	30.26	768.6	50	13.3		nw.			3				nw.	2 h'r	2 h'r	h'vy	nw.	squally.
Bk. Alba, N. 49° 08′, W. 14° 45′ *†	29.71	754.5	50	10.0		w.			0		7							rahling.
Bk. Bayonnaise, N. 24° 15′, W. 51° 55′ *†	30.04	763.0				sw.			0									clear?
S. S. Burnswell. N. 54° 28′, W. 0° 30′ *†	29.91	759.7	52	11.1		sw.			2		5?		s.	20 mi	nutes	sm'h	se.	fine.
Bk. Champion. Maasstuis, Netherlands †	29.86	758.4	50.0	13.3		sw.			3		7		sw.	10 h'r	10 h'r	con.	con.	fine.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.22	767.6	56.5	13.6	78	w.			7		5		nw.	8 h'r	8 h'r			fair.
Schr. C. R. Flint, N. 18° 16′, W. 79° 21′†	30.00	762.0	79	26.1		ne.			2		0			o	o			clear.
						nne.			4		2		ssw.	o	o	sm'h		clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper 0–10	Lower 0–10	Upper. From.	Lower. From.	Inch.	Mill.	Character.	Direction from.	
MISCELLANEOUS.—Continued.																		
S. S. D. J. Foley, N. 32° 25′, W. 74° 35′			71	21.7		nne.			6		10		ene.	0	0	long	ne.	cloudy.
Bkt. David Preston, N. 30° 14′, W. 76° 31′*†	30.15	765.8	69	20.6		n.					5		e.	0	0	long	ene.	
Bk. Don Quixote, Pasoeroean Roads, Java*†	29.78	756.4	89	31.7		ese.			6		1		ese.			sm'h		clear.
Bk. E. D. Bigelow, N. 49° 00′, W. 49° 00′*†	29.55	750.3				ene.			9		10		e.	4 h'r	4 h'r	cross	e.	gloomy.
Schr. Edith R. Seward, Wilmington, N. C*†	30.30	769.6	52	11.1		n.			2		2		calm	0	0			clear.
Bk. Eliza Barss, New York, N. Y.	30.36	771.1	51	10.6	93	ene.			6		10		ene.	0	0			overcast.
Bk. E. L. Pettingill, N. 36° 35′, W. 69° 15′†	30.08	764.0				nne.			6		8		ne.	0	0	h'vy	ne.	cloudy.
S. Enoch Train, N. 20° 26′, W. 46° 00′*†	30.08	764.0				calm			0									
Bk. Essex, Muscat, Arabia*†	29.87	758.7	86	30.0		w.			2									
Schr. F. E McDonald, Washington, D. C†	30.29	769.4				e.			1									hazy.
S. S. Foscolia, Santos, Brazil*†	29.41	747.0				var			3				var.	c	o			gloomy.
Bk. Freya, N. 42° 19′, W. 13° 14′			62	16.7		wsw.			4		5		w.	2 h'r	2 h'r	mod.	wnw.	fair.
S. Glendon, S 51° —′, W. 82° —′†	29.61	752.1	50	10.0		w.			5		10		w.	2 h'r	2 h'r	hv'y	w.	cloudy.
S. Grecian, N. 0° 50′, W. 38° 46′†	29.92	760.0	83	28.3	79	se.			5		3		se.	0	0	sm'h	ne.	clear.
Bk. Gronsvaer, S. 44° 14′, E. 126° 49′†	29.31	744.5	57.8	14.3	98	n.			7		10		n.	12 h'r	12 h'r	8	n.	stormy.
Bk Hattie G. McFarland, N. 34° 34′, W. 73° 26′†	30.24	768.1	68	20.0		ne.			4		6		w.	3 h'r	3 h'r	long	ne.	clearing
Schr. Hattie Weston, Mayaro Bay, Trinidad W. I*†	29.99	761.7	82	27.8		ene.			2		10		ene.	3 h'r	3 h'r	mod.	e.	cloudy.
S. Hedwig, N. 21° 22′, W. 60° 20′	30.00	762.1	80.2	26.8	89	n.			1		4		n.	½h'r	½h'r	1	se.	
Schr. Isabel Alberto, Key West, Fla†	30.01	762.2				nne.			3		3		nne.	0	0			fair
S. Ivy, Queenstown, Ireland†	29.77	756.1	49	9.4		ssw.			7		9		ssw.	0	0			squally.
Schr. Jennie N. Hudidell, Philadelphia, Pa†	30.19	766.8				ne.			1		10		ne.	0	0			cloudy.
S. S. John Hopkins, Norfolk, Va.			50	10.0		nne.			3		5?			0	0			overcast.?
Schr. John L. Thomas, Caxones Cays, C. A*†	30.08	764.0				n.			3		2		ne.	0	0			fine.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.97	761.2				ne.			5		2		ne.	1½h'r	1½h'r			clear.
Bk. Joseph A. Ropes, N. 18° 42′, E. 58° 19′*†	30.00	762.0	79	26.1	78	nne.			3		2		nne.			sm'h		fair.
Light House Tender, Laurel, Key West, Florida†	30.03	762.7	74	23.3		n.			2–3		4		nne.	0	0			fair
Bk. Liberia, N. 22° 56′, W. 32° 15′.*.	30.07	763.8	80	26.7	70	var.			1–3		4		e.	0	0			fine.
Bg. Lilian, N. 7° 22′, W. 57° 50′†	29.95	760.7	82	27.8		ese.			4		3		ese.	1½h'r	1½h'r	sm'h	e.	clear.
Bg. L. & W. Armstrong, N. 33° 00′, W. 74° 06′*†	30.14	765.5				nne.			7		4		ne.	0	0	h'vy	ne.	fresh gale
S. S. Madrid, N. 44° 35′, W. 19° 51′*†	30.10	764.5	56	13.3	94	wnw.			6		9			sh'rs	sh'rs	r'gh	wnw.	raining.
S. S. Malabar, N. 5° 23′, E. 83° 23′*†	29.90	759.4				sw.			3		0			0	0	sm'h		clear.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	29.94	760.5	73	22.8		nne.			5		0			0	0			clear.
Bg. Mattie B. Russell, Matanzas, Cuba*†	30.06	763.5				n.			2		1		n.	light	light	light	nne.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	29.88	758.9				n.							n	12 h'r	12 h'r	sm'h	n.	cloudy.
Bg. Myrtle, N. 25° 56′, W. 65° 66′†	30.02	762.5				calm			0		8		s.	0	0	long	n.	fair.
Bk. Norena, N. 31° 30′ W 79° 10′*†	30.18	766.6				nne.			4		9		ne.	12 h'r	12 h'r	high	var.	squally.
S. Orealla, S. 2° 30′, E. 82° 16′*	29.94	760.5				wnw.			4		6		wnw.	2 h'r	2 h'r	mod.	se.	fine.
Bk. Orpheus, N. 38° 26′, W. 70° 36′	30.23	767.8	56	13.3		nnw.			5		6 k		nnw.	0	0	mod.	se.	fair.
S Paramita, San Francisco, Cal†	30.04	793.0	55	12.8		wnw.			1				nw.	0	0			fair.
S. S. Radnorshire, N. 37° 40′, E. 8° 48′*†	30.23	767.8				calm			0		0			0	0	sm'h		clear.
Bk. Rebus, N. 33° 08′, W. 75° 34′	29.95	760.7	70	21.1		ene.			5		2		ene.	1 h'r	1 h'r	long	ene.	fair.
S. St. Francis, S. 39° 00′, W. 80° 45′†	30.41	772.4	52	11.1		se.			2		8		se.			long	sw.	misty.
Schr. S. B. Hubbard, Jacksonville, Fla†	30.13	765.3	65	18.3		nne.					0			0	0			fine.
Bk. Southern Belle, N. 45° —′, W. 29° —′*†	30.02	762.5	52	11.1		n.			3		10		nnw.	½ h'r	½ h'r	long	wnw.	cloudy.
S. S. Strathleven, N. 50° 33′, W. 1° 18′	29.81	757.2	53.5	11.9	95	wsw.			5		8		wsw.			4	sw	rainy.
Bg. Teneriffe, N. 30° 50′ W. 78° 00′	30.03	762.7				ne.			6				ne.	rain	rain	high		rainy.
Bk. Truro, N. 48° 40′, W. 17° 00′*†	29.82	757.4				w.			7–8		2		w.	5 h'r	5 h'r	r'gh	wnw.	squally.
U. S. F. C. S. S. FishHawk, Washington, D. C†.	30.40	772.1	46	7.8	84	nne.			1		10		calm					cloudy.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.37	771.3	73.4	23		calm			0		4		wnw.	0	0			
Schr. Viola Reppard, Savannah, Ga†	30.14	765.5	66	18.9		nnw.			2		0			0	0			
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†.	30.00	762.0				sse.			1		8			0	0			threatening.
Bk. Wandering Jew, N. 1° 00′, W. 29° 35′†	29.83	757.7	80	26.7		se.			6		7		se.	1 h'r	1 h'r	mod.	sse.	squally.
Bk. Warden Law S. 53° 40′, W. 8° 51′	29.74	755.4				wsw.			5		7		wsw.	3 h'r	3 h'r	mod.	w.	clearing
Bgt. Willie, S. 37° 54′, W. 17° 30′*†	29.92	760.0	66	18.9		n.			5		3		n.	0	0	r'gh	ne.	hazy.

International Chart I. November 7, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 8, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.29	769.4	64.8	18.2	92	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.28	769.0	66.6	19.2	79	w.	.....	.....	2	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.23	767.8	70.9	21.6	77	wsw.	.....	.....	1	.....	2	.....	.....	0	0	fair	Fonfrède.
Tunis	.....	.....	30.24	768.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.31	769.8	72.0	22.2	45	sw.	.....	.....	2	.....	2	.....	.....	0	0	fair	Pérès.
Tebessa	.....	.....	30.30	769 5	63.0	17.2	52	n.	.....	.....	2	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	65.5	18.6	51	wnw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair	Louchamp.
Laghouat	.....	.....	30.39	771.9	67.6	19.8	34	sw.	.....	.....	1	.....	1	.....	.....	0	0	very fair	Abraham.
Biskra	.....	.....	30.34	770.5	76.6	24.8	29	n.	.....	.....	2	.....	6	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	30.08	764.0	30.17	766.3	67.0	19.4	64	nne.	6	2.7	.....	.....	0	.....	.....	0	0	very fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.37	746.0	29.91	759.7	62.2	16.8	47	sw.	.....	.....	4	.....	4	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.02	737.1	29.78	756.3	58.6	14.8	66	sw.	8.7	3.9	.....	.....	10	.....	.....	0.016	0.4	.....	Dr. Wierzbiski.
Eperies	29.02	737.1	29.90	759.5	49.6	9.8	87	s.	.....	.....	4	.....	10 s	n.	.....	0	0	.....	Julius Mikolik.
Gratz	28.61	726 7	29.86	758.4	52.2	11.2	81	e.	.....	.....	2	.....	5	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.63	727.2	30.06	763.4	57.2	14.0	53	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling
Kremsmunster, Obs'y	28.47	723.2	29.82	757.4	47.8	8.8	87	calm	.....	.....	0	.....	8	.....	.....	0	0	.....	The Staff.
Lemberg	28.88	733.6	29.86	758.4	56.1	13.4	63	sw.	.....	.....	3	.....	5	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.96	760.9	30.07	763.7	61.5	16.4	75	nw.	.....	.....	2	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.50	749.2	29.96	761.0	60.1	15.6	80	se.	.....	.....	2	.....	8	.....	.....	0.012	0.3	.....	Joseph Midlinszay, S. J.
Szegedin	29.69	754 0	29.96	761.0	60.8	16.0	83	calm	.....	.....	0	.....	8	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.95	760.7	30.05	763.3	57.6	14.2	70	calm	.....	.....	0	.....	10; fg.	.....	.....	0	0	.....	Royal Academy.
Vienna	29.16	740.6	29.89	759.1	43.9	6.6	98	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	I. R. Central Met. Obs'y
British.																			
Aberdeen	28.98	736.1	29.07	738.4	39.7	4.3	77	ssw.	14	6.3	.....	.....	6	.....	.....	0.735	18.6	d. clouds	W. Boswell
Armagh, Observatory	28.55	725.2	28.79	731.3	41.5	5.3	90	s.	25	11.2	.....	.....	10	.....	.....	.....	.....	raining	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.22	742.2	42.0	5.6	89	s.	24	10.7	.....	.....	10	.....	.....	.....	.....	raining	John Hartnup.
Bolton, Sharples	28.70	729.0	29.22	742.2	41.3	5.2	87	s.	21	9.4	.....	.....	10	.....	.....	.....	.....	raining	Thomas Mackereth.
Bradford, Yorkshire	28.81	731.8	29.21	741.9	43.9	6.6	72	sw.	.....	.....	3	.....	8	.....	.....	0.61	15.5	d. clouds	McLandsborough & Preston
Bridgetown, Barbadoes	29.88	758.9	29.91	759.7	84.0	28.9	67	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	29.25	742.9	29.37	746.0	49.0	9.4	71	sw.	.....	.....	3–0	.....	2	.....	.....	.....	.....	blue sky	John McLaren.
Chatham, School M. E.	29.36	745.7	29.49	749.0	49.7	9.8	68	sw.	.....	.....	1	.....	3	.....	.....	blank	blank	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.29	744.0	29.52	749.8	50.0	10.0	94	wsw.	.....	.....	6	.....	4	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.78	705.6	30.00	762.0	68.0	20.0	60	n.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29 61	752.1	29.84	757.9	88.0	31.1	59	nw.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.22	767.6	30.28	769.1	69.2	20.7	92	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	28 80	731.5	29.00	736.6	39.8	4.4	87	sse.	.....	.....	3	.....	10 n	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.31	744.5	29.48	748.8	48.2	9.0	97	wsw.	.....	.....	4	.....	0	.....	.....	.....	.....	blue sky	The Staff.
Guernsey	29.30	744.2	29.60	751.8	49.0	9.4	71	wsw.	.....	.....	4	.....	9	.....	.....	.....	.....	overcast	A. Collenette, F. M. S.
Kew, Observatory	29.45	748.0	29.49	749.0	47.2	8.4	95	sw.	21	9.4	.....	.....	1	.....	.....	.....	.....	blue sky	The Staff.
Leicester, Museum	29.10	739.1	29.30	745.7	45.5	7.5	88	sw.	.....	.....	1	.....	6	.....	.....	.....	.....	d. clouds	J. C. Smith.
Malta, Mediterranean	30.04	763.0	30.12	765.0	68.8	20.4	92	nw.	.....	.....	2	.....	6	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.04	763.0	30.08	764.0	77.0	25.0	55	ne.	.....	.....	4	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28 84	732.5	29.36	745 7	44.3	6.8	74	s.	.....	.....	5	.....	10	.....	.....	.....	.....	overcast	Warren Middleton.
Oxford, Radcliffe Obs'y	29.22	742.2	29.45	748.0	46.8	8.2	70	sw.	.....	.....	5	.....	0	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.44	747.8	29.52	749.8	50.3	10.2	97	wsw.	.....	.....	3	.....	5	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	28.88	733.5	28.98	736.1	42.2	5.7	83	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Rev. G. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.02	762.5	30.08	764.0	63.6	17.6	53	sw.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky	W. H. Lyne.
Sheffield	29.01	736.8	29.29	744.0	45.0	7.2	74	sw.	.....	.....	5	.....	10	.....	.....	0.14	3.6	overcast	W. F. Cooper.
Silloth Rectory	29.02	737.1	29.05	737.9	44.6	6.7	70	wsw.	.....	.....	5	.....	10	.....	.....	0.450	11.4	squally	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.22	742.2	41.8	5.4	77	ssw.	32	14.3	.....	.....	10	.....	.....	.....	.....	raining	I. New.
Strathfield Turgiss	29.29	744.0	29.51	749.5	47.3	8.5	73	sw.	.....	.....	3	.....	0	.....	.....	.....	.....	squally	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.48	748.8	29.54	750 3	53	11.7	72	w.	.....	.....	7	.....	6	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	29.20	741.7	29.23	742.4	49.2	9.6	66	wsw.	36	16.1	.....	.....	5	.....	.....	.....	.....	squally	The Met'g'l Office
Canadian.																			
Bathurst, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.33	770.4	30.37	771.4	33	0.6	89	calm	0	0	.....	5 c	5 s	calm	calm	0	0	hazy	H. J. Cundall, C. E.
Chatham, N. B*	30.33	770.4	30.40	772.1	30	— 1.1	90	calm	0	0	.....	.....	10 s	.....	e.	0	0	cloudy	G. A. Blair.
Father Point, Quebec*	30.30	769.6	30.32	770.1	28	— 2.2	92	sw.	12	5.4	.....	5 c	5 s	w.	w.	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.38	746.2	30.25	768.3	27	— 2.8	86	nw.	11	4.9	.....	0	5 s	.....	nw.	0	0	fair	James Stewart.
Halifax, N. S*	30.22	767.6	30.36	771.1	30	2.2	92	nw.	3	1.3	.....	.....	10 k	.....	.....	0	0	cloudy	A. Allison.
Kingston, Ontario*	29.89	759.2	30.23	767.8	43	6.1	89	sw.	4	1.8	.....	.....	10 s	.....	sw.	0	0	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	30.05	763.3	30.26	768.6	28	— 2.2	96	sw.	2	0.9	.....	5 cs	2 s	fe.	.....	0	0	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.40	748.3	30.17	766.3	42	5.6	100	se.	5	2.2	.....	.....	10 n	.....	se.	0.03	0.8	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.52	749.8	30.23	767 8	44	6.7	100	calm	0	0	.....	10 c	0	w.	.....	0.01	0.3	fair	H. Morgan.
Port Stanley, Ontario	29.58	751.3	30.25	768.3	37	2.8	100	w.	4	1.8	.....	.....	8 k	.....	w.	0.05	1.3	cloudy	M. Payne.
Quebec, Quebec*	29.98	761.5	30.32	770.1	28	— 2.2	88	e.	.....	.....	1	5 c	5 k	e.	e.	0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.72	754.9	30.19	766.8	36	2.2	79	e.	6	2.7	.....	.....	10 s	.....	w.	Inap.	Inap.	light rain	W. H. McIntyre.
Saugeen, Ontario*	29.44	747.8	30.17	766.3	46	7.8	89	sw.	3	1.3	.....	.....	10 s	.....	.....	0.06	1.5	cloudy	
St. Andrews, N. B	30.26	768.6	30.31	769.9	37	2.8	80	n.	1	0.4	.....	.....	10 n	.....	.....	0	0	cloudy	
Sydney, C. B*	30.32	770.1	30.39	771.9	27	— 2.8	100	calm	0	0	.....	2 c	2 k	ne.	.....	0	0	clear	T. C. Hill, C. E
Toronto, Ontario*	29.82	757.4	30.21	767 3	45	7.2	89	s.	2	0.9	.....	.....	10 n	.....	w.	0.02	0.5	cloudy	Magnetic Observatory.
Yarmouth, N. S*	30.21	767.3	30.28	769.1	40	4.4	82	e.	4	1.8	.....	10 k	0	e.	.....	0	0	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.77	730.7	30.19	766.8	44.0	6.7	100	w.	.....	.....	2	.....	10	.....	w.	0.035	0.9	dense fog	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	35	1.7	90	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	John Denny.
Cape Colony.																			
Cape St. Francis Lt. House	30.20	767.1	30.23	767.8	67.0	19.4	78	ssw.	12.0	5.4	.....	.....	2 k	.....	.....	0	0	clear	John Duthie.
Cape Town, O. G. H. Obs'y	30.17	766.3	30.21	767.3	71.0	21.7	53	s.	35	15.6	.....	1	2	.....	.....	0	0	.....	The Staff, 1or D.GH.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.39	771.8	37.6	3.1	44	se.	2.9	1.3	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.38	771.7	30.41	772.4	49.1	9.5	80	nne.	4.9	2.2	.....	10 ck	0	W.	.....	0	0	covered	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.30	744.2	29.35	745.4	45.7	7.6	93	ssw.	.....	.....	4	.....	10	.....	.....	.....	.....	rain & fog	Oversergent Fischer.
Fanöe	29.30	744.1	29.32	744.7	46.4	8.0	82	W.	.....	.....	4	.....	4	.....	.....	.....	.....	.....	Overlœrer Lauridsen.
Godthaab, Greenland	29.89	759.0	29.93	760.1	20.1	— 6.6	79	n.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.80	756.8	29.82	757.3	24.4	— 4.2	.....	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.41	747.0	29.45	748.1	28.0	— 2.2	89	ne.	.....	.....	7	.....	8	.....	.....	.....	.....	.....	A. O. Thoriacius.
Thorshavn	28.84	732.4	28.87	733.3	46.0	7.8	88	ese.	18	8	.....	.....	10	.....	.....	.....	.....	raining	Overlœrer Bergh.
Vestervig	29.17	740.9	29.28	743.8	41.9	5.5	88	W.	.....	.....	4	.....	6	.....	.....	...	.....	.....	Lœrer Oesterboi.
French.																			
Agen, Normal School	29.39	746.5	30.04	762.9	56.5	13.6	71	ssw.	.....	.....	1	.....	.....	.....	.....	0	0	...	M. Labroue, Director.
Alençon, Normal School	29.21	742.0	29.76	756.0	50.0	10	90	sw.	.....	.....	1	.....	kn	.....	ne.	0.394	10.0	.....	M. Nicot, Director.
Arras, Engineer School	29.15	740.5	29.41	747.1	45.0	7.2	83	W.	.....	.....	4	.....	10	.....	.....	0.283	7.2	raining	M. Fénéon, Command't.
Avignon, Normal School	29.98	761.6	30.06	763.6	55.8	13.2	86	nw.	.....	.....	1	.....	10	.....	s.	0	0	covered	M. Giraud, Director.
Bar-sur-Seine	29.24	742.6	29.80	750.9	49.3	9.6	86	sw.	.....	.....	2	.....	10	.....	.....	0.165	4.2	raining	M. Saillard, Director.
Beauvais, Normal School	29.41	747.0	29.67	753 7	51.6	10.9	70	wsw.	.....	.....	2	.....	8	.....	W.	0.260	6.6	very cloudy	M. Frère Eugène Marie.
Besançon, Normal School	28.92	734.6	29.81	757.2	52.2	11.2	93	s.	.....	.....	4	.....	10 n	.....	sw.	0.24	6.	raining	M. Gobin, Director.
Bordeaux, Observatory	29.65	753.0	29.91	759.7	54.7	12.6	71	nw.	.....	.....	3	.....	10	.....	.....	0.004	0.1	covered	M. Rayet, Director.
Bourges, Normal School	29.24	742.7	29.80	756.8	50.0	10	92	wsw.	.....	.....	2	.....	10 n	.....	.....	0.031	0.8	raining	M. Malet, Director.
Brest, Naval Observatory	29.49	749.1	29.73	755.2	53.6	12.0	76	sw.	.....	.....	2	.....	9	.....	sw.	0.189	4.8	.....	M. de Kermaree, Dir.
Caen, Normal School	29.52	749.9	29.66	751.8	50.7	10.4	96	sw.	.....	.....	1	.....	10	.....	.....	0.441	11.2	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.36	745.8	29.68	753.8	49.3	9.6	90	wsw.	.....	.....	4	.....	10	.....	.....	0.472	12.0	covered	M. Jadot, Director.
Charleville, Normal School	29.14	740.1	29.66	753.3	49.5	9.7	76	nw.	.....	.....	1	.....	10	.....	.....	0.59	15.	covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.50	723.9	29.84	757.8	59.0	15.0	52	ssw.	.....	.....	3	.....	8	.....	sw.	0	0	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.02	737.0	29.87	758.6	52.3	11.3	85	W.	.....	.....	1	.....	9	.....	W.	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.88	733.6	29.74	755.4	47.1	8.4	92	wsw.	.....	.....	3	.....	10	wsw.	wsw.	0.67	17.	covered	Dr. Coulet, Director.
Gap, Normal School	27.50	698.6	30.03	762.7	59.0	15	71	.....	.....	.....	.....	.....	7	.....	sw.	0.177	4.5	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.94	735.0	30.06	763.6	56.7	13.7	80	se.	.....	.....	1	.....	10	.....	e.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.20	741.6	29.98	761.4	48.6	9.2	95	e.	.....	.....	1	cs	0	ne.	.....	0	0	.....	M. Ablard, Director.
Guéret	28.30	718.9	29.89	759.2	48.6	9.2	89	sw.	.....	.....	3	.....	5	.....	ene.	0.028	0.7	cloudy	M. Delorme, Dir.
Lamballe, Normal School	29.42	747.2	29.69	754.2	51.1	10.6	70	sw.	.....	.....	3	0	5 k	.....	sw.	0.161	4.1	cloudy	M. Ollivrault, Director.
Lescar, Normal School	29.36	745.8	29.91	759.6	70.5	21.4	45	W.	.....	.....	3	.....	10	.....	.....	0	0	covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.66	753.3	29.76	755.9	54.0	12.2	63	W.	.....	.....	2	.....	10	.....	.....	0.413	10.5	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.84	732.4	29.94	760.4	53.8	12.1	77	s.	.....	.....	6	.....	10	.....	W.	0.028	0.7	covered	M. André, Director.
Mans, Normal School	29.45	748.1	29.76	755.8	50.2	10.1	83	W.	.....	.....	3	.....	.....	.....	W.	0.386	9.8	.....	M. Piboen, Director.
Marseille, Observatory	29.77	756.1	30.04	762.9	61.3	16.3	69	ese.	.....	.....	1.2	.....	10	.....	ese.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.86	631.4	29.70	754.4	47.3	8.5	62	sw.	9.4	4.2	.....	.....	6	.....	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.89	759.2	30.02	762.4	57.2	14	93	s.	.....	.....	2	.....	5	.....	wnw.	0	0	cloudy	M. Gaizin, Director.
Nancy, Normal School	28.87	733.2	29.65	753.1	47.8	8.8	86	ssw.	.....	.....	1	.....	n	.....	W.	0.091	2.3	.....	M. Hasse, Director
Nantes, Observatory	29.65	753.0	29.81	757.2	53.6	12.0	84	wsw.	.....	.....	2	.....	10 n	.....	wsw.	0.248	6.3	.....	M. Larocque, Director.
Perpignan, Observatory	29.93	760.1	30.04	763.0	58.6	14.8	88	ne.	3.8	1.7	.....	.....	10	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.26	539.8	.....	.....	33.8	1.0	.....	W.	.....	.....	2	.....	5	.....	W.	0	0	cloudy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.96	735.6	30.02	762.4	51.4	10.8	90	s.	.....	.....	1	.....	10	s.	s.	0	0	covered	M. Taillieu.
Puy de Dôme Obs'y, Summit	24 97	634.1	.....	.....	38.5	3.6	98	wsw.	.....	.....	8	.....	10	.....	.....	0.035	0.9	covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.87	758.7	29.90	759.5	53.2	11.8	95	ssw.	.....	.....	1	.....	10	.....	.....	6.40?	161.?	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.58	751.3	29.79	759.7	55.4	13	84	W.	.....	.....	1	.....	10	.....	W	0	0	covered	M. Brotier, Director.
Rodez, Normal School	27.84	707.2	29.98	761.5	56.1	13.4	62	ne.	.....	.....	2	.....	0	.....	.....	0	0	covered	M. Seger, Director.
Rouen, Normal School	29.63	752.6	29.68	753.8	49.3	9.6	76	wsw.	.....	.....	3	.....	8	W.	.....	0.390	9.9	very cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	50.0	10	74	sw	.....	.....	2	.....	10	.....	sw.	0.689	17.5	raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.55	750.5	29.71	754.7	48.9	9.4	89	wsw.	.....	.....	1	.....	10	.....	wsw.	0.220	5.6	.....	M. Renou, Director.
Toulouse, Observatory	29.35	745.4	30.07	763.8	59.0	15.0	78	sse.	.....	.....	3	.....	8	nw.	.....	0	0	very cloudy	M. Baillaud, Director.
Tours	29.60	751.7	29.77	750.2	52.5	11.4	83	sw.	.....	.....	3	.....	10	.....	sw.	0.406	10.3	raining	M. de Tastes.
Versailles, Observatory	29.21	742.0	29.71	754.5	48.9	9.4	81	W.	.....	.....	2	.....	.....	.....	.....	0.252	6.4	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.29	718.6	29.74	755.5	48.2	9.0	88	.....	.....	.....	.....	.....	10	.....	.....	0.008	0.2	.....	Prof. Jnedt.
Bamberg	28.87	733.2	29.70	754.4	48.4	9.1	84	sw.	.....	.....	3	.....	10 n	.....	sw.	0.492	12.5	raining	Prof. Dr. Hoh.
Berlin	29.32	744.8	29.50	749 3	52.0	11.1	85	sw.	.....	.....	2	.....	10	.....	.....	0.031	0.8	raining	Prof. Dr. Arndt.
Breslau	29.20	741.7	29.72	755.0	53.6	12.0	72	ssw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.30	744.3	29.74	755.4	50.0	10.0	98	sw.	.....	.....	3	.....	10	sw.	.....	0.189	4.8	raining	Albert Senz.
Cassel	28.85	732.7	29.56	750.8	45.5	7.5	89	sw.	.....	.....	6	.....	5	sw.	.....	0.063	1.6	...	Dr. H. Möhl.
Frankfort-on-the-Main	29.31	744.5	29.68	753.9	48.9	9.4	86	sw.	.....	.....	1	.....	10	.....	.....	0.331	8.4	.....	Physical Society.
Friedrichshafen	28.41	721.7	29.85	758.1	52.5	11.4	79	sw.	.....	.....	8	.....	10	sw.	.....	0.091	2.3	.....	Wilhelm, Chief Tel.
Hamburg	29.38	746.3	29.47	748.5	47.3	8.5	87	wsw.	.....	.....	5	.....	6	.....	.....	0.031	0.8	.....	E. Preller.
Kiel	29.41	747.0	29.43	747.4	47.7	8.7	75	W.	.....	.....	2	.....	3	.....	.....	0.189	4.8	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.17	740.9	29.56	750.9	51.8	11.0	69	sw.	.....	.....	2	.....	10	wsw.	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.35	745.6	29.54	750.4	46.0	7.8	88	W.	.....	.....	3	.....	10 n	.....	.....	0.114	2.9	raining	Weather Observatory.
Memel	29.61	752.2	29.66	753.4	41.7	5.4	94	ese.	.....	.....	2	.....	10 n	.....	.....	.....	.....	light rain	Issermann.
Munich	28.00	711.3	29.85	758.3	50.9	10.5	56	sw.	.....	.....	1	.....	9	W.	.....	0	0	.....	Central Station.
Neufahrwasser	29.58	751.3	29.60	751.7	47.3	8.5	81	sw.	.....	.....	1	.....	10	.....	.....	0.185	4.7	.....	A. Lothes.
Neustadt, Palatinate	29.17	740.9	29.69	754.1	48 6	9.2	87	sw.	.....	.....	3	.....	10	ssw.	.....	0.445	11.3	raining	Dicknether.
Stuttgart	28.78	731.0	29.66	753.4	55.8	13.2	66	W.	.....	.....	3	.....	10	.....	.....	0.783	19.9	.....	Prof. Dr. Schoder.
Wustrow	29.45	747.9	29.47	748.5	47.5	8.6	91	ssw.	.....	.....	4	.....	10	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.72	754.8	30.10	764.4	69.6	20.9	.....	sw.	.....	.....	1.0	.....	2	.....	.....	0	0	.....	Schmidt & Wourltsch.
Indian.																			
Kurrachee	29.92	759.9	29.97	761 2	80.0	26.7	73	wsw.	14.0	6.3	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.44	747.7	29.91	759.6	87.3	30.7	24	wsw.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.84	757.9	29.88	758.9	82.3	27.9	65	nnw.	13.0	5.8	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.01	711.5	29.84	757.9	87.8	31.0	25	nw.	10.0	4.5	.....	.....	1	.....	e.	0	0	d. clouds	
Trichinopoly	29.61	752.0	29.89	759 2	80.9	27.2	79	ne.	1.0	0.4	.....	.....	8	.....	.....	0	0	d. clouds	
Bellary	28.35	720.2	29.81	757.1	85.2	29.6	51	se.	2.0	0.9	.....	.....	5	.....	.....	0	0	d. clouds	
Belgaum	27.32	693.8	29.83	757.7	80.1	26.7	57	ne.	2.0	0.9	.....	.....	4	sw.	e.	0	0	d. clouds	
Lahore	29.14	740.1	29.90	759 5	68.7	20.4	52	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	28.98	736.1	29.90	759.4	70.8	21.6	42	W.	.....	.....	.....	.....	0	.....	.....	0	0	.....	
Agra	29.34	745.2	29.91	759.6	77.2	25.1	28	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28 86	733.1	29.91	759.8	76.1	24.5	34	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.56	725.5	29.93	760.3	75.8	24.3	36	e.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.50	749.4	29.88	759 0	77.2	25.1	41	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.36	745.8	29.88	759.0	69.0	20.6	60	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.71	754.6	29.90	759 4	74.5	23.6	43	W.	3.5	1.6	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.86	707.6	29.91	759.6	68.6	20.3	62	nnw.	4.9	2.2	.....	.....	2	.....	.....	0	0	d. clouds	
Cuttack	29.77	756.2	29.86	758.3	79.1	26.2	76	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.84	757.8	29.86	758 4	78.8	26.0	68	n.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.72	754.8	29.84	757.8	74.2	23.4	76	calm	0.9	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.77	756.1	29.86	758.4	76.7	24.8	84	W.	1.5	0.7	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.48	748.8	29.82	757.5	72.5	22.5	91	s.	2.0	0.9	.....	.....	10	W.	W.	0	0	d. clouds	
Zanzibar, Africa	29.90	759.4	29.92	760.0	77.0	25.0	87	sse.	3.0	1.3	.....	.....	9	.....	ese.	0.35	8.9	threatening	
Jeypore	28.47	723.0	29.92	759.9	77.7	25.4	31	wnw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.65	753.2	30.07	763:7	52.9	11.6	84	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.52	749.8	30.04	763.1	52.7	11.5	91	e.	3.1	1.4	.....	.....	10	.....	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.92	760.0	30.03	762.8	54.0	12.2	88	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.11	739.3	30.02	762.6	49.6	9.8	95	e.	1.8	0.8	.....	.....	10	.....	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.85	758.3	30.05	763.2	60.8	16.0	71	s.	8.1	3.6			10	s.		0.012	0.3		Prof. G. M. Garibaldi.
Mondovi	28.09	713.5	30.03	762.7	51.8	11.0	73	nw.			2		8			0	0		Prof. D. C. Bruno
Pesaro	30.07	763.8	30.12	765.0	64.0	17.8	58	sw.					9			0	0		Prof. Luigi Guidi.
Florence	29.82	757.4	30.08	763.9	61.7	16.5	76	sw.			2		10			0.228	5.8		Prof. Costantino Pitter.
Leghorn	29.94	760.4	30.02	762.6	63.9	17.7	79	s.	0.7	0.3			9			0.189	4.8		Prof. P. Monte.
Rome	29.97	761.1	30.14	765.5	63.0	17.2	62	nnw.	3.1	1.4			5			0	0		Prof. P. Tachini.
Lecce	29.88	758.9	30.13	765.3	60.9	19.4	58	se.	2.5	1.1			8			0	0		Prof. C. de Giorgi
Cosenza	29.27	743.4	30.16	766.1	62.2	16.8	70	se.	2.5	1.1			7	e.		0	0		Prof. D. Conti.
Cagliari	29.94	760.5	30.13	765.4	66.6	19.2	64	se.			2		7			0	0		Prof. A. Pacinotti.
Palermo	29.94	760.5	30.19	766.9	64.4	18.0	72	nw.	1.8	0.8			0	nw.		0	0		Prof. G. Cacciatore.
Syracuse	30.10	764.6	30.15	765.7	65.3	18.5	69	nne.	9.4	4.2			6	wnw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.61	752.1	30.13	765.3	63.5	17.5	63	sw.	0	0			2	nw.		0	0		Prof. F. Brioschi.
Stelvio	22.05	560.2			28.4	— 2.0	75	w.			8		10			0	0	covered	Prof. P. F. Denza.
Valdobbia	22.11	561.7			29.7	— 1.3	88	ne.			2		10			0	0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.98	761.4	30.01	762.2	35.8	2.1	92	calm			0	0	6ck;s		n.	0.315	8.0	fair	Hattori.
Awomori	29.97	761.2	30.00	762.0	32.9	0.5	92	sw.	2.8	1.2			10 n			0.711	18.1	snowing	K. Ogawa.
Hakodate	29.96	761.0	29.97	761.3	31.0	— 0.6	81	nnw.	12.6	5.6			10			0.220	5.6	snowing	
Hiroshima					53.6	12.0	83	n.	2.0	0.9		0	0			0	0	clear	Y. Miwa.
Kanazawa	30.05	763.3	30.16	766.0	49.6	9.8	69	sw.	11.6	5.2			10			0.220	5.6	raining	S. Endo.
Kioto	29.99	761.7	30.17	766.3	41.5	5.3	95	nw.	0.2	0.1		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.04	762.9	30.25	768.2	49.3	9.6	67	ne.	4.2	1.9		0	0			0	0	clear	S. Takehayashi.
Nemuro	29.85	758.2	29.92	759.9	35.5	1.9	60	w.	12.0	5.4		0	2			0	0	clear	
Nigata	29.99	761.7	30.02	762.5	51.8	11.0	65	w.	30.4	13.6			10 n		w.	0.435	11.0	light rain	M. Morita.
Nobiru	29.92	760.0	29.94	760.4	46.9	8.3	78	nnw.	6.9	3.0		0	0			0.020	0 5	clear	H. Midzushima.
Osaka	30.14	765.5	30.15	765.9	48.5	9.2	77	n.	8.8	3.9		0	0			0	0	clear	
Sapporo					28.5	— 1.9	81	s.	4.8	2.1			10			inap.	inap.	covered	
Tokei Obs'y, Yeddo	29.95	760.7	30.03	762.7	51.6	10.9	89	ene.	3.5	1.5		0	4 8		n.	0.020	0.5	fair	The Staff.
Wakayama	30.11	764.8	30.17	766.3	50.7	10.4	81	nne.	2.1	0.9		0	0			0	0	clear	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.90	759.4	30.09	764.3	77.4	25.2	65	e.	16.5	7.4		2ck;cs	6 k;ks	ne.	ese.	0.11	2.8	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.76	603.4	29.98	761.4	51.3	10.7	82	w.	inap.	inap.		0	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.42	620.3	30.30	769.6	44.6	7.0	92	ne.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.79	756.7	30.05	763.3	73.0	22.8	90	n.	1.6	0.8		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.19	588.9	30.34	770.6	46.4	8.0	80	calm	0	0		2 c	2 ks			0	0	fine	The Staff.
Morelia	24.20	616.2	30.12	764.9	51.4	10.8	62	se.	1.8	0.8		0	0			0	0	clear	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascalientes	24.00	609.5	30.11	764.7	47.1	8.4	77	calm	0	0						0	0		M. V.de Leon, M. E.
Puebla, Catholic Institute	23.45	595.7	30 38	771.7	43.7	6.5	89	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.55	572.8	30.24	768.2	50.7	10.5	47	nnw.	4.5	2.0		0	2 k		ne.	0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.52	749.8	29.52	749.8	46.6	8.1		sw.			5					0.087	2.2		
Groningen	29.39	746 5	29.45	747.9	47.1	8.4		sw.			2					0.102	2.6		
Helder	29.41	747.1	29.41	747.1	47.7	8.7		sw.			4					0.142	3.6		
Hellevoetsluis	29.50	749.2	29.50	749.2	46.4	8.0	83	sw.			4					0.071	1.8		
Utrecht	29.47	748.4	29.51	749.6	45.0	7.2	81	ssw.			3		8			0.098	2.5	very cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.14	740.2	29.21	741.8	46.4	8.0	40	ese.	4	2			10			0	0		
Brono	29.45	748.1	29.49	749.1	38.5	3.6	51	ne.	0	4			3			0	0		
Christiania	29.37	746.0	29.52	749.8	36.3	2.4	85	ne.	4	2			10			0	0		
Gjæsvær	29.57	751.0	29.59	751.6	27.0	— 2.8		e.			2		10						
Lodingen	29 52	749.9	29.57	751.1	35.1	1.7	71	ne.			2		0			0	0		
PORTUGUESE.																			
Angra, Azores	29.89	759.3	30.05	763.2	70.2	21.2	78	wsw.	8.7	3.9			0			0	0		Dr. J. A. Sampaio.
Campo Major	29.20	743.2	30.25	768.4	67.1	19.5	60	wsw.	1.3	0.6			5			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.23	767.8	30.32	770.0	69.8	21.0	57	e.	4.3	1.9			4	n.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.95	760.8	30.32	770.0	61.9	16.6	78	ssw.	12.5	5.6			10			0	0		The Staff.
Ponta Delgada, Azores	30.06	763.0	30.13	765.4	70.2	21.2	77	sw.	19.2	8.6			3			0	0		
Saint Paul de Loando	29.07	753.6	29.87	758.7	76.8	24.9	93	w.	1.8	0.8			10			0.087	2.2		
Serra da Estrella	25.43	645.9	30.21	767.3	46.4	8.0	95	wsw.	28.6	12.5			10			0.638	16.2	foggy	
RUSSIAN.																			
Akmolinski	29.15	740.4	30.29	769.4	20.1	— 3.3	72	se.	9	4		0	5 ks			0	0		Major K. Lasarew.
Archangel	29.79	756.6	29.81	757.1	6.1	—14.4	83	se.	2	1			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.19	766.9	30.11	764.8	52.2	11.2	44	w.	16	7		0	2 ks			0	0		Capt. Wisgunow.
Barnaul	30.05	763 2	30.60	777.1	16.7	— 8.5	85	calm	0	0			10			0	0		Meteorological Obs'y.
Dorpat	29.48	748.7	29.73	755.1	34.7	1.5	100	calm	0	0			10 n			0.055	1.4	foggy	Observatory.
Ekaterinburg	28.97	735.9	29.98	761.6	24.8	— 4.0	91	sse.	9	4			10			0.173	4.4		Meteorological Obs'y.
Kasan	29.40	746.8	29.68	753.8	30.9	2.7	91	calm	0	0			10			0.024	0.6		Observatory.
Kertch	30.10	764.5	30.12	765.0	57.7	14.3	70	calm	0	0		0	0			0	0		Lagorio & Sastyrez.
Kieff	29.22	742.2	29.85	758.3	50.9	10.5	75	w.	7	3		ck	9 ks						Observatory.
Lugan	29.83	757.7	30.04	762.9	47.1	8.4	61	wsw.	18	8			10			0	0		Meteorological Obs'y.
Nikolaiev	30.01	762.2	30.08	764.0	55.9	13.3	81	sw.	18	8		0	7 ku			0	0		Capt. Kurdakow.
Pekin, China	30.28	769.2	30.43	772 8	38.8	3.8	43	sw.	4	2		0	0			0	0		Physical Observatory.
St. Petersburg	29.72	755.0	29.74	755.4	29.7	— 1.3	92	sse.	0	4			10 n			0.004	0.1		Central Physical Obs'y.
Semipalatinsk	29.87	758.8	30.59	777.0	18.3	— 7.6	86	n.	9	4			2			0	0		Major Lasarew.
Tashkend, Laboratory	28.01	726.8	30.20	767.0	55.4	13.0	51	calm	0	0			2						Teich, A. M.
Tiflis	28.75	730.2	30.16	766.0	60.3	15.7	44	nw.	7	3		0	0			0	0		Physical Observatory.
Tomsk																			
Vladivostock	30.19	766.9	30.26	768.6	20.5	— 6.4		nw.	11	5		0	2 k			0	0		
Warsaw	29.31	744.4	29.73	755.1	54.1	12.3	73	wsw.	11	5			9 ks						Astronomical Obs'y.
Wilna	29.26	743.1	29.68	753.8	49.4	8.0	94	sw.	11	5			10			0.083	2.1		Berg, Assistant.
Yeniseisk	30.39	771.8	30.71	780.0	7.0	—13.9	85	e.	4	2			10			0	0		M. O. Marks.
SCOTTISH.																			
Monach Ld			28.91	734.3	47	8.3	92	sw.			4		10			0.3	8.	showery	J. Youngclause.
North Unst			28.99	736.3				se.			8	4	7	s.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.93	760.2	30.03	762,8	64.4	18	57	w.	4.7	2.1		0	7			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.94	760.5	30.00	762.0	65.1	18.4	61	s.	2.0	0.9			10			0	0	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.16	689.8	30.15	765.7	51.8	11.0	81	sw.	11.0	4.9			10			0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.98	710.8	30.24	768.0	55.8	13.2	73	sw.	13.2	5.9		0	7			0	0	cloudy	The Staff.
Murcia, Met. Obs'y	30.10	766.0	30.31	769.8	73.8	23.2	59	w.	0.9	0.4		2	3	se.		0	0	clouds	Obayo Diaz, Director.
Oviedo	29.08	738.6	29.95	760.7	64.8	18.2	73	nw.	17.2	7.7			9 kn		calm	0.555	14.1	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.11	739.4	30.01	762,2	56.7	13.7	93	sw.	22.4	10.0			10			1.008	25.6	raining	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.87	758.7	29.93	760.2	79.2	26.2	87	e.	2.2	1.0		0	1 ks			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.20	767.1	30.30	769.6	67.8	19.9	57	calm	0	0		1	8	ese.	ese.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.88	758.9	29.97	761.2	77.7	25.4	89	calm	0	0		2 s	½ k	w.	w.	0	0		Manuel Muese.
Tuguegarao, Philippine Id's	29.83	757.0	29.96	760.9	77.8	25.4	90	nnw.	6.5	2.9		0	1 ks		n.	inap.	inap.	fair	José L. Yrastorza.
SWEDISH.																			
Haparanda	29.72	754.9	29.70	755.9	24.1	— 4.4	100	e.			2		10			0	0		
Umea	29.07	753.7	29.72	755.0	13.3	—10.4	44	calm			0		0			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	29.47	748.4	29.52	749.7	29.8	— 1.2	88	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	
Stockholm	29.48	748.8	29.66	753.3	37.8	3.2	97	e.	.....	.....	2	.....	2	.....	.....	0	0	.....	
Wisby	29.55	750.5	29.61	752.0	43.5	6.4	79	ese.	.....	.....	2	.....	5	.....	.....	0	0	.....	
Sub-series.																			
Upsala	29.56	750.8	29.65	753.0	29.3	— 1.5	100	nne.	1.6	0.7	.....	.....	10	.....	.....	0.028	0.7	foggy	S. G. Fineman.
Swiss.																			
Geneva	28.50	724.0	29.94	760.4	51.8	11.0	70	wsw.	.....	.....	6	.....	10	.....	.....	0	0	covered	The Observatory.
Turkish.																			
Jonstantinople	.....	.....	30.13	765.2	59.9	15.5	48	s.	3	1.5	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Talona	.....	.....	30.18	766.5	64.6	18.1	.....	e.	.....	.....	1	.....	10	.....	.....	0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.08	764.0	69.1	20.6	60	n.	.....	.....	2	.....	1 ks	.....	n.	0.07	1.8	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.23	767 8	30.31	769.9	43	6.1	74	se.	1	0.4	.....	.....	10 s	.....	nw	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.48	748.8	30.18	766.6	43	6.1	93	w.	5	2.2	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.05	636.3	30.15	765.8	46	7.8	58	e.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	W. O. Barnes.
Assinnaboine, Ft., Montana	27.20	690.9	30.18	766.6	23	— 5.0	64	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.11	739.4	30.33	770.4	49	9.4	71	w.	6	2.7	.....	0	fg.	.....	.....	0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.25	768 3	30.26	768.6	42	5.6	92	n.	9	4.0	.....	5 ck	0	.....	.....	0.07	1.8	fair	Jas. M. Watson.
Augusta, Georgia	30.15	765.8	30.35	770.9	43	6.1	93	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	John Healy.
Baltimore, Maryland	30.27	768.8	30.32	770.1	46	7.8	93	ne.	2	0.9	.....	10 ck	fg.	n.	.....	0.01	0.3	cloudy	Geo W Felger.
Barnegat, New Jersey	30.24	768.1	30.26	768.6	43.0	6.1	92	n.	10	4.5	.....	3 c	3 k	.....	ne.	0.24	6.1	fair	G. A. Hill.
Bennett, Fort, Dakota	28.68	728.5	30.37	771.4	21	— 6.1	87	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.25	692.1	30.21	767.3	25	— 3.9	64	calm	0	0	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.40	721.3	30.32	770.1	22	— 5.6	87	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	30.21	767.3	30.24	768.1	43	6.1	93	ne.	24	10.7	.....	2 c	5 ks	.....	ne.	0.14	3.6	fair	J. T. Elker.
Boise City, Idaho	27.11	688.6	30.05	763.3	37	2.8	92	n.	1	0.4	.....	.....	10 s	.....	calm	0	0	cloudy	B. E. Light.
Boston, Massachusetts	30.14	765.5	30.30	769.6	38.0	3.3	89	nw.	6	2.7	.....	.....	10s;fg	.....	n.	0.14	3.6	cloudy	C. B. Cole.
Brownsville, Texas	30.05	763.3	30.10	764.5	73.3	22.9	84	s.	2	0.9	.....	4 cs	2 s	s.	s.	0	0	fair	M. McCarty.
Buffalo, New York	29.46	748.3	30.24	768.1	48.3	9.1	94	s.	7	3.1	.....	.....	10 n	.....	sw.	0.01	0.3	light rain	W. Finn.
Buford, Fort, Dakota	28.35	720.1	30.33	770.4	22	— 5.6	73	e.	8	3.6	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.98	761.5	30.29	769.4	39.0	3.9	82	s.	4	1.8	.....	6 cs	4 s	w.	s.	0	0	cloudy	W. B. Gates.
Cairo, Illinois	29.83	757.7	30.25	768.3	57.6	14.2	95	s.	3	1.3	.....	.....	10 n	.....	s.	0.75	19.0	light rain	W. H. Ray.
Cape Henry, Virginia	30.27	768.8	30.29	769.4	52	11.1	80	n.	9	4.0	.....	0	4 s	.....	.....	0	0	fair	A. K. Alderson.
Cape May, New Jersey	30.25	768.3	30.28	769.1	44.0	6.7	83	n.	11	4.9	.....	0	3 s	.....	.....	0.06	1.5	clear	W. E. Smith.
Cape Mendocino, California	29.39	746.5	29.92	760.0	46	7.8	93	nw.	8	3.6	.....	.....	10 ks	.....	nw.	0.21	5.3	cloudy	J. J. McLean.
Cedar Keys, Florida	30.24	768.1	30.26	768.6	55	12.8	80	n.	9	4.0	.....	0	0	.....	.....	0	0	clear	F. W. Mixer.
Champaign, Illinois	29.33	745.0	30.19	766.8	45.0	7.2	76	se.	4	1.8	.....	.....	9 ks	.....	s.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.24	768.1	30.30	769.6	51	10.6	80	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.41	747.0	30.29	769.4	43.0	6.1	93	nw.	2	0.9	.....	0	fg.	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.49	749 0	30.34	770.6	42.0	5.6	100	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	B. L. Goulding.
Cheyenne, Wyoming	24 09	611.9	30.30	769.6	27.8	— 2.3	70	sw.	4	1.8	.....	.....	10 s	w.	.....	0	0	cloudy	E. McGovern.
Chicago, Illinois	29.44	747.8	30.18	766.6	47.2	8.4	74	s.	4	1.8	.....	8 k	0	.....	.....	0	0	cloudy	J. Mitchell.
Chincoteague, Virginia	30.26	768.6	30.28	769.1	46	7.8	93	n.	18	8.0	.....	.....	10 s	.....	ne.	0	0	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.62	752.3	30.31	769.9	40	4.4	89	e.	1	0.4	.....	.....	fg.	w.	.....	0	0	dense fog	R. B. Watkins.
Cleveland, Ohio	29.53	750.0	30.30	769.6	42.3	5.7	80	s.	4	1.8	.....	10 k	0	.....	.....	0.02	0.5	cloudy	J. B. Newlin.
Coleman City, Texas	28 32	719.3	30.21	767.3	59	15.0	84	s.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	L. Dorman.
Columbus, Ohio	29.42	747.3	30.31	769 9	40	4.4	89	w.	2	0.9	.....	0	fg.	.....	.....	0	0	clear	D. Cuthbertson.
Concho, Fort, Texas	28 17	715.5	30.18	766.6	64.0	17.8	90	s	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	J. McGlone.
Custer, Fort, Montana	26.85	682.0	30.17	766.3	26	— 3.3	76	se.	4	1.8	.....	6 k	0	.....	.....	0	0	fair	W. B. Lamar.
Davenport, Iowa	29.48	748.8	30.17	766.3	49	9.4	77	ne.	3	1.3	.....	1 k	4 s;fg	.....	ne.	Inap.	Inap.	fair	R. R. Martin.
Davis, Fort, Texas	25.26	641.6	30.16	766.1	59	15.0	48	s.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.29	718.6	30.07	763.8	35	1.7	92	sw.	2	0.9	.....	.....	10 s	.....	sw.	0	0	cloudy	H. Clifford.
Deadwood, Dakota	25.35	643.9	30.18	766.6	35	1.7	09	calm	0	0	.....	0	0	.....	.....	0	0	clear	G. W. Scott.
Delaware Breakwater, Del	30.30	771.1	30.38	771.6	47	8.3	100	n.	15	6.7	.....	.....	8 s	.....	ne.	Inap.	Inap.	cloudy	T. S. Townsend.
Denison, Texas	29.35	745.5	30.19	766.8	03.0	17.2	90	s.	8	3.6	.....	0	5 s	.....	.....	0	0	fair	J. W. Byram.
Denver, Colorado	24.82	630.4	30.32	770.1	30.2	2.3	01	se.	1	0.4	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.32	744.7	30.27	768.8	37	2.8	72	ne.	6	2.7	.....	c	3 s	.....	.....	0	0	clear	F. W. Conrad.
Detroit, Michigan	29.53	750 0	30.27	768.8	47.0	8.3	86	sw.	6	2.7	.....	0	fg.	.....	.....	0.05	1.3	dense fog	C. F. R. Wappenhans.
Dodge City, Kansas	27.56	700.0	30.30	769.6	30	2.2	04	n.	15	6.7	.....	8 cs	0	w.	.....	0	0	cloudy	Y. P. Temple.
Dubuque, Iowa	29.47	748.5	30.22	767.6	44	6.7	83	nw.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.46	748.3	30.25	768.3	30	— 1.1	78	sw.	8	3.6	.....	0	1 s	.....	.....	0	0	clear	N. B. Conger.
Eagle Pass, Texas	29.36	745.7	30.19	766.8	66.2	19.0	90	se.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25.20	641.6	30.12	765.0	25	— 3.9	76	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	30.25	768.3	30.32	770.1	42.0	5.0	74	e.	4	1.8	.....	.....	10s;ks	.....	e.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.35	694.7	30.28	769.1	47	8.3	58	ne.	8	3.6	.....	8 c	0	ne.	.....	0	0	fair	W. J. Cundall.
El Paso, Texas	26.37	669.8	30.22	767.6	48	8.9	93	w.	2	0.9	.....	0	0	.....	.....	0.10	2.5	clear	J. O'Dowd.
Erie, Pennsylvania	29.50	749.3	30.26	768.6	46	7.8	83	s.	5	2.2	.....	4 k	0	s.	.....	0.01	0.3	fair	Peter Wood.
Escanaba, Michigan	29.46	748.3	30.16	766.1	42.0	5.6	92	calm	0	0	.....	0	0	.....	.....	0	0	clear	George Heathcote.
Fredericksburg, Texas	28.38	720.8	30.20	767.1	66	18.9	84	s.	3	1.3	.....	1 cs	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	30.13	765.3	30.18	766.6	73	22.8	71	s.	12	5.4	.....	2 ck	hz.	se.	.....	0	0	clear	E. O'C. MacInerney.
Grand Haven, Michigan	29.48	748.8	30.18	766.6	40.0	4.4	89	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. Mueller.
Grant, Fort, Arizona	25.32	643.1	30.16	766.1	53	11.7	43	se.	5	2.2	.....	1 ck	2 s	.....	.....	0	0	clear	Robert C. Lord.
Hatteras, North Carolina	30.24	768.1	30.26	768.6	52	11.1	80	nw.	16	7.2	.....	hz.	3 k	.....	ne.	0	0	clear	R. M. Crawford.
Helena, Montana	25.77	654 5	30.15	765.8	30	— 1.1	88	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	N. C. Smith.
Henrietta, Texas	29.10	739.1	30.14	765.5	01	16.1	87	s.	6	2.7	.....	.....	10 s	.....	s.	0	0	cloudy	J. P. Sherry.
Huron, Dakota	28.90	734.0	30.38	771.6	29	— 1.7	77	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.39	746.5	30.23	767.8	44.5	6.9	82	se.	1	0.4	.....	7 k	hz.	nw.	.....	0	0	fair	O. Schutze
Indianola, Texas	30.12	765.0	30.15	765.8	73.0	22.8	82	se.	9	4.0	.....	0	4 ksin	.....	se.	Inap.	Inap.	light rain	I. A. Reed.
Jacksboro, Texas	28.93	734.8	30.15	765.8	05	18.3	73	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.22	767.6	30.27	768.8	54	12.2	80	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27 50	698.5	30.17	766.3	30	— 1.1	80	ne.	4	1.8	.....	4 c	0	w.	.....	0	0	fair	A. Schneider.
Keokuk, Iowa	29.46	748.3	30.15	765.8	50.0	10.0	80	ne.	1	0.4	.....	0	1 s	.....	.....	0	0	clear	F. Z. Goswelsch.
Key West, Florida	30.10	764.5	30.12	765.0	73.0	22.8	87	ne.	18	8.0	.....	0	2 k	.....	ne.	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.25	768.3	30.27	768.8	47.5	8.6	93	n.	14	6.3	.....	0	3 k	.....	n.	0	0	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	29.28	743.7	30.35	770.9	38	3.3	98	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.42	747 3	30.24	768.1	36	2.2	09	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	S. C. Emery.
Leavenworth, Kansas	29.27	743.4	30.21	767 3	45	7.2	83	n.	8	3.6	.....	.....	10 s	.....	nw.	0	0	cloudy	A. W. Browne.
Lewiston, Idaho	29.20	741.7	30.08	764.0	39.0	3.9	89	nw.	1	0.4	.....	.....	10 n	.....	.....	0.02	0.5	light rain	W. Bell.
Little Rock, Arkansas	29.84	757.9	30.17	766.3	60	15.6	93	sw.	6	2.7	.....	3 c	1 s	.....	.....	0	0	fair	W. U. Simens.
Los Angeles, California	29.67	753.6	30.07	763.8	57	13.9	80	se.	4	1.8	.....	.....	10 s	.....	s.	0	0	cloudy	T. S. Collins.
Louisville, Kentucky	29.66	753.4	30.25	768.3	46	7.8	83	s.	3	1.3	.....	5 cs	sk.	.....	.....	0	0	fair	L. M. Dey.
Lynchburg, Virginia	29.60	751.8	30.32	770.1	47	8.3	74	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.44	747.8	30.13	765.3	48.5	9.2	86	w.	8	3.6	.....	.....	10 ks	.....	sw.	0	0	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.27	768.8	30.28	769.1	50	10.0	86	n.	13	5.8	.....	0	0	.....	.....	0	0	clear	F. P. Chaffee.
Madison, Wisconsin	29.14	740.1	30.21	767.3	42	5.6	93	nw.	12	5.4	.....	4 c	0	w.	.....	0	0	fair	C. A. Shaw.
Maginnis, Fort, Montana	25.52	648.2	30.03	762.7	28	— 2.2	58	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	F. Burke.
McKavett, Fort, Texas	27.87	707.9	30.25	768.3	62	16.7	90	s.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	J. E. Thatcher.
Marquette Michigan	29.40	746.7	30.17	766.3	37	2.8	61	nw.	8	3.6	.....	2 k	0	nw.	.....	0	0	clear	J. Gilligan.
Memphis, Tennessee	29.86	758.4	30.21	767.3	59	15.0	93	s.	7	3.1	.....	.....	10 s	.....	.....	Inap.	Inap.	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.40	746.7	30.19	766.8	43	6.1	83	w.	5	2.2	.....	0	8 s	.....	sw.	0	0	cloudy	W. Line.
Missoula, Fort, Montana	26.73	678.9	30.14	765.5	27	— 2.8	77	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. H. Young.
Mobile, Alabama	30.25	768 3	30.29	769.2	58	14.4	90	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	C. A. Read.
Montgomery, Alabama	30.08	764.0	30.32	770.1	49	9.4	93	nw.	1	0.4	.....	0	fg.	.....	.....	0	0	clear	J. B. McLaughlin.

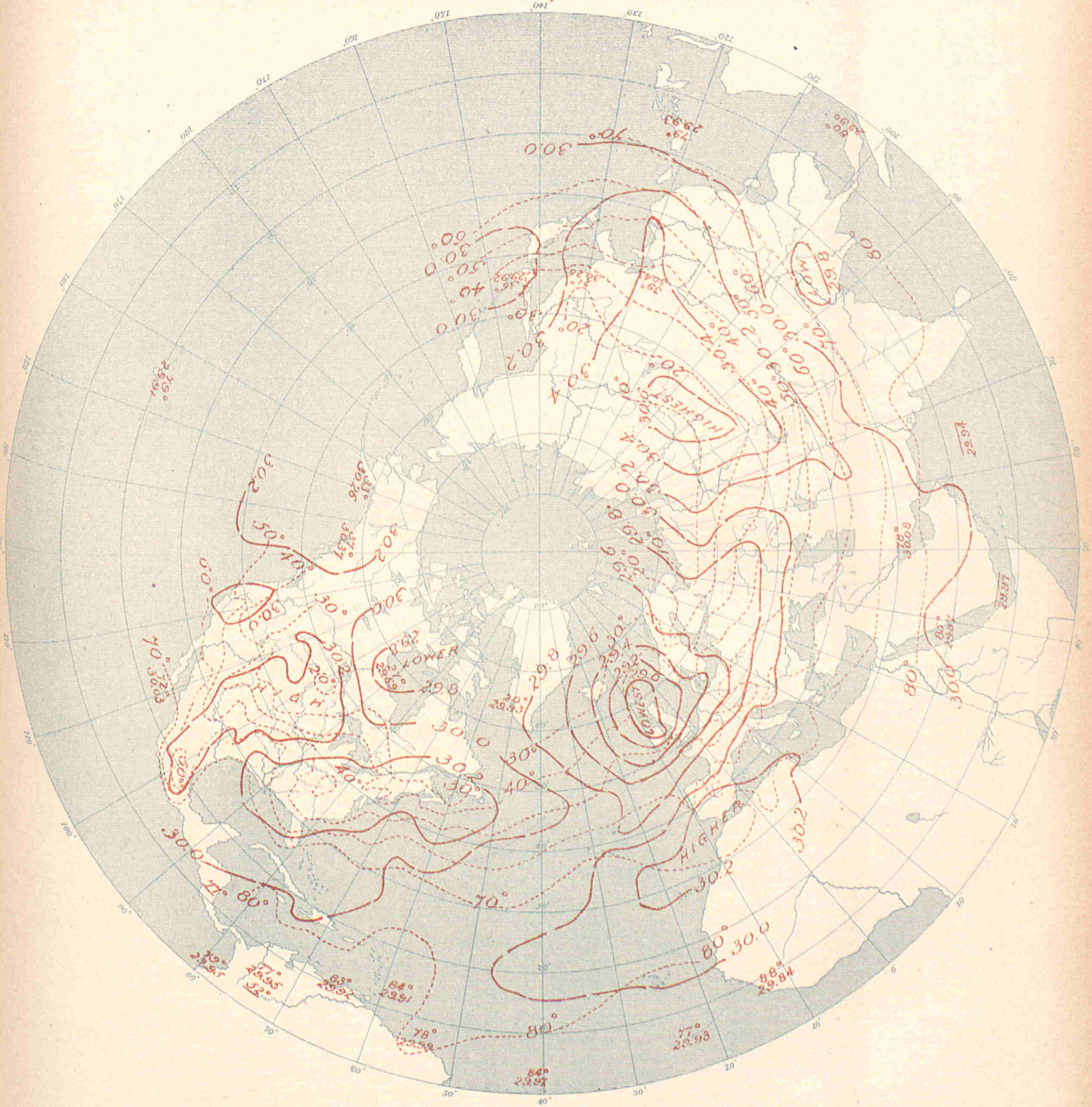
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper.	Lower.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.25	742.9	30.31	769.9	22	— 5.6	87	nw.	4	1.8		0	0			0	0	clear	H. Bessant.
Morgantown, W. Virginia	29.29	744.0	30.35	770.9	43.2	6.2	86	calm	0	0			fg.			0.26	6.6	dense fog	J. C. Sprigg, jr
Mt. Washington, N. H.	23.83	605.3	30.39	771.9	21.0	— 6.1	87	sw.	7	3.1			fg.		sw.	0	0	dense fog	J. G. Linsley
Nashville, Tennessee	29.67	753.6	30.27	768.8	46.5	8.1	88	e.	4	1.8			10 ks		nw.	inap.	inap.	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.18	766.6	30.30	769.6	36.5	2.5	84	n.	7	3.1		0	8 s		n.	0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.24	768.1	30.29	769.4	40	4.4	89	n.	6	2.7		8 k	0	e.		0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.20	767.1	30.26	768.6	65.0	18.3	90	se.	2	0.9			10 s		se.	0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.17	766.3	30.32	767.6	41.3	5.2	85	n.	10	4.5			10 s		n.	9.03	0.8	cloudy	W. McGillivray.
New York, New York	30.12	765 0	30.30	769.6	43	6.1	83	n.	4	1.8			10s;fg			inap.	inap.	cloudy	J. B. Merrill.
Norfolk, Virginia	30.29	769.4	30.32	770.1	48	8.9	93	n.	6	2.7		0	hz.			0	0	clear	Wm. Davis.
North Platte, Nebraska	27.30	693.4	30.38	771.6	23.6	— 4.7	72	calm	0	0		0	1 s			0	0	clear	E. F. Brady.
Olympia, Washington T'y	29.99	761.7	30.03	762.7	38.0	3.3	89	e.	1	0.4		4 k	0			0	0	fair	J. Dascomb.
Omaha, Nebraska	29.09	738.9	30.33	770.4	35.0	1.7	75	n.	8	3.6		0	0			0	0	clear	A. Pollak.
Oswego, New York	29.90	759 4	30.24	768.1	39.0	3.9	82	se.	6	2.7		0	9 s		nw.	0	0	cloudy	S. W. Beall.
Palestine, Texas	29.65	753.1	30.22	767.6	62.5	16.9	93	s.	6	2.7		4 cs	0	w.		0	0	fair	L. M. Pindell.
Pensacola, Florida	30.26	768.6	30.29	769.4	53.7	12.1	94	ne.	5	2.2		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	30.21	767.3	30.31	769.9	45	7.2	76	n.	3	1.3		0	8 k		n.	0.02	0.5	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.84	453.1	30.50	774.7	16	— 8.9	87	w.	9	4.0		0	5 s		w.	0	0	fair	H. Hall.
Ploche, Nevada	23.98	609.1	30.12	765.0	42	5.6	48	s.	6	2.7		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.48	748.8	30.33	770.4	44.5	6.9	87	nw.	3	1.3			10 s		nw.	0.17	4.3	cloudy	W. Daly.
Poplar River, Montana	28.01	711.4	30.30	769.6				nw.	1	0		0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.24	768.1	30.25	768.3	67.1	19.5	76	e.	11	4.9		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.54	750.3	30.26	768.6	42.3	5.7	92	s.	6	2.7		4 c	0	w.		0	0	fair	W. O. Bailey.
Portland, Maine	30.24	768.1	30.29	769.4	38.0	3.3	82	n.	12	5.4			10 s			0.02	0.5	cloudy	W. W. Eichelberger.
Portland, Oregon	29.93	760.2	30.00	762.0	39.0	3.9	89	nw.	5	2.2		0	2 s			0	0	clear	M. L. Hearne.
Portsmouth, N. C.					52	11.1	86	ne.	20	8.9		hz.	4 ks		n.	0	0	fair	F. S. Coburn.
Prescott, Arizona	24.78	629.4	30.12	765.0	52	11.1	69	s.	8	3.6		0	1 s		sw.	0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.20	767.1	30.23	767.8	45.5	7.5	93	n.	12	5.4			10 n		ne.	0.22	5.6	light rain	P. T. Jenkins.
Punta Rassa, Florida	30.17	766.3	30.18	766.6	62	16.7	84	n.	10	4.5		: ck	0	ne.		0	0	clear	W. J. Evans.
Red Bluff, California	29.49	749.0	29.90	759.4	52	11.1	100	e.	19	8.5			10 n			0.59	15.0	light rain	E. van Dyk.
Rochester, New York	29.54	750.3	30.24	768.1	41.5	5.3	84	sw.	8	3.6			10s;hz			0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.37	746.0	29.94	760.5	44.2	6.8	83	nw.	4	1.8			10 s			0	0	threatening	J. J. Nanry.
Sacramento, California	29.89	759.2	29.97	761.2	53.6	12.0	86	se.	4	1.8			10 n		se.	0.03	0.8	light rain	J. A. Barwick
St. Louis, Missouri	29.54	750.3	30.17	766.3	56.0	13.3	100	se.	7	3.1			10s;sk			0.15	3.8	cloudy	J. H. Weber.
St. Paul, Minnesota	29.37	746.0	30.29	769.4	33.0	0.6	78	nw.	6	2.7		0	1 s			0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.39	746.5	30.32	770.1	20	— 6.7	91	nw.	5	2.2		0	0			0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.50	649 2	30.13	765.3	45	7.2	49	se.	7	3.1		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.45	748.0	30.17	766.3	65.0	18.3	84	e.	3	1.3			10 s			0	0	cloudy	T. J. Kenan.
San Diego, California	29.98	761.5	30.06	763.5	60.8	16.0	84	s.	4	1.8			10 s			0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.56	750.8	30.28	769.1	42	5.6	92	sw.	10	4.5		0	0			0	0	clear	M. H. Perry.
Sandy Hook, New Jersey	30.26	768.6	30.29	769.4	44.0	6.7	83	ne.	14	6.3		5 k	0	ne.		inap.	inap.	fair	B. A. Blundon.
San Francisco, California	29.90	759 4	29.97	761.2	53	11.7	93	w.	5	2.2			10 n		sw.	0.11	2.8	light rain	N. Gorom.
Santa Fé, New Mexico	23.33	592.6	30.37	771.4	47	8.3	66	sw.	3	1.3		3 k	0	sw.		0	0	clear	H. U. Jones.
Savannah, Georgia	30.22	767.6	30.31	769.9	48	8.9	77	n.	7	3.1		0	0			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.39	670.3	30.21	767.3	25	— 3.9	76	w.	4	1.8			10 s			0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	29.97	761.2	30.22	767.6	61	16.1	100	s.	2	0.9		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	28.86	733.0	30.18	766.6	59.5	15.3	80	s.	4	1.8		0	7 ks		s.	0	0	fair	W. M. Mattingly.
Silver City, New Mexico	24.37	619.0	30.21	767.3	40.0	4.4	92	nw.	2	0.9		0	0			0.08	2.0	clear	N. D. Lane.
Sitka, Alaska	30.30	769.6	30.37	771.4	37.1	2.8	82	e.	5	2.2			10 ks		e.	0	0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.66	753.4	30.15	765.8	64.0	17.8	90	e.	4	1.8		1 cs	4 s			0	0	fair	J. B. Campbell.
Smithville, North Carolina	30.26	768.6	30.30	769.6	42	5.6	92	n.	6	2.7		0	0			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.09	711.2	30.08	764.0	33.5	0.8	83	nw.	1	0.4		0	0			0	0	clear	D. Moore.
Springfield, Illinois	29.45	748.0	30.17	766.3	53	11.7	83	s.	3	1.3			9 s		w.	0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.18	766.6	30.32	770.1	39.5	4.2	78	n.			3		10 n		n.	inap.	inap.	cloudy	Charles Mayr.
Springfield, Mo	28.68	728.5	30.19	766.8	60	15.6	87	sw.	12	5.4			10 ks		sw.	1.02	25.9	cloudy	J. B. Marbury.
Starkville, Miss	29.77	756.1	30.27	768.8	57	13.9	86	s.	7	3.1		0	3 s			0	0	clear	O. Dill.
Stevenson, Fort, Dakota	28.35	720.1	30.32	770.1	19	— 7.2	87	ne.	2	0.9		0	0			0	0	clear	W. Burrows
Stockton, Fort, Texas	27.10	688.3	30.22	767.6	51.0	10.6	69	s.	4	1.8		0	6 s		s.	0	0	fair	J. F. Marshall.
Thatcher's Island, Mass	30.24	768.1	30.29	769.4	42.0	5.6	96	n.	23	10.3			10 s		ne.	0.15	3.8	cloudy	G. Liebmann
Thomas, Camp, Arizona	27.30	693.4	30.14	765.5	49.5	9.7	87	ne.			1	0	1 k			inap.	inap.	clear	J. T. Fitzgerald.
Toledo, Ohio	29.53	750.0	30.26	768.6	43	6.1	83	s.	4	1.8		1 c	fg.			0	0	clear	A. Buell.
Tucson, Arizona	27.57	700.3	30.03	762.7	61	16.1	67	calm	0	0		2 cs	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.74	755.4	30.12	765.0	38	3.3	86	s.	1	0.4			10 s			0	0	cloudy	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					47.6	8.7	52	sw.			1	3 cs	4 s	s.	sw.	0	0	fair	D. Brooks.
Vicksburg, Mississippi	29.99	761.7	30.26	768.6	60.0	15.6	93	s.	6	2.7		1 ck	0	ne.		0	0	clear	James Kenealy.
Visalia, California	29.61	752.1	29.99	761.7	53.6	12.0	84	w.	3	1.3		0	3 s			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.52	622 8	30.26	768 6	19.4	— 7.0	73	n.	1	0.4		0	6 k			0	0	fair	T. M. Ambler.
Washington, D. C.	30.21	767.3	30.33	770.4	44.0	6.7	95	calm	0	0		5 k	fg.	nw.		0.03	0.8	fair	B. M. Pursell.
West Las Animas, Colorado	26.20	665.5	30.32	770.1	34	1.1	60	ne.	6	2.7			10 s		sw.	0	0	cloudy	F. H. Brandenburg.
Williamsport, Pa	29.68	753.9	30.31	769.9	39	3.9	89	calm	0	0		10 k	fg.	n		0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.24	768.1	30.30	769.6	46	7.8	93	n.	3	1.3		hz.	0			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.46	646 7	29.99	761.7	34	1.1	72	ne.	2	0.9			10 s		sw.	0	0	cloudy	J. Grover.
Yankton, Dakota	28.99	736.3	30.37	771.4	28	— 2.2	77	calm	0	0		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.78	756.4	29.93	760.2	58.0	14.4	80	se.	1	0.4		1 cs	0			0	0	clear	W. S. Delano.
Sub-stations.																			
Bogota, U. S. Columbia	22.04	559.8			52.0	11.1	71	n.	1	0.4		1 ck	0	n.		0.06	1.5	clear	Joaquin Gomez.
Havana, Cuba, W. I.	30.00	762.0	30.06	763.5	72.0	22.2	87	e.	6	2.7			10 n		ne.	0.29	7.4	cloudy	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.97	761.2	29.98	761.5	77	25.0	84	n.	1	0.4		8 cs	2 s	sw.		0	0	cloudy	Robert Johnston.
Navassa, W. I.	29.84	757 9	29.92	760.0	78	25.6	82	ne.	10	4.5			10			0.15	3.8	cloudy	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	78	25.6	86	e.			2	3 c	5 k	e.	e.	0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	77	25.0	89	calm			0		10 ks		calm	0.05	1.3	raining	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					77	25.0	94	ne.			2	5 ck	1 ks	se.	ne.	0	0	fair	Earl Flint.
Santiago de Cuba, W. I.	29.97	761.2	30.00	762.0	77	25.0	86	n.	6	2.7		5 cs	2 n		ne.	0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	30.20	767.1	30.26	768.6	33	0.6	68	calm			0	0	5 k			0.02	0.5	fair	W. J. Fisher.
St. Thomas, W. I.	29.88	758.9	30.00	762.0	81	27.2	97	e.				2 c	2 k	e.	e.	0	0		Aug. Walloe.
York Factory, B. A.	29.63	752.6	29.69	754.1	26.5	— 3.1	100	nw.	14	6.3			10 n		nw.	0.25	6.3	snowing	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill			
BRITISH NAVAL.																		
H. M. S. Amethyst, Colonia, Uruguay †	30.16	766.1	60.5	15.8	73	se.			2–3		2					2	se.	d. clouds.
H. M. S. Audacious, N. 21° 04′, E 38° 24′	29.87	758.7	85	29.4	79	nne.			2		2	ne.						d. clouds.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	29.96	761.0	74.5	23.6	59	n.			2		0							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C	30.07	763.8	31	— 0.6	89	calm			0		2							d. clouds.
H. M. S. Condor, N. 33° 04′ E 35° 20′	30.09	764.3	69	20.6	77	nne.			2		2	n.				1	n.	d. clouds.
H. M. S. Crocodile, N. 18° 40′, E. 39° 31′	29.90	759.4	85	29.4	72	sse.			1		1							blue sky.
H. M. S Curacoa, Kobe, Japan	30.04	763 0	56.5	13.6	09	nnw.			1		0							blue sky.
H. M. S. Diamond, S. 18° 50′, E. 178° 28′*†	29.70	754.4	77	25.0	86	ese.			4–5		5	e.				2	se.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	29.92	760.0	71	21.7	75	nnw.			1–2		2	nnw.						d. clouds.
H. M. S. Eclipse, N. 17° 21′, E. 64° 40′	29.94	760.5				ne.			2		2	ne.				2	nne.	d. clouds.
H. M. S. Espiegle, S. 10° 42′, E. 162° 51′			80	26.7	91	ne.			2		10					1	ne.	raining.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.86	758.4	77.5	25.3	82	s.			4–5		5							d. clouds.
H. M. S. Flamingo, N. 17° 43′ W. 68° 50′	29.95	760.7	84	28.9	100	ne.			1–2		1	e.				2	e.	blue sky.
H. M. S. Flying Fish, N. 37° 27′, E. 120° 33′	30.33	770.4	43.5	6.4	67	nw.			3–5		4	nnw.				1	nw.	misty.
H. M. S. Gannet, S. 18° 28′, W. 70° 21′	29.91	759.7	63.5	17.5	80	s.			1		10							overcast.
H. M. S. Iris, N. 35° 55′ E. 14° 31′	30.19	766.8	70	21.1	79	nnw.			1		0					1	nnw.	blue sky.
H. M. S. Iron Duke, N. 32° 44′, E. 129° 51′	30.23	767.8	56	13.3	93	nnw.			1–2		4	n.						d. clouds.
H. M. S. Kingfisher, N. 36° 13′ W. 123° 00′	29.94	760.5	55	12.8		nw.			2		10	nw.				3	nw.	showery.
H. M. S. Lark, S. 10° 14′, E. 101° 42′	29.84	757.9	76.3	24.6	88	calm			0		5							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.90	759.4	62	16.7		nw.			1		10							d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.23	767.8	53.3	11.8	71	ene.			1		0							blue sky.
H. M. S. Northampton, Halifax, N. S	30.34	770.6	37	2.8	85	nw.			2		10							overcast.
H. M. S. Nelson, Melbourne, Australia	29.85	758.2	84	28.9	75	calm			0									blue sky.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.90	759.4	80	26.7	93	s.			1		0							blue sky.
H. M. S. Rocket, N. 3° 00′ W. 79° 58′	29.95	760.7	79	26.1	95	sw.			2		4					3–4	sw.	misty.
H. M. S. Sappho, S. 37° 00′, W. 148° 00′	29.90	761.0	56.2	13.4	80	sse.			4–5		8	ese.				3	s.	d. clouds.
H. M. S. Superb, N. 38° 33′, E. 20° 30′*	30.18	766.6	71	21.7	62	wnw.			1									d. clouds.
H. M. S. Sylvia, Port Tamar, Patagonia	29.52	749.8	44.7	7.1	98	wnw.			2–4		Iv							raining.
H. M. S. Tourmaline, Aden, Arabia	29.97	761.2				e.			2		1	e.						blue sky.
H. M. S. Woodlark, Bushire, Persia	29.98	761.5	77.5	25.3	82	wnw.			1		0							misty.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.36	771.1	36	2.2	?	calm			0		0							blue sky.
PORTUGUESE NAVAL.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.01	762.3	82.4	28.0	81	ne.			1		3			ne.	½ h'r ½ h'r	1	se.	gloomy.
Tamega, Macao, China	30.07	763.8	75.2	24.0	67	nne.			3		10				½ h'r ½ h'r			d. clouds.
SWEDISH NAVAL.																		
Vanadis, N. 47° 44′, W. 7° 37′	29.67	753.6	54.5	12.5	68	w.			4		10							overcast.
UNITED STATES NAVAL.																		
Navy Yard, Pensacola, Fla	30.12	765.0	58	14.4	87	ne.	3	1.3			0				0	0		clear.
Navy Yard, Portsmouth, N. H	30.29	769.4	36	2.2	90	ne.	5	2.2			10			ne.	0.1	3.		cloudy.
Naval Hospital, Yokohama, Japan*	29.88	758.9	53	11.7	83	calm			0		2			w.	0.07	1.8		clearing.
Adams, Sitka, Alaska			36	2.2	90	calm			0		8							cloudy.
Alaska, N. 20° 15′ W. 155° 55′	29.91	759.7	79	26.1	73	se.			4		2				0	0	sm'h	fair.
Alliance, Hampton Roads, Va	30.24	768.1	49	9.4	100	nne.			1–2		2				0	0		clear.
Ashuelot, Kobe, Japan	30.20	767.1	55	12.8	73	nw.			1		2			nw.				clear.
Brooklyn, Keel Point, Patagonia	29.68	753 9	54	12.2	86	calm			0		10				0	0	sm'h	cloudy.
Colorado, New York, N. Y	30.39	771.9	44	6.7	75	ne.	4	1.8			10				0	0		cloudy.
Enterprise, Norfolk, Va	30.31	769 9	50	10.0	100	nnw.			1		2			calm				clear.
Essex, Callao, Peru	29.98	761.5	64	17.8	89	calm			0		10						sm'h	overcast.
Franklin, Norfolk, Va	30.28	769.1	49	9.4	93	nnw.	8	3.6			0				0	0		clear.
Galena, Montevideo, Uruguay	29.96	761.0	58	14.4	75	s.			5		5			s.			r'gh	s. fair.
Hartford, Montevideo, Uruguay*	29.90	759.4	57	13.9	87	s.			4		5			s.	light	light	mod.	s. fair.
Independence, Mare Island, Cal	29.99	761.7	52	11.1	100	se.			1		10							raining.
Iroquois, Callao, Peru	30.01	762.2	64	17.8	89	calm			0		10							overcast.
Jamestown, Newport, R. I	30.22	767.6	41	5.0	100	n.			4		10			n.				cloudy
Kearsarge, Hampton Roads, Va	30.25	768.3	49	9.4	93	nw.			2		2							fair.
Lackawanna, S. 35° 38′ W. 72° 03′*	29.78	756.4	57	13.9	93	n.			3		10			ne.			mod.	se. cloudy.
Lancaster, N. 32° 58′ E 14° 25′*	30.11	764.8	71	21.7	90	nnw.			4		8			nnw.	0	0	sm'h	fair.
Michigan, Erie, Pa	30.20	767.1	47	8.3	77	sw.			5		5							cloudy.?
Minnesota, New York, N. Y	30.34	770.6	46	7.8	76	ne.	3	1.3			10							cloudy.
Monocacy, Yokonama, Japan *	29.78	756.4	57	13.9	93	nw.			2		10			calm				cloudy.
New Hampshire, Newport, R. I	30.25	768.3	45	7.2	84	nne.			5		10			nne.			mod.	nne. cloudy.
Nipsic, Palermo, Sicily*	30.15	765.8	67	19.4	100	se.			1		8						sm'h	cloudy.
Onward, Callao, Peru	30.11	764.8	62	16.7	94	calm			0		10						long	w. cloudy.
Palos, N. 33° 27′, E. 128° 36′.*	30.16	766.1	57	13.9	62	nw.			3		0						mod.	nnw. clear.
Pensacola, Callao, Peru*	29.90	759.4	62	16.7	94	nnw.	3	1.3			10				0	0	sm'h	cloudy.
Powhatan, Boston, Mass	30.21	767.3	37	2.8	100	nnw.			2		10							overcast.
Quinnebaug, Syracuse, Sicily*	30.11	764.8	59	20.6	70	e.			1		2			calm			sm'h	clear.
Ranger, N. 27° 35′, W. 115° 17′	30.08	764.6	65	18.3	68	sw.			2		10				0	0	mod	overcast.
Richmond, Yokohama, Japan*	29.94	760.5	56	13.3	80	calm			0		2			n.				fair.
Saratoga, N. 23° 51′ W. 85° 22′	30.05	763.3	78	25.6	69	ne.			2–3		5			ne.			mod	ne. fair.
St. Louis, League Island, Pa	30.51	774.9	43	6.1	83	n.			1		8			n.				cloudy.
Swatara, S. 0° 47′, W. 28° 40 *	29.81	757.2	81	27.2	82	se.			3		5			se.			long	se. fair.
Tennessee, Hampton Roads, Va	30.25	768.3	53	11.7	86	nnw.	6	2.7			2				0	0		clear.
Vandalia, Hampton Roads, Va*	30.26	768.6	48	8.9	100	nnw.			3		1			ne.				cloudy.
Wabash, Boston, Mass	30.28	769.1	39	3.9	81	n.	5	2.2			10			ne.	0.03	0.8		clear?
Wachusetts, Mare Island, Cal	29.99	761.7	51	10.6	100	var.			1		10			calm			sm'h	clear.
Wyandotte, Washington, D. C	30.26	768.6	63	17.2	?	ne.			2		5			nw.				fair.
Yantic, Norfolk, Va	30.29	769.4	51	10.6	93	nnw.			2		2							clear.
MERCHANT MARINE.																		
S. S. Grecian, Buenos Ayres, Argentine Rep*	29.99	761.7	57	13.9	69	se.			2		3			se.	0	0	sm'h	clear.
S. S. Polynesian, Liverpool, Eng	29.45	748.6	44	6.7		nw.			3		10			w.	10 h'r	10 h'r		showery.
S. S. Scandinavian, N. 44° 46′, W. 55° 17′	30.36	771.1	43	6.1		ene.			4		3			ene.	0	0	high	ene. d. clouds.
S. S. Indiana, Philadelphia, Pa			48	8.9	85	ne.			4		10			ne.				overcast.
S. S. Lord Clive, N. 49° 20′ W. 35° 20′*†	30.02	702.5				n.			3		4			n.	0	0	mod.	nw. fine.
S. S. Lord Gough, N. 49° 57′, W. 38° 00′	30.06	763.5	44	6.7		nnw.			4		5			n.	0	0	mod.	nnw. fair.
S. S. Ohio, N. 42° 20′, W. 61° 58′	30.26	768.6	47	8.3	92	ene.			5		10			e.			mod.	ene. overcast.
S. S. Pennsylvania, Liverpool, Eng.†	29.23	742.4	44	6.7		wsw.			9		10			sw.				rainy.
S. S. Stella, N. 50° 59′ W. 14° 19′	29.23	742.4	51.8	11		wsw.			9		4			sw.			9	wsw. squally.
S. S. Anchoria, N. 44° 14′, W. 55° 39′†	30.27	708.8				e.			2		10			e.	0	0	sli't	ne. cloudy.
S. S. Bolivia, N. 54° 04′, W. 23° 18			48	8.9	78	nnw.			10		10			nw.	2 h'r	2 h'r	high	nw. stormy.
S. S. Dorian, N. 40° 48′, W. 27° 00′*	29.69	754.1	65	18.3		wsw.			7		8			w.	0	0	r'gh	w. cloudy.
S. S. Galatia, Calcutta, India†	29.85	758.2	78.3	25.7		n.			2		2				0	0		fair.
S. S. Utopia, N. 20° 31′ E. 38° 38′			88	31.1	65	nnw.			3		1			nnw.	0	0	mod.	n. clear.
S. S. Ailsa, N. 12° 27′, W. 75° 51′†	29.99	761.7	81	27.2	90	ene.			5		5			ene.	12 h'r	12 h'r	mod.	ne. fine.
S. S. Alpin, Arroyo, Porto Rico, W. I	29.95	760.7				calm			0					e.	0	0	sm'h	
S. S. Alvo, N. 36° 45′ W. 74° 05′						n.			3					n.	0	0	5	n. dull.
S. S. Antillas, N. 31° 20′, W. 72° 02′			78	25.6		ne.			2		0				0	0	sm'h	clear.
S. S. Ambrose, Para, Brazil†	29.94	760.5				n.			4		0				0	0		fine.
British Merchant, S. 5° 28′, W. 113° 42′	29.93	760.2	72.3	22.4	90	ese.			4		8							d. clouds.
Dynomene, S. 3° 26′, E. 87° 40′	29.89	759.2	81.5	27.5	83	w.			1		7							d. clouds.
S. S. Gordon Castle, N. 17° 41′, E. 114° 48′	29.87	758.7	78.5	25.8	86	ese.			4–6		8						high	ne. raining.
May Hulse, N. 5° 21′, W. 24° 08′	29.93	760.2	77	25.0	86	e.			1		10							raining.
Markland, N. 36° 46′, W. 34° 24′	29.89	759.2	70.7	21.5	90	sew.			6		8						5	misty.
S. S. Olympus, N. 36° 37′, E 32° 18′	29.80	758.4	92	33.3	45	n.			2		3							d. clouds.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.	Character.	Direction from.	
MERCHANT MARINE.—Continued.																		
Inchkeith, S. 11° 04′, W. 29° 37′	29.97	761.2	79.7	26.5	80	ese.			5		0							blue sky.
S. Meriola, N. 43° 33′ W. 12° 05′	29.83	757.7	61.7	16.5	95	sw.			9		10							misty.
S. S. Mexico, N. 33° 11′, W. 119° 35′†	30.03	762.7	61.6	16.4	74	ese.			1		10		e.			sm'h		cloudy.
S. S. Bothnia, N. 50° 04′, W. 24° 20′	29.72	754.9	52	11.1	?	nnw.			6		7		nw.	rain	rain	r'gh	wnw.	misty.
S. S. Gallia, N. 50° 12′ W. 14° 33′	.....	.....	54	12.2	80	wnw.			6		8		wnw.	sh'rs	sh'rs	high	nw.	squally.
S. S. Marathon, Tarifa Point, Spain	30.28	769.1	67	19.4	.....	calm			0		2		sw.	o	o	sm'h	w.	clear.
S. S. Pavon a, N. 41° 57′, W. 55° 30′*	30.14	765.5	53	11.7	86	ne.			6		6		ne.	o	o	r'gh	ne.	cloudy.
S. S. Scythia, N. 40° 20′, W. 70° 09′	30.10	764.5	54	12.2	93	n.			3		10		nne.	4 h'r	4 h'r	light	nne.	cloudy.
S. S. Canada, N. 49° 10′, W. 27° 40′	29.90	759.4	44.6	7	.....	nnw.			6		4		nw.	o	o	h'vy	nw.	clear.
S. S. Labradore, N. 49° 51′, W. 20° 14′	29.76	756.0	51.8	11	.....	wsw.			6		10		wsw.	rain	rain	h'vy	w.	
S. S. Ville de Marseilles, N. 49° 40′, W. 8° 25′ *†	29.40	746.7	57	13.9	.....	w.			7		5?		w.	h'vy	h'vy	high	w.	covered.?
S. S. Abyssinia, N. 40° 27′, W. 70° 19′*	30.09	764.3	55	12.8	68	ne.			4		8		ne.	o	o	mod.	e.	cloudy.
S. S. Arizona, N. 51° 27′ W. 14° 05′	29.32	744.7	52	11.1	.....	wsw.			7		5		w.	hail	hail	high	wnw.	fair.
S. S. Wisconsin, N. 40° 30′ W. 72° 15′	30.10	764.5	44	6.7	.....	n.			4		2		n.	o	o	mod.	n.	fair.
S. S. Bohemia, N. 50° 16′, W. 2° 41′†	29.65	753.1	.....	.....	.....	wsw.			6		5		wsw.	.....	.....	long	wsw.	fair.
S. S. Cimbria, N. 40° 54′, W. 66° 46′	30.07	763.8	49.6	9.8	.....	e.			6		5?		ese.	o	o	long	e.	cloudy?
S. S. Gellert N. 50° 35′, W. 17° 12′	29.53	750.0	56	13.3	.....	wnw.			9		8		nw.	3 h'r	3 h'r	h'vy	wnw.	stormy.
S. S. Silesia, N. 50° 33′, W. 6° 40′†	29.60	751.8	53.5	11.9	.....	wnw.			7		4		w.	o	o	7	wsw.	d clouds.
S. S. Vandalia, N. 41° 20′, W. 61° 15′	30.27	768.8	60.1	15.6	.....	e.			6		5		e.	o	o	h'vy	e.	squally.
S. S. City of Berlin, N. 44° —′, W. 57° 30′	30.29	769.4	47	8.3	92	ene.			4		8		ene.	.....	.....	mod.	ene.	cloudy.
S. S. Archimedes, N. 41° 26′, W. 64° 59′	30.01	762.2	.....	.....	.....	ene.			6		10		ene.	¼ h'r	¼ h'r	h'vy	ene.	overcast.
S. S. Hevelius, Buenos Ayres, Argentine Rep*†	30.10	764.5	60	15.6	.....	sw.			4		4		ssw.	o	o	.....	.....	clear.
S. S. Ptolmey, S. 17° 30′, W. 36° 15′	29.89	759.2	79.5	26.4	9	n.			6		10		var.	23 h'r	23 h'r	5	nne.	overcast.
S. S. Bulgarian, N. 53° 26′, W. 4° 04′ *	29.32	744.7	.....	.....	.....	ssw.			7		10		sw.	5 h'r	5 h'r	.....	.....	
S. S. City of San Antonio, Nassau, Bahamas, W. I†	30.10	764.5	78	25.6	.....	ne.			5		0		.....	o	o	.....	.....	clear.
S. S. Colorado, N. 29° 53′, W. 79° 33′ †	30.20	767.1	65	18.3	.....	n.			5		2		nne.	8 h'r	8 h'r	high	ne.	clear.
S. S. Rio Grande, Galveston, Texas†	30.08	764.0	74	23.3	.....	se.			3		1		ese.	o	o	.....	.....	clear.
S. S. San Marcos, N. 26° 26′, W 80° 06′	30.23	767.8	76	24.4	.....	e.			1		.....		e.	.....	.....	mod.	ese.	fine.
S. S. Archimede, Palermo, Sicily *†	30.27	768.8	68	20.0	74	ne.			1		4		ne.	½ h'r	½ h'r	.....	.....	fair.
S. S. Hermod, N. 47° 45′ W. 28° 46′†	29.94	760.5	53.6	12	.....	nw.			3		7		wnw.	4 h'r	4 h'r	long	w.	showery.
S. S. Glenapp, S. 2° 30′, W. 39° 00′†	29.96	761.0	80	26.7	.....	e.			3		4 k		e.	o	o	sm'h	.....	fine.
S. S. Chalmette, Algiers, La †	30.25	768.3	67	19.4	.....	e.			1		10		.....	o	o	.....	.....	cloudy.
S. S. New York, N. 35° 45′, W. 75° 00′	.....	.....	58	14.4	.....	n.			6		10		n.	o	o	h'vy	ene.	cloudy.
S. S. Denmark, N. 41° 03′, W. 62° 35′	30.15	765.8	55	12.8	.....	ene.			5		10		ese.	o	o	long	ene.	cloudy.
S. S. Egypt, Mersey, Eng.	.....	.....	.....	.....	.....	s.			4		8		s.	4 h'r	4 h'r	.....	.....	squally.
S. S. England, N. 41° 11′, W. 60° 21′	30.11	764.8	.....	.....	.....	ese.			6		5?		ese.	o	o	h'vy	e.	cloudy?
S. S. Erin, New York, N. Y.	30.16	766.1	54	12.2	.....	nw.			4		3		nw.	o	o	.....	.....	fine.
S. S. Greece, N. 49° 16′, W. 12° 30′	29.57	751.1	.....	.....	.....	wsw.			6–8		5		w.	4 h'r	4 h'r	long	wnw.	squally.
S. S. Helvetia, off Great Arms Head, Eng	29.05	737.9	50	10.0	.....	sw.			9		10		wsw.	9 h'r	9 h'r	short	w.	raining.
S. S. Santiago, N. 37° 20′, W. 73° 49′	30.42	772.7	65	18.3	68	n.			4		5		n.	o	o	long	ene.	fine.
S. S. City of Alexandria, N. 35° 23′, W. 75° 06′†	30.29	769.4	55	12.8	.....	n.			6		6		n.	6 h'r	6 h'r	h'vy	ne.	clearing.
S. S. City of Merida, N. 19° 10′, W. 96° 08′ *†	30.00	762.0	73.4	23	.....	w.			1		2		w.	o	o	light	n.	fine.
S. S. City of Washington, N. 23° 00′, W. 84° 35′*†	30.25	768.3	80	26.7	.....	ne.			5		8		ne.	3 h'r	3 h'r	mod.	ne.	fine.
S. S. City of Chester, N. 49° 02′, W. 39° 48′	.....	.....	46	7.8	.....	nne.			2		.....		.....	.....	.....	.....	wnw.	clear.
S. S. Knickerbocker, N. 25° 08′ W. 80° 14′*†	30.17	766.3	75	23.9	.....	nne.			4		.....		.....	.....	.....	sm'h	wsw.	squally.
S. S. Koln, N. 43° 20′, W. 53° 18′	30.17	766.3	47.0	8.3	85	ne.			4–5		8		ne.	o	o	long	ne.	fair.
S. S. Kronprinz F. Wilhelm, N. 48° 11′ W. 5° 36′*	29.67	753.6	54.5	12.5	.....	wnw.			5		5		w.	8 h'r	8 h'r	r'gh	wnw.	threatening.
S. S. Oder, N. 50° 39′, W. 1° 40′	29.52	749.8	53.6	12.0	.....	wsw.			6		3		sw.	5 h'r	5 h'r	r'gh	wsw.	fair.
S. S. Ohio, N. 24° 10′ W. 83° 08′	30.19	766.8	.....	.....	.....	n.			4		3		n.	o	o	mod.	n.	fair.
S. S. Salier, N. 42° 27′ W. 58° 55′	30.24	768.1	47.3	8.5	.....	ne.			5		10		ne.	o	o	h'vy	ne.	cloudy.
S. S. Belgic, N. 23° 35′, E. 117° 14′ †	30.16	766.1	73	22.8	76	ne.			6		7		ne.	o	o	h'vy	ne.	cloudy.
S. S. Coptic, N. 42° 17′, W. 133° 44′	30.22	767.6	52.5	11.4	73	var.			2		3		ne.	2 h'r	2 h'r	sl't	ne.	d. clouds.
S. S. City of Augusta, Savannah, Ga†	30.25	768.3	.....	.....	.....	nw.			1		0		.....	o	o	.....	.....	clear.
S. S. Mississippi, N. 48° 23′, W. 124° 53′ †	30.14	765.5	45	7.2	84	e.			2		0		.....	.....	.....	light	wnw	clear.
S. S. Oregon, N. 37° 53′, W. 122° 32′†	29.99	761.7	53	11.7	80	nw.			2		5?		nw.	o	o	sm'h	.....	clear?
S. S. Ancon, N. 32° 48′, W. 117° 23′†	30.03	762.7	62	16.7	77	s.			3		10		s.	.....	.....	sm'h	.....	cloudy.
S. S. Australia, Sydney, N. S. W.	30.28	769.1	68	20.0	84	sw.			3		5?		sw.	o	o	.....	.....	clear?
S. S. City of New York, S. 19° 35′, W. 172° 33′ †	29.90	759.4	77	25 0	77	se.			3		8		se.	4 h'r	4 h'r	mod.	se	cloudy.
S. S. City of Pekin, N. 33° 30′, E. 149° 34′ †	30.13	765.3	71	21.7	85	ne.			2		10		sw.	o	o	light	nw.	cloudy.
S. S. City of Sydney, S. 31° 34′, E. 179° 09′†	30.03	762 7	63	17.2	62	nnw.			2		5		se.	o	o	mod.	n.	fair.
S. S. Colima, Acapulco, Mexico †	30.03	762.7	75	23.9	86	calm			0		4		calm	o	o	.....	.....	clear.
S. S. Granada, N. 24° 34′, W. 112° 12′†	30.03	762.7	72	22.2	85	ne.			1		8		se.	o	o	sm'h	nw.	cloudy.
S. S. San Jose, N. 8° 54′, W. 79° 30′*†	30.12	765.0	.....	.....	.....	nw.			2		5 k		nw.	o	o	.....	.....	squally.
S. S. Bermuda, Roseau, W. I †	30.03	762 7	81	27.2	.....	e.			2		7		e	light	light	g'tl	e.	cloudy.
S. S. Muriel, Saint Kitts, W. I	29.96	761.0	82	27.8	.....	e.			3		10		.....	o	c	sm'h	.....	overcast.
S. S. Caracas, La Guayra, Venezuela†	29.92	760.0	83.3	28.5	87	e.			1		2		.....	o	o	mod.	nne.	fine.
S. S. Belgenland, New York, N. Y†	30.45	773.4	46	7.8	92	ene.			2		4		e.	o	o	.....	.....	fair.
S. S. Pennland, Antwerp, Belgium	29.67	753.6	46	7.8	92	wsw.			6		10		w.	3 h'r	3 h'r	.....	.....	raining.
S. S. Rhyniand, N. 50° 12′, W. 17° 30′	29.55	750 6	49	9.4	64	w.			7		5		nw.	2 h'r	2 h'r	high	w.	squally.
S. S. Switzerland, N. 46° 35′ W. 48° 30′ †	30.28	769.1	.....	.....	.....	n.			4		10		n.	o	o	mod.	ene.	misty.
S. S. Waesland, N. 42° 41′ W. 59° 42′	30.31	769.9	52	11.1	93	ene.			4		10		nnw.	o	o	mod.	ene.	cloudy.
S. S. Maas, New York, N. Y.	30.11	764.9	49.3	9.6	84	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
S. S. P. Oaland, Flushing, Netherlands	29.41	747.0	50.2	10.1	86	sw.			6		6		sw.	.....	.....	.....	.....	fair.
S. S. Schiedam, N. 49° 45′ W. 7° 23′	29.50	749.3	54.0	12.2	88	sw.			6		7		sw.	6 h'r	o h'r	h'vy	wnw	cloudy.
S. S. W. A. Scholten, N. 48° 09′, W. 41° 14′	30.33	770.4	48 o	8.9	81	n.			3		5		nw.	o	o	mod	nw.	
S. S. State of Florida, N. 47° 44′, W. 42° 16′	30.08	764.0	47	8.3	.....	nne.			3		5		ene.	1 h'r	1 h'r	mod.	nne.	cloudy.
S. S. State of Indiana, N. 41° 15′, W. 66° 50′†	30.14	765.5	51	10.6	.....	ene.			3		5		e.	o	o	sm'h	.....	overcast.
S. S. State of Nevada, N. 54° 22′, W. 23° 30′ †	29.50	749 3	51	10.6	.....	nw.			7		8		nw.	hail	hail	high	var.	squally.
S. S. Thingvalla, Swinemunde, Prussia †	29.50	749.3	48.2	9.0	.....	sw.			3		10		sw.	3 h'r	3 h'r	.....	.....	covered.
S. S. Adriatic, N. 48° 18′, W. 30° 44′†	30.06	763.5	49	9.4	.....	n.			3		5		nw.	.....	.....	mod.	nw.	fair.
S. S. Celtic, N. 44° 35′, W. 55° 18′ †	30.30	769.6	51	10.6	86	ene.			4		10		e.	o	o	mod.	ese.	cloudy.
S. S. Salerno, Odessa, Russia	.....	.....	50	10.0	.....	calm			0		.....		.....	o	o	.....	.....	clear.
S. S. Catherine Whiting, Philadelphia, Pa†	30.28	769.1	.....	.....	.....	ne.			1		.....		ne.	o	o	.....	.....	
S. S. Norman, N. 42° 23′, W. 71° 05′	30.29	769.4	.....	.....	.....	nne.			6		.....		nne.	2 h'r	2 h'r	.....	.....	cloudy
S. S. Saxon, Philadelphia, Pa*†	30.42	772.7	48	8.9	.....	n.			.....		7		nne.	.....	.....	.....	.....	
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 34° 34′, W. 75° 35′	.....	.....	61	16.1	.....	n.			5		2		n.	o	o	h'vy	ne.	
Bk. Adelaid, N. 8° 16′ W. 48° 09′ *†	29.94	760.5	80	26.7	.....	se.			6		8		var.	4 h'r	4 h'r	mod.	ene.	squally.
Bg. Alcira, N. 25° 09′, W. 66° 12′	29.97	761.2	79	26.1	.....	wsw.			3		4		sw.	o	o	long	n.	clear.
Schr. Anna A. Hilton, N. 36° 39′, W. 74° 00′†	30.17	766.3	62	16.7	.....	n.			5		2		n.	½ h'r	½ h'r	rg'h	ne.	clear.
S. Annie, M. Law, Kobe, Japan *†	30.15	765.8	58	14.4	.....	nne.			1		o		.....	o	o	.....	.....	fine.
Bk Anna Thormann, S. 8° 34′, E. 114° 32′*	29.89	759.2	82.4	28.0	81	sse.			2		1 k		s.	2 h'r	2 h'r	.....	.....	clear.
S. S. Antonio Lopez, Cadiz, Spain*	30.30	769.6	64	17.8	83	nw.			1		1		.....	o	o	.....	.....	hazy.
Bk. Aquidneck, N. 18° 23′, W. 39° 39′ *†	30.03	762.7	.....	.....	.....	ese.			2		.....		e.	.....	.....	light	ene.	clear.
Bk. Aureola, N. 47° 36′, W. 25° 20′*†	30.10	764.5	57	13.9	.....	n.			5		5		n.	1 h'r	1 h'r	h'vy	nw.	squally.
Bk. Alba, N. 49° 18′, W. 9° 50′ *†	29.63	752.5	51.8	11.0	.....	wsw.			8		.....		.....	.....	.....	.....	.....	covered.
Bk. Bayonnaise, N. 23° 21′, W. 51° 08′*†	30.08	764.0	.....	.....	.....	sw.			3		5?		sw.	o	o	sm'h	se.	clear?
S. S. Burswell, North Shields, Eng *†	29.54	750.3	52	11.1	.....	sw.			6		10		.....	4 h'r	4 h'r	sm'h	.....	threatening.
Bk. Champion, Maassius, Netherlands †	29.50	749.3	54.5	12.5	.....	w.			7		8		wnw.	6 h'r	6 h'r	.....	.....	fair.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.29	769.4	59	15.0	76	nne.			1		o		.....	o	o	.....	.....	clear.
Schr.C. R. Flint, N. 19° 10′, W. 82° 35′†	30.05	763.3	78	25.6	.....	nne.			5		5?		ene.	o	o	r'gh	une.	cloudy?
S. S. D. J. Foley, N. 28° 37′, W. 74° 10′	.....	.....	76	24.4	.....	nne.			6		4		n.	o	o	long	nne.	fine.
Bk. David Preston, N. 29° 25′ W. 76° 50′ *†	30.05	763.3	74	23.3	.....	ne.			0		o		.....	o	o	long	ne.	
S. Don Quixote, Passorgen Roads, Java*	29.76	755.9	88	31.1	.....	e.			6		4?		e.	.....	.....	sm'h	.....	cloudy?

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.			Force.	Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.			Amount and kind.		Direction.						
										Upper	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0-10	0-10	0-10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. E. D. Bigelow, N. 40° 18′ W. 49° 50′*†.....	29.75	755.6	.....	.....	.....	ne.	.....	.....	9	.....	5	.....	ne.	0	0	cross	ne.	fair.
Schr. Edith R. Seward, Wilmington, N. C*†.....	30.32	770.2	53	11.7	.....	n.	.....	.....	1	.....	2	.....	calm	0	0	.....	.....	clear.
S. E. J. Spicer, New York. N. Y.....	30.20	768.6	51	10.6	93	ne.	.....	.....	4	.....	10	.....	ne.	.....	.....	.....	.....	overcast.
Bk. Eliza Barss, N. 35° 25′, W. 68° 00′†.....	29.98	761.5	.....	.....	.....	w.	.....	.....	3	.....	2	.....	w.	0	0	long	ne.	clear.
S. Enoch Train, N. 20° 06′, W. 47° 00′*†.....	30.15	765.8	.....	.....	.....	s.	.....	.....	2	.....	.....	.....	.....	0	0	light	e.	clear.
Bk. Essex, Muscat, Arabia*†.....	29.90	759.4	87	30.6	.....	wnw.	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	fine.
Schr. F. E. McDonald, Washington, D. C†.....	30.29	769.4	.....	.....	.....	n.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	light rain.
S. S. Foscolia, Rio de Janeiro, Brazil*†.....	29.25	742.9	.....	.....	.....	var.	.....	.....	3	.....	.....	.....	se.	3 h'r	3 h'r	.....	.....	fair.
Bk. Freya, N. 40° 25′, W. 12° 31′	.....	.....	62	16.7	.....	wsw.	.....	.....	6	.....	5	.....	w.	0	0	mod.	nw.	rain & fog.
S. Glendon, S. 50° 40′ W. 84° 30′†.....	29.23	742.4	52	11.1	.....	nnw.	.....	.....	5	.....	10	.....	nnw.	8 h'r	8 h'r	mod.	sw.	clear.
S. Grecian, N. 2° 30′, W. 41° 00′†.....	29.97	761.2	84	28.9	83	se.	.....	.....	4	.....	5	.....	se.	0	0	sm'h	ne.	
Bk. Gronsvaer, S. 44° 58′ E. 130° 00′†.....	29.78	756 3	58.0	14.4	100	n.	.....	.....	5	.....	2	.....	n.	0	0	5	n.	
Bk. Hattie G. McFarland, N. 34° 28′, W. 72° 00′†.....	30.29	769.4	67	19.4	.....	n.	.....	.....	6	.....	6	.....	n.	0	0	short	nne.	
Schr. Hattie Weston, Mayaro Bay, Trinidad, W. I*†.	29.98	761.5	83	28.3	.....	e.	.....	.....	3	.....	10	.....	e.	3 h'r	3 h'r	mod.	e.	raining.
S. Hedwig, N. 21° 39′, W. 61° 05′.....	30.00	761.9	82.0	27.8	83	se.	.....	.....	2	.....	5	.....	se.	0	0	4	n.	
Schr. Isabel Alberto, Key West, Fla†.....	30.09	764.3	.....	.....	.....	nne.	.....	.....	4	.....	2	.....	ne.	0	0	.....	.....	clear.
Schr. Jennie N. Huddell, Philadelphia, Pa†.....	30.22	767.6	.....	.....	.....	ne.	.....	.....	5	.....	10	.....	ne.	0	0	.....	.....	cloudy.
S. S. John Hopkins, Cape Charles, Va.....	.....	.....	50	10.0	.....	n.	.....	.....	5	.....	2	.....	n.	0	0	hv'y	ene.	fair.
Schr. John L. Thomas, Vivorilla Cays, C. A *†.....	30.06	763.5	.....	.....	.....	nne.	.....	.....	4	.....	3	.....	ene.	0	0	.....	.....	fair.
Bg. John Wesley, Cardenas, Cuba, W. I†.....	29.99	761.7	.....	.....	.....	ene.	.....	.....	4	.....	1	.....	ne.	1 h'r	1 h'r	.....	.....	clear.
Bk. Joseph A. Ropes, N. 19° 46′. E. 58° 34′*†.....	30.01	762.2	83	28.3	75	calm	.....	.....	0	.....	1	.....	.....	.....	.....	sm'h	.....	fair.
Light House Tender, Laurel, Key West, Fla.†.....	30.12	765.0	74	23.3	.....	ne.	.....	.....	2	.....	4	.....	ne.	0	0	.....	.....	fair.
Bk. Liberia, N. 21° 50′, W. 32° 15′*.....	30.12	765.0	79	26.1	82	ese.	.....	.....	2	.....	3	.....	ese.	0	0	.....	.....	fine.
Bg. Lilian, Georgetown, Brit. Guiana†.....	29.90	759.4	82	27.8	.....	ese.	.....	.....	3	.....	9	.....	e.	1 h'r	1 h'r	.....	.....	raining.
Bg. L. & W. Armstrong, N. 33° 36′, W. 74° 02′*†.....	30.16	766.1	.....	.....	.....	nnw.	.....	.....	6	.....	5	.....	n.	0	0	long	nne.	mod. gale.
S. S. Madrid, N. 42° 34′, W. 22° 11′*†.....	29.84	757.9	64	17.8	94	sw.	.....	.....	7	.....	9	.....	wsw.	sh'rs	sh'rs	rg'h	.....	raining.
S. S. Malabar, N. 6° 02′ E. 80° 12′*†.....	29.85	758.2	.....	.....	.....	w.	.....	.....	1	.....	2	.....	.....	0	0	sm'h	.....	clear.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†.....	30.00	762.0	72	22.2	.....	nne.	.....	.....	6	.....	2	.....	ne.	0	0	.....	.....	fair.
Bg. Mattie B. Russell, Matanzas, Cuba*†.....	30.22	767.6	.....	.....	.....	nne.	.....	.....	3	.....	3	.....	nne.	2 h'r	2 h'r	h'vy	nne.	rainy.
Schr. Moravian, N. 12° 33′, W. 81° 43′†.....	29.88	758.9	.....	.....	.....	n.	.....	.....	.....	.....	.....	.....	n.	24 h'r	24 h'r	sm'h	n.	cloudy
Bg. Myrtle, N. 26° 53′, W. 65° 32′†.....	30.02	762.5	.....	.....	.....	nnw.	.....	.....	1	.....	2	.....	ne.	2 h'r	2 h'r	long	n.	fair.
Bk. Norena, N. 32° 01′, W 77° 15′*†.....	30.28	769.1	.....	.....	.....	nne.	.....	.....	4	.....	2	.....	nne.	1 h'r	1 h'r	high	n;e.	fine.
S. Orealla, N. 0° 14′, E. 82° 40′*.....	29.85	758.2	.....	.....	.....	w.	.....	.....	4	.....	8	.....	w.	1 h'r	1 h'r	sm'h	.....	fine.
Bk. Orpheus, N. 37° 42′ W. 66° 40′.....	29.99	761.7	60	15.6	.....	nw.	.....	.....	6	.....	10 k	.....	nw.	0	0	cross	nnw.	squally.
S. Paramita, San Francisco, Cal†.....	29.99	761.7	55	12.8	.....	nw.	.....	.....	2	.....	.....	.....	nnw.	0	0	.....	.....	fair.
S. S. Radnorshire, N. 36° 20′, E. 13° 40′*†.....	30.18	766.6	.....	.....	.....	n.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bk. Rebus, N. 33° 45′, W. 73° 20.....	30.00	762.0	62	16.7	.....	n.	.....	.....	5	.....	2	.....	n.	0	0	.....	ne.	fair.
S. St. Francis, S. 37° 45′ W. 81° 00′†.....	29.11	739.4	54	12.2	.....	w.	.....	.....	3	.....	6	.....	w.	.....	.....	long	sw.	misty.
Schr. S. B. Hubbard, Jacksonville, Fla†.....	30.31	769.9	65	18.3	.....	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	fine.
S. S. Strathleven, N. 49° 36′, W. 5° 03′.....	29.54	750.3	52.0	11.1	91	w	.....	.....	6	.....	3	.....	w.	.....	.....	6	w.	squally.
Bg. Teneriffe, N. 31° 00′, W. 78° 30′.....	30.20	767.1	.....	.....	.....	ne.	.....	.....	6	.....	.....	.....	.....	0	0	h'vy	.....	fine.
Bk. Truro, N. 47° 40′ W. 17° 00′*†.....	29.84	757.9	.....	.....	.....	w.	.....	.....	3-4	.....	10	.....	w.	rain	rain	long	wnw.	rainy.
U.S. F.C. S. S. Fish Hawk, Washington, D. C†.....	30.42	772.7	49	9.4	85	n.	.....	.....	1	.....	7	.....	calm	0.05	1.3	.....	.....	cloudy.
Bk. Vincenzo Accame, Lisbon, Portugal†.....	30.37	771.3	73.4	23.	.....	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	
Schr. Viola Reppard, Savannah, Ga†.....	30.18	766.6	64	17.8	.....	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†....	30.00	762.0	.....	.....	.....	ssw.	.....	.....	1	.....	5	.....	.....	0	0	.....	.....	fine.
Bk. Wandering Jew, S. 0° 42′, W. 30° 05′†.....	29.85	758.2	80	26.7	.....	ese.	.....	.....	6	.....	6	.....	se.	0	0	long	sse.	
Bk. Warden Law, S. 53° 00′, W. 81° 30′.....	29.44	747.8	.....	.....	.....	nnw.	.....	.....	2	.....	10	.....	w.	12 h'r	12 h'r	mod.	w.	raining.
Bgt. Willie, S. 38° 30′. W. 13° 10′*†.....	30.18	766.6	68	20.0	.....	nnw.	.....	.....	5	.....	fg.	.....	.....	.....	.....	r'gh	n.	foggy.

International Chart I. November 8, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 9, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0-10	0-10	0-10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.17	766.3	67.5	19.7	89	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.09	764.2	75.6	24.2	28	w.	.....	.....	7	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.05	763.3	73.0	22.8	68	w.	.....	.....	4	.....	4	.....	.....	0	0	cloudy	Fonfrède.
Tunis	.....	.....	30.00	763.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.24	768.0	72.7	22.6	51	sw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Pérès.
Tebessa	.....	.....	30.24	768.0	69.4	20.8	51	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	69.1	20.6	25	nw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair	Lonchamp.
Laghouat	.....	.....	30.32	770 2	65.1	18.4	47	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.27	768.9	76.3	24.6	21	.....	.....	.....	.....	.....	5	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	72.6	22.6	51	nne.	6	2.7	.....	.....	1	.....	.....	0	0	very fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	28.98	736.2	29.52	749.8	59.0	15.0	72	sw.	.....	.....	2	.....	0	.....	.....	0.465	11.8	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.66	728.0	29.42	747.3	48.2	9 0	88	ene.	9.8	4.4	.....	.....	10	.....	.....	0.374	9.5	.....	Dr. Wierzbiski.
Eperies	28.61	726.6	29.47	748.5	53.1	11.7	80	s.	.....	.....	4	.....	10 s	.....	n.	Inap.	Inap.	.....	Julius Mikolik.
Gratz	28.22	716.7	29.44	747.8	54.1	12.3	85	w.	.....	.....	2	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.30	718.8	29.71	754.5	57.4	14.1	46	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling
Kremsmunster, Obs'y	27.95	710.0	29.28	743.7	46.0	7.8	93	calm	.....	.....	0	.....	10	.....	.....	0.272	6.9	.....	The Staff.
Lemberg	28.58	725.8	29.55	750.6	50.2	10.1	76	se.	.....	.....	2	.....	10	.....	.....	0.319	8.1	.....	Dr. T. Stanecki.
Pola	29.48	748.9	29.60	751.7	63.1	17.3	69	s.	.....	.....	4	.....	10	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	29.14	740.2	29.60	751.8	57.6	14.2	65	s.	.....	.....	3	.....	10	.....	.....	0.457	11.6	.....	Joseph Midlinszay, S. J.
Szegedin	29.32	744 6	29.59	751.6	61.2	16.2	61	sw.	.....	.....	3	.....	10	.....	.....	0.453	11.5	.....	Karl Stancel.
Trieste	29.47	748.5	29.57	751.1	61.9	16.6	68	sw.	.....	.....	2	.....	10	.....	.....	0.173	4.4	.....	Royal Academy.
Vienna	28.73	729.7	29.44	747.8	48.2	9.0	89	calm	.....	.....	0	.....	10	.....	.....	0.118	3.0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	28.86	733.0	28.96	735.6	39.0	3.9	89	wnw.	30	13.4	.....	.....	10	.....	.....	0.160	4.1	raining	W. Boswell
Armagh, Observatory	29.14	740.1	29.39	746.5	43.5	6.4	72	w.	15	6.7	.....	.....	2	.....	.....	.....	.....	blue sky	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.24	742.7	47.1	8.4	73	w.	52	23.3	.....	.....	10	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Shurples	28.71	729.2	29.24	742.7	44.8	7.1	85	w.	12	5.4	.....	.....	10	.....	.....	.....	.....	rain & hail	Thomas Mackereth.
Bradford, Yorkshire	28.74	730.0	29.13	739.9	45.6	7.6	79	w.	.....	.....	5	.....	4	.....	.....	0.10	2.5	d. clouds	McLandsborough&Preston
Bridgetown, Barbadoes	29.87	758.7	29.90	759.4	85.0	29.4	68	ne.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds	Corpl.J.Surgenor, A.H.C.
Cardington	29.14	740.1	29.26	743.2	45.0	7.2	71	sw.	.....	.....	4.0	.....	4	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E	29.19	741.4	29.32	744.7	47.9	8.8	73	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.40	746.7	29.63	752.6	50.7	10.4	62	wnw.	.....	.....	5	.....	5	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.60	701.0	29.80	756.9	76.0	24.4	31	se.	.....	.....	1	.....	7	.....	.....	.....	.....	.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	87.0	30.6	62	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.17	766.3	30.22	767.6	68.0	20.0	90	w.	.....	.....	3	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	28.92	734.6	29.13	739.9	42.3	5.7	81	w.	.....	.....	4	.....	8	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.14	740.1	29.32	744.7	46.9	8.3	76	wsw.	.....	.....	4	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.28	743.7	29.58	751.3	53.0	11.7	66	nw.	.....	.....	4	.....	6	.....	.....	blank	blank	d. clouds	A. Collenette, F. M. S.
Kew, Observatory	29.30	744.2	29.33	745.0	47.9	8.8	74	wsw.	17	7.6	.....	.....	9	.....	.....	.....	.....	threatening	The Staff.
Leicester, Museum	29.01	736.8	29.26	743.2	47.2	8.4	76	nw.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.64?	752.8?	29.71?	754.6?	68.0	20.0	97	nw.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.08	764.0	30.12	765.0	74.5	23.6	57	ne.	.....	.....	3	.....	6	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.76	730.5	29.27	743.4	48.5	9.2	68	wsw.	.....	.....	0	.....	4	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.10	739.1	29.33	745.0	50.0	10.0	75	w.	.....	.....	6	.....	8	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.49	749.0	29.57	751.0	51.6	10.9	72	nw.	.....	.....	4	.....	2	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	28.94	735.1	29.04	737.6	40.8	4.9	92	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.88	758.9	29.94	760.5	68.6	20.3	42	sw.	.....	.....	1	.....	1	.....	.....	.....	.....	blue sky	W. H. Lyne.
Sheffield	28.92	734.6	29.19	741.4	47.9	8.8	77	sw.	.....	.....	6	.....	2	.....	.....	0.01	0.3	d. clouds	W. F. Cooper.
Silloth Rectory	29.12	739.6	29.15	740.4	43.4	6.3	88	nw.	.....	.....	4	.....	10	.....	.....	0.056	1.4	raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.22	742.2	46.0	7.8	76	wsw.	28	12.5	.....	.....	10	.....	.....	.....	.....	overcast	I. New.
Stratfield Turgiss	29.13	739.9	29.34	745.2	51.0	10.6	67	nw.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds	Rev.C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.62	752.3	29.68	753.9	52	11.1	66	nw.	.....	.....	6	.....	5	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	29.63	752.6	29.65	753.1	49.9	9.9	62	w.	19	8.5	.....	.....	10	.....	.....	blank	blank	misty	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.08	764 0	30.12	765.0	39	3.9	84	calm	0	0	.....	.....	10 s	.....	.....	0.020	0.5	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	30.10	764 5	30.17	766.3	30	— 1.1	88	sw.	1	0.4	.....	2 k	2 ks	sw.	sw.	0	0	fair	G. A. Blair.
Father Point, Quebec*	30.05	763.3	30.07	763.8	34	1.1	85	sw.	12	5.4	.....	10 k	.....	calm	0	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.21	741.9	30.08	764.0	22	— 5.6	87	nw.	16	7.2	.....	0	5 k	.....	nw.	0	0	fair	James Stewart.
Halifax, N. S*	29.97	761.2	30.10	764.5	41	5.0	89	n.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	A. Allison.
Kingston, Ontario*	29.79	756.7	30.13	765.3	44	6.7	93	calm	0	0	.....	.....	10 k	.....	w.	0.02	0.5	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	29.92	760.0	30.13	765.3	39	3.9	100	w.	9	4.0	.....	.....	fg	.....	.....	Inap.	Inap.	foggy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.36	745.7	30.08	764.0	33	0.6	88	w	3	1.3	.....	2 cs	2 ks	nw.	nw.	0	0	fair	Rev. R. Mosley.
Port Dover, Ontario	29.40	746.7	30.10	764.5	48	8.9	100	sw.	5	2.2	.....	.....	10 cs	.....	sw.	0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.41	747 0	30.06	763.5	52	11.1	93	sw.	4	1.8	.....	.....	10 n	.....	sw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.80	750.9	30.13	765.3	36	2.2	89	e.	.....	.....	1	.....	10 n	.....	e.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.62	752.3	30.10	764.5	31	— 0.6	96	calm	0	0	.....	.....	fg	.....	.....	0	0	dense fog	W. H. McIntyre.
Saugeen, Ontario*	29.32	744.7	30.05	763.3	39.0	3.9	96	e.	7	3.1	.....	.....	10	.....	.....	0	0	cloudy	
St. Andrews, N. B	30.08	764.0	30.13	765.3	34	1.1	84	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Sydney, C. B*	30.07	763.8	30.14	765.5	38	3.3	86	e	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.72	754.9	30.10	764.5	44	6.7	89	w.	3	1.3	.....	8 ck	2 s	w.	w.	0	0	cloudy	Magnetic Observatory
Yarmouth, N. S*	30.02	762.5	30.09	764.3	41	5.0	89	n.	2	0.9	.....	.....	10 s	.....	n.	0.05	1.3	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.63	727.2	30.04	763.0	44.0	6.7	100	sw.	.....	.....	3	.....	fg.	.....	sw.	0	0	foggy	Wm. Wylie.
St. Johns, Newfoundland	30.04	763.0	30.30	769.6	38	3.3	89	sw.	.....	.....	.....	0	0	.....	.....	0	0	clear	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.08	764.0	30.11	764.8	67.0	19.4	73	wsw.	13.8	6.2	.....	0	3 k	.....	.....	0	0	clear	John Duthie.
Cape Town, O. G. H. Obs'y	30.06	763.5	30.10	764.5	81.2	27.3	46	sse.	16	7.2	.....	2	4	.....	.....	0	0	.....	The Staff, 1or D.Gll.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.50	774.6	36.1	2.3	92	ne.	7.4	3.3	.....	.....	10	.....	.....	0	0	foggy.....	**Mission, S. J.**
Zi-Ka-Wei, near Shanghai.	30.45	773.3	30.47	774.0	50.0	10.0	94	n.	4.9	2.2	.....	.....	10 n	.....	.....	0.004	0.1	raining.	**M. Marc Dechevrens, S.J.**
Danish.																			
Copenhagen	29.15	740.5	29.20	741.7	45.7	7.6	82	sw.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	**Oversergent Fischer.**
Faröe	28.99	736.4	29.02	737.0	45.9	7.7	86	ssw.	.....	.....	6	.....	8	.....	.....	.....	.....	.....	**Overloerer Lauridsen.**
Godthaab, Greenland	29.91	759.7	29.95	760.8	14.0	—10.0	74	ene.	.....	.....	4	.....	6	.....	.....	.....	.....	.....	**S. Kleinschmidt.**
Ivigtut	29.84	757.8	29.85	758.3	18.3	— 7.6	.....	n.	.....	.....	2	.....	6	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.32	744.7	29.36	745.8	29.8	— 1.2	90	ne.	.....	.....	6	.....	5	.....	.....	.....	.....	.....	**A. O. Thorlacius.**
Thorshavn	29.06	738.0	29.09	738.9	40.6	4.8	87	calm	0	0	.....	.....	7	.....	.....	.....	...	raining.....	**Overloerer Bergh.**
Vestervig	28.87	733.4	28.97	735.8	43.8	6 1	88	sse.	.....	.....	6	.....	7	.....	.....	.....	.....	.....	**Loearer Oesterboi.**
French.																			
Agen, Normal School	29.51	749.6	30.17	766.4	52.7	11.5	100	wnw.	.....	.....	2	.....	8 n	.....	nw.	0.012	0.3	very cloudy	**M. Labroue, Director.**
Alençon, Normal School	29.10	739.2	29.65	753.2	50.0	10	89	sw.	.....	.....	1	.....	n	.....	ne.	0.126	3.2	.....	**M. Nicot, Director.**
Arras, Engineer School	29.17	741.0	29.43	747.5	50.4	10.2	84	w.	.....	.....	4	.....	n	.....	.....	0.051	1.3	.....	**M. Fénéon, Command't.**
Avignon, Normal School	29.65	753.2	29.73	755.2	59.4	15.2	80	nw.	.....	.....	1	.....	8	.....	w.	0	0	very cloudy	**M. Giraud, Director.**
Bar-sur-Seine	29.05	737.8	29.00	751.9	49.8	9.9	73	w.	.....	.....	2	.....	10	.....	wnw.	1.004	25.5	covered	**M. Sailliard, Director.**
Beauvais, Normal School	29.22	742.2	29.48	748.9	52.3	11.3	65	wsw.	.....	.....	3	.....	8	.....	w.	0.043	1.1	very cloudy	**M. Frère Eugène Marie.**
Besançon, Normal School	28 84	732.6	29.73	755.2	50.0	10	86	s.	.....	.....	2	.....	10 n	.....	.....	1.46	37.	stormy.....	**M. Gobin, Director.**
Bordeaux, Observatory	29.62	752 4	29.89	759.1	54.7	12.6	67	sw.	.....	.....	1	.....	10	.....	.....	0.390	9.9	covered.....	**M. Rayet, Director.**
Bourges, Normal School	29.17	740 8	29.72	754.8	52.2	11.2	68	w.	.....	.....	2	.....	kn	.....	w.	1.024	26.0	.....	**M. Malet, Director.**
Brest, Naval Observatory	29.53	750.1	29.78	756.3	55.4	13.0	77	wnw.	.....	.....	2	.....	3	.....	wnw.	0.098	2.5	.....	**M. de Kermaree, Dir.**
Caen, Normal School	29.45	747.9	29.52	749.8	54.3	12.4	55	sw.	.....	.....	2	.....	5	.....	w.	0.04	1.	cloudy.....	**M. Berson, Director.**
Châlons-sur-Marne, N.Sch'l	29 17	740.8	29.48	748.7	50.7	10.4	79	nw.	.....	.....	2	.....	5	.....	.....	0.354	9.0	cloudy.....	**M. Jadot, Director.**
Charleville, Normal School	28.90	734.1	29.42	747.3	48.2	9	71	wsw.	.....	.....	1	.....	10	.....	.....	1.77	45.	covered.....	**M. Grimard, Director**
Clermont-Ferrand Obs'y	28.43	722.0	29.78	756.3	52.2	11.2	54	w.	.....	.....	3	.....	5	.....	.....	0.094	2.4	½ covered..	**M. Allurd, Director.**
Cluny, Normal School	28 87	733.4	29.72	755.0	51.4	10.8	65	w.	.....	.....	4	.....	7	.....	w.	0.453	11.5	.....	**M. de Villemontée, Dir.**
Commercy, Normal School	28 65	727.6	29.50	749.3	48.6	9.2	76	w.	.....	.....	4	.....	2	w.	w.	1.38	35.	slightly cl'dy	**Dr. Coulet, Director.**
Gap, Normal School	27.21	691.2	29.74	755.3	48.2	9	92	.....	.....	.....	.....	.....	9	.....	s.	1.004	25.5	.....	**M. Jeangirard, Director.**
Grénsque, du Rhone	28.62	727.0	29.74	755.3	57.4	14.1	80	sw.	.....	.....	2	.....	9	.....	sw.	0.016	0.4	.....	**M. Kina, Director.**
Grenoble. Normal School	28.91	734.3	29.68	753.8	59.0	15	76	nw.	.....	.....	4	.....	kn	.....	nw.	0	0	.....	**M. Ablard, Director.**
Guéret	28.21	716.4	29.78	756.5	48.9	9.4	89	sw.	.....	.....	3	.....	10	.....	e.	0.673	17.1	raining.....	**M. Delorme, Dir.**
Lamballe, Normal School	29.40	746.7	29.67	753.7	53.6	12	95	w.	.....	.....	3	0	5 kn	.....	.....	0.087	2.2	cloudy	**M. Ollitrault, Director.**
Lescar, Normal School	29.35	745.4	29.91	759.7	55.4	13.0	81	w.	.....	.....	3	.....	10	.....	.....	0.126	3.2	raining.....	**M. Chauvin, Director.**
Lorient, Naval Observatory	29.66	753.3	29.76	755.9	55.0	12.8	68	w.	.....	.....	3	.....	5	.....	w.	0.059	1.5	½ covered..	**Lt. T. Carré, Director.**
Lyon, St. Genis-Laval	28.72	729.4	29.76	756.0	55.8	13.2	58	w	.....	.....	3	0	5 n	.....	wnw.	0.063	1.6	cloudy.....	**M. André, Director.**
Mans, Normal School	29.22	742.3	29.53	750.0	50.2	10.1	78	w.	.....	.....	4	.....	.....	.....	w.	0.374	9.5	.....	**M. Piboen, Director.**
Marseille, Observatory	29.46	748.3	29.73	755.1	60.1	15.6	85	w.	.....	.....	1	.....	10	.....	w.	0	0	.....	**M. Stephan, Director.**
Mt. Louis	24.65	626.2	29.50	749 2	41.9	5.5	88	w.	16.8	7.5	.....	.....	7	w.	.....	0	0	.....	**M Caré for Dr. Fines.**
Montpellier, Normal School	29.82	757.3	29.95	760.6	62.6	17	68	wnw.	.....	.....	4	.....	5	.....	nw.	0	0	cloudy.....	**M. Gulzin, Director.**
Nancy, Normal School	28.65	727.8	29 43	747.6	47.8	8.8	73	wsw.	.....	.....	2	.....	ckn	.....	w.	0.992	25.2	.....	**M. Hasse, Director**
Nantes. Observatory	29.62	752.4	29.78	756.5	56.5	13.6	63	wsw.	.....	.....	1–3	0	6 k; kn	.....	.....	1.150	29.2	.....	**M. Larocque, Director.**
Perpignan, Observatory	29.68	753.9	29.79	756.7	63.3	17.4	51	nw.	37.4	16.7	.....	.....	10	.....	.....	0	0	.....	**Dr. Fines, Director.**
Pic-du-Midi, Summit.	21.08	535.5	.....	.....	24.4	— 4.2	.....	nw.	.....	.....	2	.....	10	.....	nw.	0.366	9.3	snowy.....	**Gen'l de Nansouty, Dir.**
Privas, Normal School	28.68	728.4	29.73	755.1	55.4	13	81	w.	.....	.....	1	.....	10	w.	w	0.047	1.2	covered.	**M. Taillen.**
Puy de Dôme Obs'y, Summit	24.81	630.2	.....	.....	31.6	— 0.2	100	w	.....	.....	8	.....	10	.....	.....	0.453	11.5	foggy.....	**M. Allurd, Director.**
Rochefort, Naval Obs'y	29.85	758.1	29.88	758.9	53.6	12.0	82	wnw.	.....	.....	2	.....	8	.....	w.	0.16	4.	¾ covered...	**Lt. E. Decante, Director.**
Roche-sur-Yon, N. School	29 84	757.8	30.05	763.3	54.7	12.6	98	w.	.....	.....	4	.....	10	se.	se.	0.98	25.	covered.....	**M. Brotier, Director.**
Rodez, Normal School	27.72	704.2	29.88	758.9	48.6	9.2	89	w.	.....	.....	2	.....	10	.....	w.	0.374	9.5	raining.....	**M. Seger, Director.**
Rouen, Normal School	29.47	748.5	29.52	749.7	53.2	11.8	59	nw.	.....	.....	4	.....	2	nw.	.....	0.063	1.6	slightly cl'dy	**M. Mouillot.**
Saint Lô	.....	.....	.....	.....	51.4	10.8	69	w.	.....	.....	1	.....	.....	.....	w.	0.268	6.8	.....	**M. Delaplanche, Dir.**
Saint Maur, Observatory	29.39	746.6	29.56	750.8	51.6	10.9	72	wsw.	.....	.....	3	.....	10	.....	w.	0 161	4.1	.....	**M. Renou, Director.**
Toulouse, Observatory	29.23	742.4	29.95	760.8	54.1	12.3	92	w.	.....	.....	4	.....	10	nw.	... ...	0.197	5.0	raining.....	**M. Baillaud, Director.**
Tours	29.52	749.9	29.70	754.4	54.7	12.6	63	w.	.....	.....	3	.....	5	nw.	wnw.	0.969	24.6	cloudy.....	**M. de Tastes.**
Versailles, Observatory	29.05	737.9	29.54	750.4	51.4	10.8	68	w.	.....	.....	4	.....	.....	.....	.....	0.118	3.0	.....	**Dr. A. Bergny, Director.**
German.																			
Ansbach	27.84	707.0	29.27	743.4	45.0	7.2	94	w.	.....	.....	4	.....	10	w.	. .....	0.575	14.6	.....	**Prof. Jnedt.**
Bamberg	28.56	725.4	29.38	746.3	44.6	7.0	75	ssw.	.....	.....	3	0	9 n	.....	sw.	0.457	11.6	raining.....	**Prof. Dr. Hoh.**
Berlin	.....	.....	.....	.....	43.7	6.5	87	se.	.....	.....	2	.....	10	.....	.....	0.244	6.2	.....	**Prof. Dr. Arndt.**
Breslau	28.87	733.2	29.39	746.4	45.0	7.2	89	se.	.....	.....	2	.....	10	... ..	.....	0.268	6.8	raining.....	**Royal University Obs'y.**
Carlsruhe	28.99	736 4	29.43	747.4	45.1	7.3	93	sw.	.....	.....	4	....	10	sw.	.....	1.154	29.3	raining.....	**Albert Senz.**
Cassel	28.56	725.4	29.27	743.5	43.9	6.6	88	sw.	.....	.....	2	.....	8	sw.	.....	0.30	7.6	.....	**Dr. H. Möhl.**
Frankfort-on-the-Main	28.99	736.4	29.36	745.8	46.4	8.0	86	w.	.....	.....	1	.....	9	.....	.....	0.378	9.6	.....	**Physical Society.**
Friedrichshafen	27.93	709.5	29.34	745.3	50.7	10.4	93	wsw.	.....	.....	3	.....	10	wsw.	.....	1.346	34.2	.....	**Wilhelm, Chief Tel.**
Hamburg	29.10	739 1	29 19	741.4	46.8	8.2	92	s.	.....	.....	3	.....	10	.....	.....	0.043	1.1	.....	**E. Preller.**
Kiel	29.13	739.9	29.15	740.3	45.7	7.6	83	ssw.	.....	.....	2	.....	10	.....	.....	0.094	2.4	.....	**Prof. Dr. G. Karsten.**
Leipsic, Astron'l Obs'y	28.85	732.8	29.27	743 4	42.1	5.6	100	s.	.....	.....	1	.....	10	ssw.	.....	0.205	5.2	raining.....	**H. Leppig, Asst.**
Magdeburg	29.06	738.2	29.25	743.0	44.8	7.1	90	s.	.....	.....	2	.....	10 n	.....	.....	0.114	2.9	raining.....	**Weather Observatory.**
Memel	29.31	744.4	29.35	745.6	45.1	7.3	83	w.	.....	.....	6	.....	9 kn	.....	.....	.....	.....	.....	**Issermann.**
Munich	27.51	698.7	29.33	744.9	45.0	7.2	93	s.	.....	.....	1	0	10	.....	.....	0.097	17.7	raining..	**Central Station.**
Neufahrwasser	29.38	746.3	29.40	746.7	44.6	7.0	70	sw.	.....	.....	2	.....	5	.....	.....	0.091	2.3	.....	**A. Lothes.**
Neustadt, Palatinate	28.82	731.9	29.33	744.9	46.4	8.0	86	sw.	.....	.....	3	.....	4	wsw.	.....	0.709	18.0	raining.....	**Dicknether.**
Stuttgart	28 43	722.1	29.32	744.7	46.4	8.0	82	w.	.....	.....	5	.....	10	.....	.....	0.748	19.0	.....	**Prof. Dr. Schoder.**
Wustrow	29.23	742.4	29.26	743.1	45.7	7.6	77	s.	.....	.....	3	.....	5	s.	.....	0	0	.....	**Profs. Brannes & Reimer**
Greek.																			
Athens	29.61	752.2	29.99	761.8	67.5	19.7	.....	sw.	.....	.....	0.5	.....	1	.....	.....	0	0	clear.....	**Schmidt & Wourlisch.**
Indian.																			
Kurrachee	29.88	759.0	29.93	760.3	78.1	25.6	82	sw.	10.0	4.5	.....	.....	2	.....	.....	0	0	d. clouds	
Deesa	29.42	747.2	29.89	759.2	83.9	28.8	27	s.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Bombay	29.82	757.5	29.86	758.5	81.4	27.4	74	nw.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky.....	
Poona, Yarrowda	28.00	711.2	29.82	757 4	88.1	31.2	22	wnw.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky.....	
Trichinopoly	29.60	751.7	29.88	758.9	77.1	25.1	84	ese.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast.....	
Bellary	28.36	720.2	29.80	757.0	86.6	30.3	36	nne.	4.0	1.8	.....	.....	4	.....	.....	0	0	d. clouds	
Belgaum	27.31	693.8	29.82	757.3	82.9	28.3	44	nne.	5.0	2.2	.....	.....	2	.....	ne.	0	0	d. clouds.....	
Lahore	29.09	738.9	29.86	758.3	67.7	19.8	56	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Roorkee	28.95	735.4	29.87	758.6	72.8	22.7	30	w.	.....	.....	.....	.....	0	.....	.....	0	0	.....	
Agra	29.32	744.7	29.89	759.1	77.7	25.4	28	calm	0	0	.....	.....	0	.....	.....	c	0	blue sky.....	
Nagpur	28.85	732.7	29.90	759 3	77.5	25.3	31	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Jubbulpore	28.55	725.2	29.92	759.9	77.4	25.2	34	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Lucknow	29.49	749.1	29.87	758.7	76.2	24.6	51	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Allahabad	29.56	750.9	29.88	759.0	68.9	20.5	54	n.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Patna	29.71	754.6	29.90	759.4	72.3	22.4	55	nw.	3.1	1.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Hazaribagh	27.87	707.9	29.93	760.1	66.6	19.2	53	wnw.	6.4	2.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Cuttack	29.80	756.9	29.88	759.0	76.5	24.7	77	calm	0	0	.....	.....	0	.....	.....	0.28	7.1	blue sky.....	
Calcutta, Alipore	29.85	758.3	29.88	758.8	76.9	24.9	69	nnw.	2.0	0.9	.....	.....	1	.....	.....	0	0	d. clouds.....	
Dhubri	29.76	755.0	29.88	758.9	72.6	22.6	65	calm	0.2	0.09	.....	.....	0	.....	.....	0	0	blue sky.....	
Chittagong	29.79	756.6	29.88	759.0	75.6	24.2	99	nw.	1.3	0.6	.....	.....	1	.....	.....	0	0	blue sky.....	
Sibsagar	29.56	750.8	29.90	759.6	69.9	21.1	85	ne.	2.0	0.9	.....	.....	6	w.	w.	1.21	30.7	d. clouds.....	
Zanzibar, Africa	29.88	758.9	29.90	759.4	76.0	24.4	90	se.	3.1	1.4	.....	.....	9	.....	.....	1.31	33.3	gloomy.....	
Jeypore	28.44	722.5	29.90	759.4	76.9	24.9	32	nw.	3.1	1.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Italian.																			
Udine	29.16	740.7	29.58	751.2	54.0	12.2	94	calm	0	0	.....	.....	10	.....	.....	0.217	5.5	.....	**Prof. Giovanni Clodig.**
Milan	29.05	737.9	29.58	751.2	51.6	10.9	94	nne.	3.8	1.7	.....	.....	10	.....	.....	0.075	1.9	.....	**Prof. Schiapparelli.**
Padua	29.43	747.5	29.54	750.3	53.1	11.7	95	nne.	6.0	2.5	.....	.....	10	.....	.....	0.063	1.6	.....	**Prof. Dott. Lorenzoni.**
Moncalieri	28.65	727.7	29.57	751.0	51.8	11.0	82	ssw.	0.7	0 3	.....	.....	10	.....	.....	0	0	.....	**Prof. F. F. Denza.**

STATIONS.	Barometer. Corrected for instrumental error and for temperature		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Genoa	29.38	746.3	29.58	751.2	62.2	16.8	79	sw.	6.9	3.1	.....	.....	10	sw.	.....	0.020	0.5	.....	Prof. G. M. Garibaldi.
Mondovi	27.65	702.4	29.59	751.6	48.0	8.9	85	w.	.....	.....	2	.....	9	.....	.....	0	0	.....	Prof. D. C. Bruno
Pesaro	29.58	751.4	29.63	752.6	65.3	18.5	58	ssw.	.....	.....	.....	.....	10	wsw.	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.38	746.3	29.64	752.8	56.7	13.7	67	sw.	.....	.....	4	.....	10	.....	.....	0	0	.....	Prof. Cosmantino Pitter.
Leghorn	29.51	749.5	29.60	751.7	64.2	17.9	72	sw.	1.8	0.8	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.64	752.9	29.82	757.3	67.3	19.6	72	ssw.	20.6	9.2	.....	.....	9	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	29.67	753.5	29.92	759.9	66.6	19.2	60	ssw.	4 2	1.9	.....	.....	7	.....	.....	0	0	.....	Prof. C. de Giorgi
Cosenza	29.11	739.5	30.01	762.2	62.2	16.8	70	sw.	1.8	0.8	.....	.....	9	w.	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.69	754.0	29.88	758.9	66.9	19.4	64	wnw.	.....	.....	4	.....	9	.....	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.74	755.4	29.99	761.8	67.8	19.9	58	sw.	19.2	8.6	.....	.....	10	.....	.....	0	0	.....	Prof. G. Cacciatore.
Syracuse	29.94	760.5	29.98	761.6	66.9	19.4	70	calm	0	0	.....	.....	8	nne.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.35	745.6	29.87	758.7	64.2	17.9	77	ssw.	10.5	4.7	.....	.....	10	sw.	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	21.71	551.5	.....	.....	30.9	— 0.6	100	w.	.....	.....	4	.....	10	.....	.....	0.327	8.3	misty	Prof. P. F. Denza.
Valdobbia	21.73	552.0	.....	.....	31.6	— 0.2	91	n.	.....	.....	8	.....	10	.....	.....	0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.22	767.6	30.25	768.4	31.9	— 0.1	92	calm	.....	.....	0	.....	10 n	.....	nw.	0.346	8.8	raining	Hattori.
Awomori	30.13	765.3	30.17	766.3	30.0	— 1.1	83	w.	17.5	7.8	.....	0	3 ks	.....	.....	0.102	4.1	fair	K. Ogawa.
Hakodate	30.10	764.4	30.11	764.7	27.0	— 2.8	100	wnw.	27.0	12.1	.....	.....	10	.....	.....	0.070	1.8	overcast	
Hiroshima	.....	.....	.....	.....	45.5	7.5	83	n.	3.5	1.5	.....	0	0	.....	.....	0	0	clear	Y. Miwa.
Kanazawa	30.24	768.1	30.35	770.8	42.5	5.8	88	se.	4.8	2.1	.....	.....	10	.....	.....	1.190	30.3	raining	S. Endo.
Kioto	30.11	764 8	30.29	769.3	44.1	6.7	91	nnw.	0.9	0.4	.....	0	0	.....	.....	0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.14	765.6	30.35	771.0	48.5	9.2	64	ne.	2.1	0.9	.....	0	0	.....	.....	0	0	clear	S. Takehayashi.
Nemuro	29.99	761.7	30.06	763.5	28.5	— 1.9	94	w.	12.0	5.4	.....	0	0	.....	.....	0	0	clear	
Niigata	30.26	768.6	30.29	769.3	43.8	6.6	63	nw.	11.7	5.2	.....	.....	10ck;8	.....	n.	0.070	1.8	covered	M. Morita.
Nobiru	30.18	766.6	30.20	767.0	38.1	3.4	75	nw.	11.3	5.1	.....	0	5 ks	.....	nw.	0.005	0.1	fair	H. Midzushina.
Osaka	30.27	768.8	30.28	769.1	45.7	7.6	81	n.	4.7	2.1	.....	0	0	.....	.....	0	0	clear	
Sapporo	.....	.....	.....	.....	22.5	— 5.3	72	w.	4.2	1.9	.....	7	0	.....	.....	0	0	cloudy	
Tokei Obs'y, Yeddo	30.13	765.2	30.20	767.2	49.5	9.7	55	n.	9.2	4.1	.....	.....	9 ck	.....	.....	0	0	cloudy	The Staff.
Wakayama	30.24	768.0	30.30	769.5	49.9	9.9	74	n.	3.6	1.6	.....	0	0	.....	.....	inap.	inap.	clear	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.86	758.4	30.04	763.0	78.1	25.6	64	ene.	18.0	8.0	.....	0	4 k;ks	.....	ene.	0	0	fair	Oliver & Figg.
MEXICAN.																			
Guanajuato	23 74	603.0	29.96	761.0	53.6	12.0	87	sw.	inap.	inap.	.....	1 c	0	.....	.....	0	0	foggy	Prof. Vicente Fernandez.
Leon	24.40	619.7	30.24	768.1	46.0	7.8	90	ese.	.....	.....	1	6 c	0	sw.	.....	0	0	cloudy	Prof. M. Leal.
Mazatlan	29.73	755.0	29.99	761.7	73.0	22.8	98	nne.	0	0	.....	0	0	.....	.....	0	0	foggy	F. Quijano, C. E.
Mexico, Central Obs'y	23.17	588.6	30.33	770.4	45.9	7.7	82	calm	0	0	.....	3 ck	1 s	.....	.....	0	0	½ cloudy	The Staff.
Morelia	24.31	617.5	30.30	769.5	51.8	11.0	68	ne.	0.9	0.4	.....	0	0	.....	.....	0	0	clear	M. Tena, M. D.
Orizaba	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Pabellon, Aguascalientes	23.99	609.2	30.09	764.3	48.9	9.4	73	n.	.....	.....	2	.....	.....	.....	.....	0	0	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.1	30.37	771.0	43.5	6.4	87	calm	0	0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.56	573.0	30.26	768.7	50.0	10.0	54	wsw.	6.6	2.8	.....	0	1 s	.....	.....	0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.29	743.9	29.29	743.9	51.1	10.6	.....	w.	.....	.....	5	.....	.....	.....	.....	0.098	2.5	.....	
Groningen	29.07	738.4	29.13	739.8	46.4	8.0	.....	sw.	.....	.....	5	.....	.....	.....	.....	0.039	1.0	.....	
Helder	29.13	739.8	29.13	739.8	48.6	9.2	.....	wsw.	.....	.....	5	.....	.....	.....	.....	0.008	0.2	.....	
Hellevoetsluis	29.24	742.7	29.24	742.7	49.3	9.6	66	w.	.....	.....	4	.....	.....	.....	.....	0.071	1.7	.....	
Utrecht	29.19	741.5	29.24	742.7	51.1	10.6	69	wsw.	.....	.....	4	.....	5	.....	.....	0.039	1.0	cloudy	H. van der Bank
NORWEGIAN.																			
Bergen	28.93	734.9	29.00	736.5	45.7	7.6	43	e.	16	7	.....	.....	7	.....	.....	0	0	.....	
Brono	29.39	746.5	29.43	747.5	36.5	2.5	57	ese.	9	4	.....	.....	2	.....	.....	0	0	.....	
Christiania	29.11	739.5	29.26	743.3	38.1	3.4	83	ene.	13	6	.....	.....	8	.....	.....	0.311	7.9	snowing	
Gjæsvær	29.60	751.8	29.62	752.4	26.2	— 3.2	.....	ese.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	
Lodingen	29.45	748.1	29.50	749.3	31.6	— 0.2	72	nne.	.....	.....	2	.....	0	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	29.78	756.3	29.93	760.2	65.5	18.6	86	ssw.	15.4	6.9	.....	.....	7	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.17	740.8	30.16	766.1	64.4	18.0	56	wsw.	9.8	4.4	.....	.....	7	.....	.....	0	0	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	30.17	766.2	30.25	768.4	71.4	21.9	55	e.	5.6	2.5	.....	.....	4	ne.	.....	0	0	.....	Capt. D. A. de Canha.
Lisbon, Observatory	29.88	759.0	30.24	768.2	62.8	17.1	91	sw.	20.6	9.2	.....	.....	9	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.00	762.0	30.07	763.8	71.6	22.0	82	ssw.	13.0	5.8	.....	.....	3	.....	.....	0	0	.....	
Saint Paul de Loando	29.65	753.0	29.85	758.1	79.7	26.5	87	w.	0.7	0.3	.....	.....	5	sse	.....	0	0	.....	
Serra da Estrella	25.33	643.4	30.10	764.5	45.9	7.7	100	wnw.	.....	.....	.....	.....	10	.....	.....	1.354	34.4	rain & fog	
RUSSIAN.																			
Akmolinski	28.84	732.5	29.97	761.2	28.2	— 2.1	98	sw.	4	2	.....	6 ck	0	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	29.70	754.3	29.72	754.8	8.6	—13.0	84	e.	4	2	.....	.....	10	.....	.....	0	0	.....	Capt. Sseliwerstow.
Astrakhan	30.32	770.1	30.24	768.0	52.5	11.4	46	sw.	2	1	.....	0	0	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	29.85	758 1	30.39	772.0	13.1	—10.5	87	n.	4	2	.....	.....	0	.....	.....	c	0	.....	Meteorological Obs'y.
Dorpat	29.00	736.7	29.25	743.0	29.1	— 1.6	100	e.	9	4	.....	.....	10 n	.....	.....	0.441	11.2	snowing	Observatory.
Ekaterinburg	28.83	732.2	29.82	757.5	29.8	— 1.2	98	s.	2	1	.....	.....	10	.....	.....	0.087	2.2	.....	Meteorological Obs'y.
Kasan	29.67	753.6	29.95	760.8	24.4	— 4.2	79	sw.	2	1	.....	.....	10	.....	.....	0.079	2.0	.....	Observatory.
Kertch	29.91	759.7	29.93	760.2	58.5	14.7	81	se.	4	2	.....	0	8 n	.....	.....	0	0	.....	Lagorio & Sastyrez
Kieff	28.97	735.7	29.60	751.8	48.2	9.0	77	ssw.	9	4	.....	q;ck;ck	8 ks	.....	.....	.....	.....	.....	Observatory.
Lugan	29.74	755.4	29.95	760.6	54.1	12.3	73	ssw.	13	6	.....	.....	9	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	29.78	756.5	29.85	758.3	56.3	13.5	76	s.	45	20	.....	0	0	.....	.....	0	0	.....	Capt. Kurdakow.
Pekin, China	30.48	774.1	30.62	777.7	32.2	0.1	87	calm	0	0	.....	0	9 n	.....	.....	0	c	.....	Physical Observatory.
St. Petersburg	29.39	746.4	29.40	746.8	25.0	— 3.9	89	ene.	16	7	.....	.....	10 n	.....	.....	0.126	3.2	.....	Central Physical Obs'y.
Semipalatinsk	29.57	751.1	30.27	768.8	28.8	— 1.8	74	e.	16	7	.....	.....	8	.....	.....	0	c	.....	Major Lasarew.
Tashkend, Laboratory	28.60	726.3	30.17	766.3	57.6	14.2	46	calm	0	0	.....	.....	4	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.83	732.3	30.25	768.4	58.5	14.7	58	se.	9	4	.....	0	2 k	.....	.....	0	0	.....	Physical Observatory.
Tomsk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vladivostock	30.40	772.2	30.47	773.9	20.1	— 6.6	.....	nw.	2	1	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.06	738.2	29.49	749.0	45.7	7.6	79	sw.	7	3	.....	0	8 k	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.01	736.8	29.43	747.5	44.2	6.8	77	sw.	11	5	.....	.....	5	.....	.....	0.366	9.3	.....	Berg, Assistant.
Yeniseisk	30.34	770.5	30.65	778.6	10.8	—11.8	88	e.	4	2	.....	.....	10	.....	.....	0.008	0.2	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.18	741.2	46	7.8	92	nw.	.....	.....	7	.....	10	.....	.....	0.1	3.	showery	J. Youngclause.
North Unst	.....	.....	29.06	738.1	.....	.....	.....	ne.	.....	.....	3	5	3	se.	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.79	756.6	29.89	759.2	64.8	18.2	62	w.	4.5	2.0	.....	0	8	.....	.....	0	0	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.97	761 3	30.03	762.8	56.5	13.6	88	nw.	6.9	3.1	.....	.....	10	.....	.....	0.177	4.5	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.05	687.0	30.05	763.2	48.9	9.4	97	n.	5.6	2.5	.....	.....	10	.....	.....	0.409	10.4	covered	Domingo Martin.
Madrid, Royal Obs'y	27.82	706.6	30.04	762.9	59.9	15.2	75	sw.	24.6	11.0	.....	.....	9	.....	.....	0	0	almost cov.	The Staff.
Murcia, Met. Obs'y	29.89	759.1	30.04	763.0	71.6	22.0	56	sse.	0.7	0.3	.....	2	4	ne.	.....	0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.16	740.7	30.04	762.9	51.4	10.8	90	e.	6.5	2.9	.....	.....	10 n	.....	calm	0.055	1.4	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.13	739.8	30.04	762.9	51.8	11.0	93	nw.	3.1	1.4	.....	.....	10	.....	.....	1.366	34.7	raining	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.88	758.9	29.94	760.4	80.2	26.8	76	ene.	1.1	0.5	.....	1 c	1 ks	.....	.....	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.17	766.4	30.27	768.9	63.3	17.4	67	calm	0	0	.....	0	0	.....	.....	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.86	758.5	29.95	760.8	84.6	29.2	70	calm	0	0	.....	2 s	5 k	sw.	sw.	0	0	d, clouds	Manuel Maese.
Tuguegarao, Philippine Id's	29.85	758.3	29.98	761.6	75.2	24.0	94	nw.	6.7	3.0	.....	0	5 ks	.....	nne.	inap.	inap.	cloudy	José L. Yrastorza.
SWEDISH.																			
Haparanda	29.68	753.8	29.72	754.8	23.0	— 5.0	100	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	29.57	751.1	29.62	752.4	29.1	— 1.6	88	ne.	.....	.....	2	.....	10	.....	.....	0	0	.....	

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	29.52	740.7	29.58	751.4	31.6	— 0.2	100	ene.	.....	.....	2	.....	10	.....	.....	0.039	1.0	.....	
Stockholm	29.15	740.4	29.33	744.9	36.0	2.2	98	e.	.....	.....	6	.....	10	.....	.....	0.008	0.2	raining	
Wisby	29.18	741.1	29.24	742.6	40.6	4.8	87	ne.	.....	.....	4	.....	7	.....	.....	0,732	18.6	raining	
Sub-series.																			
Upsala	29.27	743.4	29.35	745.6	34.3	1.3	92	nne.	14.1	6.3	.....	.....	9	.....	ene.	0.059	1.5	.....	S. G. Fineman.
Swiss.																			
Geneva	28.30	718.8	29.73	755.1	52.9	11.6	57	ssw.	.....	.....	6	.....	10	.....	.....	0.315	8.0	covered	**The Observatory.**
Turkish.																			
Jonstantinople	.....	.....	29.98	761.6	62.6	17.0	48	sw.	8	3.5	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	30.00	762.1	67.1	19.5	.....	sw.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.06	763.4	71.1	21.7	61	n.	.....	.....	1	5 c	.....	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.13	765.3	30.21	767.3	47	8.3	63	s.	4	1.8	.....	.....	10 s	.....	nw.	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.37	746.0	30.07	763.8	40	4.4	89	se.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.02	635.5	30.12	765.0	46	7.8	66	w.	3	1.3	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	W. O. Barnes.
Assinnaboine, Ft., Montana	27.09	688.1	30.07	763.8	14	—10.0	66	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.08	738.6	30.30	769.6	52.5	11.4	71	sw.	10	4.5	.....	0	fg.	.....	.....	0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.22	767.6	30.23	767.8	43	6.1	93	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.13	765.3	30.33	770.4	46	7.8	88	calm	0	0	.....	0	1 s; fg	.....	.....	0	0	clear	John Healy.
Baltimore, Maryland	30.23	767.8	30.28	769.1	46	7.8	77	w.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog	Geo. W. Felger.
Barnegat, New Jersey	30.20	767.1	30.22	767.6	46.0	7.8	93	nw.	8	3.6	.....	8 k	0	n.	.....	0	0	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.52	724.4	30.21	767.3	27	— 2.8	88	nw.	9	4.0	.....	0	0	.....	.....	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.09	688.1	30.05	763.3	22	— 5.6	73	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.29	718.6	30.21	767.3	21	— 6.1	87	nw.	6	2.7	.....	hz.	5 s	.....	.....	0	0	fair	Cyrus Cramer.
Block Island, Rhode Island	30.17	766.3	30.20	767.1	43	6.1	74	n.	6	2.7	.....	3 ck	3 s	n.	n.	0	0	fair	J. T. Elker.
Boise City, Idaho	27.04	686.8	29.98	761.5	36	2.2	92	nw.	2	0.9	.....	.....	10 s	.....	calm	0	0	cloudy	B. E. Light.
Boston, Massachusetts	30.03	762.7	30.19	766.8	36.0	2.2	79	w.	5	2.2	.....	7 ck	fg.	w.	.....	inap.	inap.	fair	O. B. Cole.
Brownsville, Texas	30.00	762.0	30.05	763.3	73.2	22.9	90	se.	8	2.7	.....	0	4 s	.....	se.	0.29	7.4	fair	M. McCarty.
Buffalo, New York	29.36	745.7	30.14	765.5	47.2	8.4	75	se.	9	4.0	.....	10 ck	sk	s.	.....	inap.	inap.	cloudy	W. Finn.
Buford, Fort, Dakota	28.32	719.3	30.30	769.6	15	— 9.4	83	n.	6	2.7	.....	0	3 s	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.87	758.7	30.18	766.6	44.8	7.1	66	s.	4	1.8	.....	5 ck	3 ks	nw.	sw.	0	0	cloudy	W. B. Gates.
Cairo, Illinois	29.67	753.6	30.09	764.3	60.6	15.9	96	sw.	6	2.7	.....	.....	10 n	.....	sw.	1.23	31.2	light rain	W. H. Ray.
Cape Henry, Virginia	30.26	768.6	30.28	769.1	44	6.7	93	sw.	5	2.2	.....	0	0	.....	.....	0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.22	767.6	30.25	768.3	51.0	10.6	86	nw.	14	6.3	.....	0	hz.	.....	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	29.40	746.7	29.93	760.2	46	7.8	93	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	J. J. McLean.
Cedar Keys, Florida	30.23	767.8	30.25	768.3	59	15.0	87	ne.	7	3.1	.....	0	0	.....	.....	0	0	clear	F. W. Mixer.
Champaign, Illinois	29.16	740.7	30.02	762.5	57.8	14.3	86	sw.	7	3.1	.....	.....	10 n	.....	sw.	0.06	1.5	light rain	L. A. Welsh.
Charleston, S. Carolina	30.24	768.1	30.30	769.6	55	12.8	86	e.	3	1.3	.....	7 c	fg.	.....	.....	0	0	fair	J. H. Smith.
Charlotte, N. Carolina	29.37	746.0	30.25	768.3	50.0	10.0	77	sw.	1	0.4	.....	10 cs	fg.	w.	.....	0	0	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.40	746.7	30.25	768.3	56.0	13.3	80	ne.	1	0.4	.....	5 k	3 s; fg	sw.	.....	0	0	cloudy	B. L. Goulding.
Cheyenne, Wyoming	24.00	609.6	30.21	767.3	28.4	— 2.0	61	n.	3	1.3	.....	0	3 s	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.27	743.4	30.01	762.2	49.2	9.6	100	ne.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog	J. Mitchell.
Chincoteague, Virginia	30.24	768.1	30.26	768.6	46	7.8	100	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear	O. F. Dickens.
Cincinnati, Ohio	29.45	748.0	30.14	765.5	55	12.8	86	se.	1	0.4	.....	.....	10 n	.....	se.	0.05	1.3	light rain	R. B. Watkins.
Cleveland, Ohio	29.36	745.7	30.13	765.3	49.4	9.7	88	s.	9	4.0	.....	.....	10 n	.....	.....	0.02	0.5	light rain	J. B. Newlin.
Coleman City, Texas	28.25	717.5	30.14	765.5	59	15.0	93	sw.	3	1.3	.....	.....	fg.	.....	.....	0	0	dense fog	L. Dorman.
Columbus, Ohio	29.25	742.9	30.14	765.5	52	11.1	86	s.	2	0.9	.....	.....	10 s	.....	sw.	0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.10	713.7	30.11	764.8	63.0	17.2	90	se.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	J. McGlone.
Custer, Fort, Montana	26.83	681.5	30.15	765.8	27	— 2.8	77	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.29	744.0	29.98	761.5	50	10.0	86	ne.	6	2.7	.....	.....	10 n	.....	.....	0.09	2.3	light rain	R. R. Martin.
Davis, Fort, Texas	25.24	641.1	30.14	765.5	57	13.9	57	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.31	719.1	30.09	764.3	30.6	— 0.8	94	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear	H. Clifford.
Deadwood, Dakota	25.33	643.4	30.16	766.1	24	— 4.4	88	calm	0	0	.....	7 cs	0	w.	.....	0	0	fair	G. W. Scott.
Delaware Breakwater, Del	30.25	768.3	30.27	768.8	47	8.3	100	nw.	11	4.9	.....	0	fg.	.....	.....	0	0	light fog	T. S. Townsend.
Denison, Texas	29.25	742.9	30.09	764.3	63.0	17.2	93	s.	11	4.9	.....	0	5 s	.....	.....	0	0	fair	J. W. Byram.
Denver, Colorado	24.75	628.6	30.25	768.3	36.5	2.5	57	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.09	738.9	30.04	763.0	48	8.9	71	n.	1	0.4	.....	.....	10 s	.....	n.	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.33	745.0	30.07	763.8	55.6	13.1	80	s.	6	2.7	.....	.....	10 s	.....	.....	0	0	threatening	O. F. R. Wappenhans.
Dodge City, Kansas	27.30	694.9	30.10	764.5	36	2.2	92	se.	7	3.1	.....	0	5 s; fg	.....	.....	0	0	fair	V. P. Temple.
Dubuque, Iowa	29.27	743.4	30.02	762.5	42.8	6.0	83	n.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.22	742.2	30.01	762.2	36.6	2.6	62	sw.	8	3.6	.....	0	1 s	.....	.....	0	0	clear	N. B. Conger.
Eagle Pass, Texas	29.25	742.9	30.08	764.0	72.0	22.2	84	se.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25 16	639.1	30.02	762.5	25	— 3.9	76	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	30.07	703.8	30.14	765.5	37.0	2.8	82	n.	8	3.6	.....	0	3 s	.....	.....	0	0	clear	D. O. Murphy.
Elliott, Fort, Texas	27.22	691.4	30.16	766.1	51	10.6	74	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.29	667.8	30.14	765.5	45	7.2	86	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.37	746.0	30.13	765.3	48	8.9	71	s.	13	5.8	.....	.....	10 s	.....	s.	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.34	745.2	30.04	763.0	35.0	1.7	89	calm	0	0	.....	0	5 s	.....	.....	0	0	fair	George Heathcote.
Fredericksburg, Texas	28.32	719.3	30.14	765.5	69	20.6	100	s.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.07	763.8	30.12	765 0	74	23.3	82	s.	12	5.4	.....	0	5 ks	.....	se.	0	0	fair	E. O'C. Machierney.
Grand Haven, Michigan	29.32	744.7	30.02	762.5	41.0	5.0	96	e.	4	1.8	.....	.....	fg.	.....	.....	0	0	dense fog	J. Mueller.
Grant, Fort, Arizona	25.25	641.3	30.09	764.3	50	10.0	50	e.	6	2.7	.....	0	0	.....	.....	0	0	clear	Robert C. Lord.
Hatteras, North Carolina	30.26	768.6	30.28	769.1	51	10.6	93	n.	7	3.1	.....	0	0	.....	.....	0	0	clear	R. M. Crawford.
Helena, Montana	25.71	653.0	30.09	764.3	23	— 5.0	88	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	29.02	737.1	30.06	763.5	61	16.1	87	s.	3	1.3	.....	0	7 ks	.....	s.	0	0	fair	J. P. Sherry.
Huron, Dakota	28.64	727.4	30.12	765.0	28.8	— 1.8	77	nw.	4	1.8	.....	0	1 s	.....	.....	0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.21	741.9	30.05	763.3	57	13.9	86	se.	6	2.7	.....	.....	10 n	.....	s.	0.26	6.6	light rain	O. Schutze
Indianola, Texas	30.05	763.3	30.08	764.0	73.2	22.9	90	s.	6	2.7	.....	3 cs	2 k	s.	sw.	0.40	10.2	fair	I. A. Reed.
Jacksboro, Texas	28.90	734.0	30.12	765.0	61	16.1	72	s.	4	1.8	.....	.....	10 s	.....	s.	0	0	cloudy	D. J. Carr.
Jacksonville, Florida	30.22	767.6	30.27	768.8	56	13.3	86	ne	4	1.8	.....	0	fg.	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.55	699.8	30.22	767.6	25	— 3.9	76	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	A. Schneider.
Keokuk, Iowa	29.26	743.2	29.95	760.7	55.5	13.1	92	w.	5	2.2	.....	.....	10 s	.....	.....	0.21	5.3	cloudy	F. Z. Gosewisch.
Key West, Florida	30.11	764.8	30.13	765.3	73.0	22.8	82	ne.	16	7.2	.....	0	0	.....	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.28	769.1	30.30	769.6	45	7.2	93	n.	5	2.2	.....	hz.	0	.....	.....	0	0	dense haze	H. Mc P. Baldwin.
Knoxville, Tennessee	29.20	741.7	30.27	768.8	54	12.2	83	ne.	2	0.9	.....	.....	10 n	.....	.....	0.02	0.5	light rain	J. A. Cody.
La Crosse, Wisconsin	29.20	741.7	30.02	762.5	34	1.1	75	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	S. C. Emery.
Leavenworth, Kansas	29.14	740.1	30.08	764.0	48	8.9	93	w.	3	1.3	.....	.....	10 s	.....	nw.	inap.	inap.	cloudy	A. W. Browne.
Lewiston, Idaho	29.24	742.7	30.11	764.8	35.0	1.7	88	calm	0	0	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	W. Bell.
Little Rock, Arkansas	29.75	755.6	30.08	764.0	62	16.7	93	s.	9	4.0	.....	0	2 s	.....	.....	0	0	clear	W. U. Simons.
Los Angeles, California	29.58	751.3	29.98	761.5	55	12.8	93	w.	3	1.3	.....	0	fg.	.....	.....	1.77	45.0	light fog	T. S. Collins.
Louisville, Kentucky	29.50	749.3	30.09	764.3	57	13.9	86	s.	6	2.7	.....	.....	10s; fg	.....	.....	0.02	0.5	cloudy	L. M. Dey.
Lynchburg, Virginia	29.57	751.1	30.29	769.4	38	3.3	82	calm	0	0	.....	3 c	fg.	.....	.....	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.36	745.7	30.05	763.3	41.0	5.0	82	s.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.28	769.1	30.29	769.4	50	10.0	93	n.	7	3.1	.....	5 c	fg.	.....	.....	0	0	fair	F. P. Chaffee.
Madison, Wisconsin	28.96	735.6	30.03	762.7	42	5.6	93	n.	5	2.2	.....	.....	fg.	.....	.....	0	0	dense fog	C. A. Shaw.
Maginnis, Fort, Montana	25.32	643.1	29.83	757.7	17	— 8.3	50	n.	2	0.9	.....	0	0	.....	.....	inap.	inap.	clear	F. Burke.
McKavett, Fort, Texas	27.85	707.4	30.23	767.8	67	19.4	90	s.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.24	742.7	30.01	762.2	36	2.2	79	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	J. Gilligan.
Memphis, Tennessee	29.77	756.1	30.12	765.0	63	17.2	93	s.	5	2.2	.....	0	5 s	.....	s.	0.35	8.9	fair	D. T. Flannery.
Milwaukee, Wisconsin	29.23	742.4	30.02	762.5	45	7.2	93	n.	5	2.2	.....	.....	10s; fg	.....	.....	0	0	cloudy	W. Line.
Missoula, Fort, Montana	26.66	677.2	30.06	763.5	32	0.0	71	se.	1	0.4	.....	0	5 s	.....	.....	0	0	fair	J. H. Young.
Mobile, Alabama	30.20	767.1	30.24	768.1	55	12.8	93	nw.	2	0.9	.....	2 cs	0	sw.	.....	0	0	clear	O. A. Read.
Montgomery, Alabama	30.03	762.7	30.27	768.8	49.7	9.8	90	calm	0	0	.....	3 c	fg.	w.	.....	0	0	clear	J. B. McLaughlin.

STATIONS	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.02	737.1	30.08	764.0	26	— 3.3	88	n.	16	7.2	.....	0	0	.....	.....	0	0	clear	H. Bessant.
Morgantown, W. Virginia	29.17	740.9	30.23	767.8	39.0	3.9	89	calm	0	0	.....	0	6 s	.....	.....	0	0	fa.r	J. C. Sprigg, jr
Mt. Washington, N. H.	23.78	604.0	30.34	770.6	23.0	— 5.0	88	nw.	38	17.0	.....	.....	fg.	.....	nw.	0.02	0.5	dense fog	J. G. Linsley.
Nashville, Tennessee	29.54	750.3	30.14	765.5	57.0	13.9	96	se.	4	1.8	.....	.....	10 ks	.....	sw.	1.40	35.6	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.08	764.0	30.20	767.1	36.5	2.5	77	n	3	1.3	.....	0	1s;sk	.....	n.	0	0	clear	J. H. Sherman.
New London, Connecticut	30.15	765.8	30.20	767.1	38	3.3	82	calm	0	0	.....	3 k	0	n.	.....	0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.14	765.5	30.20	767.1	62.8	17.1	82	se.	3	1.3	.....	5 c	sk.	w.	.....	0	0	fair	L. Dunne.
Newport, Rhode Island	30.15	765.8	30.20	767.1	39.5	4.2	87	n.	1	0.4	.....	2 k	sk.	n.	.....	0	0	clear	W. McGillivray.
New York, New York	30.05	763.3	30.23	767.8	46	7.8	89	w.	3	1.3	.....	4 cs	5 s	w.	.....	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.27	768.8	30.30	769.6	46	7.8	83	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	Wm. Davis.
North Platte, Nebraska	27.10	688.3	30.18	766.6	32.6	0.3	78	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y.	30.07	763.8	30.11	764.8	29.0	— 1.7	84	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. Dascomb.
Omaha, Nebraska	28.84	732.5	30.08	764.0	41.8	5.4	65	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	A. Pollak.
Oswego, New York	29.82	757.4	30.16	766.1	44.5	6.9	87	s.	3	1.3	.....	0	5 k	.....	sw.	0.01	0.3	fair	S. W. Beall.
Palestine, Texas	29.58	751.3	30.16	766.1	65.5	18.6	92	s.	7	3.1	.....	0	7 ks	.....	sw.	0	0	fair	L. M. Pindell.
Pensacola, Florida	30.21	767.3	30.24	768.1	52.7	11.5	97	ne.	6	2.7	.....	0	8 s	.....	se.	0	0	cloudy	M. McGauran,
Philadelphia, Pa	30.15	765.8	30.25	768.3	46.5	8.1	81	sw.	1	0.4	.....	0	sk.	.....	.....	0	0	dense smoke	T. T. Townsend.
Pike's Peak, Colorado	17.73	450 3	30.39	771.9	14	—10.0	100	w.	24	10.7	.....	0	4 s	.....	.....	inap	inap.	fair	H. Hall.
Ploche, Nevada	23.84	605.5	29.98	761.5	38.8	3.8	82	s.	10	4.5	.....	.....	10 ks	.....	sw.	0.06	1.5	cloudy	C. N. Kitchel.
Pittsburg, Pennsylvania	29.34	745.2	30.19	766.8	42.8	6.0	80	e.	3	1.3	.....	.....	10s;fg	.....	.....	0	0	cloudy	W. Daly.
Poplar River, Montana	27.98	710.7	30.27	768.8	.....	.....	.....	nw.	.....	.....	1	.....	10 s	.....	.....	0	0	cloudy	W. D. Maxwell.
Port Ends, Louisiana	30.20	767.1	30.21	767.3	63.1	17.3	87	e.	3	1.3	.....	0	0	.....	.....	0	0	clear	M. Herman.
Port Huron, Michigan	29.37	746.0	30.09	764.3	45.1	7.3	95	s.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	W. O. Bailey.
Portland, Maine	30.11	764.8	30.16	766.1	39.5	4.2	73	n.	4	1.8	.....	5 c	4 s	n.	n.	inap.	inap.	cloudy	W. W. Eichelberger.
Portland, Oregon	30.02	762.5	30.09	764.3	38.0	3.3	85	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	53	11.7	80	ne.	8	3.6	.....	0	hz.	.....	.....	0	0	clear	F. S Coburn.
Prescott, Arizona	24.73	628.1	30.07	763.8	40.3	4.6	86	s.	1	0.4	.....	0	hz.	.....	.....	0	0	dense haze	W. H. Clendenon.
Provincetown, Mass	30.13	765.3	30.16	766.1	44	6.7	76	n.	9	4.0	.....	0	2 s	.....	n	0.06	1.5	clear	P. T. Jenkins.
Punta Rassa, Florida	30.16	766.1	30.17	766.3	67	19.4	73	ne.	12	5.4	.....	0	0	.....	.....	0	0	clear	W. J. Evans.
Red Bluff, California	29.57	751.1	29.98	761.5	49	9.4	100	se.	5	2.2	.....	.....	10 n	.....	.....	0.09	2.3	light rain	E. van Dyk.
Rochester, New York	29.46	748.3	30.16	766.1	46	7.8	76	s.	9	4.0	.....	.....	10k;sk	.....	w.	inap.	inap.	cloudy	E. W. McGann
Roseburg, Oregon	29.49	749.0	30.06	763.5	40.5	4.7	90	n.	1	0.4	.....	.....	10 s	.....	.....	0.10	2.5	threatening	J. J. Nanry.
Sacramento, California	29.92	760.0	30.00	762.0	50.0	10.0	93	se.	5	2.2	.....	.....	10 s	.....	.....	1.00	25.4	cloudy	J. A. Barwick
St. Louis, Missouri	29.39	746.5	30.02	762.5	57.7	14.3	100	s.	8	3.6	.....	.....	10 n	.....	sw.	0.24	6.1	light rain	J. H. Weber.
St. Paul, Minnesota	29.10	739.1	30.02	762.5	32.0	0.0	85	calm	0	0	.....	4 cs	0	.....	.....	0	0	fair	P. F. Lyons.
St. Vincent, Minnesota	29.17	740 9	30.10	764.5	25	— 3.9	80	n.	18	8.0	.....	.....	10 s	.....	.....	0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.48	647.2	30.04	763.0	51	10.6	43	ne.	6	2.7	.....	0	5 s	.....	.....	0	0	fair	J. Craig.
San Antonio, Texas	29.38	746.2	30.10	764.5	70.0	21.1	90	se.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	T. J. Kenan.
San Diego, California	29.93	760.2	30.00	762.0	58.6	14.8	91	w.	8	3.6	.....	.....	10 n	.....	w.	0.31	7.9	light rain	A. C. Dobbins.
Sandusky, Ohio	29.37	746.0	30.09	764.3	52	11.1	86	sw.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.20	767.1	30.23	767.8	48.5	9.2	86	w.	6	2.7	.....	10 k	0	nw.	.....	0	0	cloudy	B. A. Blundou.
San Francisco, California	29.93	760.2	30.00	762.0	50	10.0	77	w.	8	3.6	.....	0	1 s	.....	w.	0.02	0.5	clear	N. Gorom.
Santa Fé, New Mexico	23.24	590.3	30.28	769.1	45	7.2	71	se.	6	2.7	.....	0	1 ks	.....	w.	0.18	4.6	clear	H. U. Jones.
Savannah, Georgia	30.20	767.1	30.29	769.4	52	11.1	83	e.	4	1.8	.....	0	fg.	.....	.....	0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.24	666.5	30.06	763.5	16	— 8.9	70	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.89	759.2	30.14	765.5	62	16.7	93	s.	2	0.9	.....	0	6 s	.....	.....	0	0	fair	E. N. Meekins.
Sill, Fort, Indian Territory	28.77	730.7	30.08	764.0	53	11.7	93	nw.	4	1.8	.....	.....	fg.	.....	.....	0	0	dense fog	W. M. Mattingly.
Silver City, New Mexico	24.33	618.0	30.17	766.3	39.0	3.9	76	sw.	2	0.9	.....	2 ck	0	w.	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	30.37	771.4	30.44	773.2	37.1	2.8	85	e.	6	2.7	.....	.....	9 ks	.....	e.	0.25	6.3	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.55	750.6	30.04	763 0	63.0	17.2	90	e.	3	1.3	.....	.....	9 s	.....	.....	0.09	2.3	cloudy	J. B. Campbell.
Smithville, North Carolina	30.26	768.6	30.30	769.6	47	8.3	86	n.	6	2.7	.....	6 ck	0	w.	.....	0	0	fair	O. Parker.
Spokane Falls, Wash. Ter.	27.97	710.4	30.05	763.3	26	— 3.3	84	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	D. Moore.
Springfield, Illinois	29.28	743.7	30.00	762.0	58.5	14.7	96	s.	9	4.0	.....	.....	10 n	.....	s.	0.30	7.6	light rain	T. B. Jennings.
Springfield, Massachusetts	30.08	764.0	30.22	767.6	36	2.2	56	n.	.....	.....	2	4 ck	0	w.	.....	0	0	fair	Charles Mayr.
Springfield, Mo	28.58	725.9	30.10	764.5	60	15.6	93	s.	8	3.6	.....	.....	10 s	.....	sw.	2.81	71.4	cloudy	J. B. Marbury.
Starkville, Miss	29.70	754.4	30.20	767.1	59	15.0	93	s.	9	4.0	.....	3 c	3 s	nw.	.....	0	0	fair	C. Dill.
Stevenson, Fort, Dakota	28.27	718.0	30.24	768.1	17	— 8.3	83	n.	12	5.4	.....	8 cs	0	.....	.....	0	0	cloudy	W. Burrows
Stockton, Fort, Texas	27.02	686.3	30.14	765.5	53.0	11.7	93	s.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	30.15	765.8	30.20	767.1	40.0	4.4	77	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.23	691.6	30.07	763.8	50.5	10.3	60	s.	.....	.....	1	0	0	.....	.....	0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.34	745.2	30.07	763.8	54	12.2	80	s.	6	2.7	.....	.....	10 s	.....	sw.	0	0	cloudy	A. Buell.
Tucson, Arizona	27.55	699.8	30.01	762.2	53	11.7	74	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.75	755.6	30.13	765.3	29.5	— 1.4	94	e.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. Daly.
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. C. Imlay.
Verde, Fort, Arizona	.....	.....	.....	.....	43.6	6.4	63	se.	.....	.....	1	.....	10 s	.....	se.	0	0	cloudy	D. Brooks.
Vicksburg, Mississippi	29.93	760.2	30.20	767.1	62.0	16.7	84	s.	6	2.7	.....	0	8 s	.....	sw.	0	0	cloudy	James Kenealy.
Visalia, California	29.62	752.3	30.00	762.0	47.0	8.3	96	calm	0	0	.....	.....	10 s	.....	.....	0.73	18.5	cloudy	O. D. Stewart
Washakie, Fort, Wyoming	24.41	620.0	30.15	765.8	19.1	— 7.2	67	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	T. M. Ambler.
Washington, D. C	30.17	766.3	30.29	769.4	38.0	3.3	100	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	B. M. Purssell.
West Las Animas, Colorado	25.99	660.1	30.11	764.8	29	— 1.7	59	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.62	752.3	30.26	768.6	36	2.2	79	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	B. F. Hough.
Wilmington, N. Carolina	30.24	768.1	30.30	769.6	49	9.4	77	ne.	1	0.4	.....	10 cs	0	n.	.....	0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.36	644.1	29.90	759.4	40.5	4.7	88	ne.	8	3.6	.....	.....	10 s	.....	sw.	0.03	0.8	cloudy	J. Grover.
Yankton, Dakota	28.72	729.5	30.10	764.5	28	— 2.2	77	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. H. Atfield.
Yuma, Arizona	29.77	756.1	29.92	760.0	53.8	12.1	78	e.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.01	559.0	.....	.....	53.0	11.7	82	calm	0	0	.....	2 c	2ks;s	n.	nw.	0.28	7.1	fair	Joaquin Gomez.
Havana, Cuba, W. I.	30.00	762.0	30.07	763.8	70.0	21.1	90	se.	2	0.9	.....	c	7 n	w.	ne.	0.04	1.0	light rain	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.97	761.2	29.98	761.5	73	22.8	93	nnw.	1	0.4	.....	90;os	1 s	.....	.....	0	0	.....	Robert Johnston.
Navassa, W. I.	29.84	757.9	29.92	760.0	80	26.7	60	ne.	20	8.9	.....	0	2 ks	.....	ne.	0	0	clear	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	81	27.2	83	se.	.....	.....	2	5 k	0	e.	.....	0.200	5.1	.....	Dr. C. J. Hering.
Puerto Berrio, U.S. Col'mbia	29.35	745.5	29.91	759.7	76	24.4	89	calm	.....	.. ..	0	.....	10 ks	.....	calm	0.87	22.1	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	76	24.4	94	ne.	.....	.....	1	6 cs	0	ne.	.....	0.02	0.5	fair	Earl Flint.
Santiago de Cuba, W. I.	29.98	761.5	30.00	762.0	75	23.9	85	n.	9.6	4.3	.....	8 cs	2 n	n.	n.	0	0	cloudy	Robert Mason.
St. Paul, Kodiak Id., Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	fair	W. J. Fisher.
St. Thomas, W. I.	29.87	758.7	29.99	761.7	81	27.2	82	e.	.....	.....	.....	0	2 k	.....	e.	0.24	6.1	fine	Aug. Walloe.
York Factory, B. A.	29.76	755.9	29.83	757.7	—15.5	—26.4	70	nw.	12	5.4	.....	4 k	1 s	nw.	nw.	0.05	1.3	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Colonia, Uruguay†	30.14	765.5	60	15.6	73	n.			3		3	n.						d. clouds.
H. M. S. Audacious, N. 18° 51′, E. 39° 39′	29.84	757.9	89	31.7	76	ne.			1		1	ne.						blue sky.
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	29.98	761.5	74.5	23.6	76	calm			0		10							overcast.
H. M. S. Comus, Esquimalt, Vancouver Island	30.09	764.3	31	— 0.6	78	calm			0		2							d. clouds.
H. M. S. Condor, N. 32° 30′ E. 34° 45′	30.09	764.3	71	21.7	71	e.			2		1	ne.				2	e	d. clouds.
H. M. S. Crocodile, N. 15° 18′, E. 41° 55′	29.87	758.7	85	29.4	71	sse.			4		0							blue sky.
H. M. S. Curacoa, Kobe Japan	30.15	765.8	51.5	10.8	86	n.			1		0							blue sky
H. M. S. Diamond, S. 20° 11′ E. 176° 49′ *†	29.70	754.4	75	23.9	85	ese.			3-4		7	se.				2	se.	drizzling.
H. M. Dock Yard, Bermuda, W. I.	29.95	760.7	69.5	20.8	82	wnw.			2-3		5	wnw.						d. clouds.
H. M. S. Eclipse, N. 18° 00′ E. 67° 25′	29.81	757.2				nne.			3		3	ne.				3	ne.	d. clouds.
H. M. S. Espiegle, S. 10° 14′ E. 161° 45′			78	25.6	95	calm			0		3							d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.82	757.4	76.5	24.7	86	ssw.			4		3	ssw.						d. clouds.
H. M. S. Flamingo, N. 17° 40′, W. 66° 30′	29.93	760.2	82	27.8	100	e.			2-3		2	e.				2	e.	d. clouds.
H. M. S. Flying Fish, N. 37° 27′, E. 126° 33′	30.52	775.2	34	1.1	79	nw.			2		2					1	nw.	misty.
H. M. S. Gannet, S. 18° 28′, W. 70° 21′	30.00	762.0	65	18.3	89	calm			0		9							d. clouds.
H. M. S. Griffon, N. 41° 55′, W. 63° 18′	29.90	759.4	50	10.0	71	ne.			6		10					9	ne.	showery.
H. M. S. Iron Duke, N. 32° 44′, E. 129° 51′	30.30	769.6	51	10.6	93	calm			0		0							blue sky.
H. M. S. Kingfisher, N. 34° 04′, W. 122° 21′	30.06	763.5	54	12.2		wnw.			3		6	w.				4	w.	d clouds.
H. M. S. Lark, S. 10° 14′, E. 161° 42′	29.80	756.9	82.3	27.9	72	calm			0		3							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20.	29.94	760.5	60	15.6		calm			0		10							d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.34	770.6	51.6	10.9	72	ene.			1		0							blue sky.
H. M. S. Northampton, Halifax, N. S.	30.06	763.5	42.5	5.8	83	ne.			2		10							overcast.
H. M. S. Nelson, Melbourne, Australia	29.80	756.9	83	28.3	74	nw.			1									d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.84	757.9	82	27.8	85	calm			0									
H. M. S. Rocket, N. 1° 30′, W. 79° 35′	29.90	759.4	77	25.0	?	sw.			3		4					3-4	sw.	d. clouds.
H. M. S. Sappho, S. 38° 00′, W. 149° 30′	29.99	761.7	53.2	11.8	72	se.			4-6		10	se.				6	ne.	squally.
H. M. S. Superb, N. 39° 18′ E. 20° 11′*	30.04	763.0	71	21.7	75	e.			1									d. clouds.
H. M. S. Sylvia, Port Tamar, Patagonia	29.24	742.7	45.5	7.5	76	wnw.			3-5		10							showery.
H. M. S. Tourmaline, Aden, Arabia	29.95	760 7				e.			1		0							blue sky.
H. M. S. Woodlark, Bushire, Persia	29.99	761.7	76.5	24.7	72	wnw.			3-4		1	nw.				3-4	nw.	misty.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.56	770.2	33	0.6	100	ne.			2		2	ne.						d. clouds.
Portuguese Naval.																		
Rio Lima, Porto Prava, Cape Verd Islands	30.02	762.5	84.2	29.0	82	ne.			2		0					1	se.	blue sky.
Tamega, Macao, China	30.09	764.2	74.8	23.8	77	nne.			5		10			½ h'r	½ h'r			raining.
Swedish Naval.																		
Vanadis, N. 46° 05′, W. 8° 24′	29.90	759.5	55.4	13.0	68	wnw.			5		7							gloomy.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.13	765.3	59	15.0	94	ne.	2	0.9			8		ne.	0	0			fair.
Navy Yard, Portsmouth, N. H.	30.17	766 3	34	1.1	90	calm	0	0			8		n.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	30.03	762.7	51.5	10.8	50	n.			4		10			0	0			cloudy.
Adams, Sitka, Alaska			38	3.3	90	ne.			1		2							fair.
Alaska, Hilo, Hawaii	30.02	762.5	76	24.4	86	calm			0		5			0	0	sm'h		fair.
Alliance, Hampton Roads, Va	30.25	768.3	53	11.7	93	ene.			1		2			0	0			fair.
Ashuelot, Kobe, Japan	30.29	769.4	51	10.6	78	nnw.			2		1							clear.
Brooklyn, Keel Point, Patagonia	29.26	743.2	58	14.4	87	w.	15	6.7			5		w.	0	0	sm'h		fair.
Colorado, New York, N. Y.	30.32	770.1	48	8.9	77	calm	0	0			10			0	0			misty.
Enterprise, Norfolk, Va.	30.32	770.1	45	7.2	100	nnw.			1		5							fair.
Essex, Callao, Peru	29.98	761.5	65	18.3	89	sse.			1		10					sm'h		overcast.
Franklin, Norfolk, Va.	30.30	769.6	43	6.1	91	sw.	2	0.9			2		calm	0	0	sm'h		hazy.
Galena, Montevideo, Uruguay	30.01	762.2	58	14.4	87	n.			1		5					sm'h		hazy.
Hartford, Montevideo, Uruguay*	29.95	760 7	54	12.2	93	wnw.			2		5			light	light	sm'h	s;w	cloudy.
Independence, Mare Island, Cal.	29.98	761.5	50	10.0	78	calm			0		5							fair.
Iroquois, Callao, Peru	30.04	763.0	63	17.2	94	se.			2		10							overcast.
Jamestown, Newport, R. I.	30.09	764.3	42	5.6	80	nw.			1		2		n.					hazy.
Kearsarge, off Norfolk, Va	30.24	768.1	49	9.4	93	sw.			1		0					sm'h		foggy.
Lackawanna, S. 33° 38′, W. 72° 03′*	29.93	760.2	58	14.4	87	w.			3		10					sm'h	w.	cloudy.
Lancaster, Tripoli, Africa*	30.02	762.5	74	23.3	68	nw.			4		2		nw.	0	0	sm'h		fair.
Michigan, Erie, Pennsylvania	30.00	762.0	50	10.0	64	s.			5		10							cloudy.
Minnesota, New York, N. Y.	30.24	768.1	47	8.3	77	wsw.	1	0.4			10							foggy.
Monocacy, Yokohama, Japan*	29.96	761.0	54	12.2	68	n.	4	1.8			10		n.					cloudy.
New Hampshire, Newport, R. I.	30.22	767.6	44	6.7	92	calm			0		0					sm'h		clear.
Nipsic, Palermo, Sicily*	29.89	759.2	70	21.1	?	wsw.			4		10					sm'h		cloudy.
Onward, Callao, Peru†	30.12	765.9	63	17.2	94	se.			1		10		nw.			long	w.	cloudy.
Palos, Port Hamilton, Corean, Archipelego*	30.34	770.6	47	8.3	48	nnw.			3		0							clear.
Pensacola, Callao, Peru*	29.92	760.0	64	17.8	89	sse.	5	2.2			10			0	0	sm'h		cloudy.
Powhatan, Boston, Mass	30.19	769.8	34	1.1	100	nw.			1		5		w.					fair.
Quinnebaug, Syracuse, Sicily*	29.99	761.7	67	19.4	79	ese.			2		8		se.			sm'h		fair.
Ranger, N. 24° 55′, W. 113° 00′	30.08	764.0	68	20.0	74	w.			2		5			0	0	sm'h		fair.
Richmond, Yokohama, Japan*	30.10	764.5	54	12.2	55	n.			4		5		n.	0	0			fair.
Saratoga, N. 24° 01′, W. 85° 00′	30.03	762.7	78	25.6	73	ene.			5-6		5		ne.			mod.	ne.	fair.
St. Louis, League Island, Pa.	30.46	773.7	40	4.4	100	wnw.			1		5							fair.
Swatara, N. 0° 53′, W. 30° 19 *.	29.83	757.7	81	27.2	78	e.			1		0							clear.
Tennessee, Hampton Roads, Va.	30.24	768.1	54	12.2	86	w.					0					sm'h		clear.
Vandalia, Hampton Roads, Va*	30.26	768.6	52	11.1	86	w.	2	0.9			1			0	0			clear.
Wabash, Boston, Mass.	30.18	766.6	33	0.6	79	wnw.	1	0.4			5		calm					clear.
Wachusetts, Mare Island, Cal†	30.01	762.2	49	9.4	93	nw.			1		5		nw.	0	0			fair.
Wyandotte, Washington, D C	30.17	766.3	62	16.7	88	s.			3		2		calm	0	0	sm'h		clear.
Yantic, Norfolk, Va.	30.30	769.6	48	8.9	71	calm			0		5		e.					fair.
Merchant Marine.																		
S. S. Grecian, Buenos Ayres, Argentine Rep*	29.99	761.7	60	15.6	71	n.			4		2							foggy.
S. S. Polynesian, Liverpool, Eng.	29.36	745.7	50	10.0		w.			3		4		n.	0	0	sm'h		cloudy.
S. S. Scandinavian, N. 46° 07′, W. 50° 38′	30.24	768.1	40	4.4		ene.			9		0		nw.	8 h'r	8 h'r			hail.
S. S. Indiana, Philadelphia, Pa †.	30.09	764.3	42	5.6	83	sw.			1		1		ene.	0	0	mod.	e.	d. clouds.
S. S. Lord Clive, N. 50° 20′. W. 27° 30′*†	29.97	761.2				nw.			3		2		sw.					
S. S. Lord Gough, N. 48° 45′. W. 44° 52′	30.12	765.9	40	4.4		w.			4		7		nnw.	0	0	mod.	nnw.	cloudy.
S. S. Ohio, N. 44° 28′. W 56° 32′.	30.11	764.8	46	7.8	92	se.			2		8		w.	0	0	sm'h		cloudy.
S. S. Pennsylvania, Liverpool, Eng †.	29.27	743 4	48	8.9		nw.			4		10		se.			long	ene.	squally.
S. S. Stella, N 51° 00′, W. 14° 36′	29.69	754.1	50.0	10		wnw.			6		6		w.					cloudy.
S. S. Anchoria, N. 42° 22′ W. 62° 01′†	30.09	764.3				e.			6		5		w.			6	w.	drizzling.
S. S. Bolivia, N. 53° 15′, W. 28° 49′			47	8.3	77	w.			5		10		e.	0	0	sli't	e.	overcast.
S. S. Dorian, N. 41° 17′, W. 29° 45′ *	29.59	751.6	66	18.9		wsw.			5		8		w.	1 h'r	1 h'r	mod.	w.	cloudy.
S. S. Galatia, Calcutta, India†	29.89	759 2	79	26.1		nne.			7		8		w.	sh's	sh's	r'gh	w.	cloudy.
S. S. Utopia, N. 23° 57′, E. 36° 31′			80	26.7	74	nw.			2		0			0	0			clear.
S. S. Ailsa, N. 15° 37′, W. 77° 44 †.	30.02	762.5	80	26.7	82	ene.			4		0			0	0	mod	nw.	clear.
S. S. Alpin, N. 15° 56′, W. 67° 31′	29.93	760 2				ne.			5		5		ene.	0	c	mod.	ene.	fair.
S. S. Antillas, N. 28° 05′ W 70° 40′						nne.			2				nne.	0	0	sm'h		
S. S. Ambrose, Para, Brazil†	29.86	758.4				n.			1		2			0	0	sm'h		clear.
British Merchant, S. 3° 01′ W. 115° 53′	29.94	760.5	70.8	21.6	66	ese.			2		0			0	0			fine.
Dynomene, S. 2° 45′ E. 87° 25′	29.86	758 4	82.0	27.8	85	ne.			3		4							d. clouds.
S. S. Gordon Castle, N. 20° 49′, E. 114° 31′	30.02	762.5	75.5	24.2	95	e.			1		4							d. clouds.
May Hulse, N. 4° 41′, W. 23° 42′	29.90	759.4	82.2	27.9	83	e.			5-7		10					high		drizzling.
Markland, N. 40° 03′, W. 33° 55′	29.43	747.5	69.0	20.6	92	s.			1		9							overcest.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.85	758.2	93	33.9	43	n.			6		7							misty.
S. S. Merton, N. 43° 22′, W. 12° 01′	30.08	764.0	56.8	13.8	81	nw.			1		1					4	sw.	blue sky.
									3		10							overcast.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Force.	0–10	0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Mexico, N. 30° 50′, W. 116° 31′ †	30.05	763.3	64.6	18.1	86	se.	.....	.....	3	.. ..	10	.....	se.	.....	.....	mod.	se.	cloudy.
S. S. Bothnia, N. 48° 43′, W. 31° 30′	30.06	763.5	58	14.4	82	nnw.	.....	.....	2	.....	9	.....	.....	0	0	con.	.....	overcast.
S. S. Gallia, N. 51° 30′, W. 10° 17′	29.64	752.8	54	12.2	87	n.	.....	.....	6	.....	2	..... nw.	.....	0	0	mod.	nw.	fine.
S. S. Marathon, N. 36° 40′, W. 0° 11′	30.13	765.3	76	24.4	.....	sw.	.....	.....	4	.....	2	..... sw.	.....	0	0	sm'h	w.	clear.
S. S. Parthia, Saint George's Channel*†	29.20	741.7	47	8.3	.....	sw.	.....	.....	7	.....	5	..... ssw.	.....	0	0	mod.	w.	overcast.
S. S. Pavonia, N. 42° 23′, W. 50° 09′*	30.05	763.3	54	12.2	87	ne.	.....	.....	5	.....	0	.....	.....	0	0	long	ene.	clear.
S. S. Scythia, New York, N. Y	30.11	764.8	52	11.1	93	wsw.	.....	.....	2	.....	2	..... calm	.....	0	0	.....	.....	fine.
S. S. Canada, N. 49° 30′ W. 19° 30′	30.01	762.2	46.4	8	.....	nw.	.....	.....	4	.....	2	..... wnw.	.....	0	0	h'vy	nw.	clear.
S. S. France, N. 40° 30′, W. 72° 25′	.....	.....	46.4	8	.....	nnw.	.....	.....	4	ck	0	..... n.	.....	0	0	h'vy	ne.	cloudy.
S. S. Labradore, N. 49° 38′, W. 26° 36′*†	30.16	766.0	57.2	14	.....	w.	.....	.....	3	.....	6	..... w.	.....	0	0	h'vy	w.	fair
S. S. Ville de Marseilles, N. 49° 50′ W. 1° 16′*†	29.35	745 5	57	13.9	.....	wnw.	.....	.....	6	.....	6?	..... wnw.	h'vy	h'vy	r'gh	w.	covered, ?
S. S. Abyssinia, N. 41° 03′, W. 66° 26′	.....	.....	57	13.9	81	n.	.....	.....	9	.....	10	..... ne.	8 h'r	8 h'r	h'vy	e;ne.	gloomy.
S. S. Gellert, N. 50° 40′, W. 20° 52′	29.90	759.4	58	14.4	.....	wnw.	.....	.....	6	.....	4	..... nw.	0	0	cross	w.	cloudy.
S. S. Silesia, N. 48° 55′, W. 11° 30′†	29.72	754.9	53	11.7	.....	w.	.....	.....	7	.....	4	..... wnw.	0	0	7	wnw.	d. clouds.
S. S. Vandalia, N. 41° 45′, W. 58° 40′	30.04	763.0	61.2	16.2	.....	e.	.....	.....	6	.....	10	..... e.	4 h'r	4 h'r	h'v'y	e.	rainy.
S. S. City of Berlin, N. 46° —′, W. 50° 15′	30.23	767.8	40	4.4	91	ene.	.....	.....	2	.....	2	..... e.	.....	.....	.....	.....	.....	clear.
S. S. Archimedes, N. 41° 28′, W. 63° 39′	.....	.....	.....	.....	.....	ene.	.....	.....	7	.....	10	..... ene.	10 h'r	10 h'r	h'vy	ne.	raining.
S. S. Hevelius, Buenos Ayres, Argentine Rep*†	30.09	764.3	62	16.7	.....	ne.	.....	.....	5	.....	4	..... nne.	0	0	.....	.....	clear
S. S. Ptolmey, S. 14° 45′, W. 35° 30′	29.98	761.5	82.2	27.8	83	n.	.....	.....	6	.....	10	.....	4 h'r	4 h r	3	fne.	raining.
S. S. City of San Antonio, Nassau, Bahamas, W. I†	30.12	765.0	78	25.6	.....	ne	.....	.....	4	.....	2	..... ne.	0	0	.....	.....	fair.
S. S. Colorado, N. 33° 06′, W 76° 56′†	30.26	768.6	56	13.3	.....	ne.	.....	.....	3	.....	5	..... ne.	0	0	high	ne.	fair.
S. S. Rio Grande, Galveston, Texas†	30.08	764.0	78	25.6	.....	se.	.....	.....	3	.....	2	..... se.	0	0	.....	.....	clear.
S. S. San Marcos, Key West, Fla†	30.22	767.6	78	25.6	.....	ne.	.....	.....	4	.....	0	.....	.....	.....	mod.	e.	fine.
S. S. Archimede, Palermo, Sicily*†	29.95	760.7	68	20.0	74	sw.	.....	.....	4	.....	4	..... sw.	0	0	.....	.....	fair.
S. S. Hermod, N. 47° 03′, W. 33° 59′†	29.96	761.0	57.2	14	.....	ne.	.....	.....	4	.....	10	..... nne.	0	0	long	wnw.	cloudy.
S. S. Glenapp, S. 3° 30′, W. 37° 30′†	30.00	762.0	79	20.1	.....	e.	.....	.....	3	ck	8 s	..... e.	0	0	light	e.	cloudy.
S. S. Chalmette, N. 27° 47′, W. 87° 30′†	30.21	767.3	71	21.7	.....	e.	.....	.....	1	.....	3	..... e.	0	0	sm'h	.....	clear.,
S. S. Lone Star, N. 37° 55′ W. 74° 30′†	30.24	768.1	54	12.2	.....	nw.	.....	.....	2	.....	2	..... calm	0	0	large	ne.	hazy.
S. S. New York, N. 39° 15′, W. 74° 15′	.....	.....	50	10.0	.....	nnw.	.....	.....	4	.....	10	..... n.	0	0	ong	ene.	cloudy.
S. S. Denmark, N 41° 20′, W 58° 47′	.....	.....	61	16.1	.....	e.	.....	.....	6	.....	10	..... ese.	2 h'r	2 h'r	r'gh	e.	squally.
S. S. England, N. 42° 41′, W. 56° 18′	30.01	762.2	.....	.....	.....	ese.	.....	.....	5	.....	2	..... ese.	0	0	h'vy	ese.	clear.
S. S. Erin, New York, N. Y	30.16	766.1	56	13.3	.....	n.	.....	.....	3	.....	8	..... n.	0	0	.....	.....	fine
S. S. Greece, N. 49° 05′, W. 16° 30′	29.78	756.4	.....	.....	.....	w.	.....	.....	5	.....	8	..... w.	2 h'r	2 h'r	long	nw.	squally.
S. S. Helvetia, off Poor Head, Ireland	29.48	748 8	50	10.0	.....	w.	.....	.....	7	.....	2	..... w.	7 h'r	7 h'r	long	w.	raining.
S. S. Santiago, N. 33° 00′ W. 73° 27′	30.40	772.1	68	20.0	79	n.	.....	.....	4	.....	4	..... ne.	0	0	long	ne.	fine.
S. S. City of Alexandria, N. 39° 52′, W. 73° 55′†	30.21	767.3	50	10.0	.....	nnw.	.....	.....	6	.....	.....	.....	.....	.....	mod.	ne.	.....
S. S. City of Merida, N. 19° 10′, W. 96° 08′*†	29.98	761.5	73.4	23	.....	w.	.....	.....	1	.....	5	..... e.	2 h'r	2 h'r	light	se.	fine.
S. S. City of Washington, N. 23° 10′, W. 82° 24′ *†	30.22	767.6	80	20.7	.....	ne.	.....	.....	5	.....	5	..... ne,	0	0	sm'h	.....	fine.
S. S. City of Chester, N. 47° 16′, W. 47° 15′	.....	.....	37	2.8	.....	w.	.....	.....	1	.....	.....	.....	.....	.....	sm'h	.....	cloudy.
S. S. Knickerbocker, N. 25° 49′, W. 84° 30′ *†	30.19	766.8	75	23.9	.....	ne.	.....	.....	6	.....	.....	.....	.....	.....	.....	sw.	squally.
S. S. Elbe, N. 40° 30′, W. 69° 11′	30.11	764.8	47.3	8.5	78	n.	.....	.....	6	.....	10	..... n.	0	0	cross	n;e.	covered.
S. S. Koln, N. 42° 30′, W. 58° 58′	29.90	759.4	58.5	14.7	91	e.	.....	.....	6–7	.....	10	..... e.	8 h'r	8 h'r	r'gh	ene.	drizzling.
S. S. Kronprinz F. Wilhelm, N. 50° 19′, W. 0° 35′ *.....	29.43	747.5	52.7	11.5	.....	wnw.	.....	.....	5–6	.....	5	..... wnw.	3 h'r	3 h'r	h'vy	nw.	squally.
S. S. Oder, N. 49° 51′, W. 6° 59′	29.67	753.6	53.6	12.0	.....	nw.	.....	.....	5	.....	2	..... nw.	2 h'r	2 h'r	r'gh	nw.	fair
S. S. Ohio, N. 26° 10′, W. 87° 06′	30.22	767.6	.....	.....	.....	nne.	.....	.....	2	.....	3	..... nne.	0	0	sm'h	nne.	fair.
S. S. Salier, N 44° 05′, W. 54° 02′	30.16	766.1	41.0	5.0	.....	e.	.....	.....	4	.....	10	..... e.	0	0	long	e,	cloudy.
S. S. Werra, N. 53° 49′, E. 6° 40′ *	29.08	738 6	47.3	8.5	.....	ssw	.....	.....	6	.....	10	..... sw.	hv'y	hv'y	high	sw.	covered.
S. S. Belgic, Hong Kong China †..	30.12	765.0	70	21.1	75	e.	.....	.....	4	.....	7	..... e.	0	0	sm'h	.....	cloudy.
S. S. Coptic, N. 39° 43′, W. 127° 11′	30.12	765.0	54.0	12.2	77	nw.	.....	.....	6	.....	3	..... nw.	sh'rs	sh'rs	mod.	nw.	overcast.
S. S. City of Augusta, Savannah, Ga †	30.30	769 6	.....	.....	.....	ne.	.....	.....	1	.....	0	.....	0	0	.....	.....	smoky.
S. S. Mississippi, N. 44° 29′, W. 124° 35′†	30.15	765.8	52	11.1	79	ene.	.....	.....	1	.....	0	.....	.....	.....	light	nw.	clear.
S. S. Columbia, N. 40° 46′ W. 124° 30′†	29.98	761.5	51	10.6	72	nnw.	.....	.....	3	.....	0	.....	.....	.....	mod.	nnw.	clear.
S. S. Oregon, San Francisco, Cal †	29.95	760.7	50	10.0	93	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	hazy.
S. S. Ancon, N. 33° 25′ W. 118° 09′†	29.94	760.5	58	14.4	88	nw.	.....	.....	4	.....	10	..... nnw.	.....	.....	sm'h	.....	cloudy.
S. S. Australia, Sydney, N. S W	30.27	768.8	63	17.2	83	n.	.....	.....	4	.....	5?	.. .. nne.	0	0	.....	.....	cloudy.?
S. S. City of New York, S. 23° 42′, W. 175° 36′†	29.88	758.9	75	23.9	68	s.	.....	.....	3	.....	0	.....	0	0	mod.	se.	clear.
S. S. City of Pekin, N. 33 ° 39′, E. 145° 04′†	30.23	757 8	65	18.3	78	n.	.....	.....	6	.....	10	.. .. n.	0	0	mo t.	n.	clear.
S. S. City of Sydney, S. 27° 18′ E. 177° 40′†	30.00	762.0	63	17.2	62	nnw	.....	.....	1	.....	5	..... sw.	0	0	cross	.....	cloudy.
S. S. Colima, N. 17° 20′ W. 101° 35′†	29.85	758.2	80	20.7	87	nw.	.....	.....	4	.....	5	..... wnw.	0	0	small	sse.	fair.
S. S. Grenada, N. 23° 02′, W. 107° 54′ †	29.95	760.7	80	20.7	74	ne.	.....	.....	2	.....	0	.. ..	0	0	sm'h	nnw.	fair.
S. S. San Jose, N. 8° 54′ W. 79° 30′ *†	30.03	762.7	.....	.....	.....	nw.	.....	.....	2	.....	5 k	..... nw.	0	0	light	nw.	clear.
S. S. Bermuda, St. Pierre, W. I †	30.04	763.0	85	29.4	.....	ene.	.....	.....	1	.....	3	..... ene.	0	0	gentle	se.	fine.
S. S. Muriel, N. 20° 25′, W. 64° 23′	29.98	761.5	81	27.2	.....	e.	.....	.....	2	.....	10	.....	0	0	long	n.	overcast.
S. S. Caracas, La Guayra, Venezuela †	29.92	760.0	82	27.8	79	ene.	.....	.....	1	.....	3	..... ene.	0	0	hv'y	nne.	fair.
S. S. Belgenland, New York, N. Y †	30.38	771 6	53	11.7	86	s.	.....	.....	2	.....	3	..... s.	0	0	.....	.....	hazy.
S. S. Pennland, Antwerp, Belgium	29.34	745.2	50.5	10.3	79	w.	.....	.....	4	.....	3	..... w.	4 h'r	4 h'r	.....	.....	fine.
S. S. Rhynland. N. 50° 00′, W. 23° 30′	29.93	760.2	49	9.4	93	wnw.	.....	.....	6	.....	8	..... wnw.	2 h'r	2 h'r	long	wnw.	gloomy.
S. S. Switzerland, N. 48° 10′, W. 42° 42′†	30.15	765.8	.....	.....	.....	ne.	.....	.....	1	.....	10	..... ne.	0	0	mod.	ene	cloudy.
S. S. Waesland, N. 41° 03′, W. 66° 14′	29.90	759.4	53	11.7	93	nne.	.....	.....	6	.....	10	..... n.	5 h'r	5 h'r	r'gh	ne.	cloudy.
S. S. Maas, New York, N. Y	.....	.....	50.4	10.2	84	.....	.....	.....	.....	.....	.....	.....	.....	.....	sm'h	.....	.....
S. S. P. Oakland, N. 51° 44′, E. 3° 43′	29.27	743.4	49.6	9.8	86	w.	.....	.....	6	.....	3	..... wnw.	.....	.....	.....	.....	clear.
S. S. Schiedam, N. 49° 40′, W. 10° 35′	29.73	755.1	55.4	13.0	81	wnw.	.....	.....	5	.....	4	..... wnw.	4 h'r	4 h'r	h'vy	w.	fair.
S. S. W. A. Scholten, N. 46° 31′, W. 48° 09′	30.35	770.9	38.8	3.8	77	n.	.....	.....	1	.....	7	..... nw.	0	0	mod.	se.	
S. S. State of Florida, N. 49° 18′, W. 36° 14′	30.00	762.0	47	8.3	.....	ne.	.....	.....	2	.....	8	..... ne.	0	0	mod.	n.	cloudy
S. S. State of Indiana, N. 40° 24′, W. 72° 40′†	30.24	768.1	50	10.0	.....	nw.	.....	.....	2	.....	2	..... nw.	6 h'r	6 h'r	sm'h	.....	clear.
S. S. State of Nevada, N. 52° 58′, W. 29° 15′†	29.94	765.5	45	7.2	.....	w.	.....	.....	5	.....	5?	..... w.	0	0	long	wnw.	clear ?
S. S. Thingvalla, Swinemunde, Prussia †	29.36	745.7	49.1	9.5	.....	sw.	.....	.....	3	.....	4	..... sw.	5 h'r	5 h'r	.....	.....	clear.
S. S. Iowa, Liverpool, Eng *†	29.33	745.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Adriatic, N. 49° 48′, W. 22° 03′†	30.04	763.0	48	8.9	.....	w.	.....	.....	3	.....	3	..... wnw.	.....	.....	mod	wnw.	fair.
S. S. Baltic, N. 51° 18′, W. 12° 50′	29.71	754.6	49	9.4	85	nnw.	.....	.....	6	.....	6	..... nw.	4 h'r	4 h'r	rg'h	nw.	squally.
S. S. Celtic, N. 42° 22′, W. 62° 46′†	29.89	759.2	56	13.3	87	nne.	.....	.....	6	.....	10	.....	4 h'r	4 h'r	mod.	ne.	drizzling.
S. S. Romano, N. 52° 49′, E. 1° 38′	29.39	746.5	52	11.1	.....	sw.	.....	.....	3	.....	10	..... w.	3 h'r	3 h'r	.....	.....	dull.
S. S. Salerno, Odessa, Russia	.....	.....	50	10.0	.....	s.	.....	.....	3	.....	10	..... s.	0	0	.....	.....	dull.
S. S. Aries, N. 39° 10′, W. 74° 20′*†	30.22	767.6	.....	.....	.....	nw.	.....	.....	4	.....	0	.....	0	0	long	ese.	
S. S. Catherine Whiting, Barnegat, N. J †	30.26	768.6	.....	.....	.....	nnw.	.....	.....	1	.....	.....	..... nw.	0	0	long	e.	
S. S. Norman, N. 41° 13′, W. 71° 34′	30.20	767.1	.....	.....	.....	nw.	.....	.....	4	.....	.....	..... nw.	0	0	sm'h	.....	clear.
S. S. Saxon, Philadelphia, Pa*†	30.42	772.7	58	14.4	.....	sw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 35° 05′, W. 74° 24′	.....	.....	61	16.1	.....	n.	.....	.....	2	.....	2	..... ne.	0	0	r'gh	ne.	
Bk. Adelaid, N. 10° 40′, W. 50° 13′ *†	29.96	761.0	81	27.2	.....	ese.	.....	.....	5	.....	2	..... var.	4 h'r	4 h'r	r'eh	ese.	squally.
Bg. Alcira, N. 22° 58′, W. 66° 10′	29.99	761.7	81	27.2	.....	ne.	.....	.....	6	.. ..	2	..... ne,	0	0	h'vy	ne.	clear.
Sch. Anna A. Holton, N. 36° 39′, W. 74° 09′†	30.19	766.8	62	16.7	.....	nne.	.....	.....	4	.....	2	..... nne.	0	0	r'gh	ne.	clear.
S. Annie M. Law, Kobe, Japan *†	30.20	767.1	54	12.2	.....	nne.	.....	.....	2	.....	0	.....	0	0	.....	.....	fine.
Bk. Anna Thormann, S. 8° 42′ E. 114° 42′*.	29.92	760.0	82.4	28.0	79	se.	.....	.....	3	.....	10 k	..... ne.	0	0	long	sse.	cloudy
S. S. Antonio Lopez, Cadiz, Spain *	30.24	768.1	62	16.7	83	wnw.	.....	.....	3	.....	0	.....	0	0	.....	.....	hazy.
Bk. Aquidneck, N. 15° 35′ W. 39° 08′*†	30.02	762 5	.....	.....	.....	ese.	.....	.....	2	.....	.....	..... ese.	.....	.....	light	e.	clear.
Bk. Aureola, N. 48° 01′, W. 22° 44′*†	30.25	768.3	57	13.9	.....	w.	.....	.....	3	.....	7	..... w.	1 h'r	1 h'r	h'vy	nw.	cloudy.
Bk. Alba, N. 49° 48′, W. 4° 40′*†	29.57	751.0	51.1	10.6	.....	nw.	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	covered.
Bk. Bayonnaise, N. 22° 35′, W. 50° 12′ *†	30.08	764.0	.....	.....	.....	ssw.	.....	.....	2	.....	5?	..... sw.	0	0	r'gh	se.	clear ?
S. S. Buiswell, North Shields, Eng *†	28.88	733.5	49	9.4	.....	wnw.	.....	.....	9	.....	3	..... wnw.	5 h'r	5 h'r	sm'h	.....	clear.
Bk. Champion, Maassluis, Netherlands †	29.31	744.5	53.0	11.7	.....	wnw.	.....	.....	5	.....	2	..... wnw.	8 h'r	8 h'r	.....	.....	clear.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.24	768.1	62	16.7	88	ne.	.....	.....	1	o	4 k	..... ne.	0	0	.....	.....	fair.
Schr. C. R. Flint, N. 21° 10′, W. 84° 35′†	30.08	764.0	77	25.0	.....	ne.	.....	.....	5	.....	3	..... ne.	0	0	r'gh	ne.	fair.
S. S. D. J. Foley, N. 24° 55′, W. 74° 12′	.....	.....	77	25.0	.....	n.	.....	.....	5	.....	2	..... n.	0	0	long	n ne	fine.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
Miscellaneous.—Continued.																		
Bkt. David Preston, N. 27° 17′ W. 76° 42′..... *†..	30.08	764.0	75	23.9	.....	ne.	.....	.....	.....	.....	5	.....	ne.	0	0	mod.	ne.	
Bk. Don Quixote, Pasoeroen Roads, Java*.....	29.73	755.1	87	30.6	.....	e.	.....	.....	6	.....	3	.....	e.	.....	.....	sm'h	.....	clear.
Bk. E. D. Bigelow, N. 39° 50′, W. 49° 10′*†.....	29.90	759.4	.....	.....	.....	ene.	.....	.....	4	.....	5	.....	ene.	0	0	.....	ene.	fair.
Schr. Edith R. Seward, Wilmington, N. C.*†.....	30.36	771.1	58	14.4	.....	calm	.....	.....	0	.....	2	.....	nw.	0	0	.....	.....	clear.
S. E. J. Spicer, New York, N. Y.....	30.16	766.1	48	8.9	92	w.	.....	.....	3	.....	10	.....	nw.	.....	.....	.....	.....	overcast.
Bk. Eliza Barss, N. 33° 15′ W. 65° 30′†.....	29.98	761.5	.....	.....	.....	nw.	.....	.....	6	.....	5?	.....	nw.	0	0	mod.	ne.	clear.?
S Enoch Train, N. 19° 22′ W. 48° 55′*†....	30.10	764.5	.....	.....	.....	sse.	.....	.....	3	.....	.....	.....	.....	0	0	light	n.	clear.
Bk. Essex, Muscat, Arabia*†.....	29.91	759.7	86	30.0	.....	wnw.	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	
Schr. F E. McDonald, Georgetown, D. C†.....	30.29	769.4	.....	.....	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	fine.
S S. Foscolia, Rio de Janeiro, Brazil*†.....	29.49	749.0	.....	.....	.....	s.	.....	.....	4	.....	.....	.....	s.	0	0	.....	.....	fine.
Bk. Freya, N. 40° 32′ W. 12° 56′.....	.....	.....	64	17.8	.....	w.	.....	.....	6	.....	8	.....	w.	0	0	high	nw.	cloudy.
S. Glendon, S. 49° 30′ W. 85° 30′†.....	29.15	740.4	47	8.3	.....	w.	.....	.....	5	.....	6	.....	w.	2 h'r	2 h'r	mod.	nw.	fair.
S. Grecian, N. 4° 51′, W. 42° 53′†.....	29.97	761.2	84	28.9	83	ene.	.....	.....	5	.....	5?	.....	e.	0	0	sm'h	e.	clear?
Bk. Gronsvaer, S. 45° 05′ E. 133° 10′†.....	29.38	746.2	57.6	14.2	98	ne.	.....	.....	6	.....	10	.....	nw.	8 h'r	8 h'r	4	n.	stormy.
Bk. Hattie G. McFarland, N. 34° 46′, W. 75° 50′†.....	30.33	770.4	65	18.3	.....	nnw.	.....	.....	4	.....	10	.....	n.	0	0	long	ne.	
Schr. Hattie Weston, Mayaro Bay, Trinidad,, W. I*†..	29.96	761.0	82	27.8	.....	e.	.....	.....	2	.....	8	.....	e.	2 h'r	2 h'r	mod.	ene.	cloudy.
S. Hedwig, N. 22° 39′, W. 62° 01′	29.97	761.3	79.5	26.4	90	nw.	.....	.....	3	.....	5	.....	nw.	1 h'r	1 h'r	4	n.	fine.
Schr. Isabel Alberto, Key West, Fla†.....	30.09	764.3	.....	.....	.....	ne.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	clear.
S. Ivy, Cork, Ireland†.....	29.73	755.1	49	9.4	.....	wnw.	.....	.....	6	.....	3	.....	wnw.	5 h'r	5 h'r	.....	.....	squally.
Schr. Jennie N. Huddell, Philadelphia, Pa†.....	30.17	766.3	.....	.....	.....	sw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	.....	
S. S. John Hopkins, N. 40° —′, W. 73° —′.....	.....	.....	48	8.9	.....	n.	.....	.....	5	.....	0	.....	.....	0	0	light	e.	clear.
Schr. John L. Thomas, Vivorilla Cays, C. A*†..	30.04	763.0	.....	.....	.....	nne.	.....	.....	5	.....	8	.....	ene.	4 h'r	4 h'r	.....	.....	stormy.
Bg. John Wesley, Cardenas, Cuba, W. I†.....	30.00	762.0	.....	.....	.....	ene.	.....	.....	3	.....	2	.....	ene.	0	0	.....	.....	clear.
Bk. Joseph A. Ropes, N. 19° 44′, E. 58° 34′ *†.....	29.97	761.2	79	26.1	86	nw.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	fair.
Light House Tender, Laurel, Key West, Fla†.....	30.12	765.0	74	23.3	.....	ne.	.....	.....	1–2	.....	2	.....	ne.	0	0	.....	.....	clear.
Bk. Liberia, N. 20° 11′, W. 31° 50′*	30.02	762.5	79	26.1	82	e.	.....	.....	3	.....	2	.....	e.	0	0	.....	.....	fine.
Bg. Lilian, Demerara, Brit. Guiana†.....	29.90	759.4	82	27.8	.....	ene.	.....	.....	4	.....	9	.....	ene.	1½h'r	1½h'r	.....	.....	rainy.
Bg. L. & W. Armstrong, N. 33° 32′, W. 72° 45′*†.....	30.20	767.1	.....	.....	.....	n.	.....	.....	4	.....	4	.....	n.	0	0	mod.	nne.	clear.
S. S. Madrid, N. 40° 48′, W. 24° 17′*†.....	30.08	764.0	65	18.3	89	wsw.	.....	.....	4	.....	6	.....	w.	sh'rs	sh'rs	r'gh	var.	clearing
S. S. Malabar, N. 6° 17′, E. 78° 34′*†.....	29.90	759.4	.....	.....	.....	w.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†...	30.04	763.0	72	22.2	.....	ne.	.....	.....	6	.....	3	.....	ne.	0	0	.....	.....	fair.
Bk. Mattie B. Russell, Matansas, Cuba, W. I *†.....	30.23	767.8	.....	.....	.....	e.	.....	.....	3	.....	3	.....	ne.	1 h'r	1 h'r	h'vy	ne.	squally.
Schr. Moravian, N. 12° 33′, W. 81° 43†.....	29.88	758.9	.....	.....	.....	n.	.....	.....	.....	.....	.....	.....	n.	24 h'r	24 h'r	sm'h	n.	cloudy
S. M. P. Grace. San Francisco. Cal *.....	29.89	759.2	54	12.2	.....	nw.	.....	.....	2	.....	2	.....	nw.	0	0	long	wnw.	fair.
Bg. Myrtle, N 27° 32′. W. 67° 36′†.	30.07	763.8	.....	.....	.....	n.	.....	.....	2	.....	2	.....	n.	0	0	long	nne.	fair.
Bk. Norena. N. 33° 00′, W. 76° 15′*†.....	30.30	769.6	.....	.....	.....	nne.	.....	.....	2	.....	7	.....	e.	0	0	high	ne.	fine.
S. Orealla, N. 2° 25′, E. 82° 13′*	29.85	758.2	.....	.....	.....	w.	.....	.....	3	.....	4	.....	w.	0	0	sm'h	.....	fine.
Bk Orpheus, N. 37° 10′, W. 62° 37′.....	29.95	760.7	66	18.9	.....	n.	.....	.....	6	.....	8 k	.....	nnw.	0	0	h'vy	nnw.	squally.
S.Paramita, San Francisco, Calf.....	29.99	761.7	54	12.2	.....	w.	.....	.....	6	.....	.....	.....	wnw.	0	0	.....	.....	fair.
S. S. Peconic, N. 36° 05′, W. 8° 50′*†.	30.24	768.1	66	18.9	.....	w.	.....	.....	2	.....	2	.....	w.	0	0	long	nw.	cloudy.
S. S. Radnorshire, N. 34° 55′, E. 18° 35′†*.....	30.00	762.0	.....	.....	.....	n.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bk. Rebus, N. 33° 53′, W. 74° 19′..	30.09	764.3	63	17.2	.....	n.	.....	.....	3	.....	1	.....	n.	0	0	.....	ne.	fair.
S. St. Francis, S. 35° 10′, W. 81° 15′†..	29.06	738.1	60	15.6	.....	sw.	.....	.....	6	.....	8	.....	sw.	0	0	sm'h	wsw.	squally.
S. S. Strathleven, N. 47° 50′ W. 7° 22′.....	29.68	753.9	54.0	12.2	?	w.	.....	.....	6	.....	2	.....	wnw.	.....	.....	8	wnw.	squally.
Bg. Teneriffe, N. 32° 00′, W. 78° 00′.....	30.20	767.1	.....	.....	.....	nne.	.....	.....	5	.....	.....	.....	.....	0	0	high	.....	fine.
Bk. Truro, N. 45° 37′, W. 17° 00′†*.....	30.09	764.3	.....	.....	.....	wnw.	.....	.....	1	.....	6	.....	wsw.	0	0	mod.	wnw.	fair.
U.S.F.C.S.S. Fish Hawk, Washington, D. C†.....	30.35	770.9	40	4.4	82	ssw.	.....	.....	1	.....	10	.....	calm	0	0	.....	.....	cloudy.
Bk. Vincenzo Accame Lisbon, Portugal†.....	30.37	771.3	73.4	23	.....	s.	.....	.....	4	.....	10	.....	sw.	0	0	.....	.....	covered.
Schr Viola Reppard, Tybee, Ga†.....	30.17	766.3	64	17.8	.....	ne.	.....	.....	1	.....	2	.....	ne.	0	0	.....	.....	
Schr. Walter L. Plummer, Miragone, Hayti, W. I *†...	30.00	762.0	.....	.....	.....	nw.	.....	.....	5	.....	2	.....	nw.	0	0	.....	.....	fine.
Bk. Wandering Jew, S. 3° 05′, W. 30° 07′†.	29.87	758.7	81	27.2	.....	ese.	.....	.....	4	.....	4	.....	se.	0	0	long	sse.	clear.
Bk.Warden Law, S. 52° 19′. W. 82° 31′	29.28	743.7	.....	.....	.....	sw.	.....	.....	4	.....	6	.....	sw.	6 h'r	6 h'r	sm'h	w.	cloudy.
Bgt. Willie, S. 38° 10′, W. 8° 40′*†.....	30.36	771.1	69	20.6	.....	nw.	.....	.....	5	.....	fg.	.....	.....	.....	.....	mod.	nnw.	foggy.

International Chart I. November 9, 1882. Isobars and Isotherms.

UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 10, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.21	767.3	65.5	18.6	83	n.	.....	.....	3	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.12	765.1	68.7	20.4	57	w.	.....	.....	4	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.02	762.6	71.6	22.0	86	w.	.....	.....	4	.....	4	.....	.....	0	0	cloudy	Fonfrède.
Tunis	.....	.....	30.02	762.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	clear	Jacques.
Saida	.....	.....	30.26	768.6	75.2	24.0	40	s.	.....	.....	1	.....	0	.....	.....	0	0	very fair	Pérès.
Tebessa	.....	.....	30.21	767.3	65.8	18.8	64	w.	.....	.....	2	.....	1	.....	.....	0	0	pretty fair	Dognon.
Geriville	.....	.....	.....	.....	75.6	24.2	11	nw.	.....	.....	2	.....	3	.....	.....	0	0	clear	Longhamp.
Laghouat	.....	.....	30.28	769.1	69.8	21.0	14	ese.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.22	767.6	74.1	23.4	22	n.	.....	.....	7	.....	5	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	29.81	757.2	29.90	759.4	73.5	23.1	42	nne.	10	4.5	.....	.....	3	.....	.....	0	0	.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.21	742.0	29.76	756.0	51.8	11.0	68	e.	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.83	732.2	29.60	751.7	47.1	8.4	56	w.	12.5	5.6	.....	.....	3	.....	.....	0	0	.....	Dr. Wierzbicki.
Eperies	28.73	729.8	29.61	752.1	.....	.....	69	calm	.....	.....	0	.....	7 ks	.....	.....	0.193	4.9	.....	Julius Mikolik.
Gratz	28.50	723.9	29.75	755.6	52.2	11.2	60	sw.	.....	.....	3	0	6	.....	.....	0.083	2.1	lightning	Andreas Rospini.
Hermannstadt	28.18	715 7	29.61	752.2	44.8	7.1	87	nw	.....	.....	3	.....	10	.....	.....	0.303	7.7	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.42	721.8	29.77	756.2	45.3	7.4	73	w.	.....	.....	1	.....	9	.....	.....	0.181	4.6	raining	The Staff.
Lemberg	28.59	726.2	29.57	751.1	48.0	8.9	67	w.	.....	.....	3	.....	7	.....	.....	0.016	0.4	.....	Dr. T. Stanecki.
Pola	29.64	752.9	29 75	755.7	57.9	14.4	54	ese.	.....	.....	1	.....	0	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.13	740.0	29.60	751.7	51.4	10.8	58	w.	.....	.....	2	.....	8	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.41	746 9	29.65	753.0	51.8	11.0	75	s.	.....	.....	2	.....	6	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.68	753.9	29.78	756.5	56.5	13.6	57	calm	.....	.....	0	.....	1	.....	.....	0	0	.....	Royal Academy.
Vienna	29.02	737.0	29.73	755.1	50.0	10.0	55	w.	.....	.....	3	.....	1	.....	.....	0.008	0.2	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.27	743.4	29.37	746.0	40.7	4.8	61	w.	11	4.9	.....	.....	7	.....	.....	0.145	3.7	d. clouds	W. Roswell
Armagh, Observatory	29.19	741.4	29.43	747.5	40.9	4.9	90	ssw.	17	7.6	.....	.....	10	.....	.....	.....	.....	raining	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.50	749.3	47.6	8.7	66	wsw.	25	11.2	.....	.....	2	.....	.....	.....	.....	blue sky	John Hartnup.
Bolton, Sharples	28.97	735.8	29.50	749.3	44.3	6.8	84	wsw.	18	8.0	.....	.....	7*	.....	.....	.....	.....	gloomy	Thomas Mackereth.
Bradford, Yorkshire	29.12	739.6	29.51	749.5	41.1	5.1	87	sw.	.....	.....	2	.....	10	.....	.....	0.21	5.3	raining	McLandsborough&Preston
Bridgetown, Barbadoes	29.88	758.9	29.91	759.7	75.0	23.9	95	ne.	.....	.....	3	.....	9	.....	.....	.....	.....	raining	Corpl. J. Surgenor, A. H. C.
Cardington	29.47	748.5	29.59	751.6	46.0	7.8	76	w.	.....	.....	2.0	.....	3	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E	29.54	750.3	29.68	753.9	49.3	9.6	64	sw.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.54	750.3	29.77	750.1	50.0	10.0	76	wsw.	.....	.....	3	.....	6	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.48	698.0	29.70	754.4	89.0	31.7	35	s.	.....	.....	2	.....	7	.....	.....	.....	.....	.....	The Staff.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	86.0	30.0	58	w.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.11	764.8	30.17	766.3	69.5	20.8	92	w.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.20	741.7	29.41	747 0	40.0	4.4	87	ssw.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.50	749 3	29.67	753.6	48.8	9.3	67	wsw.	.....	.....	4	.....	2	.....	.....	.....	.....	blue sky	The Staff.
Guernsey	29.50	749.3	29.80	756.9	50.0	10.0	85	wnw.	.....	.....	2	.....	10	.....	.....	.....	.....	showery	A. Collenette, F. M. S.
Kew, Observatory	29.64	752.8	29.68	753.9	47.9	8.8	64	wsw.	18	8.0	.....	.....	5	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.33	745.0	29.59	751.6	47.2	8.4	67	sw.	.....	.....	1	.....	1	.....	.....	.....	.....	blue sky	J. G. Smith.
Malta, Mediterranean	29.88	758.9	29.96	761.0	71.2	21.8	97	nw.	.....	.....	3	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.08	764.0	30.13	765.3	75.5	24.2	66	ne.	.....	.....	3	.....	5	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.07	738.4	29.60	751.8	46.5	8.1	73	sw.	.....	.....	5	.....	5	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.43	747.5	29.66	753.4	48.9	9.4	77	sw.	.....	.....	4	.....	5	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.67	753.6	29.74	755.4	50.4	10.2	82	wsw.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	John Merrifield.
Sandwick Manse, Orkneys	29.24	742.7	29.34	745.2	42	5.6	83	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.66	753.4	29.72	754.9	64.2	17.9	67	sw.	.....	.....	2	.....	9	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.23	742.4	29.51	749.5	47.2	8.4	66	sw.	.....	.....	2	.....	1	.....	.....	0.018	4.6	blue sky	W. F. Cooper.
Silloth Rectory	29.40	746.7	29.43	747.5	44.2	6.8	94	w.	.....	.....	1	.....	8	.....	.....	0.230	5.8	showery	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.51	749.5	42.9	6.1	91	ssw.	12	5.4	.....	.....	10	.....	.....	.....	.....	overcast	J. New.
Stratfield Turgiss	29.47	748.5	29.68	753.9	48.5	9.2	77	w.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.59	751.6	29.64	752.8	53	11.7	79	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.62	752.3	29.64	752.8	48.6	9.2	71	w.	24	10.7	.....	.....	6	.....	.....	blank	blank	d. clouds	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.02	762.5	30.06	763.5	34	1.1	94	sw.	1	0.4	.....	0	2 s	.....	calm	0	0	fair	H. J. Cundall, C. E.
Chatham, N. B*	30.03	762.7	30.09	764.3	31	— 0.6	88	sw.	1	0.4	.....	2 k	8 ks	sw.	sw.	0	0	cloudy	G. A. Blair.
Father Point, Quebec*	30.08	764.0	30.10	764.5	36	2.2	92	nw.	15	6.7	.....	8 c	2 s	nw.	calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.11	739.4	29.97	761.2	24	— 4.4	100	n.	5	2.2	.....	.....	10 n	.....	n.	0.30	7.6	snowing	James Stewart.
Halifax, N. S*	29.97	761.2	30.11	764.8	34	1.1	92	w.	3	1.3	.....	.....	sk.	.....	.....	0.02	0.5	smoky	A. Allison.
Kingston, Ontario*	29.77	756.1	30.12	765.0	45	7.2	83	ne.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	29.92	760.0	30.13	765.3	42	5.6	93	ne.	6	2.7	.....	.....	10 ks	.....	w.	lnap.	lnap.	raining	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.42	747.3	30.15	765.8	30	— 1.1	88	ne.	5	2.2	.....	2 k	2 ks	sw.	sw.	0	0	fair	Rev. R. Mosley.
Port Dover, Ontario	29.39	746.5	30.09	764.3	50	10.0	100	calm	0	0	.....	.....	1g	.....	.....	0.20	5.1	foggy	H. Morgan.
Port Stanley, Ontario	29.41	747.0	30.06	763.5	50	10.0	100	e.	2	0.9	.....	.....	10 n	.....	se.	0.05	1.3	cloudy	M. Payne.
Quebec, Quebec*	29.78	756.4	30.11	764.8	37	2.8	89	calm	.....	.....	0	0	5	.....	.....	0.05	1.3	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.70	754.4	30.19	766.8	28	— 2.2	88	w.	1	0.4	.....	.....	1g.	.....	.....	0	0	dense fog	W. H. McIntyre.
Saugeen, Ontario*	29.36	745.7	30.09	764.3	42	5.6	92	e.	9	4.0	.....	.....	10 ks	.....	.....	0	0	cloudy	
St. Andrews, N. B	30.05	763.3	30.10	764.5	37	2.8	90	calm	0	0	.....	2 k	2 s	nw.	.....	0	0	fair	
Sydney, C. B*	30.00	762.0	30.07	763.8	39	3.9	89	nw.	4	1.8	.....	2 c	8 k	.....	n.	0	0	fair	T. C. Hill, C. E
Toronto, Ontario*	29.72	754.9	30.11	764.8	49	9.4	80	n.	5	2.2	.....	.....	10 n	.....	w.	0	0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	30.07	763.8	30.14	765.5	33	0.6	92	calm	0	0	.....	2 cs	sk	w.	.....	0	0	smoky	Lt. F. E. Wilmot, R. N.
Sub-arctic.																			
Mount Forest	28.57	725.7	30.00	762.0	46.0	7.8	92	ssw.	.....	.....	3	.....	10	.....	.....	0	0	cloudy	Wm. Wylie.
St. Johns, Newfoundland	29.91	759.7	30.17	766.3	36	2.2	90	w.	1	0.4	.....	.....	10	.....	.....	0	0	clear	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.93	760.2	29.96	761.0	67.0	19.4	88	sw.	17.4	7.8	.....	0	8 k	.....	.....	0	0	stormy	John Duthie.
Cape Town, C. G. H. Obs'y	30.02	762.5	30.06	763.5	79.6	26.4	53	sse.	19	8.5	.....	1	4	.....	.....	0	0	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (Sub-series).																			
Tchang-kia-tchouang	.....	.....	30.56	776.1	34.9	1.6	89	n.	1.8	0 8	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.54	775.6	30.56	776.3	53.4	11.9	77	ene.	6.0	2.7	.....	.....	10 n	.....	.....	0.004	0.1	sprinkling	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.19	741.4	29.24	742.6	44.4	6.9	91	s.	.....	.....	4	.....	10	.....	.....	.....	.....	rain and fog.	Oversergent Fischer.
Fanöe	29.09	738.9	29.11	739.5	46.8	8.2	88	w.	.....	.....	7	.....	9	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.69	754.0	29.73	755.1	30.7	— 0.7	77	s.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.85	758.2	29.87	758.7	33.1	0.6	..	se.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	
Stykkisholm, Iceland	29.59	751.5	29.63	752.6	36.0	2.2	94	ne.	.....	.....	7	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.35	745.5	29.39	746.4	42.8	6.0	87	se.	9	4	.....	.....	7	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	28.98	736.1	29.08	738.5	41.9	5.5	96	e.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	Loerer Oesterbol.
French.																			
Agen, Normal School	29.49	749.1	30.15	765.9	54.3	12.4	76	calm	.....	.....	0	2 c	k	.....	.....	0	0	.....	M. Labroue, Directo
Alençon, Normal School	29.37	746.1	29.93	760.1	46.0	7.8	91	sw.	.....	.....	1	.....	8	.....	.....	0.024	0.6	.....	M. Nicot, Director.
Arras, Engineer School	29.42	747.3	29.68	753.9	48.9	9.4	89	w.	.....	.....	2	.....	10 kn	.....	.....	0.138	3.5	raining	M. Fénéon, Command't.
Avignon, Normal School	29.98	761.4	30.06	763.4	60.1	15.6	55	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.35	745.5	29 91	759.7	50.9	10.5	63	wnw.	.....	.....	1	.....	8 k	.....	nw.	0.051	1.3	very cloudy	M. Saillard, Director
Beauvais, Normal School	29.56	750.9	29.83	757.7	49.5	9.7	71	w.	.....	.....	2	.....	8	.....	wnw.	0.134	3.4	very cloudy	M. Frère Eugène Marie.
Besançon, Normal School	29.01	736.8	29.89	759.3	49.3	9.6	84	ssw.	.....	.....	2	.....	10 n	.....	wsw.	0.39	10.	showery	M. Gobin, Director.
Bordeaux, Observatory	29.79	756.6	30.05	763.2	55.4	13.0	62	wsw.	.....	.....	1	.....	8	.....	.....	0.083	2.1	al. covered	M. Rayet, Director.
Bourges, Normal School	29.37	746.0	29.92	760.0	51.8	11	63	w.	.....	.....	1	.....	kn	.....	w.	0.220	5.6	.....	M. Malet, Director.
Brest, Naval Observatory	29.68	753.8	29.92	760.0	51.8	11.0	86	w.	.....	.....	2	.....	10	.....	w.	0.059	1.5	.....	M. de Kermaree, Dir.
Caen, Normal School	29.72	755.0	29.80	756.8	51.4	10.8	90	s.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.08	753.9	30.00	762.1	51.1	10.6	70	sw.	.....	.....	2	.....	5	.....	sw.	0.008	0.2	cloudy	M. Jadot, Director.
Charleville, Normal School	29.26	743.2	29.78	756.4	50.0	10	95	nw.	.....	.....	3	.....	2	.....	.....	0.24	6.	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.65	727.6	30.01	762.2	51.8	11.0	61	sw.	.....	.....	2	.....	10	.....	sw.	0.047	1.2	covered	M. Allnard, Director.
Cluny, Normal School	29.14	740.2	30.00	761.9	52.5	11.4	69	w.	.....	.....	3	.....	6	.....	wnw.	0.063	1.6	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.00	736.6	29.87	758.6	45.7	7.6	80	w.	.....	.....	3	.....	8	w.	w.	0.209	5.3	very cloudy	Dr. Goulet, Director.
Gap, Normal School	27.44	697.0	30.00	761.9	50.9	10.5	39	n.	.....	.....	3	.....	3	n.	o	o	.....	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.90	734.0	30.03	762.8	53.1	11.7	50	nw.	.....	.....	3	.....	1	nw.	o	o	.....	.....	M. Kina, Director.
Grenoble, Normal School	29.28	743.7	30.06	763.4	52.5	11.4	59	wsw.	.....	.....	1	.....	k	ne.	o	o	.....	.....	M. Ablard, Director.
Guéret	28.42	721.9	30.01	762.2	47.3	8.5	77	sw.	.....	.....	2	.....	5	.....	e.	0.209	5.3	cloudy	M. Delorme, Dir.
Lamballe, Normal School	29.59	751.6	29.87	758.6	50.9	10.5	95	ssw.	.....	.....	3	o	5 n	.....	ssw.	0.08	2.	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.52	749.8	30.09	764.2	58.3	14.6	82	w.	.....	.....	1	5 c	o	.....	.....	0.134	3.4	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.82	757.4	29.92	760.0	53.6	12.0	65	w.	.....	.....	1	.....	10	.....	.....	0.197	5.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.97	735.7	30.03	762.7	50.9	10.5	63	wsw.	.....	.....	1	o	5 n	.....	w.	0.008	0.2	cloudy	M. André, Director.
Mans, Normal School	29.61	752.1	29.91	759.7	52.0	11.1	96	w.	.....	.....	4	.....	.....	.....	w.	0.043	1.1	.....	M. Piboeu, Director.
Marseille, Observatory	29.74	755.4	30.01	762.3	57.7	14.3	54	nw.	.....	.....	2.3	.....	4	.....	nw.	o	o	.....	M. Stephan, Director
Mt. Louis	24.82	630.4	29.66	753.4	46.0	7.8	40	se.	9.4	4.2	.....	.....	6	sw.	.....	o	o	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29.91	759.6	30.04	762.9	61.2	16.2	69	w.	.....	.....	3	.....	2	.....	w.	o	o	slightly cl'dy	M. Gaizin, Director.
Nancy, Normal School	28.89	733.9	29.68	753.9	46.0	7.8	79	sw.	.....	.....	1	.....	k	.....	wnw.	0.413	10.5	.....	M. Hasse, Director
Nantes, Observatory	29.85	758.1	30.00	761.9	54.3	12.4	79	sw.	.....	.....	0-1	.....	10 n; kn	.....	wnw.	0.728	18.5	.....	M. Larocque, Director.
Perpignan, Observatory	29.98	761.6	30.10	764.4	60.3	15.7	42	s.	5.6	2 5	.....	.....	4	.....	.....	o	o	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.19	538.3	.....	.....	28.9	— 1.7	.....	nw.	.....	.....	2	.....	5	.....	nw.	o	o	cloudy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.85	732.7	29.92	759.9	51.8	11	63	n.	.....	.....	1	.....	5	n.	n.	o	o	cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.04	636.0	.....	.....	32.0	0.0	100	w.	.....	.....	4	.....	10	.....	.....	0.284	7.2	foggy	M. Allnard, Director
Rochefort, Naval Obs'y	30.02	762.4	30.05	763.2	55.2	12.9	81	wsw.	.....	.....	1	.....	10	.....	.....	2.76?	70.?	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.80	756.8	30.01	762.3	53.6	12	78	ssw.	.....	.....	1	.....	5	.....	ssw.	0.20	5.	cloudy	M. Brotier, Director.
Rodez, Normal School	27.89	708.4	30.09	764 2	42.3	5.7	91	w.	.....	.....	1	.....	10	.....	.....	0.04	1.	raining	M. Seger, Director.
Rouen, Normal School	29.78	756.5	29.83	757.7	50.7	10.4	76	wsw.	.....	.....	2	.....	8	w.	.....	0.146	3.7	very cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	50.2	10.1	79	w.	.....	.....	1	.....	.....	w.	w.	0.157	4.0	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.69	754.2	29.86	758.4	52.3	11.3	63	wsw.	.....	.....	1	.....	1	.....	w.	0.031	0.8	.....	M. Renou, Director.
Toulouse, Observatory	29.40	746.8	30.13	765.2	57 6	14.2	55	w.	.....	.....	1	.....	5	nw.	.....	o	o	cloudy	M. Bailland, Director.
Tours	29.78	756.5	29.96	761.0	51.8	11.0	72	sw.	.....	.....	1	.....	1	nnw.	sw.	o	o	clear	M. de Tastes.
Versailles, Observatory	29.37	746.0	29.86	758.4	51.1	10.6	65	w.	.....	.....	2	.....	.....	.....	.....	0.008	0.2	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.27	718.1	29.75	755.6	40.6	4.8	87	w.	.....	.....	4	.....	8	w.	.....	0.535	13.6	.....	Prof. Jnedt.
Bamberg	28.87	733.3	29.71	754.5	41.0	5.0	77	w.	.....	.....	2	o	9 k	.....	w.	0.079	2.0	raining	Prof. Dr. Hoh.
Berlin	29.28	743.6	29.45	748.1	47.1	8.4	57	sw.	.....	.....	3	.....	6	.....	.....	o	o	.....	Prof. Dr. Arndt.
Breslau	29.07	738.3	29.59	751.6	46.2	7.9	56	w.	.....	.....	4	.....	4	.....	.....	0.264	6.7	.....	Royal University Obs'y.
Carlsruhe	29.34	745.3	29.78	756.5	46.4	8.0	77	sw.	.....	.....	2	.....	10	sw.	.....	0.984	25.0	raining	Albert Senz.
Cassel	28.87	733 3	29.58	751.4	45.3	7.4	50	w.	.....	.....	4	.....	5	sw.	.....	0.142	3.6	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.34	745.3	29.71	754.7	44.6	7.0	78	w.	.....	.....	1	.....	8	.....	.....	0.217	5.5	.....	Physical Society.
Friedrichshafen	28.41	721.6	29.86	758.4	46.8	8.2	74	w.	.....	.....	9	.....	8	w.	.....	0.504	12.8	.....	Wilhelm, Chief Tel.
Hamburg	29.31	744.5	29.40	746.8	46.4	8.0	71	wsw.	.....	.....	7	.....	5	.....	.....	0.004	0.1	squally	E. Preller.
Kiel	29.28	743.6	29.29	744.0	46.2	7.9	78	ssw.	.....	.....	4	.....	9	.....	.....	0.276	7.0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.22	742.3	29.65	753.0	44.2	6.8	64	w.	.....	.....	4	.....	9	w.	.....	0.303	7.7	.....	H. Leppig, Asst.
Magdeburg	29.33	745.0	29.52	749.8	47.1	8.4	65	w.	.....	.....	5	o	3 k	.....	w.	0.024	0.6	.....	Weather Observatory.
Memel	29.31	744.4	29.35	745.6	40.5	4.7	77	n.	.....	.....	2	o	9 ks	.....	.....	.....	.....	.....	Issermann.
Munich	27.96	710 1	29.80	757.0	41.5	5.3	78	sw.	.....	.....	5	.....	10	.....	.....	0.276	7.0	raining	Central Station.
Neufahrwasser	29 38	746.2	29.39	746.6	45.9	7.7	76	w.	.....	.....	3	.....	9	wsw.	.....	0.028	0.7	.....	A. Lothes.
Neustadt, Palatinate	29.19	741.5	29.71	754.7	45.7	7.6	74	w.	.....	.....	6	.....	3	w.	.....	0.209	5.3	.....	Dicknether.
Stuttgart	28.82	731.9	29.72	754.9	43.2	6.2	88	w.	.....	.....	5	.....	10	.....	.....	0.083	2.1	.....	Prof. Dr. Schoder.
Wustrow	29.30	744.3	29.33	745.0	43.9	6.6	91	sw.	.....	.....	6	.....	10	.....	.....	0.386	9.8	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.41	747.1	29.79	756.7	70.0	21.1	.....	s.	.....	.....	3.0	.....	9	.....	.....	o	o	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.89	759.2	29.94	760.5	78.5	25.8	70	ssw.	16.0	7.2	.....	.....	0	.....	.....	o	o	blue sky	
Deesa	29.42	747.2	29.89	759.2	83.5	28.6	29	sse.	6.0	2.7	.....	.....	0	.....	.....	o	o	blue sky	
Bombay	29.83	757.8	29.87	758.7	80.5	26.9	79	nw.	10.0	4.5	.....	.....	0	.....	.....	o	o	blue sky	
Poona, Yarrowda	28.01	711.4	29.83	757.7	88.0	31.1	15	n.	5.0	2.2	.....	.....	1	.....	.....	o	o	d. clouds	
Trichinopoly	29.61	752.1	29.89	759.2	82.5	28.0	77	ene.	1.0	0.4	.....	.....	4	.....	.....	o	o	d. clouds	
Bellary	28.38	720.8	29.84	757.8	84.8	29.3	22	nne.	2.0	0.9	.....	.....	1	.....	.....	o	o	blue sky	
Belgaum	27.33	694.2	29.84	758.0	81.4	27.4	30	n.	3.0	1.3	.....	.....	0	.....	.....	o	o	blue sky	
Lahore	29.16	740.6	29.92	759.9	69.7	20.9	54	calm	0	0	.....	.....	0	.....	.....	o	o	blue sky	
Roorkee	29.02	737.1	29.93	760.3	72.6	22.6	52	calm	0	0	.....	.....	0	.....	.....	o	o	.....	
Agra	29.36	745.7	29.92	760.1	79.2	26.2	26	calm	0	0	.....	.....	0	.....	.....	o	o	blue sky	
Nagpur	28.87	733.2	29.92	759.8	77.7	25.4	31	calm	2.0	0.9	.....	.....	0	.....	.....	o	o	blue sky	
Jubbulpore	28.57	725.7	29.94	760.4	77.8	25.4	28	e.	2.0	0.9	.....	.....	0	.....	.....	o	o	blue sky	
Lucknow	29.54	750.3	29.92	760.0	77.2	25.1	44	calm	0	0	.....	.....	0	.....	.....	o	o	blue sky	
Allahabad	29.61	752.2	29.94	760.4	68.5	20.3	56	calm	0	0	.....	.....	0	.....	.....	o	o	blue sky	
Patna	29.77	756.1	29.96	761.0	72.5	22.5	56	nne.	1.5	0.7	.....	.....	0	.....	.....	o	o	blue sky	
Hazaribagh	27 89	708.5	29.94	760.5	69.6	20.9	45	nnw.	4.0	2.1	.....	.....	0	.....	.....	o	o	blue sky	
Cuttack	29.83	757.7	29.91	759.8	74.9	23.8	75	calm	0	0	.....	.....	0	.....	.....	o	o	blue sky	
Calcutta, Alipore	29.90	759.5	29.92	760.0	73.5	23.1	70	nnw.	3.0	1.3	.....	.....	0	.....	.....	o	o	blue sky	
Dhubri	29.82	757.4	29.94	760.5	73.2	22.9	72	calm	1.0	0.4	.....	.....	0	.....	.....	o	o	blue sky	
Chittagong	29.82	757.4	29.91	759.8	74.1	23.4	69	wnw.	1.2	0.5	.....	.....	0	.....	.....	o	o	blue sky	
Sibsagar	29.61	752.1	29.96	760.8	71.8	22.1	88	e.	2.0	0.9	.....	.....	0	.....	.....	o	o	blue sky	
Zanzibar, Africa	29.88	758.9	29.99	759.4	83.6	28.7	69	s.	3.5	1.6	.....	.....	4	.....	s.	o	o	d. clouds	
Jeypore	28.48	723.4	29.94	760.4	76.7	24.8	33	w	1.5	0.7	.....	.....	2	.....	.....	o	o	d. clouds	
Italian.																			
Udine	29.37	746.1	29.79	756.6	54.5	12.6	51	calm	o	o	.....	.....	2	.....	.....	0.059	1.5	.....	Prof. Giovanni Clodig.
Milan	29.28	743.7	29.80	757.0	55.6	13.1	52	nw.	5.6	2.5	.....	.....	0	.....	.....	o	o	.....	Prof. Schiapparelli.
Padua	29.66	753.3	29.77	756.1	55.8	13.2	72	ese.	1.3	0.6	.....	.....	3	wsw.	.....	0.004	0.1	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.88	733 5	29.80	756.8	58.3	14.6	24	w.	7.4	3.3	.....	.....	0	.....	.....	o	o	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	WEATHER.	OBSERVERS.
ITALIAN.—Continued.																			
Genoa	29.61	752.0	29.80	756.9	64.6	18.1	35	s.	1.3	0.6			0			0	0		Prof. G. M. Garibaldi.
Mondovi	27.91	708.9	29.85	758.1	56.1	13.4	19	nw.			2		0			0	0		Prof. D. C. Bruno
Pesaro	29.79	756.7	29.84	757.9	58.6	14.8	44	nw.					1	sw.		0	0		Prof. Luigi Guidi.
Florence	29.86	750.7	29.81	757.2	60.8	16.0	58	sw.			4		2			0	0		Prof. Costantino Pitter.
Leghorn	29.69	754.0	29.77	756.2	61.3	16.3	62	wsw.	9.4	4.2			2			0	0		Prof. P. Monte.
Rome	29.62	752.3	29.79	756.7	64.4	18.0	43	w.	9.4	4.2			0			0	0		Prof. P. Tachini.
Lecce	29.48	748.8	29.73	755.2	64.8	18.2	71	nnw.	11.9	5.3			7	w.		0.079	2.0		Prof. C. de Giorgi
Cosenza	28.95	735.3	29.84	758.0	61.2	16.2	69	wsw.	3.1	1.4			10	sw.		0.417	10.6		Prof. D. Conti.
Cagliari	29.78	756.3	29.97	761.2	64.9	18.3	44	nw.			6		1			0	0		Prof. A. Pacinotti.
Palermo	29.71	754.6	29.96	761.0	65.7	18.7	41	nw.	16.8	7.5			4	nw.		0.047	1.2		Prof. G. Cacciatore.
Syracuse	29.82	757.5	29.87	758.6	70.3	21.3	47	wnw.	15.4	6.9			8	wnw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.38	743.7	29.80	756.8	63.9	17.7	59	w.	16.1	7.2			1			0	0		Prof. F. Brioschi.
Stelvio	21.88	555.7			24.8	— 4.0	75	sw.			4		10			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.92	556.7			25.5	— 3.6	95	n.			6		10			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.28	771.6	30.41	772.4	37.8	3.2	58	nw.			7		10 n		nw.	0.010	0.4	snowing	Hattori.
Awomori	30 34	770.6	30.38	771.6	31.5	— 0.3	84	wsw.	8.9	4.0			10ks;n			0.067	1.7	light snow	K. Ogawa.
Hakodate	30.33	770.4	30.34	770.7	28.8	— 1.9	88	wnw.	18.0	8.0			10			0.010	0.3	overcast	
Hiroshima					46.1	7.8	75	nne.	5.1	2.2		0	0			0	0	clear	Y. Miwa.
Kanazawa	30.38	771.6	30.49	774.4	42.5	5.8	90	e.	4.0	1.8			10			0.453	11.5	raining	S. Endo.
Kioto	30.28	769.1	30.46	773.7	37.9	3.3	91	nnw.	1.6	0.7		0	1 s			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.28	769.1	30.49	774.5	49.1	9.5	63	ne.	1.8	0.8		0	4 s			0	0	clear	S. Takehayashi.
Nemuro	30.15	765.8	30.22	767.6	33.0	0.6	85	nw.	6.0	2.7		0	0			0	0	clear	
Niigata	30.41	772 4	30.45	773.4	43.2	6.2	81	w.	9.7	4.3			10 n			0.350	8.9	light rain	M. Morita.
Nobiru	30.37	771.5	30.39	771.9	35.8	2.1	93	n.	3.4	1.5			9 n;s			0	0	light rain	H. Midzushina.
Osaka	30.43	773.0	30.45	773.4	43.7	6.5	79	ne.	3.1	1.3		0	1 s		n.	0	0	clear	
Sapporo					27.0	— 2.8	62	calm	0	0		1	0			0.007	0.2	clear	
Tokei Obs'y, Yeddo	30.29	769.3	30.37	771.3	44.5	6.9	83	n.	0.3	2.8		0	1 s			0	0	clear	The Staff.
Wanayama	30.39	772.0	30.45	773.5	46.5	8.1	81	e.	2.4	1.1			1			0	0		Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.87	758.7	30.06	763.5	77.6	25.3	59	ene.	15.0	6.7		0	2 k		ene.	0.08	2.0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.71	602.2	29.93	760.2	53.6	12.0	91	sw.	inap.	inap.		0	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.37	619 0	30.17	766.3	47.5	8.6	86	n.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.72	754.9	29.98	761.5	73.5	23.1	97	e.	0.9	0.4		1 cs	0			0	0	clear	F. Quijano, O. E.
Mexico, Central Obs'y	23.14	587.6	30.29	769.3	44.6	7.0	78	calm	0	0		0	1 s			0	0	fine	The Staff.
Morelia	24.38	619.3	30.32	770.2	52.0	11.1	67	ne.	1.8	0.8		0	0			0	0	fine	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Zabellon, Aguascallentes	23.92	607.7	30.02	762.4	47.3	8.5	69	n.			2					0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.44	595.3	30.43	772 9	40.1	4.5	70	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.56	573.1	30.28	769.1	48.1	9.0	70	sw.	10.7	4.6		0	0			0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.66	753.4	29.66	753.4	50.4	10.2		wsw.			5					0.039	1.0		
Groningen	29.40	746.8	29.46	748.2	46.0	7.8		w.			5					0.039	1.0		
Helder	29.50	749.4	29.50	749.4	47.3	8.5		w.			6					0.189	4.8		
Hellevoetsluis	29.62	752.3	29.62	752.3	48.0	8.9	61	wsw.			5					0.008	0.2		
Utrecht	29.57	751 0	29.61	752.2	48.2	9.0	63	wsw.			4		5			0.010	0.4	cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.25	743.0	29.32	744.6	43.2	6.2	42	calm	0	0			3			0	0		
Brono	29.52	749.9	29.56	750.9	29.1	— 1.6	66	e.	9	4			1			0	0		
Christiania	29.35	745.4	29.50	749.2	33.8	1.0	72	ne.	4	2			10			0.004	0.1		
Gjesvaer	29.64	752.8	29.66	753 4	30.2	— 1.0		calm			0		10						
Lodingen	29.53	750.0	29.58	751.2	30.4	— 0.9	80	n.			2		10			0.004	0.1	snowing	
PORTUGUESE.																			
Angra, Azores	29.45	748.1	29.61	752.0	66.0	18.9	98	w.	15.0	6.7			6			2.441	62.0		Dr. J. A. Sampaio.
Campo Major	29.17	740.8	30.16	766.1	64.4	18.0	69	wsw.	6.3	2.8			9			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.07	763.7	30.15	765.9	68.7	20.4	62	se.	9.4	4.2			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.86	758.5	30.22	767.6	65.5	18.6	80	sw.	13.0	5.8			6	nw.		0	0		The Staff.
Ponta Delgada, Azores	29.67	753.6	29.74	755.4	68.4	20.2	92	ssw.	29.3	13.1			10			0.303	7.7	raining	
Saint Paul de Loando	29.69	754.1	29.89	759.2	76.8	24.9	95	wsw.	1.3	0.6			5	sse.		0	0		
Serra da Estrella	25.37	644.5	30.13	765.2	47.8	8.8	100	wnw.	32.2	14.0			10			7.126	181.0	rain & fog	
RUSSIAN.																			
Akmolinski	29.02	737.1	30.15	765.7	30.9	— 0.6	100	wsw.	13	6			10 n			0.004	0.1		Major K. Lasarew.
Archangel	29.67	753.7	29.69	754.2	14.0	—10.0	80	ene.	9	4			10			0	0		Capt. Ssellwerstow.
Astrakhan	30.18	766.6	30.10	764.5	53.8	12.1	66	s.	11	5		0	0			0	0		Capt. Wisganow.
Barnaul					29.5	— 1.4	98	calm	0	0			10			0.150	3.8		Meteorological Obs'y.
Dorpat	29.00	736.5	29.24	742.8	25.9	— 3.4	100	ne.	9	4			10 n			0.146	3 7		Observatory.
Ekaterinburg	28.90	734.1	29.90	759.5	29.3	— 1.5	96	ssw.	4	2			10			0.059	1.5	light snow	Meteorological Obs'y.
Kasan	29.45	748.0	29.72	755.0	39.6	4.2	93	s.	2	1			10			0.110	2.8	rain & fog	Observatory.
Kertch	29.71	754.6	29.73	755.1	62.8	17.1	74	calm	0	0		0	0			0	0		Lagorio & Sastyrez.
Kieff	28.80	731 5	29.43	747.6	45.0	7.2	73	w.	18	8			10ks;n						Observatory.
Lugan	29.52	749.7	29.72	754.8	57.6	14.2	62	ssw.	13	6			2			0	0		Meteorological Obs'y.
Nikolaiev	29.50	749.3	29.57	751.1	50.8	13.8	88	ssw.	22	10		7 cs	0			0.039	1.0	light clouds	Capt. Kurdakow.
Pekin, China	30.45	773 4	30.59	777.0	35.1	1.7	71	se.	4	2		0	1 k			0	0		Physical Observatory.
St. Petersburg	29.31	744.5	29.33	744.9	25.5	— 3.6	78	ene.	13	6			10 n			0.122	3.1		Central Physical Obs'y.
Semipalatinsk	29.48	748.8	30.17	766.3	31.6	— 0.2	98	nw.	9	4			10			inap.	inap.		Major Lasarew.
Tashkend, Laboratory	28.65	727.8	30.26	768.5	48.9	9.4	57	calm	0	0			10						Teich, A. M.
Tiflis	28.72	729.4	30.13	765.4	57.2	14.0	55	se.	2	1		7 cs	0			0	0		Physical Observatory.
Tomsk																			
Vladivostock	30.57	776.5	30.64	778.2	19.0	— 7.2		ne.	4	2		0	0			0	0		
Warsaw	29.09	738.8	29.51	749.6	43.3	6.3	81	w.	16	7			9 kn					heavy clouds	Astronomical Obs'y.
Wilna	28.91	734.3	29.34	745.1	36.0	2.2	94	sw.	11	5			10			0.193	4.9	snowing	Berg, Assistant.
Yeniseisk	30.10	764.6	30.42	772.6	10.0	—12.2	89	ne.	4	2			5			0	0		M. O. Marks.
SCOTTISH.																			
Monach Lt			29.37	746.0	45	7.2	92	se.			7	10	5	e.		0.1	3.	cloudy	J. Youngclause
North Unst			29.36	745.7				e.			4		8						Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.95	760 7	30.06	763.4	62.1	16.7	60	sw.	3.6	1.6		0	1			0	0		Antonio Rzve, Director.
Bilbao, Met. Obs'y	30.00	762.1	30.06	763.6	58.6	14.8	78	se.	2.0	0.9			10			0.043	1.1	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.11	688.7	30.11	764.9	50.5	10.3	83	w.	2.5	1.1			10			0.055	1.4	covered	Domingo Martin.
Madrid, Royal Obs'y	27.89	708.4	30.11	764.8	60.4	15.8	75	sw.	19.7	8.8			9			0	0	almost cov	The Staff.
Murcia, Met. Obs'y	29.96	761.0	30.11	764.7	73.6	23.1	56	s.	4.5	2.0		1	3	se.		0	0	clouds	Olayo Diaz, Director.
Oviedo	29.21	742.0	30.09	764.3	49.1	9.5	88	e.	8.5	3.8			10 k		calm	0	0	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.13	739.8	30.03	762.7	54.3	12.4	98	sw.	9.8	4.4			10			0.035	0.9	foggy	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.86	758.5	29.92	760.0	79.8	26.6	86	sse.	0.7	0.3		0	4 ks			0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.11	764.8	30.21	767.3	66.4	19.1	54	nnw.	1.9	0.8		0	0			c	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.88	759.0	29.97	761.3	77.0	25.0	94	calm	0	0			10 kn		w.	2.606	66.2	raining	Manuel Maese.
Tuguegarao, Philippine Id's	29.86	758.5	30.00	761.9	71.7	22.1	96	nnw.	8.1	3.6			10 kn		nne.	0.05	1.3	covered	José L. Yraeta za.
SWEDISH																			
Haparanda	29.68	753.8	29.72	754.8	21.6	— 5.8	100	n.			2		10			0	0		
Umea	29.58	751.2	29.63	752.5	28.8	— 1.8	80	nne.			2		7			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From	Inch.	Mill		
Swedish—Continued.																			
Hernosand	29.54	750.2	29.59	751.5	31.3	— 0.4	89	nne.			2		10			0.020	0.5		
Stockholm	29.27	743.4	29.45	747.9	33.8	1.0	72	nne.			2		9			0.083	2.1		
Wisby	29.30	744.2	29.36	745.7	38.5	3.6	90	e.			2		5			0.028	0.7	raining	
Sub-sertes.																			
Upsala	29.36	745.7	29.45	747.9	34.2	1.2	78	ne.	9.2	4.1			5		ene.	0	0		S. G. Fineman.
Swiss.																			
Geneva	28.58	725.9	30.02	762.6	48.6	9.2	72	sw.			5		9			0.142	3.6	covered	The Observatory.
Turkish.																			
Constantinople			29.76	756.0	65.8	18.8	60	sw.	19	8.5			10		sw.	1.457	37.0		The Observatory.
Salona			29.80	756.8	64.6	18.1		s.			1		10			0	0	covered	A. Bertrand.
Sub-sertes.																			
Beirut, Lee Obs'y, Syria			29.90	759.5	74.1	23.4	56	se.			1	7 cs		sw.		0.185	4.7		Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.06	763.5	30.14	765.5	51	10.6	80	se.	1	0.4			10 s			0.01	0.3	cloudy	J. O. Barnes.
Alpena, Michigan	29.43	747.5	30.13	765.3	35	1.7	89	w.	3	1.3		5 k	fg.	sw.		0	0	fair	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.84	630.9	29.94	760.5	36	2.2	61	e.	3	1.3		0	4 s			0	0	fair	W. C. Barnes.
Assinnaboine, Ft., Montana	27.31	693.7	30.29	769.4	8	—13.3	58	nw.	8	3.6		0	0			0.02	0.5	clear	B. O. Lenoir.
Atlanta, Georgia	29.04	737.6	30.26	768.6	53.5	11.9	76	w.	7	3.1		0	fg.			0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.09	764.3	30.10	764.5	55	12.8	93	s.	13	5.8			10 s		s.	0.05	1.3	cloudy	Jas. M. Watson.
Augusta, Georgia	30.07	763.8	30.27	768.8	49	9.4	93	calm	0				fg.			0	0	dense fog	John Healy.
Baltimore, Maryland	30.08	764.0	30.12	765.0	54	12.2	93	s.	3	1.3			10s;fg		n.	0.12	3.0	cloudy	Geo W Felger.
Barnegat, New Jersey	30.09	764.3	30.11	764.8	54.0	12.2	96	sw.	3	1.3			10 s			0.04	1.0	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.07	713.0	29.76	755.9	31	— 0.6	81	nw.	5	2.2			10 s		nw.	inap.	inap.	cloudy	A. Pritchard.
Benton, Fort, Montana	27.37	695.2	30.33	770.4	10	—12.2	80	ne.	12	5.4			10 s		ne.	0.03	0.8	cloudy	S. Wheaton.
Bismarck, Dakota	27.96	710.2	29.88	758.9	26	— 3.3	88	ne.	14	6.3			10 s			0	0	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.12	765.0	30.15	765.8	52.7	11.4	86	w.	7	3.1			10 s		w.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.04	686.8	29.98	761.5	30	— 1.1	81	nw.	16	7.2		0	4 s		nw.	0	0	fair	B. E. Light.
Boston, Massachusetts	29.99	761.7	30.15	765.8	47.0	8.3	77	sw.	6	2.7			10s;fg		sw.	0	0	cloudy	O. B. Cole.
Brownsville, Texas	29.94	760.5	29.99	761.7	74.2	23.4	82	s.	5	2.2		0	3 s		s.	0	0	clear	M. McCarty.
Buffalo, New York	29.35	745.5	30.13	765.3	50.8	10.4	92	s.	4	1.8			10n;fog		sw.	0.05	1.3	light rain	W. Finn.
Buford, Fort, Dakota	28.11	714.0	30.09	764.3	19	— 7.2	87	n.	8	3.6			10 s			0.08	1.5	cloudy	F. A. Mellen.
Burlington, Vermont	29.82	757.4	30.13	765.3	52.3	11.3	65	s.	3	1.3		7 cs	3 s	w.	w.	0	0	cloudy	W. B. Gates.
Cairo, Illinois	29.70	754.4	30.12	765.0	59.6	15.3	89	s.	12	5.4			10 s		s.	1.34	34.0	cloudy	W. H. Ray.
Cape Henry, Virginia	30.11	764.8	30.13	765 3	55	12.8	74	sw.	18	8.0			10 s			0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.08	764.0	30.11	764.8	60.0	15.6	70	s.	20	8.9			10 s		s.	0.32	8.1	cloudy	W. E. Smith.
Cape Mendocino, California	29.46	748.3	29.99	761.7	48	8.9	77	nw.	16	7.2			10 s		nw.	0	0	cloudy	J. J. McLean.
Cedar Keys, Florida	30.21	767.3	30.23	767.8	62	16.7	87	e.	4	1.8		0	0			0	0	clear	F. W. Mixer.
Champaign, Illinois	29.14	740.1	30.00	762.0	50.8	10.4	86	s.	6	2.7			fg.			0.32	8.1	dense fog	L. A. Welsh.
Charleston, S. Carolina	30.18	766.6	30.24	768.1	57	13.9	93	se.	3	1.3		0	fg.			0	0	dense fog	J. H. Smith.
Charlotte, N. Carolina	29.28	743.7	30.16	766.1	48.2	9.0	93	s.	2	0.9		5 cs	fg	sw.		0	0	fair	D. O'Donoghue.
Chattanooga, Tennessee	29.39	746.5	30.24	768.1	60.0	15.6	78	sw.	7	3.1		4 cs	3 k	sw.	sw.	0	0	fair	B. L. Goulding.
Cheyenne, Wyoming	23.08	601.5	29.88	758.9	31.3	— 0.4	47	w.	4	1.8		0	0			0	0	clear	E. McGovern.
Chicago, Illinois	29.25	742.9	29.99	761.7	53.8	12.1	97	e.	5	2.2			10 s			0.13	3.3	cloudy	J. Mitchell.
Chincoteague, Virginia	30.10	764.5	30.12	765.0	54.5	12.5	86	s.	12	5.4			10 ks		w.	0.10	2.5	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.41	747.0	30.10	764.5	60	15.6	93	sw.	1	0.4			10 s		sw.	0.02	0.5	cloudy	R. B. Watkins.
Cleveland, Ohio	29.34	745.2	30.11	764.8	51	10.6	93	se.	2	0.9			10 n		se.	0.26	6.6	light rain	J. B. Newlin.
Coleman City, Texas	28.14	714.7	30.03	762.7	69	20.6	81	s.	12	5.4			10 s		s.	0	0	cloudy	L. Dorman.
Columbus, Ohio	29.21	741.9	30.10	764.5	56	13.3	93	s.	2	0.9			10s;fg			0.26	6.6	cloudy	D. Cuthbertson.
Concho, Fort, Texas	27.98	710.7	29.99	761.7	66.3	19.1	90	s.	18	8.0			10 s		s.	0	0	cloudy	J. McGlone.
Custer, Fort, Montana	26.79	680.5	30.11	764.8	19	— 7.2	100	nw.	2	0.9			10 n		calm	0.09	2.3	light snow	W. B. Lamar.
Davenport, Iowa	29.24	742.7	29.93	760.2	56	13.3	86	se.	7	3.1			10s;fg			0.14	3.6	cloudy	R. R. Martin.
Davis, Fort, Texas	25.13	638.3	30.03	762.7	56	13.3	83	se.	4	1.8		0	0			0	0	clear	J. Williams.
Dayton, Washington T'y	28.32	719.3	30.10	764.5	29.4	— 1.4	82	sw.	1	0.4			10 s			inap.	inap.	cloudy	H. Clifford.
Deadwood, Dakota	25.09	637.3	29.92	760.0	27	— 2.8	88	w.	1	0.4			10 n			inap.	inap.	light snow	G. W. Scott.
Delaware Breakwater, Del.	30.10	764.5	30.12	765.0	53	11.7	93	s.	12	5.4			10 s		s.	0.10	2.5	cloudy	T. S. Townsend.
Denison, Texas	29.16	740.7	30.00	762.0	70.0	21.1	84	s.	12	5.4			10 s			inap.	inap.	cloudy	J. W. Byram.
Denver, Colorado	24.43	620.5	29.93	760.2	44.0	6.7	51	s.	12	5.4		0	1 s			0	0	clear	F. M. Neal.
Des Moines, Iowa	28.91	734.3	29.86	758.4	52	11.1	86	s.	3	1.3			10 n		s.	inap.	inap.	light rain	F. W. Conrad.
Detroit, Michigan	29.35	745.5	30.09	764.3	55.1	12.8	80	se.	2	0.9			fg			0.09	2.3	dense fog	C. F. R. Wappenhans.
Dodge City, Kansas	27.16	689.9	29.90	759.4	46	7.8	71	sw.	7	3.1		0	0			0	0	clear	V. P. Temple.
Dubuque, Iowa	29.18	741.2	29.93	760.2	52.7	11.5	96	se.	3	1.3			fg			0	0	dense fog	J. Harvey Smith.
Duluth, Minnesota	29.18	742.2	29.90	761.0	40	4.4	73	e.	15	6.7			10 s			0	0	cloudy	N. B. Conger.
Eagle Pass, Texas	29.16	740.7	29.99	761.7	73.1	22.8	82	se.	12	5.4			10 s		se.	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	24.96	634.0	29.82	757.4	18	— 7.8	87	sw.	7	3.1			10 n			0.01	0.3	light snow	J. M. Clifford.
Eastport, Maine	30.04	763.0	30.11	764.8	40.0	4.4	86	w.	2	0.9		4 k	3s;hz	w.	w.	0	0	fair	D. C. Murphy.
Elliott, Fort, Texas	27.11	688.6	30.04	763.0	52	11.1	86	s.	4	1.8		0	0			0	0	clear	W. J. Cundall.
El Paso, Texas	26.13	663.7	29.98	761.5	42	5.6	68	calm	0	0		0	0			0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.37	746.0	30.13	765.3	53	11.7	86	s.	1	0.4			fg.			0.29	7.4	dense fog	Peter Wood.
Escanaba, Michigan	29.35	745.5	30.05	763.3	37.0	2.8	82	ne.	3	1.3		2 ck	5 k;s		sw.	0	0	fair	George Heathcote.
Fredericksburg, Texas	28.25	717.5	30.07	763.6	69	20.6	84	sw.	12	5.4			10 ks		sw.	0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.01	762.2	30.06	763.5	74	23.3	84	s.	12	5.4		2 c	hz.			inap.	inap.	clear	E. O'O. Macinerney.
Grand Haven, Michigan	29.35	745.5	30.05	763 3	48.5	9.2	93	ne.	4	1.8			fg.			0	0	dense fog	J. Mueller.
Grant, Fort, Arizona	25.00	636.5	29.90	759.4	50	10.0	57	se.	3	1.3			10 s			0	0	cloudy	Robert C. Lord.
Hatteras, North Carolina	30.20	767 1	30.22	767.6	57	13.9	86	sw.	5	2.2		10 k	0	s.		0	0	cloudy	R. M. Crawford.
Helena, Montana	25.79	655 0	30.17	766.3	15	— 9.4	83	n.	14	6.3			10 n			inap.	inap.	light snow	N. C. Smith.
Henrietta, Texas	28.90	734.0	29.94	760.5	66	18.9	90	s.	12	5.4		0	2 ks		s.	0	0	clear	J. P. Sherry.
Huron, Dakota	28.28	718.3	29.76	755.9	35	1.7	82	se.	9	4.0		0	1 s			0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.20	741.7	30.04	763.0	56	13.3	93	calm	0				fg.			0.69	17.5	dense fog	O. Schutze
Indianola, Texas	29.99	761.7	30.02	762.5	73.2	22.9	82	s.	10	4.5		0	0			0.02	0.5	clear	I. A. Reed.
Jacksboro, Texas	28.72	729.5	29.94	760.5	64	17.8	68	s.	12	5.4		0	0			0	0	clear	D. J. Carr.
Jacksonville, Florida	30.20	767.1	30.25	768.3	57	13.9	93	calm	0	0		0	fg.			0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.43	696.7	30.10	764.5	21	— 6.1	87	nw.	14	6.3			10 n		nw.	0.04	1.0	light snow	A. Schneider.
Keokuk, Iowa	29.21	741.9	29.90	759.4	56.0	13.3	90	se.	1	0.4			10 n			0.08	2.0	light rain	F. Z. Gosewisch.
Key West, Florida	30.11	764 8	30.13	765.3	72.0	22.2	76	ne.	12	5.4		0	2 s			0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.18	766.6	30.20	767.1	55	12.8	83	sw.	12	5.4			10 ks		nw.	0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.16	740.7	30.23	767.8	57.8	14.3	88	sw.	6	2.7			10 s		w.	0.15	3.8	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.08	738.6	29.90	759.4	45	7.2	76	nw.	2	0.9			10 s			0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	28.92	734.6	29.86	758.4	61	16.1	93	s.	4	1.8			10 s		sw.	0	0	cloudy	A. W. Browne.
Lewiston, Idaho	29.20	741 7	30.07	763.8	35.0	1.7	66	s.	4	1.8			10 s			0	0	cloudy	W. Bell.
Little Rock, Arkansas	29.70	754.4	30.03	762.7	66	18.9	93	s.	5	2.2			10 s			0	0	cloudy	W. U. Simons.
Los Angeles, California	29.55	750.6	29.95	760.7	49	9.4	93	ne.	5	2.2			10 s		n.	0	0	cloudy	T. S. Collins.
Louisville, Kentucky	29.48	748.8	30.07	763.8	60	15.6	93	s.	3	1.3			fg.			0.05	1.3	dense fog	L. M. Dey.
Lynchburg, Virginia	29.39	746.5	30.11	764.8	52	11.1	86	sw.	1	0.4		2 c	4 k	nw.	w.	0.03	0.8	fair	Lewis Duane.
Mackinaw City, Michigan	29.42	747.3	30.11	764.8	39.0	3.9	82	s.	7	3.1		6 ck	0	sw.		0	0	fair	F. R. Day.
Macon, Fort, North Carolina	30.20	767 1	30.21	767.3	58	14.4	86	sw.	3	1.3		10 k	0	w.		0	0	cloudy	F. P. Chauffee.
Madison, Wisconsin	28.92	734.6	29.99	761.7	52	11.1	93	se.	8	3.6			10 n			0.01	0.3	light rain	O. A. Shaw.
Maginnis, Fort, Montana	25.50	647.7	30.02	762.5	9	—12.8	80	nw.	22	9.8		10 k	0	nw.		0.05	1.3	cloudy	F. Burke.
McKavett, Fort, Texas	27.70	703.6	30.08	764.0	67	19.4	84	s.	16	7.2		0	4 ks	s.		0	0	fair	J. E. Thatcher.
Marquette, Michigan	29.29	744.0	30.06	763.5	37	2.8	72	calm	0	0		10 k	0			0	0	cloudy	J. Gilligan.
Memphis, Tennessee	29.78	756.4	30.12	765.0	63	17.2	90	se.	4	1.8		0	4 s	se.	se.	0.01	0.3	fair	D. T. Flannery.
Milwaukee, Wisconsin	29.22	742.2	30.01	762.2	47	8.3	100	ne.	4	1.8			fg.			inap.	inap.	dense fog	W. Line.
Missoula, Fort, Montana	26.70	678.2	30.10	764.5	21	— 6.1	61	ne.	7	3.1		0	0			0.05	1.3	clear	J. H. Young.
Mobile, Alabama	30.16	766 1	30.20	767.1	55	12.8	86	n.	3	1.3		7 cs	0	sw.		0	0	fair	C. A. Read.
Montgomery, Alabama	29.99	761.7	30.23	767.8	51	10.6	93	calm	0	0		0	fg.			0	0	clear	J. B. McLaughlin.

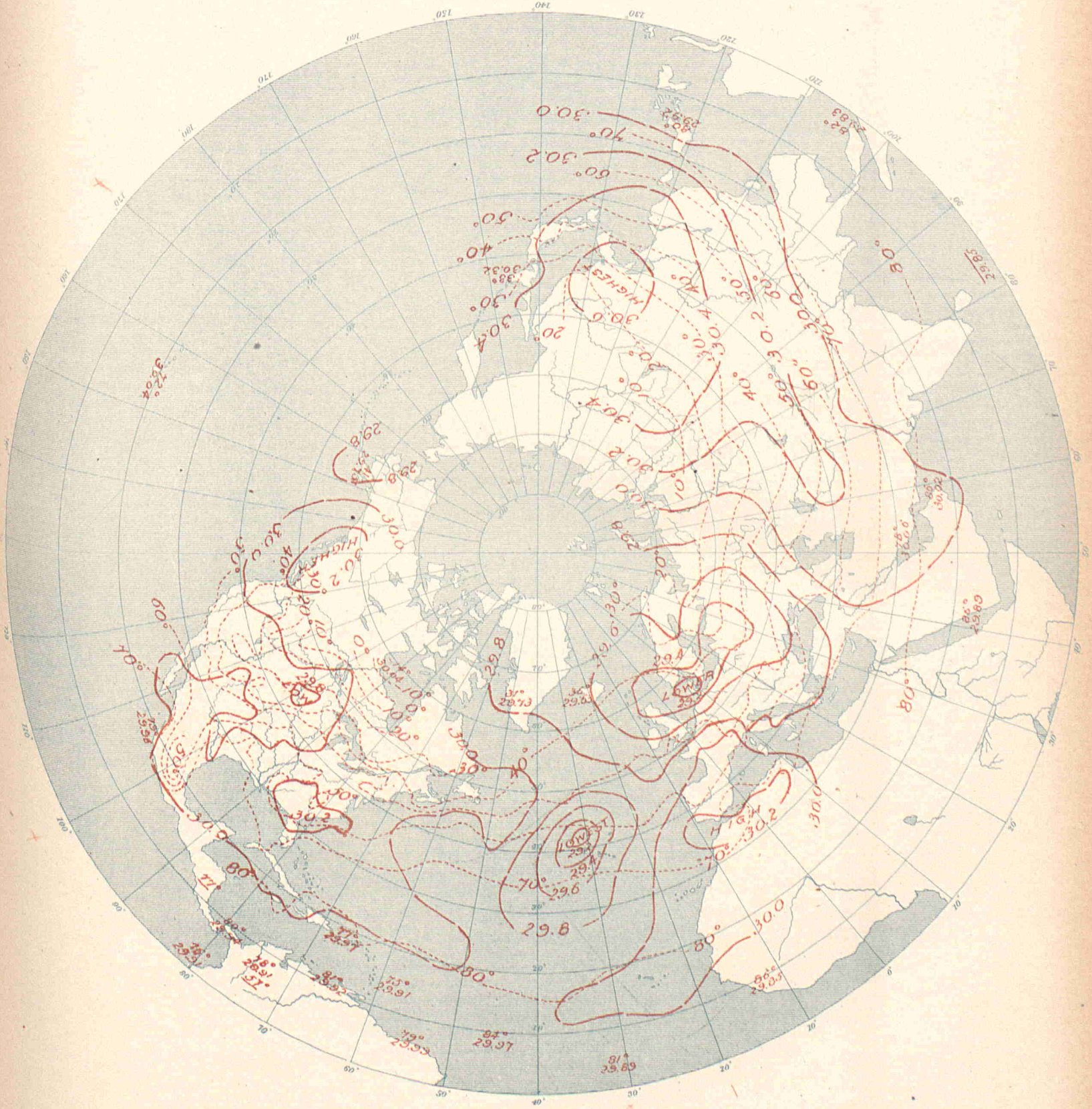
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	28.74	730.0	29.80	756.9	35	1.7	69	s.	8	3.6	.....	0	5 s	.....	.....	0	0	fair	H. Bessant.
Morgantown, W. Virginia	29.09	738.9	30.15	765.8	57.3	14.1	86	calm	0	0	.....	.....	fg.	.....	.....	0.15	3.8	dense fog	J. C. Sprigg, jr
Mt. Washington, N. H.	23.82	605.0	30.38	771.6	28.0	— 2.2	100	nw.	24	10.7	.....	.....	fg.	.....	nw.	0	0	dense fog	J. G. Linsley.
Nashville, Tennessee	29.57	751.1	30.17	766.3	60.5	15.8	90	se.	4	1.8	.....	10 n	.....	.....	sw.	0.46	11.7	light rain	L. N. Jesunofsky.
New Haven, Connecticut	30.02	762.5	30.14	765.5	47	8.3	86	sw.	1	0.4	.....	10s;fg	.....	.....	sw.	0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.12	765.0	30.17	766.3	48	8.9	100	calm	0	0	.....	10s;fg	.....	.....	.....	0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.10	764.5	30.16	766.1	64.0	17.8	90	e.	4	1.8	.....	0	sk.	.....	.....	0	0	clear	L. Dunne.
Newport, Rhode Island	30.10	764.5	30.15	765.8	51.2	10.7	92	sw.	4	1.8	.....	2 ck	7 s	ne.	sw.	0	0	cloudy	W. McGillivray.
New York, New York	29.97	761.2	30.15	765.8	50	10.0	93	s.	3	1.3	.....	.....	10n;fg	.....	.....	0.07	1.8	light rain	J. B. Merrill.
Norfolk, Virginia	30.10	764.5	30.14	765.5	53	11.7	86	s.	7	3.1	.....	.....	10 ks	.....	s.	inap.	inap.	cloudy	Wm. Davis.
North Platte, Nebraska	26.75	679.4	29.83	757.7	37.1	2.8	72	calm	0	0	.....	hz.	5 s	.....	.....	0	0	fair	E. F. Brady.
Olympia, Washington T'y	30.13	765.3	30.17	766.3	40.0	4.4	40	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	J. Dascomb.
Omaha, Nebraska	28.58	725.9	29.82	757.4	50.2	10.1	93	se.	6	2.7	.....	.....	10n;fg	.....	.....	inap.	inap.	light rain	A. Pollak.
Oswego, New York	29.77	756.1	30.11	764.8	53.0	11.7	75	s.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	S. W. Beall.
Palestine, Texas	29.51	749.5	30.08	764.0	70.0	21.1	92	s.	16	7.2	.....	.....	10 n	.....	sw.	0.03	0.8	light rain	L. M. Pindell.
Pensacola, Florida	30.17	766.3	30.20	767.1	55.2	12.9	93	ne.	5	2.2	.....	0	9 s	.....	e.	0	0	cloudy	M. McGauran.
Philadelphia, Pa	30.03	762.7	30.13	765.3	54	12.2	93	calm	0	0	.....	.....	fg.	.....	.....	0.03	0.8	dense fog	T. T. Townsend.
Pike's Peak, Colorado	17.52	445.0	30.18	766.6	13	—10.6	100	sw.	24	10.7	.....	.....	10 s	.....	sw.	0	0	cloudy	H. Hall.
Ploche, Nevada	23.72	602.5	29.86	758.4	24.6	— 4.1	94	s.	2	0.9	.....	0	fg.	.....	.....	0.58	14.7	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.27	743.4	30.12	765.0	54.0	12.2	90	n.	1	0.4	.....	.....	fg	.....	.....	0.20	5.1	dense fog	W. Daly.
Poplar River, Montana	27.72	704.1	30.01	762.2	.....	.....	.....	nw.	.....	.....	6	.....	10 s	.....	.....	0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.15	765.8	30.16	766.1	66.3	19.1	92	se.	6	2.7	.....	0	8 k	.....	se.	0	0	cloudy	M. Herman.
Port Huron, Michigan	29.40	746.7	30.12	765.0	49.0	9.4	100	e.	4	1.8	.....	.....	10 s	.....	.....	0.15	3.8	cloudy	W. O. Bailey.
Portland, Maine	30.05	763.5	30.10	764.5	45.0	7.2	83	w.	2	0.9	.....	.....	10s;fg	.....	.....	0	0	cloudy	W. W. Eichelberger.
Portland, Oregon	30.10	764.5	30.17	766.3	32.0	0.0	88	s.	5	2.2	.....	0	fg.	.....	.....	0	0	clear	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	56	13.3	93	sw.	5	2.2	.....	4 ck;k	3 ks	.....	.....	0	0	fair	F. S. Coburn.
Prescott, Arizona	24.48	621.8	29.82	757.4	43.5	6.4	86	s.	6	2.7	.....	.....	10 n	.....	.....	0.38	9.7	heavy rain	W. H. Clendenon.
Provincetown, Mass.	30.10	764.5	30.13	765.3	50	10.0	93	sw.	3	1.3	.....	.....	10s;hz	.....	sw.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.16	766.1	30.17	766.3	64.5	18.1	81	ne.	7	3.1	.....	0	0	.....	.....	.0	0	clear	W. J. Evans.
Red Bluff, California	29.57	751.1	29.98	761.5	49	9.4	93	nw.	2	0.9	.....	0	1 s	.....	nw.	inap.	inap.	clear	E. van Dyk.
Rochester, New York	29.42	747.3	30.12	765.0	48	8.9	100	sw.	4	1.8	.....	.....	10s;fg	.....	.....	0.02	0.5	cloudy	E. W. McGann
Roseburg, Oregon	29.54	750.3	30.12	765.0	39.8	4.3	85	ne.	2	0.9	.....	0	9 s	.....	w.	0	0	cloudy	J. J. Nanry.
Sacramento, California	29.90	759.4	29.98	761.5	46.9	8.3	93	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. A. Barwick
St. Louis, Missouri	29.36	745.7	29.99	761.7	60.0	15.6	100	s.	12	5.4	.....	.....	10s;sk	.....	s.	0.24	6.1	threatening	J. H. Weber.
St. Paul, Minnesota	28.93	734.8	29.85	758.2	41.0	5.0	65	se.	12	5.4	.....	2 k	4 s	w.	se.	0	0	fair	P. F. Lyons.
St. Vincent, Minnesota	29.00	736.6	29.93	760.2	26	— 3.3	88	ne.	8	3.6	.....	.....	10 n	.....	.....	inap.	inap.	light snow	C. B Dilley.
Salt Lake City, Utah	25.29	642.4	29.80	758.4	42	5.6	52	w.	6	2.7	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. Craig.
San Antonio, Texas	29.30	744.2	30.02	762.5	70.0	21.1	90	e.	3	1.3	.....	0	6 ks	.....	.....	0	0	fair	T. J. Kenan.
San Diego, California	29.88	758.9	29.95	760.7	51.5	10.8	82	e.	5	2.2	.....	4 k	1 s	.....	.....	0	0	fair	A. O. Dobbins.
Sandusky, Ohio	29.38	746.2	30.10	764.5	52	11.1	93	s.	5	2.2	.....	.....	10 s	.....	.....	0.41	10.4	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.11	764.8	30.14	765.5	51.5	10.8	93	s.	3	1.3	.....	.....	10 n	.....	s.	0.02	0.5	light rain	B. A. Blundon.
San Francisco, California	29.93	760.2	30.00	762.0	49	9.4	81	w.	5	2.2	.....	0	fg.	.....	w.	0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.06	585.7	30.10	764.5	44	6.7	51	s.	9	4.0	.....	0	0	.....	.....	0	0	clear	H. U. Jones.
Savannah, Georgia	30.15	765.8	30.24	768.1	54	12.2	83	se.	1	0.4	.....	2 ck	fg.	.....	.....	0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.49	672.8	30.31	769.9	13	—10.6	83	n.	3	1.3	.....	.....	10 s	.....	.....	0.09	2.3	cloudy	A. L. Mathews.
Shreveport, Louisiana	29.83	757.7	30.08	764.0	68	20.0	93	s.	4	1.8	.....	.....	10 s	.....	s.	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.66	728.0	29.97	761.2	65	18.3	90	s.	12	5.4	.....	.....	10 ks	.....	s.	0	0	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.18	614.2	30.02	762.5	48.5	9.2	55	sw.	2	0.9	.....	3 ck	2 s	w.	.....	0	0	fair	N. D. Lane.
Sitka, Alaska	30.26	768.6	30.33	770.4	35	1.7	79	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. W. Fickett.
Smith, Fort, Arkansas	29.48	748.8	29.97	761.2	65.0	18.3	90	e.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.18	766.6	30.22	767.6	53	11.7	93	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.03	711.9	30.11	764.8	28	— 2.2	77	ne.	10	4.5	.....	0	0	.....	.....	0	0	clear	D. Moore.
Springfield, Illinois	29.26	743.2	29.98	761.5	57	13.9	93	s.	7	3.1	.....	.....	10 s;n	.....	w.	0.05	1.3	thnd'r storm	T. B. Jennings.
Springfield, Massachusetts	30.03	762.7	30.17	766.3	44.0	6.7	83	w.	.....	.....	2	7 ck	fg.	se.	.....	c	0	fair	Charles Mayr.
Springfield, Mo.	28.50	723.9	30.01	762.2	62	16.7	93	s.	11	4.9	.....	0	4 s;fg	.....	sw.	0	0	fair	J. B. Marbury.
Starkville, Miss.	29.69	754.1	30.19	766.8	59	15.0	87	s.	8	3.6	.....	0	0	.....	.....	0	0	clear	C. Dill.
Stevenson, Fort, Dakota	27.96	710.2	29.93	760.2	23	— 5.0	100	n.	12	5.4	.....	.....	10 n	.....	.....	0.11	2.8	light snow	W. Burrows
Stockton, Fort, Texas	26.87	682.5	29.99	761.7	59	15.0	78	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	30.12	765.0	30.16	766.1	42.6	5.9	83	calm	0	0	.....	5 k	0	w.	.....	0	0	fair	G. Liebmann.
Thomas, Camp, Arizona	27.07	687.6	29.91	759.7	43.5	6.4	61	ne.	.....	.....	1	hz.	3 k	.....	s.	0	0	fair	J. T. Fitzgerald.
Toledo, Ohio	29.36	745.7	30.09	764.3	53	11.7	86	calm	0	0	.....	.....	10n;fg	.....	.....	0.15	3.8	light rain	A. Buell.
Tucson, Arizona	27.41	696.2	29.87	758.7	51	10.6	66	se.	1	0.4	.....	0	4 ks	.....	.....	0	0	fair	J. L. Whiteside.
Umatilla, Oregon	29.81	757.2	30.19	766.8	38	3.3	48	n.	15	6.7	.....	.....	10 s	.....	n.	0	0	cloudy	J. Daly.
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. C. Imlay.
Verde, Fort, Arizona	.....	.....	.....	.....	52.8	11.6	74	s.	.....	.....	4	.....	10 s	.....	s.	0	0	cloudy	D. Brooks.
Vicksburg, Mississippi	29.89	759.2	30.16	766.1	60.5	15.8	90	se.	7	3.1	.....	0	hz.	.....	.....	0	0	clear	James Kenealy.
Visalia, California	29.66	751.8	29.98	761.5	46.0	7.8	89	nw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	O. D. Stewart
Washakie, Fort, Wyoming	24.11	612.4	29.85	758.2	21.9	— 5.6	73	se.	11	4.9	.....	.....	10 n	.....	.....	inap.	inap.	heavy snow	T. M. Ambler.
Washington, D. C.	30.00	762.0	30.12	765.0	53.2	11.8	95	calm	0	0	.....	3 k	3s;fg	nw.	.....	0.13	3.3	fair	B. M. Purssell.
West Las Animas, Colorado	25.73	653.5	29.85	758.2	31	— 0.6	52	w.	5	2.2	.....	5 c	0	w.	.....	0	0	fair	F. H. Brandenburg.
Williamsport, Pa.	29.50	749.3	30.13	765.3	48	8.9	93	e.	1	0.4	.....	.....	fg.	.....	.....	0.18	4.6	dense fog	B. F. Hough.
Wilmington, N. Carolina	30.17	766.3	30.23	767.8	53	11.7	93	s.	1	0.4	.....	hz.	0	.....	.....	0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.46	646.7	29.99	761.7	32	0.0	88	ne.	7	3.1	.....	.....	10 s	.....	sw.	0.34	8.6	cloudy	J. Grover.
Yankton, Dakota	28.42	721.9	29.80	756.9	35	1.7	69	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. H. Atfield.
Yuma, Arizona	29.70	754.4	29.85	758.2	50.7	10.4	58	w.	4	1.8	.....	0	1 s	.....	.....	0.01	0.3	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8	.....	.....	56.5	13.6	75	calm	0	0	.....	.....	10 s	.....	nw.	0.25	6.3	cloudy	Joaquin Gomez.
Havana, Cuba, W. I.	30.01	762.2	30.07	763.8	66.0	18.9	90	se.	1	0.4	.....	2 c	k	w.	e.	inap.	inap.	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.97	761.2	29.98	761.5	74	23.3	94	calm	0	0	.....	8 c	1 s	.....	e.	0	0	fair	Robert Johnston.
Navassa, W. I.	29.86	758.4	29.94	760.5	80	26.7	72	ne.	25	11.2	.....	0	2 ks	.....	ne.	0	0	clear	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	79	26.1	87	e.	.....	.....	2	5 ck	3 s	e.	.....	0.230	5.8	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	78	25.6	89	calm	.....	.....	0	.....	10 ks	.....	calm	0.10	2.5	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	76.5	24.7	92	ne.	.....	.....	3	2 cs	5 ks	.....	ne.	0	0	fair	Earl Flint.
Santiago de Cuba, W. I.	29.98	761.5	30.01	762.2	73	22.8	81	n.	4.8	2.1	.....	2 c	0	.....	.....	0	0	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.69	754.1	29.75	755.6	41	5.0	82	se.	.....	.....	4	.....	10 n	.....	.....	0.34	8.6	light rain	W. J. Fisher.
St. Thomas, W. I.	29.86	758.4	29.98	761.5	80	26.7	91	ne.	.....	.....	.....	2 k	2 k	e.	ne.	0.00	1.5	fine	Aug. Walloe.
York Factory, B. A.	29.97	761.2	30.04	763.0	—14.0	—25.6	72	w.	7	3.1	.....	2 c	1 s	w.	w.	0	0	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Colonia, Uruguay†	30.05	763.3	66	18.9	74	nne.			4		0							blue sky.
H. M. S. Audacious, N. 16° 33′, E. 41° 07′	29.89	759.2	86	30.0	79	se.			3		3	s.				2	se.	d. clouds.
H. M. S. Carysfort, N. 29° 56′ E 32° 33′	29.99	761.7	80.5	26.9	58	ssw.			1		2	ssw.						d. clouds.
H. M. S. Champion, N. 31° 14′, E. 121° 28′			57	13.9	81	ne.			1–2		10					2	nw.	overcast
H. M. S. Comus, Esquimalt, Vancouver Island, B C	30.24	768.1	30	— 1.1	78	n.			1–2		2							d. clouds.
H. M. S. Condor, Gaza, Syria	30.02	762.5	74	23.3	72	sw.			2–3		3	ssw.				2	wsw.	d. clouds.
H. M. S. Curacoa, Kobe, Japan	30.23	767.8	53.5	11.9	86	n.			1		2	n.						d. clouds.
H. M. S. Diamond, S. 21° 45′, E. 175° 23′ *†	29.67	753.6	71	21.7	75	ese.			4–5		8					2	se.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I	30.03	762.7	68	20.0	71	wnw.			2–3		8	wnw.						d. clouds.
H. M. S. Eclipse, N. 18° 29′, E. 69° 58′	29.76	755.9				ne.			3		3	ne.				2	ne.	d. clouds.
H. M. S. Espiegle, S. 10° 14′, E. 161° 45′			80	26.7	91	calm			0		3							d. clouds.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.88	758 9	74.5	23.6	85	s.			3		8							d. clouds.
H. M. S. Flamingo, N. 16° 49′, W. 64° 30′	29.91	759.7	83	28.3	95	e.			1–2		1	e.				1	ne	blue sky.
H. M. S. Flying Fish, N. 37° 14′ E.126° 37′	30.61	777.5	37.5	3.1	66	nw.			1–2		0							misty.
H. M. S. Gannet, S. 18° 28′, W. 70° 21′	29.99	761.7	65	18.3	83	calm			0		8							d. clouds.
H. M. S. Griffon, N. 39° 17′ W. 63° 50′	29.96	761 6	65	18.3	83	n.			6		10					8	n.	showery.
H. M. S. Iron Duke, N. 32° 44′ E. 129° 51′	30.43	772.9	52	11.1	93	n.			1–2		5	ne.						d. clouds.
H. M. S. Kingfisher, N. 32° 14′ W. 121° 05′	30.02	762.5	54	12.2		nw.			5		5	nw.				5	nw.	d. clouds.
H. M. S. Lark, S. 1° 14′, E. 161° 42′	29.78	756.4	84.3	29.1	93	sw.			1		5					1	w.	showery.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.99	761.7	62	16.7		nw.			1		10							d. clouds.
H. M. S. Maple, Nagasaki, Japan	30.46	773.7	52.5	11.4	66	ne.			2		2	wsw.						d. clouds.
H. M. S. Northampton, Halifax, Nova Scotia	30.06	763.5	37.5	3.1	90	nnw.			2									misty.
H. M. S. Nelson, Melbourne, Australia	29.69	754.1	67	19.4	79	s.			6–7									d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.83	757.7	82	27.8	85	sw.			2		2							d. clouds.
H. M. S. Rocket, N. 1° 10′, W. 80° 50′	29.91	759.7	76	24.4	?	s.			4		5							d. clouds.
H. M. S. Sappho, S. 39° 24′, W. 150° 28′	30.07	763.8	52.2	11.2	60	ese.			2		10	ese.				3	ne.	d. clouds.
H. M. S. Superb N. 39° 37′, E. 19° 56′ *	29.78	756.4	65	18.3	83	sse.			1									showery.
H. M. S. Sylvia, Port Tamar, Patagonia	29.29	744.0	42.5	5.8	93	sw.			3		6	calm						d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.96	761.0				ene.			1		0							blue sky.
H. M. S. Woodlark, Bushire, Persia	29.96	761.0	77.5	25.3	60	nw.			6–7		6					2	wnw.	misty.
H. M. S. Zephyr, N. 39° 09′, E. 117° 09′	29.68	753.9	37	2.8	100	calm			0		0							blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.11	764.7	83.3	28.5	88	ne.			1		2		ne.			1	se.	d. clouds.
Tamega, Macao, China	30.11	764.9	75.2	24.0	79	ene.			4		10							overcast
Swedish Naval.																		
Vanadis, N. 44° 53′, W. 9° 22′	29.94	760.4	56.1	13.4	82	ssw.			3		10							raining.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.11	764.8	60	15.6	88	ne.	3	1.3			8		ne.	0	0			fair.
Navy Yard, Portsmouth, N. H	30.13	765.3	38	3.3	80	w.	2	0.9			10		w.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	30.18	766.6	44.5	6.9	80	calm			0		0			0	0			clear.
Adams, Sitka, Alaska			34	1.1	90	ene.			1		0							clear.
Alaska, Hilo, Hawaii	30.04	763.0	72	22.2	90	sw.			1		10			0.55	14.0	sm'h		cloudy.
Alliance, Hampton Roads, Va	30.10	764.5	56	13.3	93	sw.			3–4		10							cloudy.
Ashuelot, Kobe, Japan	30.47	773 9	52	11.1	72	nnw.			1		2		nnw.					clear.
Brooklyn, Keel Point, Patagonia	29.29	744.0	55	12.8	68	w.	9	4.0			5		w.	0	0	sm'h		f.air.
Colorado, New York, N. Y	30.26	768.6	51	10.6	78	sse.	1	0.4			2		calm	0.05	1.3			rainy.
Enterprise, Norfolk, Va	30.22	767.6	56	13.3	93	nw.			1		5		calm					fair.
Essex, Callao, Peru	30.01	762.2	63	17.2	94	sse.			1		10					sm'h	sse.	overcast.
Franklin, Norfolk, Va	30.17	766.3	53	11.7	93	sw.	10	4.5			8		sw.	0	0			fair.
Galena, Montevideo, Uruguay	29.98	761.5	66	18.9	90	n.			5		2					sm'h		clear.
Hartford, Montevideo, Uruguay*	29.93	760.2	64	17.8	89	n.			5		0			light	light	sm'h	n	clear.
Independence, Mare Island, Cal	30.03	762.7	48	8.9	92	calm			0		8							cloudy
Iroquois, Callao, Peru	30.05	763.3	65	18.3	89	se.			1		10							overcast.
Jamestown, Newport, R. I	30.10	764.5	54	12.2	86	wsw.			1		10		w.					cloudy.
Kearsarge, Norfolk, Va	30.13	765.3	56	13.3	93	ssw.			2		10					sm'h		cloudy.
Lackawanna, Valparaiso, Chili*	30.03	762.7	60	15.6	82	calm			0		8		sw.					cloudy.
Lancaster, N. 34° 00′, E. 13° 44′*	29.94	760.5	75	23.9	76	nnw.			4		0			0	0	mod.	nw.	clear.
Michigan, Erie, Pa	29.95	760.7	53	11.7	86	s.			2		10							cloudy.
Minnesota, New York, N. Y	30.16	766.1	53	11.7	79	sw.	1	0.4			10							misty.
Monocacy, Yokohama, Japan*	30.11	764.8	51	10.6	86	nw.			2		2		calm					hazy.
New Hampshire, Newport, R. I	30.16	766.1	53	11.7	86	sw.			2		10		sw.			sm'h		cloudy.
Nipsic, Palermo, Sicily*	29.91	759.7	71	21.7	53	wnw.			4		5					sm'h		squally.
Onward, Callao, Peru	30.11	764.8	63	17.2	94	se.			2		10		n.			long	w.	cloudy.
Palos, Port Hamilton, Corean, Archipelego*	30.47	773.9	49	9.4	77	n.			2		10		n.					cloudy.
Pensacola, Callao, Peru*	29.95	760.7	63	17.2	94	sse.	2	0.9			10			0	0	sm'h		misty.
Powhatan, Boston, Mass	30.11	764.8	45	7.2	92	w.			0–5		5		w.					foggy.
Quinnebaug, Syracuse, Sicily*	29.85	758.2	72	22.2	67	nnw.			3–4		5		nnw.			sm'h		fair.
Ranger, N. 22° 48′, W. 110° 26′	30.01	762.2	73	22.8	76	nnw.			3		2		n.	0	0	sm'h		fair.
Richmond, Yokohama, Japan*	30.36	771.1	54	12.2	55	nw.			1		0			0	0			clear.
Saratoga, N. 25° 47′, W. 84° 21′	30.06	763.5	76	24.4	76	ene.			5		5		ne.			mod.	ne.	fair.
St. Louis, League Island, Pa	30.36	771.1	50	10.0	100	e.			1		10			0.075	1.9			foggy.
Swatara, N. 2° 57′ W. 32° 04′*	29.79	756.7	81	27.2	82	se.			2		2		sse.			sm'h		fair.
Tennessee, Hampton Roads, Va	30.08	764.0	58	14.4	87	ssw.	22	9.8			5?			sprin	kling.			cloudy.
Vandalia, Hampton Roads, Va*	30.11	764.8	55	12.8	100	ssw.			4		10		sw.					cloudy.
Wabash, Boston, Mass	30.13	765.3	44	6.7	84	calm	0	0			0			0	0			foggy.
Wachusetts, Mare Island, Cal	30.02	762.5	48	8.9	92	sw.			0–1		1		calm	0	0	sm'h		fair.
Wyandotte, Washington, D. C	30.10	764.5	72	22.2	85	ne.			1		8		nw.					cloudy.
Yantic, Norfolk, Va	30.16	766.1	55	12.8	80	ssw.			2		10							overcas
Merchant Marine.																		
S. S. Grecian, Buenos Ayres, Argentine Rep.*	29.90	759.4	66	18.9	74	ene.			6		0			0	0	sm'h		clear
S. S. Polynesian, Liverpool, Eng	29.58	751.3	50	10.0		wnw.			7		6		wnw.	6 h'r	6 h'r			fair.
S. S. Scandinavian, N. 47° 56′ W. 45° 51′	30.15	765.8	37	2.8		ssw.			1		10		ne.	0	0	mod.	ene.	overcas
S. S. Indiana, Philadelphia, Pa†	29.97	761.2	52	11.1	86	e.			3		10		se.					foggy.
S. S. Lord Clive, N. 51° 00′, W. 20° 50′ *†	29.85	758.2				nnw.			4		6		nnw.	0	0	mod.	nw.	cloudy.
S. S. Lord Gough, N. 47° 26′ W. 51° 26′	30.00	762.0	40	4.4		se.			3		10			0	0	sm'h		cloudy.
S. S. Ohio, N. 46° 01′, W. 50° 20′	30.03	762.7	47	8.3	92	e.			5		6		ese.			long	ene.	fine.
S. S. Pennsylvania Liverpool, England†	29.50	749.3	47	8.3		nw.			3		8		w.					cloudy.
S. S. Stella, N. 51° 00′ W. 17° 20′	29.78	756.4	50.0	10		nw.			6		6		nw.			4	nw.	squally.
S. S. Anchoria. N. 40° 54′, W. 69° 04′†	30.13	765.3				n			6		1		nw.	1 h'r	1 h'r	sli't	e.	clear.
S. S. Bolivia, N. 51° 09′, W. 35° 20′			46	7.8	100	wnw.			2		10			0	0	sm'h		overcast
S. S. Dorian, N. 41° 12, W. 31° 30′*	28.97	735.8	64	17.8		w.			6		10		nw.	shr's	sh'rs	r'gh	w.	cloudy
S. S. Galatia, Calcutta, India†	29.90	759.4	78	25.6		n.			2		0			0	0			clear.
S. S. Utopia, N. 27° 22′, E. 34° 04′			79	20.1	62	nnw.			5		9		nw.	0	0	hv'y	nw.	cloudy.
S. S. Ailsa, N. 17° 55′, W. 77° 50′†	29.92	760.0	80	26.7	82	ene.			4		2		ene.	0	0	mod.	ene.	fair.
S. S. Alpin, N. 13° 34′ W. 69° 42′	29.93	760.2				ne.			3				ne.	½h'r	½h'r	sm'h		
S. S. Antillas, N. 24° 10′, W. 69° 30′						ne.			2		8		ne.	1 h'r	1 h'r	mod.	ne.	squally.
S. S. Ambrose, Para, Brazil†	29.86	758.4				n.			2		0			0	0			fine.
British Merchant, S. 1° 42′, W. 117° 23′	29.98	761.5	70.2	21.2	96	nne.			1		6							d. clouds.
Dynomene, S. 2° 30′ E. 87° 10′	29.38	758.9	83.5	28.6	79	sw.			1		3							d. clouds.
May Hulse, N. 4° 29, W. 23° 32′	29.89	759.2	78.7	25.9	95	se.			1		10							raining.
Markland, N. 42° 10′ W. 31° 55′	29.90	738.1	63.5	17.5	97	ssw.			3		10					5		misty.
S. S. Olympus. N. 30° 37′, E. 32° 18′	29.80	756 9	91.2	32.9	33	n.			2		0							blue sky.
Inchkeith, S. 18° 00′ W. 28° 49′	30.05	763.3	75.3	24.1	86	e.			6		2							d. clouds.
S. S. Mentola, N. 43° 30′, W. 11° 37′	29.95	760.7	61.7	16.5	97	ssw.			6		6							overcast.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.	Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mil.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	Upper.	Lower.	Inch.	Mil.			
MERCHANT MARINE.—Continued.																	
S. S. Mexico, N. 26° 47′, W. 114° 23′†	30.02	762.5	64.6	18.1	92	sse.		2		5		se.			sm'h		fair.
S. S. Bohmia, N. 46° 36′, W. 39° 04′	29.93	760.2	53	11.7	93	nne.		4		9		ne.	o	o	mod.	e.	misty.
S. S. Marathon, N. 37° 04′ E. 5° 10′	30.13	765.3	79	26.1		w.		3		0		w.	o	o	mod.	w.	cloudy.
S. S. Parthia, N. 51° 11′ W. 12° 17′*†	29.70	754.4	50	10.0		sw.		7		7		sw.	12 h'r	12 h'r	r'gh	w.	overcast.
S. S. Pavon a. N. 44° 18′, W. 44° 41′*	30.02	762.5	56	13.3	75	ne.		4		10		nne.	o	o	long	ne.	cloudy.
S. S. Colina, Cape Henry, Vaf	30.05	763.3				s.		2		8		w.	o	o			overcast.
S. S. Canada, N. 49° 40′, W. 11° 05′			50.0	10.0		wsw.		3		2		w.	o	o	sm'h		clear.
S. S. France, N. 44° 15′, W. 66° 49′†	29.95	760.7	40.4	8.0		n.		0	ck	0	n.		o	o	h'vy	ne.	cloudy.
S. S. Labradore, N. 48° 56′, W. 34° 50′†*	30.12	765.0	57.2	14		ene.		0		3		ne.	o	o	sm'h	w.	clear.
S. S. Abyssinia, N. 41° 46′, W. 61° 55′*	29.87	758.7	55	12.8	87	n.		8		10		ne.	o	o	h'vy	var.	gloomy.
S. S. Frisia, N. 49° 05′, W. 70° 05′	30.19	766.8	53	11.7		var.		1–2		4		e.	o	o			fair.
S. S. Gellert N. 49° 56′, W. 13° 46′	29.84	757.9	58	14.4		wnw.		5		9		wnw.	1 h'r	1 h'r	long	nw.	cloudy.
S. S. Silesia, N. 48° 04′, W. 17° 16′†	29.90	759.5	54.2	12.3		ne.		2		8		n.	o	o	4	wnw.	d clouds.
S. S. Vandalia, N. 42° 27′, W. 55° 10′	29.86	758.4	61.2	16.2		e.		0		10		e.	rain	rain	cross	e.	squally.
S. S. City of Berlin, N. 48° 15′, W. 43° —′	30.07	763.8	49	9.4	78	ne.		2		10							cloudy.
S. S. Mentmore, Liverpool, England*	29.51	749.5				w.		7		8		w.	o	o	sm'h	w.	threatening.
S. S. Nessmore, Barrow, England*	29.24	742.7	53	11.7	86	sw.		5		8		sw.					showery.
S. S. Archimedes, N. 42° 21′, W. 61° 40	29.81	757.2				ne.		8		10		nne.	o	o	h'vy	nne.	hazy.
S. S. Hevelius, Buenos Ayres, Argentine Rep*†	30.00	762.0	70	21.1		ne.		5		2		n.	o	o			clear.
S. S. Ptolmey, S 12° 30′, W. 35° 30′	30.01	762.2	81	27.2	83	ne.		4		0			o	o	2	nne.	d. clouds.
S. S. City of San Antonio, N. 24° 20′, W. 80° 05′ †	30.14	765.5	77	25 0		ne.		4		5		ne.	o	o	sm'h		fair.
S. S. Colorado, N. 36° 17′, W. 75° 19′ †	30.20	767.1	57	13.9		sw.		2		10		sw.	o	o	long	ne.	cloudy.
S. S. Rio Grande, N. 28° 52′, W. 91° 30′†	30.10	764.5	78	25.6		s.		2		2		s.	o	o	mod.	ese.	
S. S. San Marcos, N. 26° 02′, W. 86° 00′	30.22	767.6	79	26.1		e.		4		1		ne.			mod.		fine.
S. S. Archimede, Palermo, Sicily *†	29.94	760.5	64	17.8	68	wnw.		5		2		wnw.	o	o			clear.
S. S. Hermod, N. 46° 26′ W. 39° 28′†	29.94	760 5	57.2	14		ne.		5		8		ne.	o	o	long	ese.	cloudy.
S. S. Glenapp, S. 5° 00′, W. 36° 00′†	29.97	761.2	79	26.1		se.		3	6 ck	0	se.		1 h'r	1 h'r	short	se.	fine.
S. S. Chalmette, N. 25° 00′ W. 83° 40′†	30.15	765 8	75	23.9		ese.		4		3		e.	o	o	mod.		clear.
S. S. Lone Star, N. 34° 16′, W. 76° 30′ †	30.22	767.6	64	17.8		wsw.		2		2		sw.	o	o	small	ne.	clear.
S. S. Denmark, N. 41° 37′, W. 56° 20′			64	17.8		e.		3		10		se.	4 h'r	4 h'r	long	e.	raining.
S. S. England, N. 44° 31′, W. 51° 41′	29.91	759.7				ese.		5		2		ese.	o	o	mod.	ese.	clear.
S. S. Erin, New York, N. Y.	30.29	709.4	54	12.2		nne.		4		10			6 h'r	6 h'r			gloomy.
S. S. Greece, N. 49° 04′, W. 21° 55′	29.72	754.9				nne.		6		10		nw.	o	o	mod.	n.	overcast.
S. S. Helvetia, N. 51° 20′ W. 13° 15′	29.70	754.4	50	10.0		w.		5		2		nne.	4 h'r	4 h'r	h'vy	nw.	showery.
S. S. Santiago, N. 28° 20′, W. 73° 26′	30.34	770.6	74	23.3	72	ene.		3		4		s.	o	o	long	ne.	fine.
S. S. City of Alexandria, New York, N. Y†	30.19	766.8	53	11.7		se.		3									
S. S. City of Merida, N. 19° 29′, W. 91° 42′ *†	29.94	760.5	80.6	27		se.		2		8		se.	1 h'r	1 h'r	light	se.	squally.
S. S. City of Washington, Havana, Cuba, W. I*†	30.30	769.6	80	26.7		ne.		5		5		ne.	o	o	sm'h		fine.
S. S. City of Chester, N. 44° 50′, W. 54° 30′			50	10.0		ese.		3								e.	overcast.
S. S. Knickerbocker, N. 28° 26′ W. 88° 01′*†	30.17	766.3	74	23.3		calm		0							sm'h		
S. S. Elbe, N. 41° 54′, W. 61° 59′	29.94	760.5	50.9	10.5	93	nnw.		6–7		10		nnw.	o	o	h'vy	var.	covered.
S. S. Koln, N. 41° 32′, W. 64° 17′	29.90	759.4	53.0	11.7	80	nne.		0		8		ne.	10 h'r	10 h'r	r'gh	nne.	
S. S. Oder, N. 50° 22′, W. 13° 00′	29.77	750.1	52.7	11.5		w.		0		8		w.	2 h'r	2 h'r	r'gh	wnw.	cloudy.
S. S. Ohio, N. 28° 29′ W. 91° 27′	30.18	766.6				ssw		1–2		0			o	o	sm'h	var.	clear.
S. S. Sailer, N. 45° 51′ W. 48° 53′	30.07	703.8	43.7	6.5		ese.		3		5		e.	o	o	long	ese.	fair.
S. S. Werra, N. 50° 39′, E 0° 16′ *	29.77	750 1	50.0	10.0		wsw.		0		2		wsw.	o	o	r'gh	wsw.	fair.
S. S. Belgic, Hong Kong, China†	30.14	765.5	71	21.7	75	ne.		5		10		e	o	o			overcast.
S. S. City of Augusta, Savannah, Ga†	30.25	768.3				nw.		1		0			o	o			foggy.
S. S. Mississippi, N. 40° 28′, W. 124° 28′ †	30.18	766.0	50	10.0	79	nnw.		4		8		n.			mod.	nw.	fair.
S. S. Columbia, N. 45° 34′, W. 124° 09′†	30.15	765.8	45	7.2	72	nne.		4		0					mod.	nnw.	clear.
S. S. Oregon, San Francisco, Cal†	29.97	761.2	49	9.4	93	calm		0		0							clear.
S. S. Ancon, N. 34° 22′, W. 120° 12′†	29.89	759.2	52	11.1	73	nnw.		5		0					sm'h		clear.
S. S. Australia, Sydney, N. S. W.	30.28	769.1	64	17.8	78	ne.		4		8		ne.					cloudy.
S. S. City of New York, S. 27° 18′, W. 178° 21′ †	29.88	758.9	67	19.4	00	ssw.		5		5		ssw.	o	o	h'vy	ssw.	fair.
S. S. City of Pekin, N. 34° 47′, E. 140° 13′ †	30.48	774.2	60	15.6	88	nne.		5		5		n.	o	o	small	n.	fair.
S. S. City of Sydney, S. 22° 51′, W. 174° 49′†	29.90	759.4	66	18.9	68	wsw.		4		8		sw.	o	o	mod.	sw	cloudy.
S. S. Colima, N. 19° 14′, W. 105° 09′†	29.96	761.0	79	26.1	86	calm		0		4		wnw.	o	o	small	wnw	clear
S. S. Grenada, N. 21° 45′, W. 166° 04′†	29.91	759.7	78	25.6	86	calm		0		5?		sw.	o	o	sm'h	wsw.	clear?
S. S. San José, N. 8° 54′, W. 79° 30′*†	30.09	764.3	80	26.7		nw.		2		2		wnw.	o	o	light	nw.	
S. S. Bermuda, Castries, W. I †	30.05	763.3	80	30.0		calm		0		1		e.	light	light	sm'h		fine.
S. S. Muriel, N. 23° 42′, W. 65° 25′	30.02	762.5	79	26.1		nne.		3		10			o	o	long	n.	overcast.
S. S. Caracas, Puerto Cabello, Venezuela†	30.02	762.5	81	27.2	87	calm		0		3		ene.	2 h'r	2 h'r	h'vy	nne.	fair.
S. S. Belgenland, New York, N. Y†	30.24	768.1	53	11.7	93	ssw.		2		9		s.	1 h'r	1 h'r			cloudy
S. S. Pennland, Antwerp, Belgium	29.68	753.9	50	10.0	72	wsw.		5		5		wsw.	2 h'r	2 h'r			fine.
S. S. Rhyniand, N. 49° 40′, W. 30° 30′	29.89	759.2	49	9.4	04	ene.		0		0		nne.	o	o	long	ne.	cloudy.
S. S. Switzerland, N. 49° 25′ W. 36° 35′ †	30.03	762.7				nne.		5		10		nne.	o	o	med.	ene.	cloudy.
S. S. Waesland, N. 40° 28′ W. 72° 50′	30.17	766.3	50	13.3	94	s.		2		10		sw.	sh'rs	sh'rs	sm'h	s.	hazy.
S. S. Maas, New York, N. Y.	30.26	768.5	52.5	11.4	?												
S. S. P. Oaland, N. 51° 58′, E. 4° 04′	29.60	751.8	49.1	9.5	86	nnw.		0		3		wnw.					clear.
S. S. Schledam, N 49° 28′ W. 14° 42′	29.84	757.9	57.6	14.2	89	nw.		5		7		e.	2 h'r	2 h'r	cross	nw.	cloudy
S. S. W. A. Scholten, N. 44° 49′, W. 54° 00′	30.07	763.8	47.9	8.8	94	se.		5		10		wsw.	o	o	mod.	se.	
S. S. State of Florida, N. 50° 56′, W. 29° 50′	29.88	758.9	46	7.8		ene.		4		8		ene.	o	o	mod.	ne.	cloudy.
S. S. State of Georgia, N. 40° 34′, W. 70° 15′†	30.18	766.6	54	12.2		w.		2		8			o	o	long	e.	cloudy.
S. S. State of Nevada, N. 51° 10′, W. 35° 13′ †	30.11	764.8	44	6.7		nnw.		1		10			n.	o	o	long	n.	overcast.
S. S. Thingvalla, Swinemunde, Prussia †	29.46	748.2	42.8	6.0		sw.		3		8			sw.	o	o			covered.
S. S. Iowa, Liverpool, Eng*†	29.59	751.6															
S. S. Adriatic, N. 51° 00′, W. 12° 55′†	29.94	760.5	48	8.9		w		5		3			wnw.		rg'h	wnw.	fair.
S. S. Baltic, N. 50° 48′, W. 26° 01′	29.90	759.4	48	8.9	78	n.		4		4		nw.	o	o	mod	nw.	d. clouds.
S. S. Celtic, N. 40° 45′, W. 70° 44′ †	30.15	765.8	57	13.9	81	sw.		2		10			6 h'r	6 h'r	sm'h		overcast.
S. S. Romano, N 50° 34′, W 1° 18′	29.64	752.8	53	11.7		w.		5		10		w.	o	o	r'gh		dull.
S. S. Salerno, Odessa, Russia			50	10.0		sw.		5		10		sw.	3 h'r	3 h'r			dull.
S. S. Catherine Whiting, Providence, R. I†	30.22	767.6				calm		0									
S. S. Norman, N. 38° 55′, W. 75° 04′	30.20	767.1				sw.		4				nw.	2 h'r	2 h'r	sm'h		cloudy.
S. S. Saxon, Philadelphia, Pa*†	30.28	769.1	64	17.8		calm		0									dense fog.
MISCELLANEOUS.																	
Bg. Abbie Clifford, N. 35° 36′, W. 73° 30′			66	18.9		nw.		1		10		wsw.	o	o	h'vy	ne.	
Bk. Adelaid, N. 12° 33′ W. 51° 40′ *†	29.92	760.0	84	28.9		se.		4		1		ese.	o	o	mod.	ese.	fair.
Bg. Alcira, N. 20° 05′, W. 66° 19′	29.98	761.5	81	27.2		nne.		6		0?		ne.	2 h'r	2 h'r	h'vy	nne.	clear?
Schr. Anna A. Holton, N. 36° 30′, W. 74° 20′†	30.17	766.3	63	17.2		wsw.		5		10			o	o	r'gh	ne.	cloudy.
S. Annie, M. Law, Kobe, Japan *†	30.39	771.9	53	11.7		n.		1		0			o	o			fine.
Bk. Anna Thormann, S. 9° 02′, E. 114° 22′*	29.94	760.5	80.8	27.1	87	sse.		4		4 k		se.	o	o	long	ssw.	misty.
S. S. Antonio Lopez, Cadiz, Spain*	30.18	766.6	67	19.4	70	n.		1		2			o	o	sm'h		clear.
Bk. Aquidneck, N. 12° 55′, W. 37° 35′ *†	30.01	762.2				e.		3				e.			light	e.	clear.
Bk. Aureola, N. 47° 55′, W. 21° 27′*†	30.05	763.3	57	13.9		ne.		0		8		e.	o	o	mod.	ne.	cloudy.
Bk. Alba, N. 50° 30′, E. 0° 30′ *†	29.74	755.5	50.9	10.5		wsw.		7									covered.
Bk. Bayonnaise, N. 22° 10′, W. 49° 30′*†	30.10	764.5				ssw.		2		5?		sw.	4 h'r	4 h'r	r'gh	se.	clear?
S. S. Burswell, North Shields, Eng *†	29.42	747.3	48	8.9		wnw.		6		4		wnw.	o	o	sm'h		clear.
Bk. Champion, Manasilus, Netherlands †	29.51	749.5	55.0	12.8		wnw.		5		2		wnw.	4 h'r	4 h'r			clear.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.21	767.3	65	18.3	94	ne.		1	0	5 k		ne.	o	o			fair.
Schr. C. R. Flint, N. 22° 52′, W. 85° 21′†	30.13	765.3	74	23.3		ene.		4		3		ne.	o	o	r'gh	ene.	fair.
S. Cornelius, N. 34° 59′, W. 7 20° 00′ *†	30.32	770.1	55.6	13.1		ssw.		3		10		sw.	o	o	long	e.	cloudy.
S. S. D. J. Foley, N. 21° 14′, W. 74° 10′			82	27.8		nne.		4		8		ne.	shr's	shr's	sm'h	ne.	fine.
Bk. David Preston, N. 26° 10′, W. 78° 25′ *†	30.00	762.0	84	28.9		ne.						ne.	o	o	sm'h		
Bk. Don Quixote, Pasoeroen Roads, Java*	29.78	756.4	87	30.0		ese		4		4		ese.			sm'h		clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. E. D. Bigelow, N. 39° 38′, W. 48° 50′*†	29.90	759.4				se.			5		8		var.	0	0		ene.	cloudy.
Schr. Edith R. Seward, Wilmington, N. C*†	30.30	769 6	53	11.7		s.			1		1		calm	0	0			clear.
S. E. J. Spicer, New York, N. Y	30.15	765.8	52	11.1	93	s.			2		10		sw.	7 h'r	7 h'r			overcast.
Bk. Eliza Barss, Bermuda, W. I†	30.03	762.7				nw.			6		5?		nw.	0	0			clear.?
S. Enoch Train, N. 18° 40′, W. 51° 00′*†	30.10	764.5				se.			3		4		ese.	0	0	light	nnw.	fine.
Bk. Essex, Muscat, Arabia*†	29.92	760 0	86	30.0		nw.			5									
Schr. F. E. McDonald, Georgetown, D. C†	30.24	768.1				calm			0		0							fine.
S. S. Foscolia, Rio de Janeiro, Brazil*†	29.60	751.8				s.			4				s.	0	0			fine.
Bk. Freya, N. 39° 09′, W. 12° 47′†	29.63	752.6	68	20.0		wsw.			3		0			0	0	mod.	nw.	clear.
S. Glendon, S 46° 25′, W. 86° 20′†	29.51	749.5	52	11.1		w.			6		7		w.	0	0	mod.	w.	cloudy.
S. Grecian, N. 7° 42′, W. 45° 52′†	29.97	761.2	84	28.9	79	ne.			6		5		ne.	1 h'r	1 h'r	sm'h	ne.	clear.
Bk. Gronsvaer, S. 45° 23′, E. 136° 42′†	29.61	752.0	57.0	13.9	97	wsw.			5		5		w.	15 h'r	15 h'r	5	wsw.	
Bk Hattie G. McFarland, N. 34° 33′, W. 73° 16′†	30.33	770.4	69	20.6		wnw.			1		8			0	0	long	ne.	
Schr. Hattie Weston, Mayaro Bay, Trinidad W. I*†	29.95	760.7	81	27.2		ese.			2		10		ese.	3 h'r	3 h'r	mod.	e.	raining.
S. Hedwig, N. 23° 17′, W. 64° 22′	30.03	762.7	78.1	25.6	82	n.			4		4		n.	¼ h'r	¼ h'r	4	n.	fine.
Schr. Isabel Alberto, N. 25° 45′, W. 83° 00′†	30.13	765.3				ene.			3		6		ne.	0	0	mod.	ene.	fair
S. Ivy, Cork, Ireland†	29.91	759.7	45	7.2		wnw.			5		4		wnw.	0	0			squally.
Schr. Jennie N. Huddell, Philadelphia, Pa†	30.29	769.4				calm			0		10		calm	0	0			foggy.
S. S. John Hopkins, Boston, Mass			50	10.0		sw.			1		10			0	0			overcast.
Schr. John L. Thomas, Vivorilla Cays, C. A *†	30.02	762.5				ne.			3		5		ene.	5 h'r	5 h'r			squally.
Bg. John Wesley, Cardenas, Cuba, W. I†	30.02	762.5				ene.			4		1			0	0			clear.
Bk. Joseph A. Ropes, N. 20° 35′, E. 59° 06′*†	29.93	760.2	82	27.8	79	ssw.			3		0					sm'h		fair.
Light House Tender, Laurel, Key West, Florida†	30.11	764.8	74	23.3		ne.			2–3		5		ne.	0	0			fair
Bk. Liberia, N. 18° 25′, W. 31° 06′.*..	29.98	761.5	80	26.7	78	e.			3		2		e.	0	0			fine.
Bg. Lilian, Demerara, Brit. Guianat	29.90	759.4	82	27.8		ne.			4		10		ene.	1 h'r	1 h'r			rainy.
Bg. L. & W. Armstrong, N. 33° 35′, W. 73° 30′*†	30.20	767.1				wnw.			1		1		nw.	0	0	mod.	nne.	clear.
S. S. Madrid, N. 38° 54′, W. 25° 31′*†	29.70	754.4	66	18.9	100	s.			6		10			5 h'r	5 h'r	r'gh	ssw.	heavy rain.
S. S. Malabar, N. 7° 37′, E. 75° 43′*†	29.85	758.2				calm			0		0			0	0	sm'h		clear.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	30.04	793.0	72	22.2		ne.			6		0			0	0			clear.
Bg. Mattie B. Russell, Matanzas, Cuba*†	30.27	768.8				calm			0		2		ene.	0	0	light	ne.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	29.93	760.2				ne.							nne.	4 h'r	4 h'r	long	ne.	fair.
S. M. P. Grace, N. 34° 37′, W. 122° 56′*	29.98	761.5	54	12.2		nw.			5		7		nw.	0	0	long	nw.	cloudy.
Bg. Myrtle, N. 28° 31′, W. 70° 04′†	30.17	766.3				w.			1		2		n.	0	0	long	n.	fair.
Bk. Norena, N. 33° 00′ W 76° 31′*†	30.28	769.1				nnw.			2		3		ne.	0	0	high	ne.	fine.
S. Orealla, N. 3° 2-′, E. 82° 31′*	29.85	758.2				w.			3		4		w.	0	0	sm'h		fine.
Bk. Orpheus, N. 37° 03′, W. 60° 00′	29.94	760.5	68	20.0		n.			7		k		n.	0	0	h'vy	nnw.	squally.
S Paramita, San Francisco, Cal†	30.04	763.0	55	12.8		wsw.			1				w.	0	0			foggy.
S. S. Peconic, N. 36° 25′, W. 13° 30′*†	30.20	767.1	67	19.4		ssw.			4		2		ssw.	0	0	long	wnw.	cloudy.
S. S. Radnorshire, N. 33° 40′, E. 23° 12′*†	30.00	762.0				w.			3		0			0	0	sm'h		clear.
Bk. Rebus, N. 34° 26′, W. 74° 27′	29.96	761.0	67	19.4		wnw.			2		1		w.	0	0		ne.	clear.
S. St. Francis, S. 32° 45′, W. 83° 00′†	30.26	768.6	59	15.0		sw.			5		3		sw.	0	0	long	sw.	fine.
S. S. Strathleven, N. 44° 21′, W. 80 32′			56.0	13.3	100	s.			4		8		s.			6	wnw.	misty.
Bg. Teneriffe, N. 32° 40′ W. 77° 20′	30.14	765.5				var.			2					0	0	long		fine.
Bk. Truro, N. 45° 35′, W. 18° 30′*†	29.87	758.7				wsw.			1		10		sw.	12 h'r	12 h'r	mod.		rainy.
U. S. F. C. S. S. FishHawk, Washington, D. C†-	30.25	768.3	54	12.2	93	calm			0		5		calm	0.10	2.5			fair.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.33	770.3	71.6	22.		w.			3		6		w.	0	0			
Schr. Viola Reppard, Tybee, Ga†	30.16	766.1	64	17.8		calm			0		0			0	0			
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762.1				sse.			1		2		sse.	0	0			fine.
Bk. Wandering Jew, S. 5° 39′, W. 30° 57′†	29.87	758.7	81	27.2		se.			6		4		se.	0	0	sm'h		clear.
Bk. Warden Law S. 50° 09′, W. 82° 30′	29.68	753.9				w.			4		3		w.	0	0	sm'h	w.	fair.
Bgt. Willie, S. 38° 29′, W. 5° 00′*†	30.32	770.1	70	21.1		nw.			5		0			0	0	long	w,	clear.

International Chart I. November 10, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 11, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer: Corrected for instrumental error and for temperature.		Barometer: Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind: Direction.	Wind: Velocity.		Wind: Force.	Clouds: Amount and kind. Upper.	Clouds: Amount and kind. Lower.	Clouds: Direction. Upper.	Clouds: Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.15	765.9	65.1	18.4	88	s	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.13	765.2	66.2	19.0	72	calm	.....	.....	0	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.11	764.8	74.8	23.8	63	nw.	.....	.....	2	.....	2	.....	.....	0.031	0.8	fair	Fonfréde.
Tunis	.....	.....	30.13	765.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.13	765.2	70.9	21.6	50	s.	.....	.....	2	.....	2	.....	.....	0	0	fair	Pérès.
Tebessa	.....	.....	30.25	768.3	68.7	20.4	54	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	75.6	24.2	11	sw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair	Louchamp.
Laghouat	.....	.....	30.30	769.6	71.6	22.0	10	sse.	.....	.....	4	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.26	768.6	69.1	20.6	63	.....	.....	.....	.....	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	30.06	763.5	30.15	765.8	58.0	14.4	76	se.	9	4.0	.....	.....	10	.....	.....	0	0	dull	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.21	742.0	29.77	756.1	49.1	9.5	74	sw.	.....	.....	2	.....	10	.....	.....	0.126	3.2	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.83	732.3	29.60	751.8	46.6	8.1	61	sw.	12.5	5.6	.....	.....	10	.....	.....	0.154	3.9	.....	Dr. Wierzbiski.
Eperies	28.83	732.2	29.71	754.7	44.4	6.9	74	s.	.....	.....	4	0	8 s	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.47	723.1	29.74	755.3	44.6	7.0	69	se.	.....	.....	2	.....	3	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.45	722.5	29.89	759.2	46.4	8.0	59	wnw.	.....	.....	4	.....	0	.....	.....	0.028	0.7	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.23	717.0	29.57	751.1	51.6	10.9	41	w.	.....	.....	2	.....	6	.....	.....	0.091	2.3	.....	The Staff.
Lemberg	28.72	729.5	29.72	754.9	43.3	6.3	76	sw.	.....	.....	3	.....	2	.....	.....	0.220	5.6	.....	Dr. T. Stanecki.
Pola	29 68	753.8	29.79	756.6	60.4	15.8	61	ssw.	.....	.....	3	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.34	745.3	29.81	757.1	47.1	8.4	59	sw.	.....	.....	3	.....	3	.....	.....	0.398	10.1	.....	Joseph Midlinszky, S. J.
Szegedin	29.55	750.6	29.84	757.8	50.5	10.3	61	s.	.....	.....	3	.....	0	.....	.....	0.071	1.8	.....	Karl Stancel.
Trieste	29.68	753.8	29.78	756.4	59.7	15.4	64	sw.	.....	.....	1	.....	6	.....	.....	0	0	.....	Royal Academy.
Vienna	28.90	734.0	29.61	752.0	53.4	11.9	44	s.	.....	.....	3	.....	5	.....	.....	0.189	4.8	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.64	752.8	29.74	755.4	41.9	5.5	84	wnw.	13	5.8	.....	.....	2	.....	.....	0.010	0.3	blue sky	W. Boswell
Armagh, Observatory	29.62	752.3	29.87	758.7	42.3	5.7	84	w.	7	3.1	.....	.....	0	.....	.....	.....	.....	blue sky	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.74	755.4	45.7	7.6	84	w.	25	11.2	.....	.....	6	.....	.....	.....	.....	d. clouds	John Hartnup.
Bolton, Sharples	29.20	741.7	29.74	755.4	42.6	5.9	80	nnw.	3	1.3	.....	.....	3	.....	.....	.....	.....	d. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.31	744.5	29.71	754.6	42.1	5.6	72	nw.	.....	.....	3	.....	4	.....	.....	0.01	0.3	d. clouds	McLandsborough&Preston
Bridgetown, Barbadoes	29.84	757.9	29.87	758.7	83.0	28.3	74	se.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	29.60	751.8	29.72	754.9	47.0	8.3	73	w.	.....	.....	1.0	.....	1	.....	.....	.....	.....	blue sky	John McLaren.
Chatham, School M. E	29.59	751.6	29.72	754.9	45.3	7.4	71	sw.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.69	754.1	29.92	760.0	49.8	9.9	65	wnw.	.....	.....	3	.....	6	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.57	700.3	29.79	756.7	79.0	26.1	20	e.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	87.0	30.6	58	sw.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.14	765.5	30.19	766.8	70.0	21.1	87	w.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.58	751.3	29.78	756.4	45.2	7.3	03	wnw.	.....	.....	1	.....	1 k	.....	.....	.....	.....	blue sky	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.59	751.6	29.76	755.9	44.6	7.0	71	wnw.	.....	.....	4	.....	3	.....	.....	.....	.....	d. clouds	The Staff.
Guernsey	29.60	751 8	29.90	759.4	50.0	10.0	64	wnw.	.....	.....	1	.....	2	.....	.....	.....	.....	d. clouds	A. Collenette, F. M. S.
Kew, Observatory	29.74	755.4	29.78	756.4	46.4	8.0	68	wnw.	16	7.2	.....	.....	2	.....	.....	.....	.....	blue sky	The Staff.
Leicester, Museum	29.48	748.8	29.73	755 1	46.0	7.8	60	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	J. C. Smith.
Malta, Mediterranean	30.00	762 0	30.06	763.5	69.0	20.6	97	w.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.11	764.8	30.16	766.1	74.2	23.4	67	ne.	.....	.....	3	.....	8	.....	.....	.....	.....	drizzling	C. S. Duncombe.
Oscott, St. Mary's College	29.24	742.7	29.77	756.1	45.9	7.7	65	wnw.	.....	.....	4	.....	2	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.56	750.8	29.79	756.7	45.8	7.7	70	wnw.	.....	.....	4	.....	1	.....	.....	.....	.....	blue sky	The Staff.
Plymouth	29.79	756.7	29.87	758.7	49.4	9.7	75	nw.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	29.67	753.0	29.77	756.1	44.3	6.8	76	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	d. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.87	758.7	29.94	760.5	52.4	11.3	93	n.	.....	.....	2	.....	5	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.42	747.3	29.71	754.6	45.3	7.4	75	nw.	.....	.....	2	.....	1	.....	.....	0	0	blue sky	W. F. Cooper.
Silloth Rectory	29.71	754.6	29.74	755.4	40.0	4.4	82	n.	.....	.....	2	.....	4	.....	.....	0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	.....	.....	43.4	6.3	71	w.	8	3.6	.....	.....	7	.....	.....	.....	.....	d. clouds	I. New.
Strathfield Turgiss	29.58	751.3	29.80	756.9	47.2	8.4	09	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.89	759 2	29.94	760.5	54	12.2	73	nw.	.....	.....	4	.....	8	.....	.....	.....	.....	gloomy	W. Newcombe.
Valencia, Observatory	29.91	759.7	29.93	760.2	50.0	10.0	04	nw.	8	3.6	.....	.....	6	.....	.....	blank	blank	d. clouds	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.35	770.9	30.39	771.9	32	0.0	85	calm	0	0	.....	0	0	.....	.....	0	0	clear	H. J. Cundall, C. E.
Chatham, N. B*	30.35	770 9	30.42	772.7	28	— 2.2	92	ne.	.....	.....	1	5 c	0	ne.	.....	0	0	fair	G. A. Blair.
Father Point, Quebec*	30.29	769.4	30.32	770.1	23	— 5.0	92	nw.	5	2.2	.....	0	5 s	.....	calm	0	0	clear	J. McWilliams.
Fort Garry, Manitoba*	29.30	744.2	30.19	766.8	12	—11.1	100	n.	22	9.8	.....	.....	10 n	.....	.....	0.06	1.5	fair	James Stewart.
Halifax, N. S*	30.26	768.6	30.40	772.1	33	0.6	88	w.	5	2.2	.....	0	0	.....	.....	0	0	clear	A. Allison.
Kingston, Ontario*	29.79	756.7	30.13	765.3	50	10.0	90	s.	14	6.3	.....	.....	10 s	.....	sw.	0	0	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	30.01	762.2	30.22	767.6	36	2.2	92	ne.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.22	742.2	29.91	759.7	52	11.1	93	se.	14	6.3	.....	.....	10 n	.....	se.	0.12	3.0	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.36	745.7	30.05	763.3	54	12.2	100	sw.	3	1.3	.....	.....	10 cs	.....	sw.	lnap.	lnap.	threaning	H. Morgan.
Port Stanley, Ontario	29.37	746.0	30.01	762.2	57	13.9	100	sw.	4	1.8	.....	.....	10 n	.....	sw.	0.18	4.6	threatening	M. Payne.
Quebec, Quebec*	29.94	760.5	30.28	769.1	33	0.6	88	e.	.....	.....	6	.....	10 k	.....	e.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.52	749.8	29.99	761.7	42	5.6	93	e.	5	2.2	.....	.....	fg	.....	.....	0.02	0.5	light rain	W. H. McIntyre.
Saugeen, Ontario*	29.17	740.9	29.88	758.9	53	11.7	93	s.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	
St. Andrews, N. B	29.34	745.2	30.39	771.9	41	5.0	90	se.	1	0.4	.....	2 k	5 ks	nw.	.....	0	0	cloudy	
Sydney, C. B*	30.30	769.6	30.37	771.4	37	2.8	64	ne.	7	3.1	.....	0	2 k	.....	.....	0	0	clear	T. C. Hill, C. E
Toronto, Ontario*	29.66	753.4	30.04	763.0	54	12.2	90	e.	8	3.6	.....	.....	10 n	.....	calm	0	0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	30.32	770.1	30.39	771.9	35	1.7	85	e.	4	1.8	.....	8 ck	0	w.	.....	0	0	fair	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.53	724.6	29.92	760.0	55.0	12.8	100	sw.	.....	.....	6	.....	10	.....	sw.	0.030	0.8	showery	Wm. Wylie.
St. Johns, Newfoundland	30.15	765.8	30.41	772.4	33	0.6	89	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.08	764.0	30.11	764 8	67.0	19.4	78	sw.	23.2	10.4	.....	8 cs	0	.....	.....	0	0	.....	John Duthie.
Cape Town, O. G. H. Obs'y	30.00	762.0	30.04	763.0	80.2	26.8	53	sse.	34	15.2	.....	0	2	.....	.....	0	0	.....	The Staff, for D.Gll.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
CHINESE (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.33	770.4	39.4	4.1	90	ne.	5.6	2.5	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai.	30.41	772.5	30.44	773.2	50.2	10.1	96	ne.	4.9	2.2	.....	.....	10 n	.....	.....	0.142	3.6	raining	M. Marc Dechevrens, S. J.
DANISH.																			
Copenhagen	29.15	740.3	29.19	741.5	41.5	5.3	87	ese.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	Oversergent Fischer.
Fanöe	29.21	741.9	29.23	742.5	35.8	2.1	93	n.	.....	.....	7	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.48	748.8	29.52	749.9	29.8	— 1.2	.....	s.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.58	751.3	29.60	751.8	33.1	0.6	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	snowing	
Stykkisholm, Iceland	29.95	760.8	30.00	761.9	35.6	2.0	80	ne.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.88	758.9	29.91	759.8	45.0	7.2	60	e.	9	4	.....	.....	7	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.24	742.6	29.33	745.0	35.2	1.8	95	nne.	.....	.....	7	.....	10	.....	.....	.....	.....	rain & snow	Loearer Oesterbol.
FRENCH.																			
Agen, Normal School	29.40	746.7	30.06	763.5	54.3	12.4	100	calm	.....	.....	0	.....	8	.....	W.	0.177	4.5	light rain	M. Labroue, Directo
Alençon, Normal School	29.30	744.2	29.85	758.2	48.6	9.2	71	n.	.....	.....	1	.....	8	S.	S.	0.016	0.4	.....	M. Nicot, Director.
Arras, Engineer School	29.51	749.5	29.77	756.1	46.2	7.9	89	nw.	.....	.....	2	ck	0	.....	.....	0.047	1.2	.....	M. Fénéon, Command't.
Avignon, Normal School	29.84	757.9	29.92	759.9	54.0	12.2	83	nnw.	.....	.....	1	.....	5	.....	wnw.	0	0	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.28	743.8	29.84	758.0	48.2	9.0	61	sw.	.....	.....	1	.....	5	.....	.....	0.091	2.3	cloudy	M. Saillard, Director
Beauvais, Normal School	29.53	750.1	29.80	756.9	50.1	10.1	58	w.	.....	.....	3	.....	8	.....	nw.	0.130	3.3	¾ covered	M. Frère Eugène Marie.
Besançon, Normal School	28.89	733.9	29.79	756.6	49.6	9.8	84	sw.	.....	.....	2	.....	n	.....	sw.	0.04	1.	.....	M. Gobin, Director.
Bordeaux, Observatory	29.71	754.7	29.98	761.4	54.0	12.2	86	n.	.....	.....	1	.....	10	.....	.....	0.154	3.9	raining	M. Rayet, Director.
Bourges, Normal School	29.36	745.7	29.91	759.7	50.9	10.5	74	calm	.....	.....	0	.....	10 kn	.....	.....	0.008	0.2	raining	M. Malet, Director.
Brest, Naval Observatory	29.74	755.4	29.98	761.6	50.0	10.0	71	nnw.	.....	.....	2	.....	9	.....	nnw.	0.079	2.0	.....	M. de Kermaree, Dir.
Caen, Normal School	29.74	755 5	29.82	757.4	50.4	10.2	58	nw.	.....	.....	1	.....	5	.....	nw.	0.059	1.5	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.44	747.7	29.76	755.8	50.9	10.5	57	wsw.	.....	.....	2	.....	5	.....	w.	0.177	4.5	cloudy	M. Jadot, Director.
Charleville, Normal School	29.19	741.3	29.71	754.5	48.0	8.9	83	nnw.	.....	.....	4	.....	2	.....	.....	0.256	6.5	¼ covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.55	725.1	29.91	759.6	51.4	10.8	73	nw.	.....	.....	1	.....	10	.....	w.	0.591	15.0	covered	M. Allnard, Director
Cluny, Normal School	29.05	737.9	29.89	759.2	51.4	10.8	63	w.	.....	.....	2	.....	8	.....	wnw.	0.071	1.8	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.88	733.6	29.75	755.6	46.0	7.8	72	w.	.....	.....	1	.....	5	w.	w.	0.20	5.	cloudy	Dr. Goulet, Director.
Gap, Normal School	27.39	695.7	29.98	761.6	36.5	2.5	89	.....	.....	.....	.....	.....	9	.....	s.	0.04	1.	.....	M. Jeangirard, Director.
Grésque, du Rhone	28.81	731.7	29.93	760.3	54.9	12.7	83	w.	.....	.....	1	.....	10	.....	sw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.15	740.4	29.93	760.1	47.1	8.4	92	sse.	.....	.....	1	.....	kn	.....	se.	0.28	7.	.....	M. Allard, Director.
Guéret	28.32	719.4	29.94	760.5	45.5	7.5	91	w.	.....	.....	1	.....	10	.....	se.	0.280	7.1	covered	M. Delorme, Dir.
Lamballe, Normal School	29.64	752.8	29.91	759.8	51.1	10.6	97	sw.	.....	.....	4	0	5 k	.....	sw.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.54	750.2	30.10	764.6	59.4	15.2	76	wnw.	.....	.....	1	.....	2	.....	.....	0	0	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.88	759.0	29.98	761.6	52.5	11.4	57	wnw.	.....	.....	1	.....	10	.....	.....	0.079	2.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.86	733.1	29.93	760.3	48.2	9.0	89	sse.	.....	.....	1	0	5 n	.....	w.	0.098	2.5	cloudy	M. André, Director.
Mans, Normal School	29.56	750.9	29.87	758.6	48.7	9.3	89	wnw.	.....	.....	1	.....	.....	.....	nw.	0.031	0.8	.....	M. Piboen, Director.
Marseille, Observatory	29.65	753.1	29.92	759.9	62.1	16.7	70	wnw.	.....	.....	2.3	.....	10	.....	wnw.	inap.	inap.	.....	M. Stephan, Director.
Mt. Louis	24.81	630.2	29.65	753.2	51.8	11.0	59	sw.	5.6	2.5	.....	.....	0	.....	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.76	755.8	29.89	759.1	63.7	17.6	74	w.	.....	.....	3	.....	5	.....	.....	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	28.90	734.0	29.70	754.3	45.3	7.4	64	wsw.	.....	.....	2	.....	kn	.....	sw.	0.102	2.6	.....	M. Husse, Director
Nantes, Observatory	29.83	757.7	29.99	761.8	52.2	11.2	62	wnw.	.....	.....	1–2	0	9 k; kn	.....	wnw.	0.071	1.8	.....	M. Lavocque, Director.
Perpignan, Observatory	29.84	757.8	29.95	760.6	71.2	21.8	39	nw.	16.8	7.5	.....	.....	9	nw.	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.24	539.4	.....	.....	29.5	— 1.4	.....	nw.	.....	.....	2	.....	5	.....	nw.	0.016	0.4	.....	Gen'l de Nansouty, Dir.
Privas, Normal School	28.84	732.4	29.91	759.7	48.2	9	84	w.	.....	.....	1	.....	10	w.	w.	0.094	2.4	covered	M. Tailleu.
Puy de Dôme Obs'y, Summit	24.98	634.5	.....	.....	36.0	2.2	100	wnw.	.....	.....	4	.....	10	.....	.....	0.504	12.8	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.98	761.4	30.01	762.2	54.7	12.6	84	wnw.	.....	.....	1	.....	10	.....	.....	c.12	3.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.79	756 6	30.00	762.1	51.8	11	80	nnw.	.....	.....	1	.....	10	.....	nnw.	0.31	8.	covered	M. Brotier, Director.
Rodez, Normal School	27.85	707.4	30.01	762.3	49.1	9.5	95	w.	.....	.....	1	.....	10	.....	.....	0.35	9.	raining	M. Seger, Director.
Rouen, Normal School	29.78	756.5	29.83	757.7	50.4	10.2	62	wnw.	.....	.....	4	..	10	wnw.	.....	0.122	3.1	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	49.1	9.5	64	w.	.....	.....	1	.....	.....	.....	w	0.236	6.0	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.67	753.6	29.84	757.8	49.3	9.6	63	w.	.....	.....	2	.....	2	.....	nw.	0.059	1.5	.....	M. Renou, Director.
Toulouse, Observatory	29.30	744.2	30.02	762.6	60.4	15.8	73	w.	.....	.....	8	.....	5	w.	.....	0	0	cloudy	M. Baillaud, Director.
Tours	29.74	755.4	29.88	759.9	52.5	11.4	63	sw.	.....	.....	1	.....	2	nw.	w.	0.020	0.5	slightly cl'dy	M. de Tastes.
Versailles, Observatory	29.34	745.2	29.83	757.7	49.3	9.6	62	w.	.....	.....	3	.....	.....	.....	.....	0.012	0.3	.....	Dr. A. Bérigny, Director.
GERMAN.																			
Ansbach	28 15	715.1	29.64	752.9	33.8	1.0	95	w.	.....	.....	4	.....	10	w.	.....	0.217	5.5	.....	Prof. Jaedt.
Bamberg	28.72	729.5	29.55	750.6	42.8	6.0	70	wsw.	.....	.....	3	0	6 k	.....	wsw.	0.150	3.8	raining	Prof. Dr. Hoh.
Berlin	29.04	737.7	29.22	742 2	46.2	7.9	69	sw.	.....	.....	3	.....	8	.....	.....	0.374	9.5	.....	Prof. Dr. Arndt.
Breslau	28.91	734.3	29.43	747.5	46.2	7.9	68	sse.	.....	.....	4	.....	9	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.21	742.0	29.65	753.2	41.7	5.4	83	sw.	.....	.....	4	.....	9	var.	.....	0.217	5.5	.....	Albert Senz.
Cassel	28.64	727.4	29.35	745 5	43.5	6.4	65	sw	.....	.....	8	.....	8	w.	.....	0.374	9.5	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.15	740.5	29.52	749.9	46.0	7.8	56	wnw.	.....	.....	3	.....	5	.....	.....	0.193	4.9	.....	Physical Society.
Friedrichshafen	28.27	718.0	29.70	754.4	48.7	9.3	67	wsw.	.....	.....	9	.....	10	w.	.....	0.201	5.1	.....	Wilhelm, Chief Tel.
Hamburg	29.08	738.7	29.17	741.0	40.5	4.7	94	nw.	.....	.....	4	.....	8	.....	.....	0.626	15.9	.....	E. Preller.
Kiel	29.14	740.2	29.16	740.6	40.5	4.7	82	nw.	.....	.....	3	.....	10	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.93	734.9	29.35	745.6	40.8	4.9	73	wsw.	.....	.....	4	.....	4	.....	.....	0.016	0.4	.....	H. Leppig, Asst.
Magdeburg	29.07	738.3	29.26	743.1	44.1	6.7	74	wsw.	.....	.....	6	.....	10 ks	.....	wsw.	0.181	4.6	.....	Weather Observatory.
Memel	29.45	748.1	29.50	749.3	33.6	0.9	94	e.	.....	.....	2	.....	10	.....	.....	.....	.....	covered	Issermann.
Munich	27.79	705.8	29.63	752.5	48.0	8.9	55	sw.	.....	.....	4	.....	9	nw.	.....	0	0	.....	Central Station.
Neufahrwasser	29.41	746.9	29.42	747.3	39.9	4.4	82	s.	.....	.....	3	.....	9	.....	.....	0.256	6.5	.....	A. Lothes.
Neustadt, Palatinate	29.06	738.2	29.58	751.4	42.6	5.9	82	w.	.....	.....	6	.....	7	w.	.....	0.315	8.0	.....	Dicknether.
Stuttgart	28.71	729.2	29.62	752.3	39.7	4.3	76	w.	.....	.....	5	.....	10	.....	.....	0.154	3.9	.....	Prof. Dr. Schoder.
Wustrow	29.13	739.8	29.15	740.5	41.0	5.0	89	nne.	.....	.....	2	.....	10 s	.....	.....	0.008	0.2	.....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.65	753.0	30.03	762.7	66.7	19.3	.....	n.	.....	.....	1.0	0	0	.....	.....	0	0	clear	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	29.92	760.0	29.97	761.3	76.9	24.9	77	wsw.	16.0	7.2	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.41	747.1	29.88	759.1	85.2	29.6	32	wsw.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.86	758.6	29.90	759.5	82.5	28.1	52	nw.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.04	712.2	29.89	759.1	84.6	29.2	18	ne.	3.0	1.3	.....	.....	1	.....	.....	0	0	d. clouds	
Trichinopoly	29.68	753.7	29.96	761.0	75.7	24.3	91	ene.	1.0	0.4	.....	.....	10	.....	.....	0.18	4.6	overcast	
Bellary	28.41	721.7	29.87	758.7	84.2	29.0	24	ne.	2.0	0.9	.....	.....	5	.....	.....	0	0	d. clouds	
Belgaum	27.37	695.1	29.89	759.2	79.2	26.2	30	nne.	4.0	1.8	.....	.....	6	se.	.....	0	0	d. clouds	
Lahore	29.17	741.0	29.93	760.3	69.7	20.9	53	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.04	737.6	29.96	760.9	72.8	22.7	55	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.39	746.6	29.96	761.0	78.2	25.7	27	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.90	734.2	29.96	760.9	76.9	24.9	33	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.61	726.6	29.98	761.4	76.7	24.8	30	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.60	751.8	29.98	761.4	77.2	25.1	44	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.65	753.0	29.97	761.2	69.8	21.0	60	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.80	757.0	30.00	761.9	73.9	23.3	70	calm	1.2	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.93	709.5	29.99	761.6	69.1	20.6	65	nne.	2.9	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.87	758.8	29.96	760.9	75.7	24.3	73	calm	0	0	.....	.....	2	.....	.....	0	0	d. clouds	
Calcutta, Alipore	29.93	760.2	29.95	760.8	74.5	23.6	72	nnw.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.84	757.8	29.96	760.9	74.9	23.8	74	ne.	1.4	0.6	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.80	756.8	29.89	759.1	75.1	23.9	80	nw.	1.5	0.7	.....	.....	1	.....	.....	0	0	blue sky	
Sibsagar	29.65	753.1	29.99	761.7	71.4	21.9	83	e.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.90	759.5	29.93	760.1	81.1	27.3	77	nnw.	4.9	2.2	.....	.....	4	.....	e.	0	0	d. clouds	
Jeypore	28.49	723.6	29.95	760.7	75.4	24.1	37	sw.	2.4	1.1	.....	.....	0	.....	.....	0	0	blue sky	
ITALIAN.																			
Udine	29.37	746.1	29.79	756.7	54.5	12.5	62	n.	0.7	0.3	.....	.....	4	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.30	744.3	29.83	757.7	50.4	10.2	65	nw.	1.8	0.8	.....	.....	9	wsw.	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.63	752.7	29.74	755.5	52.9	11.6	69	nnw.	1.8	0.8	.....	.....	9	wsw.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.89	733.9	29.81	757.2	53.2	11.8	47	ene.	1.8	0.8	.....	.....		e.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.60	751.7	29.75	755.5	62.1	16.7	54	se.	6.3	2.8			4	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	27.89	708.5	29.84	758.c	48.4	9.1	43	w.			2		0			0	0		Prof. D. C. Bruno
Pesaro	29.81	757.1	29.85	758.3	60.1	15.6	53	sw.	9.4	4.2			10	s.		0	0		Prof. Luigi Guidi.
Florence	29.58	751.3	29.84	757.8	57.6	14.2	72	s.			2		10	sw.		0	0		Prof. Costantino Pittier.
Leghorn	29.69	754.0	29.77	756.1	61.9	16.6	51	sw.	22.4	10.0			10	sw.		0	0		Prof. P. Monte.
Rome	29.78	756.4	29.96	760.9	60.4	15.8	71	wsw.	10.5	4.7			10			0	0		Prof. P. Tachini.
Lecce	29.76	755.9	30.01	762.3	64.0	17.8	44	sw.	4.3	1.9			7			0	0		Prof. C. de Giorgi
Cosenza	29.17	741.0	30.06	763.6	61.5	16.4	69	wsw.	2.5	1.1			0	sw.		0	0		Prof. D. Conti.
Cagliari	29.83	757.6	30.02	762.5	65.1	18.4	50	sse.			2		4			0	0		Prof. A. Pacinotti.
Palermo	29.83	757.7	30.08	764.0	66.2	19.0	48	wsw.	6.9	3.1			9			0	0		Prof. G. Cacciatore.
Syracuse	29.99	761.8	30.04	762.9	64.9	18.3	62	wsw.	8.1	3.6			5	wnw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.50	749.3	30.02	762.6	59.9	15.5	66	sw.	6.3	2.8			8	sw.		0	0		Prof. F. Brioschi.
Stelvio	21.86	555.3			23.7	— 4.6	71	sw.			4		4			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.92	556.7			27.9	— 2.3	73	n.			10		10			0.787	20.0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.49	774.3	30.51	775.1	36.5	2.5	95	calm			0		rocks		w.	0.031	0.8		Hattori.
Awomori	30.44	773.2	30.48	774.2	37.0	2.8	74	s.	9.0	4.0			10 8			0	0	overcast	K. Ogawa.
Hakodate	30.42	772.6	30.43	772.9	40.5	4.7	64	w.	9.0	4.0			10			0	0	overcast	
Hiroshima					51.1	10.6	76	e.	3.9	1.7			10 8			0	0	covered	Y. Miwa.
Kanazawa	30.37	771.4	30.47	774.0	45.0	7.2	84	e.	0.8	0.4			10			0.050	1.3	overcast	S. Endo.
Kioto	30.26	768.6	30.44	773.2	47.6	8.7	83	nne.	0.8	0.4			10 8			0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	30.18	766.4	30.38	771.7	55.1	12.8	70	ne.	0.9	0.4			9 8			0	0		S. Takahayashi.
Nemuro	30.35	770.9	30.42	772.6	34.0	1.1	72	nw.	0.0	2.7		0	0			0	0	clear	
Nilgata	30.45	773.4	30.49	774.4	42.6	5.9	89	sse.	0.6	0.3			10 ck			0.010	0.2	cloudy	M. Morita.
Nobiru	30.48	774.1	30.49	774.5	35.8	2.1	98	nnw.	4.0	2.1			9 8			0.050	1.3	cloudy	H. Midzushima.
Osaka	30.41	772.3	30.42	772.7	49.2	9.6	77	ne.	5.4	2.4			10 8			0	0	cloudy	
Sapporo					35.0	1.7	69	s.	6.0	2.7		0	8			0	0	cloudy	
Tokei Obs'y, Yeddo	30.42	772.7	30.50	774.7	48.8	9.3	65	n.	0.8	3.0			10 8			0.691	17.5	overcast	The Staff.
Wakayama	30.37	771.3	30.43	772.8	52.1	11.2	61	ne.	2.8	1.3			10			0	0	cloudy	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.89	759.2	30.09	764.3	76.8	24.9	64	ene.	11.5	5.1			10ks;ku		ne.	c	0	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.71	602.3	29.93	760.3	53.6	12.0	91	sse.	inap.	inap.		0	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.37	619.0	30.14	765.5	50.0	10.0	89	nnw.			1	0c	0	sw.		0	0	cloudy	Prof. M. Leal.
Mazatlan	29.74	755.4	30.00	762.0	72.0	22.2	90	nnw.	5.3	2.3		0	1 8			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.14	587.6	30.28	769.0	46.6	8.1	70	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.21	615.0	30.07	763.7	51.6	10.9	69	ne.	0.9	0.4		3 c	0	s.		0	0	clear	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascallentes	23.92	607.6	29.95?	720.7?	50.7	10.4	75	w.			1					0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.6	30.31	769.9	42.8	6.0	89	nw.				0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.63	574.7	30.34	770.7	50.9	10.5	59	e.	8.4	3.7		0	0			0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.61	752.1	29.61	752.1	47.1	8.4		wnw.			6					0.663	1.0		
Groningen	29.34	745.2	29.39	746.6	43.9	6.6		n.			4					0.520	13.2		
Helder	29.47	748.4	29.47	748.4	47.1	8.4		nnw.			5					0.063	1.6		
Hellevoetsluis	29.55	750.5	29.55	750.5	48.0	8.9	73	nw.			4					0.283	7.2		
Utrecht	29.47	748.4	29.51	749.6	48.4	9.1	70	wnw.			3		5			0.114	2.9	cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.50	749.2	29.56	750.8	34.9	1.6	59	sw.	4	2			0			0	0		
Brono	29.72	755.0	29.76	756.0	28.6	— 1.9	74	calm	0	0			5			0.039	1.0		
Christiania	29.47	748.6	29.62	752.4	32.4	0.2	71	nne.	20	9			10					snowing	
Gjæsvær	29.05	753.1	29.67	753.7	25.2	— 3.8		calm			0		6						
Lodingen	29.71	754.7	29.76	755.9	25.2	— 3.8	73	calm			0		1			0.031	0.8		
PORTUGUESE.																			
Angra, Azores	29.35	745.6	29.51	749.5	65.5	18.6	83	wnw.	18.0	8.3			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.09	738.8	30.08	763.9	66.9	19.4	61	ssw.	4.9	2.2			7			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	29.94	760.4	30.02	762.6	72.9	22.7	63	sw.	3.8	1.7			4	nw.	a.	c	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.76	756.0	30.12	765.1	63.1	17.3	87	se.	1.8	0.8			8	wsw.		0	0		The Staff.
Ponta Delgada, Azores	29.54	750.4	29.61	752.2	68.0	20.0	69	w.	17.4	7.8			3	nne.		0.358	9.1		
Saint Paul de Loando	29.05	753.2	29.85	758.3	79.9	26.6	90	sw.	1.3	0.6			4	se.		0.047	1.2		
Serra da Estrella	25.33	643.4	30.10	764.6	45.1	7.3	96	wsw.	6.3	2.8			9			0.302	9.2	foggy	
RUSSIAN.																			
Akmolinski	29.08	738.7	30.21	767.2	32.7	0.4	100	wnw.	9	4			10 n			0.020	0.5		Major K. Lasarew.
Archangel	29.32	744.7	29.34	745.2	0.1	—14.4	83	ne.	4	2			10			0.374	9.5	snowing	Capt. Sseliwerstow.
Astrakhan	29.90	759.4	29.82	757.3	50.2	10.1	68	se.	13	6			10			0	0	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.70	754.4	30.22	767.7	32.2	0.1	96	sw.	2	1			10			0.016	0.4		Meteorological Obs'y.
Derpat	29.31	744.4	29.56	750.8	25.9	— 3.4	100	nw.	4	2			10ks;n			0	0		Observatory.
Ekaterinburg	29.10	739.1	30.09	764.2	36.7	2.6	89	sw.	4	2			10			0	0		Meteorological Obs'y.
Kasan	29.55	750.6	29.83	757 6	41.0	5.0	87	s.	13	6			10			0.035	0.9		Observatory.
Kertch	29.49	749.1	29.51	749 6	62.8	17.1	72	calm	0	0		0	8 n			0	0		Lagorio & Sastyrez.
Kieff	29.02	737.2	29.67	753.5	42.6	5.9	63	w.	4	2		0	1 k;ks						Observatory.
Lugan	29.35	745.5	29.55	750.6	57.6	14.2	45	sse.	13	6			9			0	0		Meteorological Obs'y.
Nikolaiev	29.72	754.9	29.79	756.7	46.0	7.8	82	n.	13	6		0	4 sn			0.008	0.2	light clouds	Capt. Kurdakow.
Pekin, China	30.26	768 5	30.40	772.1	36.3	2.4	84	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	29.48	748.7	29.49	749.1	24.6	— 4.1	89	n.	7	3			10 n			0.154	3.9		Central Physical Obs'y.
Semipalatinsk	29.50	749.2	30.19	766.7	31.6	— 0.2	100	s.	13	6			10			0.138	3.5		Major Lasarew.
Tashkend, Laboratory	28.65	727.6	30.25	768.3	48.9	9.4	57	calm	0	0			0						Teich, A. M.
Tiflis	28.50	723 9	29.92	760.0	52.9	11.6	76	calm	0	0			10 8			0	0		Physical Observatory.
Tomsk																			
Vladivostock	30.29	769.3	30.35	771.0	38.5	3.6		sse.	4	2		0	0			0	0		
Warsaw	29.12	739.7	29.55	750.6	42.8	6.0	75	sw.	13	6		ck	8 8					light clouds	Astronomical Obs'y.
Wilna	29.13	739.9	29.56	750.8	35.4	1.9	96	ssw.	7	3			10			0.173	4.4	snowing	Berg, Assistant.
Yeniseisk	30.25	768.4	30.58	776.6	3.7	—15.7	81	e.	9	4			5			0	0		M. O. Marks.
SCOTTISH.																			
Monach Lt			29.76	755.9	46	7.8	92	n.			4	3	3	n.		0	0		J. Youngclause
North Unst			29.92	760.0				ne.			4	3	4	e.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.89	759.2	29.99	761.8	65.7	18.7	55	w.	3.8	1.7		1 c	0			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.00	762.1	30.00	763.0	65.1	18.4	70	nw.	1.3	0.6		5	3	sw.		0	0	cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.16	689.8	30.15	765.8	50.9	10.5	77	sw.	7.2	3.2			10			0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.89	708.5	30.11	764.8	60.8	16.0	76	sw.	3.1	1.4			1c			0.008	0.2	covered	The Staff.
Murcia, Met. Obs'y	29.92	760.0	30.09	764.2	74.7	23.7	65	sw.	3.6	1.6		2	4	ne.		0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.11	739 3	29.98	761.4	54.5	12.5	80	se.	5.8	2.6		0	6 k		nw.	0	0	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.09	738.8	29.98	761.5	59.5	15.3	78	s.	6.3	2.8			10			0.004	0.1	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.85	758 3	29.91	759.7	78.9	26.1	92	se.	0.7	0.3		0	2 ks			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.07	763.8	30.17	766.4	64.9	18.3	77	calm	0	0			10		s.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.84	757.8	29.93	760.1	80.2	26.8	72	ne.	12.5	5.6		3 cs	3 k	ne.	ne.	0.059	1.5		Manuel Muese.
Tuguegarao, Philippine Id's	29.82	757.5	29.90	760.9	75.5	24.2	93	nnw.	4.7	2.1		0	4 ks		e.	0	0	partly cl'dy	José L. Yrastorza.
SWEDISH																			
Haparanda	29.76	755.9	29.80	756.9	14.0	—10.0	94	n.			4		5			0	0		
Umea	29.70	754.4	29.75	755 7	23.0	— 5.0	86	nne.			2		10			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill	Weather.	Observers.
SWEDISH—Continued.																			
Hernosand	29.69	754.2	29.74	755.5	31.3	— 0.4	70	n.	.....	.....	4	.....	8	.....	.....	0.004	0.1	....	.....
Stockholm	29.39	746.5	29.57	751.0	29.8	— 1.2	76	ne.	.....	.....	4	.....	10	.....	.....	0	0	.....	.....
Wisby	29.40	746.7	29.45	748.2	36.3	2.4	93	ne.	.....	.....	4	.....	10	.....	.....	0.008	0.2	rain & snow.	.....
Sub-series.																			
Upsala	29.51	749.6	29.60	751.8	29.5	— 1.4	83	nne.	10.7	4.8	.....	.....	10	.....	ne.	0	0	.....	S. G. Fineman.
SWISS.																			
Geneva	28.45	722.7	29.89	759.2	51.1	10.6	76	sw.	.....	.....	6	.....	10	.....	.....	0.008	c.2	covered.....	The Observatory.
TURKISH.																			
Constantinople	.....	.....	29.99	761.8	53.1	11.7	63	nw.	13	6.0	.....	.....	8	.....	nw.	0	0	.....	The Observatory.
Valona	.....	.....	30.07	763.7	63.1	17.3	.....	sw.	.....	.....	1	.....	2	.....	.....	0.08	2.	slightly cl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.98	761.5	70.9	21.6	70	sw.	.....	.....	2	.....	5 n	.....	sw.	0.07	1.8	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.23	767.8	30.31	769.9	45.2	7.3	74	s.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog....	J. O. Barnes.
Alpena, Michigan	29.16	740.7	29.86	758.4	55	12.8	100	se.	6	2.7	.....	.....	10 n	.....	.....	0.31	7.9	heavy rain..	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.93	633.2	30.03	762.7	41	5.0	62	n.	4	1.8	.....	.....	10 n	.....	.....	0.29	7.4	light snow..	W. O. Barnes.
Assinnaboine, Ft., Montana	27.44	697.0	30.42	772.7	3	—16.1	49	sw.	3	1.3	.....	0	0	.....	.....	0.01	0.3	clear.....	B. O. Lenoir.
Atlanta, Georgia	29.08	738.6	30.30	769.6	57.5	14.2	70	s.	5	2.2	.....	4 c	fg.	.....	.....	0	0	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.28	769.1	30.29	769.4	54	12.2	96	sw.	2	0.9	.....	9 cs	fg.	.....	.....	0	0	clear.....	Jas. M. Watson.
Augusta, Georgia	30.12	765.0	30.32	770.1	52.4	11.3	90	calm	0	0	.....	0	fg.	.....	.....	0	0	cloudy.....	John Healy.
Baltimore, Maryland	30.28	769.1	30.33	770.4	51	10.6	86	ne.	1	0.4	.....	.....	10s;fg	.....	.....	0	0	cloudy.....	Geo W Felger.
Barnegat, New Jersey	30.27	768.8	30.29	769.4	55.0	12.8	99	e.	8	3.6	.....	.....	10 s	.....	e.	0.07	1.8	cloudy.....	G. A. Hill.
Bennett, Fort, Dakota	28.48	723.4	30.17	766.3	15	— 9.4	83	nw.	25	11.2	.....	.....	10 n	.....	nw.	0.03	0.8	light snow..	A. Pritchard.
Benton, Fort, Montana	27.50	698.5	30.46	773.7	3	—16.1	76	calm	0	0	.....	0	0	.....	.....	0.04	1.0	clear.....	S. Wheaton.
Bismarck, Dakota	28.26	717.8	30.18	766.6	18	— 7.8	100	n.	15	6.7	.....	.....	10 n	.....	.....	inap.	inap.	light snow..	Cyrus Cramer.
Block Island, Rhode Island	30.30	769.6	30.33	770.4	47	8.3	93	calm	0	0	.....	1 c	0	sw.	.....	0	0	clear.....	J. T. Elker.
Boise City, Idaho	27.28	692.9	30.22	767.6	18	— 7.8	87	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	B. E. Light.
Boston, Massachusetts	30.17	766.3	30.33	770.4	45.0	7.2	99	se.	1	0.4	.....	.....	fg.	.....	.....	inap.	inap.	dense fog....	O. B. Cole.
Brownsville, Texas	29.85	758.2	29.90	759.4	77.0	25.0	76	s.	14	6.3	.....	0	3 s	.....	.....	0	0	clear.....	M. McCarty.
Buffalo, New York	29.32	744.7	30.10	764.5	56.6	13.7	88	se.	11	4.9	.....	7ck;cs	sk.	sw.	.....	inap.	inap.	fair	W. Finn.
Buford, Fort, Dakota	28.43	722.1	30.41	772.4	11	—11.7	100	n.	8	3.6	.....	.....	10 n	.....	.....	0.01	0.3	light snow..	F. A. Mellen.
Burlington, Vermont	29.94	760.5	30.25	768.3	44.3	6.8	88	s.	8	3.6	.....	3 ck	2 s	w.	n.	0	0	fair	W. B Gates.
Cairo, Illinois	29.68	753.9	30.10	764.5	62.0	17.0	80	sw.	12	5.4	.....	5 c	0	w.	.....	0	0	fair.....	W. H. Ray.
Cape Henry, Virginia	30.28	769.1	30.30	769 6	57	13.9	86	n.	9	4.0	.....	.....	10 s	.....	s.	0.13	3.3	cloudy.....	A. K. Alderson.
Cape May, New Jersey	30.28	769.1	30.30	769.6	56.0	13.3	83	nw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy.....	W. E. Smith.
Cape Mendocino, California	29.51	749.5	30.04	763.0	44	6.7	70	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	J. J. McLean.
Cedar Keys, Florida	30.23	767.8	30.25	768.3	62	16.7	87	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	F. W. Mixer.
Champaign, Illinois	29.12	739.6	29.58	761.5	61.8	16.6	84	s.	14	6.3	.....	0	6 s	.....	s.	0.52	13.2	clear.....	L. A. Welsh.
Charleston, S. Carolina	30.23	767.8	30.29	769.4	59	15.0	93	calm	0	0	.....	0	fg.	.....	.....	0	0	fair	J. H. Smith.
Charlotte, N. Carolina	29.38	746.2	30.26	768.6	54.0	12.2	93	sw.	1	0.4	.....	0	fg.	.....	.....	0	0	clear.....	D. O'Donoghue.
Chattanooga, Tennessee	29.42	747.3	30.27	768.8	51.0	10.6	93	calm	0	0	.....	.....	fg.	.....	.....	0	0	clear.....	B. L. Goulding.
Cheyenne, Wyoming	23.88	606.5	30.09	764.3	— 0.8	—18.2	83	n.	12	5.4	.....	.....	10 s	.....	.....	0.04	1.0	dense fog....	E. McGovern.
Chicago, Illinois	29.14	740.1	29.88	758.9	64.0	17.8	90	s.	10	4.5	.....	.....	10 s	.....	s.	0.01	0.3	cloudy	J. Mitchell.
Chincoteague, Virginia	30.27	768.8	30.29	769.4	51	10.6	93	ne.	4	1.8	.....	2 cs	2ks;fg	.....	.....	inap.	inap.	fair.....	C. F. Dickens.
Cincinnati, Ohio	29.47	748.5	30.16	766.1	60	15.6	87	s.	3	1.3	.....	3 c	0	sw.	.....	0.19	4.8	clear.....	R. B. Watkins.
Cleveland, Ohio	29.33	745.0	30.10	764.5	61	16.1	85	s.	6	2.7	.....	.....	10 s	.....	sw.	0.01	0.3	cloudy.....	J. B. Newlin.
Coleman City, Texas	28.00	712.7	29.95	760.7	66	18.9	78	s.	14	6.3	.....	6 cs	0	.....	.....	0	0	fair.....	L. Dorman.
Columbus, Ohio	29.26	743.2	30.15	765.8	58	14.4	86	s.	4	1.8	.....	.....	10 s	.....	sw.	0.03	0.8	cloudy	D. Cuthbertson.
Concho, Fort, Texas	27.91	708.9	29.92	760.0	65.2	18.4	84	s.	22	9.8	.....	0	3 s	.....	.....	0	0	clear.....	J. McGlone.
Custer, Fort, Montana	27.04	686.8	30.36	771.1	8	—13.3	80	nw.	4	1.8	.....	.....	10 n	.....	calm	0.02	0.5	light snow..	W. B. Lamar.
Davenport, Iowa	29.14	740.1	29.83	757.7	64	17.8	90	sw.	16	7.2	.....	.....	10 ks	.....	sw.	0.01	0.3	cloudy.....	R. R. Martin.
Davis, Fort, Texas	25.07	636.8	29.97	761.2	58	14.4	52	nw.	12	5.4	.....	.....	10 ks	.....	nw.	0	0	cloudy	J. Williams.
Dayton, Washington T'y	28.56	725.4	30.34	770.6	17.7	— 7.9	78	e.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	H. Chilford.
Deadwood, Dakota	25.35	643.9	30.18	766.6	6	—14.4	100	e.	3	1.3	.....	.....	10 n	.....	.....	0.42	10.7	light snow..	G. W. Scott.
Delaware Breakwater, Del	30.30	769 0	30.32	770.1	53	11.7	93	n.	7	3.1	.....	2 k	7 ks	n.	n.	0	0	cloudy.....	T. S. Townsend.
Denison, Texas	29.07	738.4	29.91	759.7	70.0	21.1	84	s.	17	7.6	.....	0	5 s	.....	.....	0	0	fair.....	J. W. Byram.
Denver, Colorado	24.63	625.6	30.13	765.3	12.0	—11.1	100	n.	5	2.2	.....	.....	10 n	.....	.....	0.30	7.6	light snow..	F. M. Neal.
Des Moines, Iowa	28.79	731.3	29.74	755.4	57	13.9	93	s.	6	2.7	.....	.....	10 s	.....	s.	0.98	24.9	cloudy.....	F. W. Conrad.
Detroit, Michigan	29.26	743 2	30.00	762.0	62.2	16.8	84	s.	14	6.3	.....	.....	10s	.....	se.	0.01	0.3	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.33	694.2	30.07	763.8	27	— 2.8	67	n.	22	9.8	.....	0	8 ks	.....	w.	inap.	inap.	cloudy	V. P. Temple.
Dubuque, Iowa	29.93	737.3	29.78	756.4	63	17.2	78	nw.	11	4.9	.....	.....	10 s	.....	nw.	0.13	3.3	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.02	737.1	29.81	757.2	42	5.6	82	n.	12	5.4	.....	.....	10 s	.....	n.	0	0	cloudy.....	N. B. Conger.
Eagle Pass, Texas	29.09	738.9	29.92	760.0	66.1	18.9	90	se.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy.....	F. Belford.
Eagle Rock, Idaho	25.24	641.1	30.10	764.5	6	—14.4	87	n.	10	4.5	.....	.....	10 s	.....	.....	0.39	9.9	cloudy.....	J. M. Clifford.
Eastport, Maine	30.32	770.1	30.39	771.9	44.0	6.7	72	se.	4	1.8	.....	9 k	0	w.	.....	0	0	cloudy..	D. C. Murphy.
Elliott, Fort, Texas	27.06	687.3	29.98	761.5	57	13.9	34	w.	20	8.9	.....	9 k	0	w.	.....	0	0	cloudy	W. J. Cundall.
El Paso, Texas	26.20	665.5	30.05	763.3	35	1.7	89	w.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	J. O'Dowd.
Erie, Pennsylvania	29.34	745.2	30.10	764.5	60	15.6	81	s.	15	6.7	.....	.....	10ks	.....	s.	inap.	inap.	clear.....	Peter Wood.
Escanaba, Michigan	29.02	737.1	29.72	754.9	52.0	11.1	100	s.	2	0.9	.....	.....	10 n	.....	.....	0.53	13.5	cloudy.....	George Heathcote.
Fredericksburg, Texas	28.19	716.0	30.01	762.2	68	20.0	84	s.	14	6.3	.....	5 k	0	.....	.....	0	0	light rain....	Frank Halwegler.
Galveston, Texas	29.94	760.5	29.99	761.7	75	23.9	90	s.	16	7.2	.....	0	5 ks	.....	sw.	0	0	fair.....	E. O'C. MacInerney.
Grand Haven, Michigan	29.14	740.1	29.84	757.9	60.0	15.6	87	s.	25	11.2	.....	.....	10 s	.....	sw.	0	0	cloudy	J. Mueller.
Grant, Fort, Arizona	25.16	639.1	30.00	762.0	39	3.9	76	e.	4	1.8	.....	.....	10 s	.....	.....	0.03	0.8	cloudy.....	Robert C. Lord.
Hatteras, North Carolina	30.27	768.8	30.29	769.4	57	13.9	93	n.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	R. M. Crawford.
Helena, Montana	25.91	658.1	30.29	769.4	10	—12.2	100	sw.	4	1.8	.....	0	0	.....	.....	0.02	0.5	clear.....	N. C. Smith.
Henrietta, Texas	28.84	732.5	29.88	758.9	70	21.1	93	s.	20	8.9	.....	.....	10ks	.....	s.	0	0	clear.....	J. P. Sherry.
Huron, Dakota	28.49	723.6	29.97	761.2	24.8	— 4.0	84	nw.	17	7.6	.....	.....	10 n	.....	.....	0.01	0.3	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.22	742.2	30.06	763.5	63	17.2	84	s.	5	2.2	.....	0	8 s	.....	sw.	0.38	9.7	light snow..	O. Schutze
Indianola, Texas	29.93	760.2	29.96	761.0	75.0	23.9	85	s.	12	5.4	.....	2 c	1 ks	w.	.....	inap.	inap.	cloudy	I. A. Reed.
Jacksboro, Texas	28.66	728.0	29.88	758.9	71	21.7	66	s.	16	7.2	.....	3 cs	3 s	.....	s.	0	0	fair.....	D. J. Carr.
Jacksonville, Florida	30.22	767.6	30.26	768.6	58	14.4	93	calm	0	0	.....	0	fg.	.....	.....	0	0	clear.....	J. W. Smith.
Keogh, Fort, Montana	27.75	704.8	30.42	772.7	9	—12.8	80	n.	13	5.8	.....	.....	10 s	.....	n.	0.02	0.5	clear.....	A. Schneider.
Keokuk, Iowa	29.13	739.9	29.82	757.4	65.5	18.6	86	s.	14	6.3	.....	1 cs	2 s	.....	.....	0.28	7.1	cloudy.....	F. Z. Gosewisch.
Key West, Florida	30.12	765.0	30.14	765.5	73.0	22.8	90	ne.	12	5.4	.....	0	5 ks	.....	ne.	0	0	fair.....	R. H. Paxton.
Kittyhawk, North Carolina	30.28	769.1	30.30	769.6	57	13.9	93	ne.	14	6.3	.....	1 c;hz	1 s	.....	.....	0.04	1.0	clear.....	H. Mc P. Baldwin.
Knoxville, Tennessee	29.21	741.9	30.28	769.1	48.8	9.3	100	e.	2	0.9	.....	.....	fg.	.....	.....	0.01	0.3	dense fog....	J. A. Cody.
La Crosse, Wisconsin	28.89	733.8	29.71	754.6	58	14.4	93	s.	5	2.2	.....	.....	10 n	.....	.....	0.93	23.6	heavy rain..	S. C. Emery.
Leavenworth, Kansas	28.82	732.0	29.76	755.9	69	20.6	78	s.	20	8.9	.....	.....	10 s	.....	sw.	0	0	cloudy.....	A. W. Browne.
Lewiston, Idaho	29.54	750.3	30.41	772.4	21.0	— 6.1	84	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	W. Bell.
Little Rock, Arkansas	29.72	754.9	30.05	763.3	65	18.3	93	s.	10	4.5	.....	.....	10 s	.....	s.	0	0	cloudy.....	W. U. Simons.
Los Angeles, California	29.63	752.6	30.03	762.7	48	8.9	86	e.	10	4.5	.....	0	0	.....	.....	0	0	clear.....	T. S. Collins.
Louisville, Kentucky	29.53	750 0	30.12	765.0	62	16.7	78	s.	10	4.5	.....	3 cs	0	.....	.....	0.05	1.3	clear.....	L. M. Dey.
Lynchburg, Virginia	29.60	751.8	30.32	770.1	53.2	11.8	86	calm	0	0	.....	.....	10s;fg	.....	.....	0	0	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.07	738.4	29.76	755.9	55.5	13.1	96	se.	10	4.5	.....	.....	10 s	.....	sw.	0.48	12.2	cloudy.....	F. R. Day.
Macon, Fort, North Carolina	30.28	769.1	30.29	769.4	55	12.8	100	ne.	6	2.7	.....	3 c	fg.	n.	.....	0	0	clear.....	F. P. Chaffee.
Madison, Wisconsin	28.76	730.5	29.83	757.7	62	16.7	93	w.	20	8.9	.....	.....	10 n	.....	.....	0.10	2.5	light rain....	C. A. Shaw.
Maginnis, Fort, Montana	25.69	652.5	30.20	767.1	0	—17.8	72	ne.	8	3.6	.....	3 c	0	.....	.....	0.03	0.8	clear.....	F. Burke.
McKavett, Fort, Texas	27.68	703.1	30.06	763.5	64	17.8	90	sw.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. E. Thatcher.
Marquette, Michigan	28.96	735.6	29.73	755.1	49	9.4	93	nw.	5	2.2	.....	.....	10 n	.....	.....	0.18	4.6	light rain....	J. Gilligan.
Memphis, Tennessee	29.75	755.6	30.10	764.5	61	16.1	93	se.	8	3.6	.....	0	5 s	.....	.....	0	0	fair.....	D. T. Flannery.
Milwaukee, Wisconsin	29.01	736.8	29.80	756 9	64	17.8	93	s.	17	7.6	.....	.....	10 s	.....	.....	0.03	0.8	threatening.	W. Line.
Missoula, Fort, Montana	26.91	683.5	30.32	770.1	8	—13.3	22	w.	2	0.9	.....	0	0	.....	.....	0.04	1.0	clear.....	J. H. Young.
Mobile, Alabama	30.16	766.1	30.20	767.1	58.5	14.7	97	se.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	C. A. Read.
Montgomery, Alabama	30.02	762.5	30.26	768.6	54.7	12.6	94	calm	0	0	.....	0	2k;fg	.....	.....	0	0	clear.....	J. B. McLaughlin.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	28.91	734.3	29.97	761.2	22	— 5.6	87	n.	28	12.5			10 n		n.	0.06	1.5	light snow.	H. Bessant.
Morgantown, W. Virginia	29.21	741.9	30.27	768.8	55.0	12.8	90	sw.	1	0.4		0	5 s		nw.	0.19	4.8	fair	J. C. Sprigg, jr
Mt. Washington, N. H.	23.98	609.1	30.54	775.7	31.0	— 0.6	100	w.	30	13.4			fg.		w.	0	0	dense fog	J. G. Linsley.
Nashville, Tennessee	29.59	751.6	30.19	766.8	58.0	14.4	80	se.	5	2.2		7 cs	0	w.		0.08	2.0	fair	L. N. Jesunofsky.
New Haven, Connecticut	30.20	767.1	30.32	770.1	43.5	6.4	96	nw.	3	1.3			10s;fg			0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.30	769.6	30.34	770.6	42	5.6	100	s.	3	1.3		10 k	fg.	s.		0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.07	763.8	30.13	765.3	68.7	20.4	91	se.	7	3.1		4 c	2 s	nw.	se.	0	0	fair	L. Dunne.
Newport, Rhode Island	30.29	769.4	30.34	770.6	46.2	7.9	92	sw.	2	0.9		1 c	1s;sk		se.	0	0	clear	W. McGillivray.
New York, New York	30.15	765.8	30.33	770.4	53	11.7	100	e.	6	2.7			fg.			0.05	1.3	dense fog	J. B. Merrill.
Norfolk, Virginia	30.28	769.1	30.31	769.9	50	13.3	93	calm	0	0		6 ck	fg.	ne.		0	0	fair	Wm. Davis.
North Platte, Nebraska	27.03	686.5	30.11	764.8	17.6	— 8.0	67	nw.	16	7.2			10 s			inap.	inap.	cloudy	E. F. Brady.
Olympia, Washington T'y.	30.22	767.6	30.26	768.6	24.0	— 4.4	88	calm	0	0		0	0			0	0	clear	J. Dascomb.
Omaha, Nebraska	28.57	725.7	29.81	757.2	35.4	1.9	94	n.	18	8.0			10 n		n.	1.26	32.0	thund'r st'm	A. Pollak.
Oswego, New York	29.82	757.4	30.16	766.1	51.0	10.6	82	se.	11	4.9		0	9 s		sw.	0	0	cloudy	S. W. Beall.
Palestine, Texas	29.44	747.8	30.01	762.2	69.5	20.8	84	s.	14	6.3		0	5 ks		sw.	inap.	inap.	fair	L. M. Pindell.
Pensacola, Florida	30.17	766.3	30.20	767.1	67.7	19.8	82	se.	6	2.7		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa.	30.23	767.8	30.33	770.4	55.5	13.1	90	ne.	3	1.3			fg.			0	0	dense fog	T. T. Townsend.
Pike's Peak, Colorado	17.29	439.2	29.95	760.7	0	—17.8	100	sw.	8	3.6			10 n		sw.	0.11	2.8	light snow.	H. Hall.
Ploche, Nevada	23.83	605.3	29.97	761.2	10.2	—12.1	79	nw.	4	1.8		0	0			0.07	1.8	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.35	745.5	30.20	767.1	58.8	14.9	81	se.	4	1.8			9 s		sw.	0.06	1.5	cloudy	W. Daly.
Poplar River, Montana	28.13	714.5	30.42	772.7				nw.			4		10 s			0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.15	765.8	30.16	766.1	71.3	21.8	84	se.	12	5.4		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.28	743.7	30.00	762.0	58.1	14.5	93	s.	14	6.3			10 s		sw.	0.17	4.3	cloudy	W. O. Bailey.
Portland, Maine	30.26	768.6	30.32	770.1	48.5	9.2	82	ne.	1	0.4			10s;fg			0	0	cloudy	W. W. Elchelberger.
Portland, Oregon	30.22	767.6	30.29	769.4	30.2	— 1.0	81	nw.	6	2.7		0	0			0	0	clear	M. L. Hearne.
Portsmouth, N. C.					59	15.0	87	ne.	12	5.4		0	hz.			0	0	clear	F. S. Coburn.
Prescott, Arizona	24.58	624.3	29.92	760.0	34.4	1.3	85	sw.	14	6.3			8 s		sw.	0.32	8.1	cloudy	W. H. Clendenon.
Provincetown, Mass.	30.29	769.4	30.32	770.1	46.5	8.1	93	calm	0	0			fg.			0	0	dense fog	P. T. Jenkins.
Punta Rassa, Florida	30.18	766.0	30.19	766.8	65	18.3	84	ne.	10	4.5		0	0			0	0	clear	W. J. Evans.
Red Bluff, California	29.74	755.4	30.15	765.8	39	3.9	38	nw.	17	7.6		0	0			0	0	clear	E. van Dyk.
Rochester, New York	29.45	748.0	30.15	765.8	52	11.1	86	s.	14	6.3		8 k	hz.	w.		0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.63	752.6	30.20	767.1	26	— 3.3	88	calm	0	0		0	0			0	0	clear	J. J. Nanry.
Sacramento, California	30.02	762.5	30.10	764.5	39.8	4.3	57	nw.	10	4.5		0	0			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.34	745.2	29.97	761.2	65.7	18.7	96	s.	16	7.2		6 cs	1 s	sw.		0	0	fair	J. H. Weber.
St. Paul, Minnesota	28.80	731.5	29.72	754.9	46.0	7.8	93	n.	10	4.5			10 s		n.	0.33	8.4	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.23	742.4	30.16	766.1	15	— 9.4	91	n.	26	11.6		0	0			0.19	4.8	clear	C. B Dilley.
Salt Lake City, Utah	25.47	646.9	30.04	763.0	23	— 5.0	64	calm	0	0		0	0			0.32	8.1	clear	J. Craig.
San Antonio, Texas	29.24	742.7	29.96	761.0	70.5	21.4	90	e.	3	1.3		2 k	4 ks		se.	0	0	fair	T. J. Kenan.
San Diego, California	30.00	762.0	30.06	763.5	55.8	13.2	64	w.	8	3.6			10 s		w.	0.06	1.5	cloudy	A. U. Dobbins.
Sandusky, Ohio	29.36	745.7	30.08	764.0	63	17.2	84	sw.	17	7.6			10 s		w.	0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.30	769.6	30.33	770.4	55.0	12.8	86	se.	6	2.7		10 k	0	se.		0.08	2.0	cloudy	B. A. Blundon.
San Francisco, California	30.05	763.3	30.12	765.0	48	8.9	63	w.	7	3.1		0	1 s		w.	0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.00	584.2	30.04	763.0	32	0.0	65	sw.	2	0.9			10 s		sw.	0.04	1.0	cloudy	H. U. Jones.
Savannah, Georgia	30.19	766.8	30.28	769.1	58	14.4	80	sw.	2	0.9		0	fg.			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.57	674.9	30.39	771.9	6	—14.4	76	ne.	2	0.9		0	0			0.03	0.8	clear	A. L. Mathews.
Shreveport, Louisiana	29.79	756.7	30.04	763.0	65	18.3	93	se.	4	1.8		0	9 s		se.	0.03	0.8	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.57	725.7	29.88	758.9	65	18.3	84	s.	17	7.6			10 n		s.	0.02	0.5	light rain	W. M. Mattingly.
Silver City, New Mexico	24.20	614.7	30.04	763.0	34.5	1.4	77	sw.	4	1.8		3 ck	2 s	w.		0.08	2.0	fair	N. D. Lane.
Sitka, Alaska	29.94	760.5	30.01	762.2	40.7	4.8	73	se	6	2.7		0	4 ks		se.	0	0	fair	F. W. Fickett.
Smith, Fort, Arkansas	29.43	747.5	29.92	760.0	70.5	21.4	70	s.	4	1.8			10 s		s.	0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.24	768.1	30.28	769.1	55	12.8	93	nw.	4	1.8		1 c	fg.			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.26	717.8	30.34	770.6	15	— 9.4	83	ne.	1	0.4		0	0			0	0	clear	D. Moore.
Springfield, Illinois	29.22	742.2	29.94	760.5	63.5	17.5	92	s.	14	6.3		2 c	1 s	w.	sw.	0.51	13.0	clear	T. B. Jennings.
Springfield, Massachusetts	30.21	767.3	30.35	770.9	38.2	3.4	86	w.			1		fg.			0	0	dense fog	Charles Mayr.
Springfield, Mo.	28.45	722.6	29.96	761.0	65	18.3	84	s.	13	5.8		6 cs	0	calm		0	0	fair	J. B. Marbury.
Starkville, Miss.	29.68	753.9	30.18	766.6	59	15.0	87	se.	8	3.6		5 c	0	w.		0	0	fair	C. Dill.
Stevenson, Fort, Dakota	28.30	718.8	30.27	768.8	17	— 8.3	100	n.	12	5.4		0	8 s			0.05	1.3	cloudy	W. Burrows
Stockton, Fort, Texas	26.85	682.0	29.97	761.2	54.0	12.2	80	sw.	2	0.9		0	8 ks		sw.	0	0	cloudy	J. F. Marshall.
Thatcher's Island, Mass.	30.27	768.8	30.32	770.1	46.0	7.8	96	se.	1	0.4			10s;fg			0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.17	690.1	30.01	762.2	42	5.6	67	se.			1		9 ks		sw.	0.01	0.3	cloudy	J. T. Fitzgerald.
Toledo, Ohio	29.29	744.0	30.02	762.5	63	17.2	84	s.	11	4.9		0	8 k		sw.	inap.	inap.	cloudy	A. Buell.
Tucson, Arizona	27.54	699.5	30.00	762.0	47	8.3	86	calm	0	0		0	8 ks			0.10	2.5	cloudy	J. L. Whiteside.
Umatilla, Oregon	30.02	762.5	30.40	772.1	18	— 7.8	91	se.	4	1.8		0	0			0	0	clear	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					41.8	5.4	82	se.			1		10 n		se.	0.41	10.4	light rain	D. Brooks.
Vicksburg, Mississippi	29.86	758.4	30.13	765.3	61.2	16.2	91	se.	5	2.2		3 ck	0	sw.		0	0	clear	James Keneally.
Visalia, California	29.68	753.9	30.06	763.5	41.6	5.3	94	nw.	4	1.8		0	0			inap.	inap.	clear	O. D. Stewart
Washakie, Fort, Wyoming	24 39	619.5	30.13	765.3	1.3	—17.1	80	se.	3	1.3			10 n			0.39	9.9	light snow	T. M. Ambler.
Washington, D. C.	30.20	767.1	30.32	770.1	50.8	10.4	93	e.	3	1.3		6 k	fg.	w.		0	0	fair	B. M. Purssell.
West Las Animas, Colorado	25.92	658.4	30.04	763.0	19	— 7.2	78	n.	13	5.8		0	8 s		n.	0.01	0.3	cloudy	F. H. Brandenburg.
Williamsport, Pa.	29.66	753.4	30.20	769.4	47	8.3	89	ne.	2	0.9			fg.			0	0	dense fog	B. F. Hough.
Wilmington, N. Carolina	30.22	767.6	30.28	769.1	56	13.3	86	calm	0	0		hz.	sk.			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.59	650.0	30.12	765.0	11	—11.7	71	sw.	9	4.0		0	0			0.01	0.3	clear	J. Grover.
Yankton, Dakota	28.53	724.6	29.91	759.7	27	— 2.8	100	nw.	12	5.4			10 n			0.05	1.3	light rain	J. H. Attfield.
Yuma, Arizona	29.82	757.4	29.97	761.2	51.0	10.6	69	w.	1	0.4		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8			55.5	13.1	80	calm	0	0			10 s		w.	0.43	10.9	cloudy	Joaquin Gomez.
Havana, Cuba, W. I.	30.02	762.5	30.08	764.0	69.8	21.0	87	e.	6	2.7		0	1 k		ne.	0	0	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.96	761.0	29.97	761.2	73	22.8	92	n.	1	0.4		8 cs	0			0	0	fair	Robert Johnston.
Navassa, W. I.	29.84	757.9	29.92	760.0	79.5	26.4	69	ne.	26	11.6		2 ks	2 k	e.	ne.	0	0		F. M. Everett.
Paramaribo, S. A.	29.98	761.5	29.98	761.5	78	25.6	91	e.			3	3 c	5 k	e.	e.	0.530	13.5	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.93	760.2	78	25.6	89	n			1	3 c	7 ks	calm	n.	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					77	25.0	94	ne.			2	4 ck	6 ks		ne.	0	0	fair	Earl Flint.
Santiago de Cuba, W. I.	29.99	761.7	30.02	762.5	76	24.4	81	n.	7.2	3.2		2 cs	4 n		n.	0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.08	738.6	29.14	740.1	40	4.4	82	se.			6		10 n			1.08	27.4	heavy rain	W. J. Fisher.
St. Thomas, W. I.	29.85	758.2	29.97	761.2	80	26.7	67	nne.				0	4 k		nne.	0.10	2.5	fine	Aug. Walloe.
York Factory, B. A.	30.04	763 0	30.11	764.8	— 7.0	—21.7	80	sw.	10	4.5		2 c	0	s.		0	0	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Colonia, Uruguay †	29.96	761.0	62.5	16.9	94	ene.			2		8							d. clouds.
H. M. S. Audacious, N. 14° 11′, E. 42° 41′	29.89	759.2	84	28.9	83	s.			6		3	s.				3	sse.	d. clouds.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	29.95	760.7	80.5	26.9	58	calm			0		0							blue sky.
H. M. S. Champion, N 31° 00′, E. 122° 10′			55	12.8	?	e.			2–5		10					3	e.	drizzling.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C.	30.25	768.3	27	— 2.8	82	nnw.			1		0							blue sky.
H. M. S. Condor, N. 31° 42′ E 32° 50′	30.05	763.3	69	20.6	79	wsw.			4–5		4	sw.				4	wsw.	d. clouds.
H. M. S. Crocodile, N. 13° 20′, E. 48° 06′	29.96	761.0	80	26.7	66	calm			0		0							blue sky.
H. M. S Curacoa, Kobe, Japan	30.33	770.4	56.5	13.1	68	ne.			1		10							overcast.
H. M. S. Diamond, S. 23° 50′, E. 173° 50′*†	29.62	752.3	70	21.1	75	ese.			4–6		9					5	se.	squally.
H. M. Dock-Yard, Bermuda, W. I.	30.04	763 0	69	20.6	67	nnw.			2–3		4	nnw.						d. clouds.
H. M. S. Espiegle, S. 10° 14′, E. 161° 45′			78	25.6	?	calm			0		10							d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.92	760.0	75.5	24.2	81	s.			3		4							d. clouds.
H. M. S. Flamingo, N. 15° 30′ W. 63° 00′	29.89	759.2	82	27.8	?	e.			1–2		2	e.				1	e.	d. clouds.
H. M. S. Flying Fish, N. 37° 14′, E. 126° 37′	30.46	773.7	41	5.0	69	ne.			0–1		8							misty.
H. M. S. Gannet, S. 18° 28′, W. 70° 21′	30.00	762.0	65	18.3	83	sw.			1		4							d. clouds.
H. M. S. Griffon, N. 35° 20′ W. 63° 40′	30.11	764.8	67	19.4	84	nne.			4		4	nne.				6	n.	squally.
H. M. S. Iron Duke, N. 32° 05′, E. 128° 55′	30.35	770.9	62	16.7	94	nw.			2		10	ne.				2	ne.	overcast.
H. M. S. Kingfisher, N. 29° 46′ W. 118° 57′	30.11	764.8	60	15.6		nw.			4		10	nw.				5	nw.	overcast.
H. M. S. Lark, S. 10° 14′, E. 161° 42′	29.75	755.6	79.3	26.3	93	calm			0		7							misty.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.90	759.4	65	18.3		n.			1		10							d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.36	771.1	57.8	14.3	74	nne.			1		9							d. clouds.
H. M. S. Northampton, Halifax, N. S	30.33	770.4	35	1.7	90	nnw.			1		0							misty.
H. M. S. Nelson, Melbourne, Australia	29.89	759.2	67	19.4	74	s.			3									squally.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.86	758.4	83	28.3	77	nne.			1		8							d. clouds.
H. M. S. Rocket, —, 0° 00′ W. 80° 10′	29.98	761.5	74	23.3	?	ssw.			3		3							d. clouds.
H. M. S. Sappho, S. 40° 30′, W. 150° 00′	29.93	760.2	50.2	10.1	86	ne.			3–4		10					7	ne.	squally.
H. M. S. Superb, N. 39° 37′, E. 19° 56′*	30.08	764.6	72	22.2	49	se.			1		1	nnw.						blue sky.
H. M. S. Sylvia, Port Tamar, Patagonia	29.42	747.3	43.7	6.5	81	nnw.			3–5		10							d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.97	761.2				ese.			2		2	e.						d. clouds.
H. M. S. Woodlark, Bushire, Persia	29.98	761.5	77.5	25.3	60	nw.			2		5					1	wnw.	misty.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.32	770.1	38	3.3	100	ne.			1		0							blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.14	765.6	82.4	28.0	77	ne.			2		0					1	se.	blue sky'
Tamega, Macao, China	30.12	765.0	68.0	20.0	77	n.			6		0							blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.07	763 8	72	22.2	80	se.	3	1.3			2		se.	0	0			fair.
Navy Yard, Portsmouth, N. H	30.32	770.1	45	7.2	100	se.	2	0.9			10		se.	0	0			foggy.
Naval Hospital, Yokohama, Japan*	30.36	771.1	49.5	9.7	71	n.			3		10		nnw.	0	0			gloomy.
Adams, Sitka, Alaska			40	4.4	82	e.			1		8							fair.
Alaska, Hilo, Hawaii	30.03	762.7	75	23.9	85	n.			2		5		n.	0.2	5.	sm'h		fair.
Alliance, Hampton Roads, Va	29.97	761.2	58	14.4	100	ne.			1		5			0	0			fair.
Ashuelot, Kobe, Japan	30.47	773.9	57	13.9	75	ne.			2		10		ne.					cloudy.
Brooklyn, Keel Point, Patagonia	29.58	751.3	54	12.2	79	w.	12	5.4			2		calm	0.02	0.5	sm'h		fair.
Colorado, New York, N. Y	30.38	771.6	54	12.2	93	ne.	1	0.4			10			0.08	2.0			misty.
Enterprise, Norfolk, Va	30.30	769.6	56	13.3	87	calm			0		2		calm					clear.
Essex, Callao, Peru	29.99	761 7	65	18.3	89	sse.			1		10					sm'h		overcast.
Franklin, Norfolk, Va	30.31	769 9	55	12.8	93	ne.	1	0.4			8		nw.					fair.
Galena, Montevideo, Uruguay	29.88	758.9	64	17.8	100	ssw.			5		0?					mod.	s.	clear.?
Hartford, Montevideo, Uruguay*	29.82	757.4	63	17.2	94	sw.			5		10?			h'vy	h'vy	mod.	sw.	cloudy.?
Independence, Mare Island, Cal	30.10	764.5	46	7.8	48	nw.			2		0							clear.
Iroquois, Callao, Peru	30.02	762.5	64	17.8	94	se.			1		10							overcast.
Jamestown, Newport, R. I	30.29	769.4	46	7.8	100	nnw.			1		2							misty.
Kearsarge, Norfolk, Va	30.26	768.6	57	13.9	87	e.			1		8		nw.			sm'h		misty.
Lackawanna, Valparaiso, Chili*	30.14	765.5	59	15.0	82	nw.			2		0							clear.
Lancaster, Valetta, Malta*	30.03	762.7	72	22.2	?	nw.			3		5		nw.	0	0	sm'h		fair.
Michigan, Erie, Pa	30.05	763.3	58	14.4	81	s.			2		10							cloudy.
Minnesota, New York, N. Y	30.40	772.1	59	15.0	87	calm	0	0			10							foggy.
Monocacy, Yokohama, Japan *	30.31	769.9	51	10.6	86	nnw.			2		10		calm					cloudy.
New Hampshire, Newport, R. I	30.37	771.4	49	9.4	93	nw.			1		2		calm			sm'h		fair.
Nipsic, Palermo, Sicily*	30.03	762.7	72	22.2	54	nw.			2		2					sm'h		clear.
Onward, Callao, Peru	30.13	765.3	63	17.2	94	se.			1		10		n.			long	w.	cloudy.
Palos, N. 34° 30′, E. 125° 04′.*	30.38	771.6	52	11.1	59	n.			2		8		calm			sm'h		fair.
Pensacola, Callao, Peru*	29.95	760.7	63	17.2	94	sse.	3	1.3			10					sm'h		misty.
Powhatan, Boston, Mass	30.32	770.1	45	7.2	84	calm			0		10							foggy.
Quinnebaug, Syracuse, Sicily*	30.05	763.3	66	18.9	59	se.			1		8		se.					fair.
Ranger, N. 20° 40′, W. 107° 24′	30.00	762.0	76	24.4	81	calm			0		0			0	0	mod	wnw.	clear.
Richmond, Yokohama, Japan*	30.39	771.9	52	11.1	72	nnw.			3		10		n.	0	0			cloudy.
Saratoga, N. 24° 22′ W. 83° 23′	30.06	763.5	76	24.4	76	nne.			4		2		ne.			mod.	ne.	fair.
St. Louis, League Island, Pa	30.53	775.4	52	11.1	100	ne.			1		10							foggy.
Swatara, S. 5° 16′, W. 33° 33 *	29.75	755.6	82	27.8	78	ese.			3		2		se.			sm'h		fair.
Tennessee, Hampton Roads, Va	30.28	769.1	58	14.4	93	ne.	6	2.7			8			Bl'k	Bl'k			fair.
Vandalia, Hampton Roads, Va*	30.29	769.4	56	13.3	100	nne.			1		2							clear.
Wabash, Boston, Mass	30.35	770.9	45	7.2	92	calm	0	0			10							foggy.
Wachusetts, Mare Island, Cal†	30.09	764.3	44	6.7	75	ne.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.25	768.3	75	23.9	90	calm			0		10		calm					cloudy.
Yantic, Norfolk, Va	30.30	769.6	56	13.3	93	e.			1		8							misty.
Merchant Marine.																		
S. S. Grecian, Buenos Ayres, Argentine, Rep*	29.82	757.4	63	17.2	89	ene.			2		10		w.	8 h'r	8 h'r	sm'h		cloudy.
S. S. Polynesian, Liverpool, Eng	29.81	757.2	48	8.9		wnw.			4		5		nw.	4 h'r	4 h'r			showery.
S. S. Scandinavian, N. 45° 01′, W. 40° 49′	30.09	764.3	49	9.4		s.			1		10		s.	0	0	mod.	sse.	d. clouds.
S. S. Indiana, Philadelphia, Pa†	30.15	765.8	52	11.1	86	w.			1		8		w.					cloudy.
S. S. Lord Clive, N. 51° 12′ W. 13° 20′*†	29.93	760.2				nne.			3		5		nne.	0	0	mod.	nw.	fine.
S. S. Lord Gough, N. 44° 30′, W 57° 44′	30.21	767.3	41	5.0		n.			3		5		nne.	0	0	sm'h	n.	fair.
S. S. Ohio, N. 47° 35′, W. 43° 51′	30.10	764.5	48	8.9	92	n.			3		9		ne.			sm'h		fair.
S. S. Pennsylvania, Liverpool, Eng.†	29.73	755.1	45	7.2		nw.			3		2		w.					clear.
S. S. Stella, N. 51° 03′ W. 20° 45′	29.90	760.9	48.2	9		ne.			5		5		n.			3	n.	d. clouds.
S. S. Bolivia, N. 49° 20′, W. 42° 31′			48	8.9	70	wnw.			2		8		wnw.	0	0	sm'h		cloudy.
S. S. Dorian, N. 40° 53′, W. 35° 38′*	29 59	751.6	60	15.6		n.			6		4		n.	sh'rs	sh'rs	r'gh	n.	clear.
S. S. Galatia, Calcutta, In ian	29.89	759.2	78.3	25.7		n.			2		1		n.					fair.
S. S. Utopia, Suez Canal, Egypt			75	23.9	77	calm			0		1		calm	0	0	sm'h		clear.
S. S. Ailsa, Kingston, Jamaica, W. I	29.99	761.7	82	27.8	87	ne.			3		0			0	0			fair.
S. S. Alpin, Maracaribo, Venezuela	29.94	760.5				ne.			3				nne.	½ h'r	½ h'r	sm'h		
S. S. Ambrose, Para, Brazil†	29.88	758.9				n.			1		0			0	0			
British Merchant, N. 0° 20′, W. 119° 28′	29.92	760 0	71	21.7	90	ese.			3		3							d. clouds.
Dynomene, S. 1° 45′, E. 87° 35′	29.85	758.2	81.5	27.5	87	nw.			4		4							misty.
May Hulse, N. 3° 12′, W. 24° 37′	29.87	758.7	82.5	28.1	83	se.			3		5							d. clouds.
Markland, N. 41° 54′, W. 31° 29′	29.53	750.0	62.9	17.2	89	nnw.			6		10					5	ne.	d. clouds.
S. S. Olympus, N. 30° 37′ E. 32° 18′	29.83	757.7	90	32.2	41	n.			1		2							d. clouds.
S. S. Inchkeith, S. 19° 58′, W. 28° 26′	30.00	762.0	72.8	22.7	91	e.			4		5							showery
S. S. Mertola, N. 43° 58′, W. 12° 25′	29.84	757.9	61.0	10.1	95	s.			6		10							overcast.
S. S. Mexico, N. 24° 29′, W. 111° 46′†	30.07	763.8	66.6	19.2	76	ne.			3		2		ne.			mod.	nw.	fair.
S. S. Bothnia, N. 44° 31′ W. 46° 26′	30.06	763.5	61	16.1	88	ne.			2		8		calm	0	0	mod.	e.	overcast.
S. S. Marathon, N. 37° 14′, E. 10° 27′	30.12	765.0	79	26.1		wnw.			2		3		nw.	0	0	sm'h	nw.	clear.
S. S. Parthia, N. 56° 47′, W. 18° 43′ *†	29.90	759 4	52	11.1		wsw.			5		5		sw.	0	0	mod.	sw.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE—Continued.																		
S. S. Pavonia, N. 46° 23′, W. 38° 26′*	30.02	762.5	55	12.8	80	ne.			5		10		ene.	0	0	long	ene.	cloudy.
S. S. Colina, N. 37° 32′, W. 72° 06′†	30.22	767.6				ese.			2		7		se.			mod.	ese.	cloudy.
S. S. Canada, N. 49° 35′ W. 3° 10′	29.92	759.9	50.0	10		nw.			5–6		4		nw.	0	0	sm'h	nw.	clear.
S. S. France, N. 42° 18′, W. 61° 37′			46.4	8		nne.			6	ck	0	n.		0	0	h'vy	ne.	cloudy.
S. S. Labradore, N. 47° 57′ W. 43° 00′*†	30.24	768.0	57.2	14		ene.			3		5?		ene.	0	0	sm'h	e.	clear.?
S. S. Abyssinia, N. 42° 49′, W. 57° 50′ *	30.06	763.5	55	12.8	80	nne.			8		10		ene.	0	0	con.		gloomy.
S. S. Wyoming, Liverpool, Eng *.	29.72	754.9	47	8.3		wnw.			5		6		n.	0	0	mod.	w.	fair.
S. S. Frisia, N. 41° 29′, W. 64° 11′	30.32	770.1	57	13.9		ne.			5		2		ne.	0	0	long	ne.	fair.
S. S. Gellert, N. 49° 50′ W 8° 20′	29.99	761.7	51	10.6		wsw.			3		3		nne.	0	0		wnw.	fair.
S. S. Silesia, N. 48° 06′ W. 25° 05′†	29.81	757.2	53.2	11.8		w.			5		8		ne.	0	0	7	ne.	d. clouds.
S. S. Vandalia, N. 43° 27′, W. 51° 10′	30.11	764.8	50.0	10.0		ene.			5		10		e.	0	0	mod.	ene.	cloudy.
S. S. City of Berlin, N 49° 30′, W. 35° 30′	30.06	763 5	49	9.4	78	ene.			2		10					sl'it	ese.	overcast.
S. S. Mentmore, Ballycottin, Ireland *	29.82	757.4				nw			6		2		nw.	0	0	sm'h	w.	clearing.
S. S. Archimedes, N. 42° 29′, W. 58° 26′						nne.			7		10		nne.	0	0	h'vy	ne.	overcast.
S. S. Hevelius, Buenos Ayres, Agentine Rep*†	29.95	760.7	66	18.9		sw.			6		9?		sw.	12 h'r	12 h'r			clear.?
S. S. Ptoymey, S. 9° —′, W. 35° 30′	29.94	760.5	81	27.2	78	ne.			2		6			0	0	2	con.	d. clouds.
S. S. City of San Antonio, Matanzas, Cuba †	30.13	765.3	76	24.4		ne.			3		0			0	0			clear.
S. S. Colorado, N. 40° 22′, W. 74° 56′ †	30.32	770.1	53	11.7		e.			2		10		e.			mod.	ne.	cloudy.
S. S. Rio Grande, N. 27° 21′, W. 89° 15′†	30.13	765.3	79	26.1		se.			3		3		se.	1 h'r	1 h'r.	short	ese.	squally.
S. S. San Marcos, N. 28° 10′ W. 90° 00′	30.23	767.8	79	26.1		sse.			5		1		se.			mod.	se.	fine.
S. S. Archimede, Palermo, Sicily*†	30.05	763 3	68	20.0	65	wnw.			2		1		wnw.	0	0			clear.
S. S. Hermod, N. 46° 05′, W. 44° 34′†	30.32?	770.1?	55.4	13		n.			2		6		w.	0	0	long	ne.	clearing.
S. S. Glenapp, Pernambuco, Brazil †	29.97	761.2	79	26.1		se.			3	5 ck	0	se.		0	0	sm'h		fine.
S. S. Chalmette, N. 25° 55′, W. 79° 50′ †—	30.17	766.3	77	25.0		ene.			5		3		ne.	0	0	long	ne.	clear.
S. S. Lone Star, N. 31° 15′, W. 80° 15′ †	30.27	768.8	70	21.1		n.			1		1		calm	0	0	small	ne.	clear.
S. S. Denmark, N. 41° 48′, W. 53° 19′			58	14.4		ne.			9		8		ene.	6 h'r	6 h'r	h'vy	ne.	raining.
S. S. England, N. 46° 00′ W 46° 27′	30.08	764.0				nne.			4		2		ne.	0	0	mod.	e.	clear.
S. S. Erin, New York, N. Y	30.33	770.4	52	11.1		n.			2		8			12 h'r	12 h'r			fine.
S. S. Greece, N. 46° 59′, W. 29 45′	29.79	756.7				ene.			6		10		ene.	0	0	mod.	ene.	dull.
S. S. Helvetia, N. 51° 05′ W. 20° 15′	29.91	759.7	50	10.0		ne.			1		5		ne.	2 h'r	2 h'r	long	ne.	showery.
S. S. Santiago, N. 24° 06′, W. 73° 48′	30.24	768.1	79	26.1	78	ne.			3		0			0	0	mod.	ne.	fine.
S. S. City of Alexandria, New York, N. Y †	30.36	771.1	55	12.8		calm			0									
S. S. City of Merida, N. 19° 40′, W. 90° 44′*†	29.92	760.0	75.2	24		e.			2		2		e.	0	0	light	e.	fine.
S. S. City of Washington, Havana, Cuba *†	30.25	768.3	80	26.7		ne.			5		5		ne.	0	0	sm'h		fine.
S. S. City of Chester, N. 42° 40′ W. 62° 12′ *†	30.18	766.6	49	9.4		n.			4							sm'h		clear.
S. S. Elbe, N. 43° 38′, W. 55° 51′	30.03	762.8	46.4	8.0	100	nne.			6		10		nne.	0	0	cross	ne.	covered.
S. S. Koln, N 40° 02′, W. 69° 18′	30.33	770.4	58.0	14.4	82	e.			2–3		10		e.	0	0	sm'h		cloudy.
S. S. Oder, N. 50° 37′, W. 20° 52′	29.95	760.7	50.0	10.0		ene.			4		4		ene.	0	0	mod	ene.	cloudy.
S. S. Ohio, Galveston Roads, Texas	30.03	762.7				se.			3–4		4		se.	0	0	sm'h	se.	fair.
S. S. Salier, N. 47° 45′ W. 42° 38′	30.09	764.3	43.3	6.3		nnw.			4		10		nnw.	0	0	long	ese.	cloudy.
S. S. Werra, N. 49° 54′, W. 7° 28′ *	30.04	763.0	50.9	10.5		n.			1–2		4		nne.	2 h'r	2 h'r		n.	fine.
S. S. Belgic, Hong Kong, China†	30.12	765.0	70	21.1	80	w.			1		3		e.	0	0			clear.
S. S. City of Augusta, N. 34° 11′, W. 76° 34′†.	30.29	769 4				ne.			4		3		n.	0	0	sm'h		clear.
S. S. Mississippi, San Francisco, Cal †	30.20	767.1	50	10.0	58	nne.			1		0							clear.
S. S. Oregon, San Francisco, Calf	30.11	764.8	47	8.3	92	ne.			1		0							clear.
S. S. Ancon, N. 36° 20′, W. 121° 54′†	30.03	762.7	50	10.0	72	nw.			5		0					mod.	nw.	clear.
S. S. Dakota, N. 40° 32′, W. 124° 35′†	30.05	763.3	56	13.3	81	n.			4		2		n.	0	0	sm'h	nw.	clear.
S. S. Orizaba, N. 35° 15′ W. 120° 50′†	30.16	766.1	55	12.8	68	nw.			8		8		nw.			r'gh	wnw.	cloudy.
S. S. Australia, Sydney, N. S. W	30.22	767.6	64	17.8	94	nne.			4		1?		ne.	0	0			cloudy?
S. S. City of New York, S. 30° 59′, E. 179° 02′ †	29.90	759.4	66	18.9	64	ssw.			4		0			0	0	mod	ssw.	clear.
S. S. City of Pekin, Yokohama, Japan †	30.64	778.2	50	10.0	86	n.			5		10		n.	0	0			cloudy.
S. S. City of Sydney, S. 18° 30′, W. 172° 19′ †	29.92	760.0	79	26.1	86	une.			2		8		nw.	0	0	mod.	sw.	cloudy.
S. S. Colima, N. 22° 47′, W. 106° 24′ †	30.01	762.2	78	25.6	73	n.			2		2		nnw.	0	0	mod.	w.	clear.
S. S. Grenada, N. 18° 03′, W. 103° 30′ †	29.91	759.7	79	25.6	82	e.			2		0			0	0	sm'h	wsw.	clear.
S. S. San Jose, N. 8° 54′, W. 79° 30′ *†	30.07	763 8				nw.			2		2		nnw	0	0	light	nnw.	
S. S. Bermuda, Bridgetown, Barbadoes, W. I †	30.00	762.0	87	30.6		calm			0		2		ese.	shr's	shr's	gentle	se.	fine.
S. S. Muriel, N. 26° 50′, W. 66° 30′	30.08	764.0	74	23.3		nne.			5		10			0	0	r'gh	nne.	overcast.
S. S. Belgenland, New York, N. Y †	30.44	773.2	55	12.8	87	ese.			3		6		se.	0	0			foggy.
S. S. Pennland, Antwerp, Belgium	29.62	752.3	45	7.2	?	wnw.			6		5		wnw.	8 h'r	8 h'r			raining.
S. S. Rhyuland, N. 49° 00′, W. 38° 00′	29.97	761.2	48	8.9	78	wnw.			2		9		n.	0	0	long	se.	cloudy.
S. S. Switzerland, N. 49° 37′, W. 31° 23′†	30.04	763.0				ne.			2		10		ne.	0	0	long	ne.	cloudy
S. S. Waesland, Hudson River, N. Y	30.31	769.9	57	13.9	94	calm			0		10		se.	sh'rs	sh'rs			light fog.
S. S. Maas, New York, N. Y	29.80	756.8	51.4	10.8	74													
S. S. P. Oaland, Rotterdam, Holland			47.3	8.5	92	wnw.			6		5		nw.					cloudy.
S. S. Schiedam, N. 49° 05′, W. 21° 27′	29.80	756.9	58.8	14.9	86	ene.			6		5		ne.	0	0	h'vy	ne.	fair.
S. S. W. A. Scholten, N. 42° 46′, W. 60° 22′	30.43	772.9	45.5	7.5	73	nne.			6		6		nnw.	0	0	mod.	une.	
S. S. State of Florida, N. 52° 13′, W. 23° 25′	29.96	761.0	47	8.3		ene.			4		6		ene.	0	0	mod.	n.	cloudy.
S. S. State of Georgia, N. 41° 39′, W 65° 02′†	30.33	770.4	51	10.6		ne.			4		0			0	0	mod.	ene.	clear.
S. S. State of Nevada, N. 49° 00′, W. 41° 30′†	30.12	765.0	47	8.3		nw.			5		10		wnw.	0	0	sm'h		overcast.
S. S. Thingvalla, Swinemunde, Prussia			41.0	5.0		n.			3		10		n.	16 h'r	16 h'r			covered.
S. S. Iowa, Liverpool, Eng *†	29.80	756.9																
S. S. Baltic, N. 50° 19′, W. 28° 46′			49	9.4	78	ese.			6		10		ne.	0	0	con	nw.	overcast.
S. S. Celtic, New York, N. Y †	30.34	770.6	55	12.8	80	var.			1		10			0	0			overcast.
S. S. Romano, N. 49° 51′, W. 5° 48′	29.89	759.2	50	10.0		nnw.			2		10		nw.	0	0	h'vy	w.	dull.
S. S. Salerno, Odessa, Russia			44	6.7		nw.			5		10		nw.	0	0			hazy.
S. S. Aries, N. 39° 55′, W. 73° 45′*†	30.30	769.6				ene.			4		8		ne.	0	0	long	e.	cloudy.
S. S. Catherine Whiting, Providence, R. I †	30.32	770.1				ne.												
S. S. Norman, N. 39° 56′, W. 75° 08′	30.17	766.3				sw.			4		fg.			0	0			foggy.
S. S. Saxon, N. 40° —′, W. 73° 30′*†	30.42	772.7	60	15.6		ene.			3		8		nnw.			light	ese.	
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 36° 48′, W. 73° 10′			68	20.0		ne.			4		2		ne			h'vy	ne.	
Bk. Adelaid, N. 13° 58′, W. 53° 15′ *†	29.96	761.0	79	26.1		se.			4		9		sse.	1 h'r	1 h'r	mod.	se.	rainy.
Bg. Alcira, N. 18° 35′, W. 67° 16′	29.99	761.7	80	26.7		nne.			4		3		ne.	2 h'r	2 h'r	h'v'y	nne.	clear.
Schr. Anna A. Holton, N. 37° 48′, W. 71° 26′†	30.23	767.8	62	16.7		ne.			4		2		ne.	0	0	mod.	ne.	clear.
S. Annie M. Law, Kobe, Japan*†	30.28	769.1	54	12.2		nne.			1		0			0	0			fine.
Bk. Anna Thormann, S. 9° 42′, E. 113° 19′*	29.91	759.6	81.5	27.5	80	sse.			3		3 k		s.	0	0	long	ssw.	clear.
S. S. Antonio Lopez, N. 34° 02′, W. 9° 34′ *.	30.14	765.5	68	20.0	90	e.			2		3			0	0	sm'h		fair.
Bk. Aquidneck, N. 10° 10′, W. 36° 06′*†	30.10	764.5				e.			3				e.			light	e.	clear.
Bk. Aureola, N. 47° 17′, W. 21° 10′*†	29.80	756.9	61	16.1		ene.			8		10		ene.	sleet	sleet	h'vy	ene.	cloudy.
Bk. Alba, N. 52° 29′, E. 2° 54′ *†	29.61	752.0	47.1	8.4		w.			7									
Bk. Bayonnaise, N. 21° 50′, W. 48° 52′ *†	30.06	763.5				ssw.			2		7		sw.	6 h'r	6 h'r	r'gh	se.	overcast.
S. S. Burswell, North Shields, Eng *†	29.61	752.1	49	9.4		nw.			2		7		nw.	5 h'r	5 h'r	sm'h		raining.
Bk. Champion, Maassilus, Netherlands †	29.39	746.5	52.0	11.1		nnw.			2		5		wnw.	8 h'r	8 h'r			fair.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.23	767.8	69	20.6	80	ese.			1	0	0			0	0			clear.
Schr. C. R. Flint, N. 26° 03′ W. 85° 13′†	30.20	767.1	76	24.4		ene.			4		3		ene.	0	0	r'gh	ene.	fair.
S. Cornelius, N. 39° 51′, W. 71° 27′ *†	30.47	773.9	59.0	15.0		ese.			3		8			0	0	long	e.	cloudy.
S. S. D. J. Foley, N. 18° 20′, W. 76° 25′			83	28.3		ne.			6		5		ne.	0	0	long	ne.	fine
Bkt. David Preston, N. 25° 40′, W. 79° 45′*†	30.05	763.3	79	26.1		ene.					0			0	0	sm'h		
Bk. Don Quixote, Pasoeroean Roads, Java*†	29.75	755.6	89	31.7		ese.			3		2		ese.			sm'h		clear.
Bk. E. D. Bigelow, N. 40° 24′ W. 48° 25′*†	29.65	753.1				ese.			9		10		ese.	0	0	cross	se.	gloomy.
Schr. Edith R. Seward, Wilmington, N. C*†	30.32	770.1	66	18.9		calm			0		1		ese.	0	0			clear.
S. E. J. Spicer, New York, N. Y	30.35	770.9	54	12.2	93	se.			2		10		s.					overcast.
S. Eliza Barss, Bermuda, W. I †	30.04	763.0				n.			6		5?		nne.	0	0			cloudy?
S. Enoch Train, N. 18° 24′, W. 53° 00′*†	30.05	763.3				var.			2		10		var.	sh'rs	sh'rs			showery.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Essex, Muscat, Arabia*†	29.96	761.0	87	30.6		nw.			3									
Schr. F. E. McDonald, Georgetown, D. C†	30.29	769.4				calm			0		0							fine.
S. S. Foscolia, S. 22° 50′ W. 41° 38′*†	29.40	746.7				ene.			2		5		e.	0	0	cross		fine.
Bk. Freya, N. 39° 04′ W. 14° 37′			66	18.9		s.			5		8		sw.	0	0	high	w.	fair.
S. Glendon, S. 43° 10′ W. 87° —′†	29.83	757.7	56	13.3		wsw.			5		6		sw.	2 h'r	2 h'r	mod.	w.	fair.
S. Grecian, N. 10° 08′, W. 48° 59′†	29.97	761.3	83	28.3	83	ene.			6		5?		ene.	0	0	long	n.	clear?
Bk. Gronsvaer, S. 45° 31′ E. 138° 19′†	29.69	754.2	57.5	14.2	97	w.			5		4		w.	3 h'r	3 h'r	4	wsw.	squally.
Bk. Hattie G. McFarland, N. 35° 00′, W. 73° 00′†	30.36	771.1	70	21.1		n.			1		4		n.	0	0	long	ne.	
Schr. Hattie Weston, Mayaro Bay, Trinidad,, W. I*†.	29.90	759.4	81	27.2		e.			2		8		e.	2 h'r	2 h'r	mod.	e.	cloudy.
S. Hedwig, N. 24° 13′, W. 66° 45′	30.05	763.2	76.3	24.6	82	nne.			6		4		nne.	2 h'r	2 h'r	4	nne.	
Schr. Isabel Alberto, N. 28° 06′, W. 83° 11′†	30.19	766.8				e.			3		0			0	0	sm'h		clear.
S. Ivy, Cork, Irelandt	30.11	764.8	45	7.2		wsw.			2		1			0	0			clear.
Schr. Jennie N. Huddell, Philadelphia, Pat	30.24	768.1				calm			0		10			0	0			foggy.
S. S. John Hopkins, Boston, Mass			46	7.8		calm			0					0	0			foggy.
Schr. John L. Thomas, Vivorilla Cays, C. A*†	30.03	762.7				ne.			4		3		ene.	1 h'r	1 h'r			squally.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.99	761.7				e.			4		2			0	0			clear.
Bk. Joseph A. Ropes, N. 21° 46′, E. 59° 43′ *†	29.96	761.0	82	27.8	79	e.			2		1					sm'h		fair.
Light House Tender, Laurel, Key West, Flat	30.13	765.3	74	23.3		ne.			2		4		ne.	0	0			fair.
Bk. Liberia, N. 16° 37′, W. 30° 06′*	29.97	761.2	81	27.2	78	e.			3		2		e.	0	0			fine.
Bg. Lilian, Demerara, Brit. Guianat	29.90	759.4	82	27.8		e.			3		9			1 h'r	1 h'r			rainy.
Bg. L. & W. Armstrong, N. 33° 50′, W. 73° 10′*†	30.26	768.6				n.			1		2		n.	0	0	long	ne.	fine.
S. S. Madrid, N. 38° 19′, W. 27° 16′*†	29.62	752.3	66	18.9	89	wsw.			7		3		wnw.	sh'rs	sh'rs	r'gh	wsw.	squally.
S. S. Malabar, N. 8° 54′, E. 72° 05′*†	29.89	759.2				var.			1		0			0	0	sm'h		clear.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	30.05	763.3	71	21.7		ne.			6		0			0	0			clear.
Bk. Mattie B. Russell, Off Sombrero Key, Fla *†	30.30	769.6				ene.			5		3		ene.	0	0	large	e.	
Schr. Moravian, N. 12° 33′, W. 81° 43†	29.93	760.2				ne.							nne.	10 h'r	10 h'r	long	ne.	fair.
S. M. P. Grace. N. 31° 26′, W. 122° 46′*	30.14	765.5	58	14.4		nw.			5		9		nnw.	0	0	sm'h	nw.	cloudy
Bg. Myrtle, N. 29° 41′, W. 72° 20′†	30.22	767.6				nne.			2		1		nne.	0	0	long	nne.	clear.
Bk. Norena. N. 34° 06′, W. 75° 40′*†	30.31	769.9				nne.			3		1		e.	0	0	light	e.	fine.
S. Orealla, N. 4° 24′, E. 82° 50′*	29.93	760.2				wsw.			3		6		wsw.	2 h'r	2 h'r	sm'h		showery.
Bk Orpheus, N. 37° 00′, W. 59° 40′	30.11	764.8	74	23.3		n.			6		6 k		n.	0	0	h'vy	n.	fair.
S.Paramita, San Francisco, Calt	29.99	761.7	55	12.8		ne.			1				ne.	0	0			foggy.
S. S. Peconic, N. 36° 35′, W. 18° —′*†.	29.76	755.9	68	20.0		s.			6		2		s.	0	0	rg'h	cross	threatening.
S. S. Radnorshire, N. 32° 41′, E. 28° 01′†*	29.97	761.2				wsw.			4		0			0	0	mod.	w.	clear.
Bk. Rebus, N. 36° 02′, W. 72° 51′			67	19.4		n.			2		2		n.	0	0		ne.	fair.
S. St. Francis, S. 30° 56′, W. 84° 38′†	30.44	773.2	60	15.6		sw.			6		4		sw.	0	0	long	sw.	fine.
S. S. Strathleven, N. 41° 08′ W. 9° 40′	29.98	761.5	61.2	16.2	95	s.			5		3		s.			3	nw.	clear.
Bg. Teneriffe, N. 33° 30′, W. 75° 40′	30.24	768.1				nne.			4					0	0	mod.		fine
Bk. Truro, N. 45° 30′, W. 19° 45′†*	29.63	752.6				ssw.			3–4		10		sw.	16 h'r	16 h'r	mod.	sw.	rainy.
U.S.F.C.S.S.Fish Hawk, Washington, D. Ct	30.42	772.7	53	11.7	86	ne.			1		8		ne.	0	0			cloudy.
Bk. Vincenzo Accame Lisbon, Portugalt	30.17	766.3	68.0	20.0		var.			4		0			0	0			foggy.
Schr Viola Reppard, N. 32° 20′, W. 79° 51′†	30.20	767.1	74	23.3		nnw.			2		0			0	0	sm'h		
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762.0				ne.			1		2		ne.	0	0			fine.
Bk. Wandering Jew, S. 8° 28′, W. 32° 02′†	29.85	758.2	79	26.1		se.			6		9		se.	2 h'r	2 h'r	mod.	se.	threatening.
Bk.Warden Law, S. 47° 00′, W. 81° 40′	30.02	762.5				w.			5		2		w.	0	0	sm'h	w.	fair.
Bgt. Willie, S. 38° 35′, W. 1° 10′*†	30.24	768.1	67	19.4		nw.			4		6		nw.	0	0	long	wsw	fair.

International Chart I. November 11, 1882. Isobars and Isotherms.

UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 12, 1882,

7 A. M., Washington Mean Time.

STATIONS.	BAROMETER.				Temperature of the air.		Relative humidity.	WIND.				CLOUDS.				Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Corrected for instrumental error and for temperature.		Reduced to sea-level					Direction.	Velocity.		Force.	Amount and kind.		Direction.					
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0-10	0-10	0-10	From.	From.	Inch.	Mill.		
ALGERIAN.																			
Nemours	.....	.....	30.13	765.2	65.8	18.8	88	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.11	764.9	66.6	19.2	74	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.10	764.5	70.9	21.6	80	nw.	.....	.....	2	.....	2	.....	.....	0	0	fair	Fonfrède.
Tunis	.....	.....	30.09	764.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.27	768.9	77.7	25.4	55	se.	.....	.....	1	.....	1	.....	.....	0	0	very fair	Pérès.
Tebessa	.....	.....	30.25	768.4	69.8	21.0	60	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	73.4	23.0	8	nw.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair	Lonchamp.
Laghouat	.....	.....	30.34	770.6	71.6	22.0	16	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.28	769.0	72.3	22.4	38	.....	.....	.....	.....	.....	4	.....	.....	0	0	cloudy	Malau.
AUSTRALIAN.																			
Melbourne, Victoria	30.27	768.8	30.36	771.1	51.1	10.6	70	s.	6	2.7	.....	.....	1	.....	.....	0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN.																			
Agram	29.45	748.0	30.00	762.0	51.4	10.8	51	e.	.....	.....	2	.....	3	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.95	735.3	29.74	755.3	35.2	1.8	93	wnw.	12.5	5.6	.....	.....	10	.....	.....	1.008	25.6	.....	Dr. Wierzbiski.
Eperies	28.80	731.4	29.68	753.8	47.1	8.4	61	w.	.....	.....	2	3 c;cs	0	e.	.....	0	0	.....	Julius Mikolik.
Gratz	28.73	729.6	29.99	761.7	48.9	9.4	41	nw.	.....	.....	7	.....	3	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.46	722.8	29.91	759.7	44.2	6.8	54	wnw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.70	729.0	30.08	764.0	41.9	5.5	65	w.	.....	.....	2	.....	4	.....	.....	0	0	fair	The Staff.
Lemberg	28.62	727.0	29.62	752.4	40.6	4.8	78	w.	.....	.....	4	.....	10	.....	.....	0.220	5.6	.....	Dr. T. Stanecki.
Pola	29.85	758.3	29.97	761.1	58.6	14.8	52	ne.	.....	.....	1	.....	5	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.30	744.1	29.76	755.8	47.3	8.5	58	sw.	.....	.....	4	.....	8	.....	.....	0	0	.....	Joseph Midlinszay, S. J.
Szegedin	29.66	753.4	29.95	760.6	50.4	10.2	48	sw.	.....	.....	2	.....	4	.....	.....	0	0	.....	Karl Stancel.
Trieste	29 91	759.6	30.01	762.2	58.3	14.6	74	e.	.....	.....	2	.....	0	.....	.....	0	0	.....	Royal Academy.
Vienna	29.28	743.7	30.01	762.3	45.1	7.3	41	w.	.....	.....	4	.....	1	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
BRITISH.																			
Aberdeen	30.04	763.0	30.14	765.5	41.4	5.2	81	w.	8	3.6	.....	.....	6	.....	.....	0.115	2 9	misty	W. Roswell
Armagh, Observatory	29.84	757.9	30.09	764.3	36.9	2.7	88	ssw.	2	0.9	.....	.....	.....	.....	.....	.....	.....	.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.07	763.8	36.4	2.4	96	ese.	8	3.6	.....	.....	0	.....	.....	.....	.....	misty	John Hartnup.
Bolton, Sharples	29.54	750.3	30.09	764.3	39.7	4.3	87	n.	9	4.0	.....	.....	6	.....	.....	.....	.....	d. clouds	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.01	0.3	.....	McLandsborough & Preston
Bridgetown, Barbadoes	29.81	757.2	29.84	757.9	78.0	25.6	95	se.	.....	.....	1	.....	9	.....	.....	.....	.....	raining	Corpl. J. Surgenor, A. H. C.
Cardington	29.90	759.4	30.02	762.5	34	1.1	100	nw.	.....	.....	0-1	.....	10	.....	.....	.....	.....	foggy	John McLaren.
Chatham, School M. E	29.95	760.7	30.08	764.0	45.7	7.6	80	calm	.....	.....	0	.....	3	.....	.....	blank	blank	misty	Corpl. G. A. Pickles.
Falmouth, Observatory	29.67	753.6	29.90	759.4	48.1	8.9	81	ese.	.....	.....	6	.....	10	.....	.....	.....	.....	overcast	The Staff.
Fort Napier, Natal	27.65	702.3	29.87	758.7	85.0	29 4	29	se.	.....	.....	1	.....	5	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	85.0	29.4	68	calm	.....	.....	0	.....	9	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.05	763.3	30.11	764.8	71.6	22.0	87	e.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.85	758.2	30.05	763.3	34.0	1.1	84	n.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.90	759.4	30.08	764.0	38.3	3.5	89	e.	.....	.....	1	.....	0	.....	.....	.....	.....	foggy	The Staff.
Guernsey	29.67	753.6	29.98	761.5	45.0	7.2	84	ese.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	30.04	763.0	30.08	764.0	31.7	— 0.2	.....	nw.	4	1.8	.....	.....	fg.	.....	.....	.....	.....	foggy	The Staff.
Leicester, Museum	29.83	757.7	30.10	764.5	31.0	— 0.6	100	calm	.....	.....	0	.....	fg	.....	.....	.....	.....	d. clouds	J. C. Smith.
Malta, Mediterranean	30.04	763.0	30.12	765.0	72.2	22.3	98	w.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.10	764.5	30.15	765.8	75.0	23.9	66	ne.	.....	.....	3	.....	5	.....	.....	blank	blank	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.55	750.6	30.08	764.0	42.9	6.1	79	nne.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky	Warren Middleton.
Oxford, Radcliffe Obs'y	29.84	757.9	30.07	763.8	36.4	2.4	100	nnw.	.....	.....	1	.....	0	.....	.....	.....	.....	foggy	The Staff.
Plymouth	29.85	758.2	29.92	760.0	47.3	8.5	90	s.	.....	.....	2	.....	10	.....	.....	.....	.....	showery	John Merrifield.
Sandwick Manse, Orkneys	30.03	762 7	30.13	765.3	39.8	4.3	89	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	d. clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.84	757.9	29.91	759.7	60.6	15.9	56	sw.	.....	.....	2	.....	6	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	29.80	756.9	30.09	764.3	40.9	4.9	73	ne.	.....	.....	1	.....	1	.....	.....	0	0	blue sky	W. F. Cooper.
Silloth Rectory	30.06	763.5	30.09	764.3	37.8	3.2	85	n.	.....	.....	1	.....	0	.....	.....	0	0	blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.09	764.3	41.9	5.5	70	n.	6	2.7	.....	.....	0	.....	.....	.....	.....	blue sky	I. New.
Straifield Turgiss	29.85	758.2	30.07	763 8	38.7	3.7	90	calm	.....	.....	0	.....	7	.....	.....	.....	.....	foggy	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.85	758.2	29.90	759.4	49	9.4	86	e.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.96	761.0	29.98	761.5	48.1	8.9	68	ene.	15	6.7	.....	.....	2	.....	.....	blank	blank	blue sky	The Met'g'l Office
CANADIAN.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.85	758.2	29.89	759.2	45	7.2	86	sw.	12	5.4	.....	.....	10 n	.....	.....	0.035	0.9	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	29.75	755.6	29.81	757.2	49	9.4	93	sw.	8	3.6	.....	.....	10 n	.....	sw.	0.1	0.3	light rain	G. A. Blair.
Father Point, Quebec*	29.83	757.7	29.85	758.2	38	3.3	96	ne.	25	11.2	.....	.....	10 n	.....	calm	0.44	11.2	light rain	J. McWilliams.
Fort Garry, Manitoba*	29.33	745.0	30.24	768.1	4.0	—15.6	100	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	James Stewart.
Halifax, N. S*	29.89	759.2	30.02	762.5	46	7.8	86	sw.	8	3.6	.....	.....	10 s	.....	w.	0	0	cloudy	A. Allison.
Kingston, Ontario*	29.50	749.3	29.83	757.7	55	12.8	93	sw.	16	7.2	.....	.....	10 s	.....	w.	0.24	0.1	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	29.56	750 8	29.76	755.9	60	15.6	75	w.	19	8.5	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.07	738.4	29.75	755.6	59	15.0	93	calm	0	0	.....	.....	10 n	.....	sw.	1.08	27.4	cloudy	Rev. R. Mosley.
Fort Dover, Ontario	29.17	740.9	29.85	758.2	56	13.3	100	sw.	10	4.5	.....	.....	10 n	.....	sw.	0.43	10.9	threatening	H. Morgan.
Fort Stanley, Ontario	29.23	742.4	29.87	758.7	55	12.8	96	sw.	12	5.4	.....	.....	10 n	.....	sw.	0.16	4.1	light rain	M. Payne.
Quebec, Quebec*	29.41	747.0	29.73	755.1	47	8.3	100	calm	.....	.....	0	.....	fg.	.....	.....	1.07	27.2	light rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.35	745.5	29.82	757.4	40	4.4	92	n.	2	0.9	.....	.....	10 s	.....	Lo.	1.99	50.5	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.06	738.1	29.76	755.9	58	14.4	93	sw.	14	6.3	.....	.....	10 ks	.....	.....	0.29	7.4	cloudy	.....
St. Andrews, N. B	29.81	757.2	29.87	758.7	50	10.0	93	sw.	8	3.6	.....	.....	10 n	.....	.....	0.08	2.0	cloudy	.....
Sydney, C. B*	29.95	760.7	30.01	762.2	39	3.9	89	s.	14	6.3	.....	10 cs	0	sw.	.....	0	0	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.46	748.3	29.84	757.9	56	13.3	90	sw.	5	2.2	.....	.....	10 ks	.....	w.	0.04	1.0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.94	760.5	30.01	762.2	50	10.0	90	s.	8	3.6	.....	.....	10 k	.....	s.	0	0	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.45	722.6	29.84	757.9	56	13.3	100	w.	.....	.....	6	.....	10	.....	.....	0.332	8.4	rainy	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	37	2.8	90	se.	2	0.9	.....	.....	10ks	.....	.....	0	0	overcast	John Delany.
CAPE COLONY.																			
Cape St. Francis Lt. House	29.89	759.2	29.92	760.0	72.0	22.2	79	e.	7.8	3.5	.....	9 cs	0	.....	.....	0	0	light haze	John Duthie.
Cape Town, C. G. H. Obs'y	29.83	757.7	29.87	758.7	80.8	27.1	55	sse.	37	16.5	.....	0	6	.....	.....	0	0	.....	The Staff, for D.GH.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction Upper.	Clouds. Direction Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mil.	Inch.	Mil.	Fah.	Cent.	Per cent	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mil.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.34	770.6	38.3	3.5	91	w.	3.1	1.4	.....	5 cs	0	ne.	.....	0.079	2.0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.34	770.6	30.37	771.3	53.8	12.1	97	ene.	6.0	2.7	.....	.....	10 n	.....	.....	0.677	17.2	raining.	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	30.04	762.9	30.08	764.1	36.0	2.2	68	ne.	.....	.....	2	.....	5	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	30.12	765.0	30.14	765.6	36.1	2.3	79	ne.	.....	.....	2	.....	6	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.53	750.1	29.58	751.2	22.3	— 5.4	93	sse.	.....	.....	4	.....	9	.....	.....	.....	.....	snowing	S. Kleinschmidt.
Ivigtut	29.60	751.8	29.62	752.3	20.8	— 6.2	.....	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.70	754.3	29.74	755.4	39.9	4.4	84	se.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	A. O. Thorlacius.
Thorshavn	30.04	763.0	30.08	763.9	38.5	3.6	85	calm	0	0	.....	.....	2	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	30.06	763.6	30.16	766.0	33.6	0.9	87	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	Loerer Oesterboi.
Jacobshavn	29.47	748.6	29.52	749.8	22.1	— 5.5	.....	s.	.....	.....	2	.....	9	.....	.....	.....	.....	snowing	
French.																			
Agen, Normal School	29.43	747.4	30.08	764.0	61.9	16.6	81	calm	.....	.....	0	c	0	.....	.....	0.213	5.4	.....	M. Labroue, Director.
Alençon, Normal School	29.50	749.2	30.05	763.2	46.0	7.8	91	n.	.....	.....	1	.....	fg	sw.	sw.	0	0	foggy	M. Nicot, Director.
Arras, Engineer School	29 82	757.3	30.08	764.1	43.7	6.5	79	sw.	.....	.....	1	.....	10 n	.....	.....	0	0	foggy	M. Fénéon, Command't.
Avignon, Normal School	29.94	760.4	30.02	762.4	59.4	15.2	60	n.	.....	.....	1	.....	.....	.....	.....	0	0	.....	M. Giraud, Director.
Bar-sur-Seine	29.52	749.8	30.09	764.2	47.3	8.5	81	sse.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.82	757.4	30.10	764.4	43.3	6.3	82	e.	.....	.....	1	...	10	.....	.....	0	0	covered	M. Frère Eugène Marie.
Besançon, Normal School	29.14	740.2	30.04	763.1	47.5	8.6	88	ene.	.....	.....	1	.....	n	.....	w.	0.059	1.5	.....	M. Gobin, Director.
Bordeaux, Observatory	29.71	754.6	29.97	761.2	60.8	16.0	64	sse.	.....	.....	1	.....	8	.....	.....	0.055	1.4	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.52	749.7	30.07	763.8	50.0	10	74	ese.	.....	.....	1	.....	n	.....	.....	0.051	1.3	.....	M. Malet, Director.
Brest, Naval Observatory	29.61	752.1	29.85	758.3	47.1	8.4	94	e.	.....	.....	2	.....	10	.....	e.	0.551	14.0	raining	M. de Kermaree, Dir.
Caen, Normal School	29.91	759.8	30.03	762.7	45.3	7.4	80	s.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.74	755.3	30.06	763.5	48.4	9.1	76	w.	.....	.....	1	.....	2	.....	sw.	0	0	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.60	751.7	30.11	764.9	38.3	3.5	80	ssw.	.....	.....	1	.....	10	.....	.....	0	0	foggy	M. Grimard, Director
Clermont-Ferrand Obs'y	28.66	727.9	30.02	762.6	50.4	10.2	70	n.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Allnard, Director.
Cluny, Normal School	29.22	742.3	30.16	766.0	50.7	10.4	52	ne.	.....	.....	1	.....	3	w.	.....	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.24	742.8	30.13	765.2	44.2	6.8	71	w.	.....	.....	1	.....	2	w.	w.	0.012	0.3	slightly cl'dy	Dr. Coulet, Director.
Gréasque, du Rhone	28.87	733.4	29.99	761.8	56.3	13.5	57	nw.	.....	.....	3	.....	2	.....	nw.	0	0	.....	M. Jeangirard, Director.
Grenoble, Normal School	29.28	743.7	30.06	763.4	50.7	10.4	77	ese.	.....	.....	1	o	2 k	.....	nnw.	0.16	4.	slightly cl'dy	M. Kina, Director.
Guéret	28.45	722.6	30.02	762.6	50.4	10.2	92	sw.	.....	.....	1	.....	n	.....	sw.	0	0	.....	M. Ablard, Director.
Lamballe, Normal School	29.62	752.4	29.90	759.4	43.7	6.5	97	se.	.....	.....	2	.....	10 n	.....	se.	0.480	12.2	raining	M. Delorme, Dir.
Lescar, Normal School	29.40	746.7	29.96	761.0	59.7	15.4	66	nw.	.....	.....	1	o	o	.....	.....	0	0	clear	M. Olitrault, Director.
Lorient, Naval Observatory	29.79	756.7	29.89	759.3	50.5	10.3	86	ese.	.....	.....	1	.....	10	.....	.....	1.378	35.0	covered	M. Chauvin, Director.
Lyon, St. Genis-Laval	29.01	736.8	30.08	764.0	49.3	9.6	62	ese.	.....	.....	1	o	8 n	.....	wnw.	0	0	very cloudy	Lt. T. Carré, Director.
Mans, Normal School	29.71	754.6	30.02	762.4	47.3	8.5	80	se.	.....	.....	3	.....	.....	.....	.....	0.004	0.1	.....	M. André, Director.
Marseille, Observatory	29.72	754.8	29.98	761.6	60.4	15.8	69	wnw.	.....	.....	1.2	.....	7	.....	wnw.	0	0	.....	M. Piboen, Director.
Mt. Louis	24.83	630.7	29.67	753.7	48.6	9.2	61	w.	9.4	4.2	.....	.....	4	w.	.....	0	0	.....	M. Stephan, Director.
Montpellier, Normal School	29.87	758.6	29.99	761.8	62.2	16.8	73	calm	.....	.....	0	.....	2	.....	e.	0	0	slightly cl'dy	M Carê for Dr. Fines.
Nancy, Normal School	29.28	743.8	30.04	763.0	45.3	7.4	64	w.	.....	.....	1	c	o	.....	.....	0.157	4.0	.....	M. Galzin, Director.
Nantes, Observatory	29.83	757.6	29.99	761.7	51.8	11.0	93	ese.	.....	.....	0–1	.....	10	.....	.....	0.016	0.4	rainy	M. Hasse, Director
Perpignan, Observatory	29.91	759.8	30.02	762.6	64.8	18.1	58	ne.	7.4	3.3	.....	.....	7	nw.	.....	0	0	.....	M. Larocque, Director.
Pic-du-Midi, Summit	21.20	538.6	.....	.....	34.5	1.4	.....	nw.	.....	.....	2	.....	5	.....	nw.	0	0	cloudy	Dr. Fines, Director.
Privas, Normal School	28.97	735.7	30.04	763.0	52.5	11.4	93	nw.	.....	.....	1	.....	2	nw.	nw.	0	0	slightly cl'dy	Gen'l de Nansouty, Dir.
Puy de Dôme Obs'y, Summit	25.12	638.0	.....	.....	39.0	3.9	100	wsw.	.....	.....	3	.....	10	.....	.....	0.154	3.9	foggy	M. Tailieu.
Rochefort, Naval Obs'y	29.96	761.0	29.99	761.8	59.0	15.0	93	sse.	.....	.....	1	.....	2	.....	s.	0	0	¼ covered	M. Allnard, Director.
Roche-sur-Yon, N. School	29.75	755.6	29.96	761.0	52.2	11.2	97	sse.	.....	.....	1	.....	10	.....	se.	0.130	3.3	covered	Lt. E. Decante, Director.
Rodez, Normal School	27.85	707.4	30.01	762.3	50.7	10.4	93	w.	.....	.....	1	.....	1	.....	w.	0.138	3.5	clear	M. Brotier, Director.
Rouen, Normal School	29.90	759.5	29.95	760.7	46.0	7.8	80	w.	.....	.....	1	.....	10	wnw.	.....	0.024	0.6	covered	M. Seger, Director.
Saint Lô	.....	.....	.....	.....	43.2	6.2	88	e.	.....	.....	1	.....	10	.....	.....	0.079	2.0	raining	M. Moullot.
Saint Maur, Observatory	29.91	759.6	30.07	763.8	48.9	9.4	74	e.	.....	.....	1	.....	.....	.....	.....	0	0	.....	M. Delaplanche, Dir.
Toulouse, Observatory	29.34	745.2	30.06	763.6	54.5	12.5	86	se.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	M. Renou, Director.
Tours	29.82	757.4	30.00	761.9	52.9	11.6	74	e.	.....	.....	1	.....	10	.....	ese.	0	0	covered	M. Bailland, Director.
Versailles, Observatory	29.57	751.1	30.06	763.6	46.0	7.8	75	se.	.....	.....	1	.....	.....	.....	.....	0.063	1.6	.....	M. de Tastes.
German.																			
Ansbach	28.63	727.2	30.12	765.1	41.7	5.4	65	nw.	.....	.....	4	.....	5	nw.	.....	0.209	5.3	.....	Dr. A. Bérigny, Director.
Bamberg	29.19	741.5	30.04	763.0	43.2	6 2	70	.....	.....	.....	.....	o	5 ks	.....	.....	0	0	.....	Prof. Jnedt.
Berlin	29.75	755.7	29.93	760.3	44.2	6.8	68	nw.	.....	.....	2	.....	10	.....	.....	0.354	9.0	.....	Prof. Dr. Hoh.
Breslau	29.30	744.2	29.83	757.6	38.1	3.4	100	nw.	.....	.....	6	.....	10	.....	.....	0.579	14.7	raining	Prof. Dr. Arndt.
Carlsruhe	29.68	753.9	30.13	765.3	44.8	7.1	73	sw.	.....	.....	1	.....	1	sw.	.....	0.591	15.0	.....	Royal University Obs'y.
Cassel	29.30	744.2	30.01	762.3	44.2	6.8	59	nw.	.....	.....	4	.....	5	nw.	.....	0.067	1.7	.....	Albert Senz.
Frankfort-on-the-Main	29.75	755.6	30.13	765.2	47.3	8.5	66	wnw.	.....	.....	1	.....	8	.....	.....	0.012	0.3	.....	Dr. H. Möhl.
Friedrichshafen	28.66	727.9	30.13	765.2	45.1	7.3	66	sw.	.....	.....	2	.....	0	.....	.....	0.102	2.6	.....	Physical Society.
Hamburg	29.98	761.4	30.07	763.7	40.5	4.7	89	nne.	.....	.....	3	.....	10	.....	.....	0.173	4.4	.....	Wilhelm, Chief Tel.
Kiel	30.04	763.1	30.06	763.5	40.5	4.7	75	ne.	.....	.....	2	.....	10	.....	.....	0.268	6.8	.....	E. Preller.
Leipsic, Astrom'l Obs'y	29.60	751.9	30.04	762.9	39.9	4.4	80	wnw.	.....	.....	2	.....	10	.....	.....	0.161	4.1	light rain	Prof. Dr. G. Karsten.
Magdeburg	29.82	757.4	30.02	762.4	40.8	4.9	87	wnw.	.....	.....	2	o	9 k, ks	.....	nw.	0.043	1.1	.....	H. Leppig, Asst.
Memel	29.83	757.6	29.87	758.8	27.9	— 2.3	83	ne.	.....	.....	4	.....	10 s	.....	.....	.....	.....	.....	Weather Observatory.
Munich	28.27	718.0	30.14	765.5	41.5	5.3	62	n.	.....	.....	1	.....	7	nw.	.....	0.157	4.0	.....	Issermann.
Neufahrwasser	29.82	757.5	29.84	757.9	37.8	3.2	87	ne.	.....	.....	3	.....	10	.....	.....	0.461	11.7	.....	Central Station.
Neustadt, Palatinate	29.58	751.3	30.11	764.7	45.3	7.4	79	calm	.....	.....	0	.....	1	.....	.....	0	0	.....	A. Lothes.
Stuttgart	29.14	740.2	30.06	763.5	43.3	6.3	78	ne.	.....	.....	1	.....	4	n.	.....	0	0	.....	Dicknether.
Wustrow	30.04	762.9	30.06	763.5	40.3	4.6	82	e.	.....	.....	2	o	4 k	.....	.....	0.071	1.8	.....	Prof. Dr. Schoder.
Greek.																			
Athens	29.63	752.5	30.00	762.1	68.0	20.0	.....	sw.	.....	.....	1.5	.....	8	.....	.....	0	0	.....	Profs. Brandes & Reimer
Indian.																			
Kurrachee	29.94	760.5	29.99	761.8	81.0	27.2	60	sw.	12.0	5.4	.....	.....	3	.....	.....	0	0	.....	Schmidt & Wourlisch.
Deesa	29.45	747.9	29.92	759.9	84.3	29.1	30	n.	2.0	0.9	.....	.....	0	.....	.....	0	0	d. clouds	
Bombay	29.87	758.8	29.91	759.7	80.2	26.8	61	nw.	12.0	5.4	.....	.....	1	wnw.	.....	0	0	blue sky	
Poona, Yarrowda	28.06	712.6	29.90	759.5	82.8	28.2	21	ne.	4.0	1.8	.....	.....	3	ese.	.....	0	0	d. clouds	
Trichinopoly	29.62	752.4	29.90	759.6	81.4	27.4	73	e.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Bellary	28.41	721.6	29.87	758.8	83.0	28.3	26	nnw.	6.0	2.7	.....	.....	7	.....	.....	0	0	d. clouds	
Belgaum	27.37	695.3	29.91	759.6	78.0	25.6	32	ne.	4.0	1.8	.....	.....	8	e.	e.	0	0	d. clouds	
Lahore	29.19	741.4	29.94	760.6	74.3	23.5	38	e.	.....	.....	.....	.....	1	.....	.....	0	0	blue sky	
Roorkee	29.10	739.0	30.03	762.6	65.8	18.8	49	ne.	5.0	2.2	.....	.....	4	n.	.....	0	0	.....	
Agra	29.39	746.6	29.97	761.3	71.0	21.7	30	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.89	733.9	29.94	760.6	78.3	25.7	29	calm	3.0	1.3	.....	.....	1	.....	.....	0	0	blue sky	
Jubbulpore	28.60	726.5	29.98	761.4	75.1	23.9	31	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.57	751.1	29.95	760.8	76.2	24.6	55	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.63	752.7	29.95	760.8	71.6	22.0	64	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.78	756.5	29.97	761.3	74.3	23.5	66	calm	1.0	0.4	.....	.....	2	e.	e.	0	0	.....	
Hazaribagh	27.91	709.0	29.96	761.0	70.4	21.3	63	e.	2.7	1.2	.....	.....	2	.....	.....	0	0	d. clouds	
Cuttack	29.86	758.5	29.94	760.6	75.2	24.0	72	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.92	759.9	29.94	760.5	76.4	24.7	71	nnw.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.84	758.0	29.96	761.0	75.6	23.9	80	ene.	1.8	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.86	758.4	29.95	760.8	75.1	23.9	78	w.	1.2	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.64	752.9	29.99	761.6	70.5	21.4	88	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.90	759.6	29.93	760.1	87.2	30.7	55	s.	6.3	2.8	.....	.....	5	.....	se.	0	0	d. clouds	
Jeypore	28.50	723.8	29.96	760.8	76.7	24.8	40	nnw.	2.0	0.9	.....	.....	2	.....	.....	0	0	d. clouds	
Italian.																			
Udine	29.59	751.6	30.01	762.2	54.7	12.6	51	calm	0	0	.....	.....	1	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.52	749.7	30.04	763.1	51.8	11.0	61	se.	1.8	0.8	.....	.....	1	.....	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.90	759.4	30.01	762.2	53.6	12.0	55	nnw.	0	0	.....	.....	2	wnw.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.10	739.2	30.02	762.5	50.0	10.0	71	ene.	1.3	0.6	.....	.....	1	s.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec.	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.77	756.2	29.97	761.1	59.0	15.0	41	ne.	6.3	2.8			4	n.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.09	713.5	30.04	763.0	48.6	9.2	50	w.			4		0			0	0		Prof. D. C. Bruno.
Pesaro	30.01	762.2	30.06	763.4	57.6	14.2	62	nnw.	9.8	4.4			9			0	0		Prof. Luigi Guidi.
Florence	29.72	755.0	29.98	761.5	62.2	16.8	73	s.			2		9			0.161	4.1		Prof. Costantino Pitter
Leghorn	29.80	756.9	29.88	759.0	63.7	17.6	68	wsw.	6.3	2.8			9	wsw.		0	0		Prof. P. Monte.
Rome	29.78	756.3	29.95	760.8	68.4	20.2	69	ssw.	6.3	2.8			8			0	0		Prof. P. Tachini.
Lecce	29.71	754.5	29.96	760.9	68.0	20.0	65	sw.	9.4	4.2			7			0	0		Prof. C. de Giorgi.
Cosenza	29.15	740.4	30.04	763.0	62.6	17.0	70	ssw.	3.1	1.4			9	w.		0.307	7.8		Prof. D. Conti.
Cagliari	29.82	757.4	30.01	762.3	70.3	21.3	57	nw.			2		1			0	0		Prof. A. Pacinotti.
Palermo	29.82	757.3	30.06	763.6	71.1	21.7	50	wsw.	4.9	2.2			9			0	0		Prof. G. Cacciatore.
Syracuse	29.99	761.8	30.04	762.9	69.1	20.6	69	ene.	2.5	1.1			9	w.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.48	748.9	30.00	762.1	65.1	18.4	71	w.	7.4	3.3			6	nw.		0	0		Prof. F. Brioschi.
Stelvio	22.08	560.8			23.0	— 5.0	38	sw.			2		0			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.11	561.5			27.1	— 2.7	68	e.			1		1			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.35	771.0	30.38	771.8	42.0	5.6	96	calm			0		9 n		w.	0.094	2.4	raining	Hattori.
Awomori	30.30	769.6	30.33	770.4	43.0	6.1	85	sw.	7.8	3.5		0	5 ks			0.030	0.8	fair	K. Ogawa.
Hakodate	30.29	769.4	30.30	769.7	44.0	6.7	84	nw.	3.0	1.3		1	0			0.055	1.4	clear	
Hiroshima					53.1	11.7	93	nne.	0.3	2.8			10 ck			0	0	covered	Y. Miwa.
Kanazawa	30.33	770.5	30.44	773.2	45.6	7.6	92	ese.	5.2	2.3			10			0	0	cloudy	S. Endo.
Kioto	30.23	767.8	30.41	772.4	48.6	9.2	85	nnw.	1.6	0.8		0	9 s			0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	30.15	765.9	30.36	771.1	58.9	14.9	65	ne.	3.3	1.5			10 s			0.018	0.3	overcast	S. Takehayashi.
Nemuro	30.18	766.6	30.24	768.1	42.9	6.1	98	nw.	12.0	5.4		0	0			0	0	clear	
Niigata	30.38	771.6	30.42	772.6	45.6	7.6	95	se.	0.4	0.2			10 cks			0.040	1.0	covered	M. Morita.
Nobiru	30.30	769.5	30.31	769.9	36.4	2.4	97	nnw.	3.9	1.7		0	1 s			0.090	2.3	fair	H. Midzushina.
Osaka	30.39	771 9	30.40	772.2	53.8	12.1	70	n.	4.5	2.0			10 s			0	0	cloudy	
Sapporo					40.2	4.6	73	nw.	6.6	2.9			10			0	0	covered	
Tokei Obs'y, Yeddo	30.32	770.1	30.40	772.1	48.0	8.9	97	n.	2.0	0.9			10 s			0.287	7.1	cloudy	The Staff.
Wakayama	30.35	771.0	30.41	772.5	56.9	13.8	63	n.	8.0	3.6		6	4			0	0	cloudy	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.88	758.9	30.07	763.8	77.9	25.5	59	e.	14.0	6.3		10c;cs	2 k	wnw.	e.	0	0	overcast	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.72	602.5	29.94	760.5	53.2	11.8	82	ese.	Imp.	Imp.		3 c	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.37	619.0	30.19	766.8	47.5	8.6	87	ese.			1	8 c	0			0	0	cloudy	Prof. M. Leal.
Mazatlan	29.73	755.0	29.99	761.7	71.0	21.7	75	nnw.	11.0	4.9		0	1 s			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.15	587.8	30.28	769.0	47.7	8.7	76	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.34	618.3	30.31	769.9	56.17	10.87	60	se.	5.1	2.3		2 c	3 k	se.	s.	Imp.	Imp.	½ cloudy	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascallientes	23.96	608.7	30.12	764.9	49.5	9.7	78	w.	0	0						0	0		M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.1	30 31	769.8	44.6	7.0	85	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.55	572.7	30.24	768.0	51.3	10.7	68	nw.	2.5	1.1		0	0			0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.10	764.5	30.10	764.5	50.7	10.4		w.			2					0.091	2.3		
Groningen	30.05	763 2	30.10	764.6	42.8	6.0		nne.			2					0.004	0.1		
Helder	30.09	764.3	30.09	764.3	45.5	7.5		e.			2					0	0		
Hellevoetsluis	30.10	764.4	30.10	764.4	47.3	8.5	84	calm			0					0.059	1.5		
Utrecht	30.07	763.8	30.12	765.0	46.6	8.1	65	wnw.			1		8			0.016	0.4	very cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	30.13	765.2	30.19	766.8	33.4	0.8	51	sse.	7	3			1			0	0		
Brono	29.83	757.6	29.87	758.6	35.6	2.0	93	sw.	9	4			10			0.244	6.2	raining	
Christiania	30.02	762.4	30.17	766.3	31.8	— 0.1	49	wnw.	4	2			0			0	0		
Gjæsvær	29.56	750.8	29.58	751.4	27.3	— 2.6		se.			4		10						
Lodingen	29.66	753.3	29.71	754.5	32.7	0.4	78	wsw.			2		7			0	0		
PORTUGUESE.																			
Angra, Azores	29.76	756.0	29.92	760.0	63.0	17.2	78	nnw.	6.9	3.1			7			0.102	2.6		Dr. J. A. Sampaio.
Campo Major	29.06	738.0	30.05	763.2	63.3	17.4	56	ese.	2.5	1.1			9			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	29.94	760.4	30.02	762.6	68.5	20.3	79	sw.	3.8	1.7			10	sw.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.67	753.7	30.04	762.9	59.2	15.1	77	ne.	3.8	1.7			10			0	0		The Staff.
Ponta Delgada, Azores	29.81	757.1	29.88	758.9	66.9	19.4	68	n.	8.1	3.6			4			0	0		
Saint Paul de Loando	29.66	753.4	29.86	758.5	77.9	25.5	94	wsw.	0.7	0.3			8			0	0		
Serra da Estrella	25.28	642.2	30.02	762.6	47.5	8.6	56	ssw.	15.4	6.9			10			0.004	0.1	foggy	
RUSSIAN.																			
Akmolinski	29.20	741.7	30.33	770.4	33.4	0.8	100	s.	4	2			10 n			0.004	0.1		Major K. Lasarew.
Archangel	29.85	758.1	29.87	758.6	8.2	—13.2	92	calm	0	0			10			blank	blank	light clouds	Capt. Sselliwerstow.
Astrakhan	29.88	758.9	29.86	758.6	53.8	12.1	60	nw.	9	4			10 s			0	0		Capt. Wisganow.
Barnaul	29.90	759.4	30.43	772 9	30.0	— 1.1	94	calm	0	0			10			0.012	0.3		Meteorological Obs'y.
Dorpat	29.70	754.3	29.95	760.8	27.0	— 2.8	85	nnw.	2	1			10 n			0	0		Observatory.
Ekaterinburg	29.16	740.7	30.16	766.1	35.6	2.0	77	sse.	7	3			10			0	0		Meteorological Obs'y.
Kasan	29.50	749.4	29.78	756.4	37.9	3.3	75	sse.	13	6			10			0.094	2.4		Observatory.
Kertch	29.81	752.7	29.82	757.7	51.6	10.9	77	calm	0	0		0	7 n			0.043	1.1		Lagorio & Sastyres.
Kieff	28.94	735.0	29.59	751.5	35.8	2.1	96	s.	4	2			10ks;n					raining	Observatory.
Lugan	30.71?	754.5?	29.91?	595.8?	40.3	4.6	73	wsw.	4	2			10			0.067	1.7		Meteorological Obs'y.
Nikolaiev	29.67	753.5	29.74	755.3	52.7	11.5	81	s.	31	14			10 n			0.122	3.1		Capt. Kurdakow.
Pekin, China	30.25	768.4	30.39	772 0	41.2	5.1	91	se.	4	2		0	2 k			0	0		Physical Observatory.
St. Petersburg	29.89	759.2	29.91	759.6	23.4	— 4.8	77	nw.	9	4			10 n			0.012	0.3		Central Physical Obs'y.
Semipalatinsk	29.79	756.7	30.49	774.5	28.8	— 1.8	92	wnw.	9	4			10			Imp.	Imp.		Major Lasarew.
Tashkend, Laboratory	28.54	725.0	30.11	764.7	59.7	15.4	4	calm	0	0			0						Teich, A. M.
Tiflis	28.58	725.8	30.00	761.9	54.5	12.5	53	nw.	22	10		6 cs	0			0	0		Physical Observatory.
Tomsk																			
Vladivostock	30.35	770 8	30.41	772.5	21.4	— 5.9		nw.	16	7		0	2 k			0	0		
Warsaw	29.18	741.2	29.61	752.1	40.1	4.5	86	n.	9	4			10 kn					heavy clouds	Astronomical Obs'y.
Wilna	29.26	743.3	29.70	754.3	34.5	1.4	96	e.	11	5			10			0.169	4.3	snowing	Berg, Assistant.
Yeniseisk	30.62	777.7	30.95	786.1	— 6.0	—21.1	71	ese.	4	2			0			0	0		M. O. Marks.
SCOTTISH.																			
Monach Lt			30.09	764.3	47	8.3	92	se.			4	3	0	s.		0	0	clear	J. Youngclause.
North Unst			30.14	765.5				se.			1	0	0						Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.90	759.4	30.00	762.1	63.7	17.6	63	s.	3.1	1.4		0	2			0	0	almost clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.93	760.2	29.99	761.7	70.9	21.6	53	se.	1.3	0.6		2	2	w.		0	0	cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.11	688.5	30.06	763.6	56.8	13.8	53	sw.	7.8	3.5		0	8			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.89	708.5	30.14	765.5	55.0	12.8	82	se.	1.6	0.7		10	0	w.		0.004	0.1	covered	The Staff.
Murcia, Met. Obs'y	29.92	760.0	30.08	763.9	73.4	23.0	56	sw.	0.9	0.4		3	4	nw.		0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.08	738.6	29.95	760.8	53.6	12.0	78	se.	18.6	8.3		6 kn	6 kn	w.		0	0	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.95	735.3	29.84	757.9	59.2	15.1	70	s.	21.0	9.4			10			0	0	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.85	758.1	29.91	759.6	78.5	25.8	88	ese.	2.2	1.0		0	3 ks			0.189	4.8	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.04	763.0	30.14	765.5	72.5	22.5	41	calm	0	0		0	4		s.	0	0		Capt. C. Pujason, R. N.
San Juan de Porto Rico, W.I	29.84	758.0	29.93	760.3	79.5	26.4	98	n.	13.9	6.2		3 s	4 kn	n.	n.	0.827	21.0	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.81	757.1	29.94	760.4	75.2	24.0	95	calm	0	0		0	7 ks		e.	0.04	1.0	very cloudy	José L. Yrastorza.
SWEDISH																			
Haparanda	29.92	760.0	29.96	761.0	7.5	—13.6	100	n.			2		8			0	0		
Umea	29.96	761.0	30.01	762.3	7.5	—13.6	83	calm			0		1			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
SWEDISH—Continued.																			
Hernosand	30.02	762.4	30.07	763.7	30.6	— 0.8	62	sw.			2		0			0	0		
Stockholm	29.89	759.2	30.07	763.7	29.1	— 1.6	64	wnw.			2		10			0	0		
Wisby	29.96	761.0	30.02	762.5	33.4	0.8	71	ene.			4		10			0.051	1.3		
Sub-series.																			
Upsala	29.99	761.8	30.08	764.0	28.4	— 2.0	94	nw.	9.4	4.2			3		nne.	0.004	0.1	snowing	S. G. Fineman.
SWISS.																			
Geneva	28.65	727.6	30.09	764.3	47.7	8.7	61	nne.			1		5			0.043	1.1	cloudy	The Observatory.
TURKISH.																			
Constantinople			29.97	761.1	57.0	13.9	58	sw.	16	7.0			5		sw.	0.827	21.0		The Observatory.
Valona			29.99	761.8	66.7	19.3		s.			1		10			0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.06	763.6	72.1	22.3	58	sw.			2		3 k		sw.	0.34	8.6		Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.92	760.0	30.00	762.0	57	13.9	64	s.	4	1.8		10 cs	0	nw.		0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.06	738.1	29.76	755.9	56	13.3	93	sw.	7	3.1			10 s			2.08	52.8	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.19	639.8	30.29	769.4	28	— 2.2	61	n.	8	3.6		0	0			trap.	trap.	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.30	693.4	30.28	769.1	15	— 9.4	51	sw.	26	11.6		0	0			0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.04	637.6	30.26	768.6	57	13.9	86	se.	6	2.7		3 c	fg.			0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.11	764.8	30.12	765.0	55	12.8	93	s.	12	5.4		8 cs	0			0	0	cloudy	Jas. M. Watson.
Augusta, Georgia	30.10	764.5	30.30	769.6	53	11.7	90	calm	0	0		0	fg.			0	0	clear	John Healy.
Baltimore, Maryland	30.09	764.3	30.14	765.5	54	12.2	86	calm	0	0			10s;fg			0	0	cloudy	Geo W Felger.
Barnegat, New Jersey	30.09	764.3	30.11	764.8	54.0	12.2	96	sw.	12	5.4		8 cs	0	n.		0	0	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.67	728.2	30.36	771.1	11	—11.7	89	nw.	8	3.6		0	0			0.02	0.5	clear	A. Pritchard.
Benton, Fort, Montana	27.46	697.5	30.42	772.7	7	—13.9	80	calm	0	0		0	0			0	0	clear	S. Wheaton.
Bismarck, Dakota	28.36	720.3	30.28	769.1	11	—11.7	80	nw.	12	5.4			10 s			0.06	1.5	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.08	764.0	30.12	765.0	55	12.8	93	sw.	15	6.7		3 cs	7 s		sw.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.62	701.5	30.56	776.2	18.5	— 7.5	91	w.	4	1.8		0	0			0	0	clear	B. E. Light.
Boston, Massachusetts	29.88	758.9	30.04	763.0	56.0	13.3	86	sw.	16	7.2			10 s		sw.	0	0	cloudy	O. B. Cole.
Brownsville, Texas	29.91	759.7	29.96	761.0	75.8	24.3	85	s.	4	1.8		0	3 ks			0	0	clear	M. McCarty.
Buffalo, New York	29.13	739.9	29.91	759.7	62	16.7	72	s.	12	5.4			10 s		sw.	0.06	1.5	threatening	W. Finn.
Buford, Fort, Dakota	28.41	721.6	30.39	771.9	— 1	—18.3	72	w.	1	0.4		0	0			trap.	trap.	clear	F. A. Mellen.
Burlington, Vermont	29.58	751.3	29.89	759.2	54.7	12.6	88	s.	22	9.8		7 cs	0	w.		0.17	4.3	fair	W. B Gates.
Cairo, Illinois	29.66	753.4	30.08	764.0	57.6	14.3	92	nw.	1	0.4			10 s		nw	1.15	29.2	cloudy	W. H. Ray.
Cape Henry, Virginia	30.18	766.6	30.20	767.1	57	13.9	74	sw.	18	8.0		2 c	1 s			0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.11	764.8	30.14	765.5	60.0	15.6	75	s.	22	9.8		5 cs	0	s.		0	0	clear	W. E. Smith.
Cape Mendocino, California	29.66	753.4	30.19	766.8	49	9.4	63	se.	6	2.7			10 ks		se.	0	0	fair	J. J. McLean.
Cedar Keys, Florida	30.22	767.6	30.24	768.1	63	17.2	93	ne.	4	1.8		0	0			0	0	cloudy	F. W. Mixer.
Champaign, Illinois	29.18	741.2	30.04	763.0	40.6	4.8	75	w.	13	5.8			10 s		w.	0.11	2.8	clear	L. A. Welsh.
Charleston, S. Carolina	30.22	767.6	30.28	769.1	58	14.4	86	calm	0	0		0	fg.			0	0	cloudy	J. H. Smith.
Charlotte, N. Carolina	29.36	745.7	30.24	768.1	54.0	12.2	93	sw.	3	1.3		0	fg.			0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.38	746.2	30.23	767.8	55.0	12.8	90	s	3	1.3		8 ck	fg.	sw.		0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	24.01	609.8	30.22	767.6	—11.2	—24.0	60	nw.	4	1.8		0	0			0	0	cloudy	E. McGovern.
Chicago, Illinois	29.22	742.2	29.96	761.0	38.1	3.4	82	w.	12	5.4			10 s			0.20	5.1	clear	J. Mitchell.
Chincoteague, Virginia	30.16	766.1	30.18	766.6	56	13.3	100	s.	12	5.4		5 cs	3 s	w.		trap.	trap.	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.39	746.5	30.08	764.0	63	17.2	90	sw.	8	3.6			10 n		sw.	0.16	4.1	light rain	R. B. Watkins.
Cleveland, Ohio	29.20	741.7	29.97	761.2	60.6	15.9	87	sw.	18	8.0			10 n		sw.	0.13	3.3	heavy rain	J. B. Newlin.
Coleman City, Texas	28.36	720.3	30.24	768.1	36	2.2	72	n.	28	12.5		10 cs	0			0	0	cloudy	L. Dorman.
Columbus, Ohio	29.14	740 1	30.03	762.7	60	15.6	87	sw.	12	5.4			10 n		sw.	0.03	0.8	light rain	D. Cuthbertson.
Concho, Fort, Texas	28.21	716.5	30.22	767.6	40.0	4.4	67	n.	14	6.3			10 s			0	0	cloudy	J. McGlone.
Custer, Fort, Montana	27.04	686.8	30.36	771.1	— 9	—22.8	61	e.	6	2.7		0	0			0.02	0.5	clear	W. B. Lamar.
Davenport, Iowa	29.40	746.7	30.09	764.3	30	— 1.1	88	w.	11	4.9			10 s		w.	0.35	8.9	cloudy	R. R. Martin.
Davis, Fort, Texas	25.21	640.3	30.11	764.8	39	3.9	52	sw.	3	1.3		0	0			0	0	clear	J. Williams.
Dayton, Washington T'y	28.71	729.2	30.49	774.4	18.8	— 7.3	81	n.	4	1.8		0	0			0	0	clear	H. Clifford.
Deadwood, Dakota	25.38	644.6	30.21	767.3	4	—15.6	100	se.	1	0.4		0	0			0.01	0.3	clear	G. W. Scott.
Delaware Breakwater, Del.	30.12	765.0	30.14	765.5	54	12.2	100	s.	18	8.0		8 ck	0	sw.		0	0	cloudy	T. S. Townsend.
Denison, Texas	29.35	745.5	30.19	766.8	39.0	3.9	73	n.	14	6.3			10 s		sw.	0.13	3.3	cloudy	J. W. Byram.
Denver, Colorado	24.79	629.7	30.29	769.4	— 1.0	—18.3	48	calm	0	0		0	0			0.10	2.5	clear	F. M. Neal.
Des Moines, Iowa	29.23	742.4	30.18	766.6	22	— 5.6	73	nw.	14	6.3			10 s		nw.	0.73	18.5	cloudy	F. W. Conrad.
Detroit, Michigan	29.16	740.7	29.90	759.4	60.5	15.8	87	s.	7	3.1			10 n			0.25	6.3	light rain	C. F. R. Wappenhans.
Dodge City, Kansas	27.67	702.8	30.41	772.4	12	—11.1	83	n.	18	8.0		0	6 s		nw.	trap.	trap.	fair	V. P. Temple.
Dubuque, Iowa	29.28	743.7	30.03	762.7	27.5	— 2.5	77	sw.	7	3.1			10 s			0.47	11.9	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.03	737.3	29.82	757.4	28.6	— 1.9	90	nw.	15	6.7			10 s		nw.	0.38	9.7	cloudy	N. B. Conger.
Eagle Pass, Texas	29.19	741.4	30.02	762.5	63.0	17.2	78	calm	0	0		0	3 s			0	0	clear	F. Belford.
Eagle Rock, Idaho	25.58	649.7	30.44	773.2	—12	—24.4	78	calm	0	0		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	29.81	757.2	29.88	758.9	51.0	10.6	90	sw.	15	6.7			10s;fg		sw.	0.07	1.8	cloudy	D. U. Murphy.
El Paso, Texas	27.44	697.0	30.37	771.4	17	— 8.3	56	nw.	12	5.4		c	0			0	0	clear	W. J. Cundall.
Erie, Pennsylvania	26.35	669.3	30.20	767.1	38	3.3	65	w.	5	2.2		0	0			0	0	clear	J. O'Dowd.
Escanaba, Michigan	29.17	740.9	29.93	760.2	64	17.8	73	sw.	12	5.4			10 n		sw.	0.06	1.5	light rain	Peter Wood.
Fredericksburg, Texas	29.02	737.1	29.72	754.9	43.0	6.1	100	calm	0	0			10 s		sw.	0.98	24.9	cloudy	George Heathcote.
Galveston, Texas	28.34	719.8	30.16	766.1	70	21.1	90	sw.	8	3.6			10 s			0	0	cloudy	Frank Halwegler.
Grand Haven, Michigan	29.97	761.2	30.02	762.5	76	24.4	85	s.	11	4.9		4 cs	5 ks		sw.	0	0	cloudy	E. O'C. Macinerney.
Grant, Fort, Arizona	29.19	741.4	29.89	759.2	48.0	8.9	77	sw.	22	9.8			10 s		sw.	0.35	8.9	cloudy	J. Mueller.
Hatteras, North Carolina	30.25	768.3	30.27	768.8	56	13.3	93	ne.	7	3.1		0	0			0	0	clear	Robert C. Lord.
Helena, Montana	26.01	660.6	30.39	771.9	6	—14.4	75	calm	0	0		0	0			0	0	clear	R. M. Crawford.
Henrietta, Texas	29.21	741.9	30.25	768.3	31	— 0.6	68	n.	20	8.9			10 ks		n.	0	0	cloudy	N. C. Smith.
Huron, Dakota	28.76	730.5	30.24	768.1	12	—11.1	80	nw.	18	8.0			10 n			0.19	4.8	light snow	J. P. Sherry.
Indianapolis, Indiana	29.11	739.4	29.95	760.7	60	15.6	87	se.	4	1.8			10 n		se.	0.07	1.8	light rain	S. W. Glenn.
Indianola, Texas	29.95	760.7	29.98	761.5	75.0	23.9	90	s.	5	2.2		2 c	2 k	sw.	s.	0	0	fair	O. Schutze
Jacksboro, Texas	29.05	737.9	29.27	743.4	34	1.1	60	n.	10	4.5		0	0			trap.	trap.	clear	I. A. Reed.
Jacksonville, Florida	30.22	767.6	30.28	769.1	59	15.0	93	calm	0	0		4 k	fg.	e.		0	0	fair	D. J. Carr.
Keogh, Fort, Montana	27.73	704.3	30.40	772.1	— 6	—21.1	64	w.	2	0.9		0	0			trap.	trap.	clear	J. W. Smith.
Keokuk, Iowa	29.42	747.3	30.10	764.5	31.0	— 0.6	78	w.	6	2.7			10 s		w.	0.69	17.5	cloudy	A. Schneider.
Key West, Florida	30.09	764.3	30.11	764.8	73.0	22.8	79	ne.	13	5.8		0	0			0	0	clear	F. Z. Gosewisch.
Kittyhawk, North Carolina	30.24	768.1	30.26	768.6	55	12.8	93	sw.	8	3.6		hz.	2 k		nw.	0	0	clear	R. H. Paxton.
Knoxville, Tennessee	29.15	740.4	30.22	767.6	58.2	14.6	80	sw.	9	4.0		0	2 s		sw.	0	0	clear	H. Mc P. Baldwin.
La Crosse, Wisconsin	29.16	740.7	29.98	761.5	27	— 2.8	76	w.	12	5.4			10 s			0.51	13.0	cloudy	J. A. Cody.
Leavenworth, Kansas	29.32	744.7	30.26	768.6	26	— 3.3	76	nw.	10	4.5			10 s		nw.	0.37	9.4	cloudy	S. C. Emery.
Lewiston, Idaho	29.73	755.1	30.60	777.2	19.5	— 6.9	74	ne.	1	0.4		0	0			0	0	clear	A. W. Browne.
Little Rock, Arkansas	29.71	754.6	30.04	763.0	58	14.4	93	ne.	3	1.3			10 s			1.56	39.6	cloudy	W. Bell.
Los Angeles, California	29.87	758.7	30.27	768.8	48	8.9	71	ne.	9	4.0			10 s			0	0	cloudy	W. U. Simons.
Louisville, Kentucky	29.44	747.8	30.03	762.7	63	17.2	90	s.	1	0.4			10 n			0.46	11.7	light rain	T. S. Collins.
Lynchburg, Virginia	29.44	747.8	30.16	766.1	49	9.4	93	calm	0	0			fg.			0	0	dense fog	L. M. Dey.
Mackinaw City, Michigan	29.05	737.9	29.74	755.4	46.0	7 8	93	se.	11	4.9			10 s			1.02	25.9	cloudy	Lewis Duane.
Macon, Fort, North Carolina	30.24	768.1	30.25	768.3	58	14.4	100	e.	1	0.4		6 cs	fg.	w.		0	0	fair	F. R. Day.
Madison, Wisconsin	28.86	733.0	29.93	760.2	31	— 0.6	88	w.	12	5.4			10 s		w.	0.57	14.5	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.62	650.7	30.13	765.3	14	—10.0	66	ne.	6	2.7		0	0			0	0	clear	O. A. Shaw.
McKavett, Fort, Texas	27.79	705.9	30.17	766.3	40	4.4	59	n.	10	4.5		0	0			0	0	clear	F. Burke.
Marquette, Michigan	28.92	734.6	29.69	754.1	42	5.6	92	w.	4	1.8		10 k	0	w.		0.72	18.3	cloudy	J. E. Thatcher.
Memphis, Tennessee	29.72	754.9	30.07	763.8	61	16.1	100	calm	0	0			10 n			1.59	38.1	light rain	J. Gilligan.
Milwaukee, Wisconsin	29.11	739.4	29.90	759.4	35	1.7	89	sw.	23	10.3			10 s		w.	0.46	11.7	cloudy	D. T. Flannery.
Missoula, Fort, Montana	27.10	688.3	30.51	774.9	4	—15.6	30	calm	0	0		0	0			0	0	clear	W. Line.
Mobile, Alabama	30.11	764.8	30.15	765.8	69.5	20.8	90	se.	4	1.8			10 s		sw.	0	0	cloudy	J. H. Young.
Montgomery, Alabama	29.97	761.2	30.21	767.3	59.4	15.2	83	se.	7	3.1		1 c	0	w.		0	0	clear	C. A. Read.
																			J. B. McLaughlin.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.03	737.3	30.09	764.3	9	—12.8	100	n.	24	10.7			10 n		n.	0.47	11.9	light snow.	H. Bessant.
Morgantown, W. Virginia	29.07	738.4	30.13	765.3	57.5	14.2	85	sw.	2	0.9		2 ck	2 s	w.		0	0	fair	J. C. Sprigg, jr
Mt. Washington, N. H	23.68	601.5	30.24	768.1	39.5	4.2	100	nw.	68	30.4			fg		nw.	0.59	15.0	dense fog	J. G. Linsley.
Nashville, Tennessee	29.47	748.5	30.07	763.8	64.0	17.8	84	s.	14	6.3			10 ks		s.	0	0	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	29.97	761.2	30.09	764.3	52	11.1	93	sw.	6	2.7			10s;fg		sw.	0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.05	763.3	30.10	764.5	54	12.2	74	w.	9	4.0		5 k	0	w.		0	0	fair	J. G. Lynch.
New Orleans, Louisiana	30.06	763.5	30.12	765.0	69.0	20.6	90	calm	0	0			fg.			0	0	dense fog	L. Dunne.
Newport, Rhode Island	30.05	763.3	30.10	764.5	54.7	12.6	94	sw.	11	4.9			10 s		sw.	0	0	cloudy	W. McGillivray.
New York, New York	29.95	760.7	30.13	765.3	50.5	10.3	100	s.	8	3.6			10s;fg			0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.19	766.8	30.22	767.0	55	12.8	86	sw.	8	3.6		4 cs	0	sw.		0	0	fair	Wm. Davis.
North Platte, Nebraska	27.27	692.6	30.35	770.9	6.6	—14.1	78	w.	6	2.7		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.30	769.6	30.34	770.6	22.0	— 5.6	88	e.	1	0.4		0	0			0	0	clear	J. Dascomb.
Omaha, Nebraska	29.05	737.9	30.28	769.1	19.2	— 7.1	76	nw.	14	6.3		0	7 s			0.16	4.1	fair	A. Pollak.
Oswego, New York	29.55	750.6	29.89	759.2	59.0	15.0	78	s.	11	4.9		8 cs	0	w.		inap	inap.	cloudy	S. W. Beall.
Palestine, Texas	29.49	749.0	30.06	763.5	65.0	18.3	93	nw.	8	3.6			10 n			0.13	3.3	thund'r st'm	L. M. Pindell.
Pensacola, Florida	30.15	765.8	30.18	766.6	70.1	21.2	84	se.	8	3.6		1 cs	0			0	0	clear	M. McGauran.
Philadelphia, Pa	30.03	762.7	30.13	765.3	52	11.1	86	sw.	2	0.9			10s;fg		sw.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.30	439.4	29.96	761.0	—22	—30.0	100	w.	16	7.2		0	1 s			0.04	1.0	clear	H. Hall.
Ploche, Nevada	24.20	614.7	30.34	770.6	8.7	—12.9	77	nw.	7	3.1		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.20	741.7	30.05	763.3	64.4	18.0	63	s.	9	4.0		0	4 s		sw.	0	0	fair	W. Daly.
Poplar River, Montana	28.08	713.2	30.36	771.1				sw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.12	765 0	30.13	765.3	73.1	22.8	90	se.	18	8.0		0	6 k		se.	0.31	7.9	fair	M. Herman.
Port Huron, Michigan	29.18	741.2	29.90	759.4	56.1	13.4	100	s.	10	4.5			10 n			0.15	3.8	light rain	W. O. Bailey.
Portland, Maine	29.85	758.2	29.90	759.4	51.0	10.6	90	sw.	11	4.9			10 ks		sw.	0.05	1.3	cloudy	W. W. Eichelberger.
Portland, Oregon	30.33	770.4	30.40	772.1	33.0	0.6	68	e.	3	1.3		0	0			0	0	clear	M. L. Hearne.
Portsmouth, N. C					57	13.9	93	ne.	2	0.9		0	fg.			0	0	light fog	F. S. Coburn.
Prescott, Arizona	24.91	632.7	30.25	768.3	20.3	— 6.5	87	calm	0	0		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.02	762.5	30.05	763.3	54.5	12.5	93	s.	12	5.4			10 s		sw.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.17	766.3	30.18	766.6	65	18.3	90	ne.	8	3.6		0	0			0	0	clear	W. J. Evans.
Red Bluff, California	29.95	760.7	30.36	771.1	35.5	1.9	68	nw.	3	1.3		0	0			0	0	clear	E. van Dyk.
Rochester, New York	29.23	742.4	29.93	760.2	59	15.0	75	sw.	16	7.2		10 k	hz.	w.		inap.	inap.	cloudy	E. W. McGann
Roseburg, Oregon	29.79	756.7	30.36	771.1	26	— 3.3	88	calm	0	0		2 c	0	nw.		0	0	clear	J. J. Nanry.
Sacramento, California	30.28	769.1	30.36	771.1	37.9	3.3	73	nw.	4	1.8		0	0			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.49	749 0	30.12	765.0	37.2	2.9	98	nw.	12	5.4			10 s		nw.	0.76	19.3	cloudy	J. H. Weber.
St. Paul, Minnesota	28.96	735.6	29.88	758.9	27.0	— 2.8	88	sw.	17	7.6			10 s		sw.	0.39	9.9	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.24	742.7	30.17	766.3	7.5	—13.6	87	n.	16	7.2		0	3 s			0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.97	659.6	30.54	775.7	11	—11.7	64	se.	2	0.9		0	0			0.11	2.8	clear	J. Craig.
San Antonio, Texas	29.28	743.7	30.00	762.0	72.5	22.5	90	se.	3	1.3			10 s			0	0	cloudy	T. J. Kenan.
San Diego, California	30.19	766.8	30.26	768.6	49.0	9.4	77	ne.	4	1.8		0	hz.			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.26	743.2	29.98	761.5	60	15.6	93	sw.	12	5.4			10 n	w.		0.48	12.2	light rain	M. H. Perry.
Sandy Hook, New Jersey	30.11	764.8	30.14	765.5	50.5	10.3	93	sw.	8	3.6			10 s			0	0	cloudy	B. A. Blundon.
San Francisco, California	30.26	768.6	30.33	770.4	49	9.4	44	ne.	5	2.2		10 k	0	nw.		0	0	cloudy	N. Gorom.
Santa Fé, New Mexico	23.21	589.5	30.25	768.3	14	—10.0	40	n.	16	7.2		0	0			0.02	0.5	clear	H. U. Jones.
Savannah, Georgia	30.19	766.8	30.28	769.1	57.5	14.2	85	se.	2	0.9		2 ck	0	s.		0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.46	672.1	30.28	769.1	18	— 7.8	58	sw.	20	8.9		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.77	756.1	30.02	762.5	68	20.0	93	sw.	4	1.8			10 s			0.02	0.5	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	29.01	736.8	30.32	770.1	27.5	— 2.5	46	n.	21	9.4		0	0			inap.	inap.	clear	W. M. Mattingly.
Silver City, New Mexico	24.33	618.0	30.17	766.3	32.5	0.3	61	w.	5	2.2		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.41	747.0	29.48	748.8	45.2	7.3	71	se.	30	13.4			10 n		se.	0.85	21.6	heavy rain	F. W. Fickett.
Smith, Fort, Arkansas	29.99	754.1	30.18	766.6	41.5	5.3	82	nw.	10	4.5			10 s		n.	0.12	3.0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.23	767.8	30.27	768.8	56	13.3	100	e.	2	0.9		1 c	fg.			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.42	721.9	30.50	774.7	16	— 8.9	76	calm	0	0		0	0			0	0	clear	D. Moore.
Springfield, Illinois	29.35	745.5	30.07	763.8	39	3.9	73	w.	7	3.1			10 s		w.	0.57	14.5	cloudy	T. B. Jennings.
Springfield, Massachusetts	29.92	760.0	30.06	763.5	53.5	11.9	88	s.			4		10 n		sw.	0	0	cloudy	Charles Mayr.
Springfield, Mo	28.70	729 0	30.21	767.3	31	— 0.6	88	nw.	13	5.8			10 s		nw.	0.79	20.1	cloudy	J. B. Marbury.
Starkville, Miss	29.63	752.6	30.13	765.3	65	18.3	90	se.	16	7.2			10 s		se.	0	0	cloudy	C. Dill.
Stevenson, Fort, Dakota	28.34	719.8	30.31	769.9	8	—13.3	80	nw.	10	4.5		0	0			inap.	inap.	clear	W. Burrows
Stockton, Fort, Texas	27.05	687.1	30.17	766.3	35	1.7	82	sw.	2	0.9		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.94	760.5	29.99	761.7	52.6	11.4	86	sw.	18	8.0		5 k	0	w.		0	0	fair	G. Liebmann.
Thomas, Camp, Arizona	27.40	695.9	30.24	768.1	37.5	3.1	83	nw.			1	0	0			0.04	1.0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.22	742.2	29.95	760.7	61	16.1	87	sw.	8	3.6			10 n		sw.	0.21	5.3	light rain	A. Buell.
Tucson, Arizona	27.74	704.6	30.20	767.1	35	1.7	72	calm	0	0		0	0			inap.	inap.	clear	J. L. Whiteside.
Umatilla, Oregon	30.22	767.6	30.60	777.2	16	— 8.9	100	s.	3	1.3		0	0			0	0	clear	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					28.4	— 2.0	77	n.			1	0	0			0.02	0.5	clear	D. Brooks.
Vicksburg, Mississippi	29.83	757.7	30.10	764.5	68.0	20.0	93	se.	6	2.7		0	8 s		sw.	0.20	5.1	cloudy	James Kenealy.
Visalia, California	29.97	761.2	30.35	770.9	35.0	1.7	92	n.	2	0.9		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.52	622.8	30.26	768.6	—15.3	—26.3	85	calm	0	0		0	0			0.05	1.3	clear	T. M. Ambler.
Washington, D. C	30.02	762.5	30.14	765.5	54.7	12.6	95	sw.	3	1.3			10s;fg			0	0	cloudy	B. M. Purssell.
West Las Animas, Colorado	26.24	666.5	30.36	771.1	1	—17.2	85	nw.	3	1.3		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.44	747.8	30.08	764.0	51.8	11.0	93	se.	1	0.4			10 s			0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.21	767.3	30.27	768.8	55	12.8	93	calm	0	0		4 c	sk.			0	0	fair	Samuel A. Haney.
Winnemucca, Nevada	25.93	658.6	30.46	773.7	12	—11.1	64	e.	8	3.6		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.84	732.5	30.22	767.6	15	— 9.4	67	nw.	17	7.6			10 ks			0.02	0.5	cloudy	J. H. Atfield.
Yuma, Arizona	30.13	765.3	30.28	769.1	51.0	10.6	18	n.	10	4.5		4 cs	0			0	0	fair	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.98	558.3			55.0	12.8	77	calm	0	0			8ks;s		se.	0.10	2.5	cloudy	Joaquin Gomez.
Havana, Cuba, W. I	30.08	764.0	30.15	765.8	69.9	21.1	84	e.	2	0.9		0	2 k		e.	0	0	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I	29.95	760.7	29.96	761.0	77	25.0	79	calm	0	0		0	0			0	0	fine	Robert Johnston.
Navassa, W. I	29.84	757.9	29.92	760.0	78	25.6	67	ne.	25	11.2		0	2 ks			0	0	clear	F. M. Everett.
Paramaribo, S. A	30.00	762.0	30.00	762.0	78	25.6	86	e.			2	5 k	7 ks	e.	e.	0.100	2.5		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	78	25.6	89	calm			0		10 ks		calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A					76	24.4	96	ne.			2	ck	10 ks		ne.	0.06	1.5	cloudy	Earl Flint.
Santiago de Cuba, W. I	29.98	761.5	30.01	762.2	74	23.3	76	n.	7.2	3.2		0	2 ks		ne.	0	0	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.11	739.4	29.17	740.9	35	1.7	79	s.			3	0	5 k			0	0	fair	W. J. Fisher.
St. Thomas, W. I	29.82	757.4	29.94	760.5	79	26.1	62	n.				0	3 k		n.	0.20	5.1	fine	Aug. Walloe.
York Factory, B. A	29.94	760.5	30.01	762.2	8.5	—13.1	89	s.	11	4.9		2 c	0	s.		0	0	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Shanghai, China	30.35	770.9	55	12.8	.....	ene.	.....	.....	2	.....	8	e.	.....	.....	.....	.....	.....	raining
H. M. S. Amethyst, Colonia, Uruguay†	30.03	762.7	66.5	19.2	90	n.	.....	.....	1–2	.....	6	se.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Audacious, N. 12° 32′, E. 44° 19′	29.87	758.7	81	27.2	87	ese.	.....	.....	3	.....	1	se.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	30.14	765.5	74.5	23.6	68	n.	.....	.....	1	.....	2	n.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Champion, N. 29° 21′ E. 122° 47′	.....	.....	69	20.6	95	ne.	.....	.....	5–6	.....	10	.....	.....	.....	.....	5	var.	raining.
H. M. S. Comus, Esquimalt, Vancouver Island	30.33	770.4	28	— 2.2	77	nne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky
H. M. S. Condor, N. 31° 30′ E. 32° 12′	30.14	765.5	70	21.1	75	wnw.	.....	.....	2	.....	2	wnw.	.....	.....	.....	3	nnw.	d. clouds.
H. M. S. Crocodile, N. 14° 29′, E. 52° 29′	29.97	761.2	80	26.7	66	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Curacoa, Kobe Japan	30.31	769.9	57.5	14.2	76	n.	.....	.....	1	.....	6	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Diamond, S. 25° 31′ E. 171° 57′*†	29.75	755.6	66	18.9	84	se.	.....	.....	3	.....	5	se.	.....	.....	.....	2	se.	d. clouds.
H. M. Dock Yard, Bermuda, W. I.	30.07	763.8	66	18.9	76	nne.	.....	.....	3–4	.....	6	nne.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.91	759.7	75.5	24.2	81	s.	.....	.....	5	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Flamingo, N. 13° 22′, W. 62° 11′	29.85	758.2	77	25.0	?	sse.	.....	.....	2–3	.....	4	se.	.....	.....	.....	2	e.	d clouds.
H. M. S. Flying Fish, N. 36° 38′, E. 125° 26′	30.43	772.9	56	13.3	80	s.	.....	.....	0–1	.....	7	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Gannet, S. 19° 10′, W. 70° 20′	29.99	761.7	63	17.2	83	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	2	var.	overcast.
H. M. S. Griffon, N. 33° 06′, W. 63° 30′	30.08	764.0	66	18.9	78	nne.	.....	.....	4	.....	2	nne.	.....	.....	.....	6	n.	d. clouds.
H. M. S. Iron Duke, N. 30° 24′, E. 126° 44′	30.32	770.1	66	18.9	90	ne.	.....	.....	4	.....	10	ne.	.....	.....	.....	3	ne.	d. clouds.
H. M. S. Kingfisher, N. 27° 48′, W. 117° 29′	30.21	767.3	59	15.0	.....	nne.	.....	.....	4	.....	8	n.	.....	.....	.....	5	n.	d. clouds.
H. M. S. Lark, S. 10° 14′, E. 161° 42′	29.77	756.1	78.3	25.7	88	se.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	showery.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.90	759.4	65	18.3	.....	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.35	770.9	59.6	15.3	79	n.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Northampton, Halifax, N. S.	29.99	761.7	47.5	8.6	85	sse.	.....	.....	1	.....	10	sw.	.....	.....	.....	.....	.....	overcast.
H. M. S. Nelson, Melbourne, Australia	30.11	764.8	60	15.6	94	s.	.....	.....	5–6	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.82	757.4	78	25.6	88	nnw.	.....	.....	2	.....	4	.....	.....	.....	.....	.....	.....	d clouds.
H. M. S Rocket, S. 1° 20′, W. 81° 00′	29.98	761.5	74	23.3	?	sw.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sappho, S. 42° 00′, W. 148° 00′	29.52	749.8	51.2	10.7	72	ene.	.....	.....	5	.....	10	ne.	.....	.....	.....	3	sse.	d. clouds.
H. M. S Superb, N. 39° 37′ E. 19° 56′*	30.05	753.3	68	20.0	79	sw.	.....	.....	1	.....	2	wsw.	.....	.....	.....	1	ssw.	d. clouds.
H. M. S. Sylvia, Sholl Bay, Patagonia	29.58	751.3	41.5	5.3	91	calm	.....	.....	0	.....	6	calm	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.94	760.5	.....	.....	.....	se.	.....	.....	3	.....	3	ese.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Woodlark, Bushire, Persia	29.98	761.5	75.5	24.2	76	w.	.....	.....	1	.....	2	w.	.....	.....	.....	.....	.....	misty.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.34	770.6	41	5.0	100	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.14	765.5	84.2	29.0	71	ne.	.....	.....	1	.....	2	.....	ne.	.....	.....	2	se.	d. clouds.
Tamega, Macao, China	30.12	765.0	69.8	21.0	82	n.	.....	.....	5	.....	9	.....	.....	10 mi	nutes	.....	.....	overcast.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.07	763.8	72	22.2	85	se.	8	3.6	.....	.....	5	.....	se.	0	0	.....	.....	fair.
Navy Yard, Portsmouth, N. H.	29.98	761.5	54	12.2	93	calm	0	0	.....	.....	10	.....	sw.	0	0	.....	.....	cloudy.
Naval Hospital, Yokohama, Japan*	30.24	768.1	49.5	9.7	93	calm	.....	.....	0	.....	8	.....	n.	1.27	32.3	.....	.....	drizzling.
Adams, Sitka, Alaska	.....	.....	43	6.1	91	e.	.....	.....	5	.....	10	.....	.....	.....	.....	.....	.....	light rain.
Alaska, Hilo, Hawaii	30.03	762.7	71	21.7	95	nnw.	.....	.....	1	.....	10	.....	ne.	0.35	8.9	sm'h	.....	cloudy.
Alliance, Hampton Roads, Va	29.98	761.5	57	13.9	100	s.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	clear.
Ashuelot, Kobe, Japan	30.42	772.7	69	20.6	38	calm	.....	.....	0	.....	10	.....	n.	0	0	.....	.....	cloudy.
Brooklyn, Keel Point, Patagonia	29.52	749.8	49	9.4	85	e.	18	8.0	.....	.....	10	.....	e.	0.04	1.0	sm'h	.....	cloudy.
Colorado, New York, N. Y.	30.21	767.3	51	10.6	100	sw.	12	5.4	.....	.....	10	.....	.....	0	0	.....	.....	foggy.
Enterprise, Norfolk, Va.	30.23	767.8	56	13.3	87	calm	.....	.....	0	.....	2	.....	calm	.....	.....	.....	.....	clear.
Essex, Callao, Peru	29.95	760 7	65	18.3	89	sw.	.....	.....	0–1	.....	10	.....	.....	.....	.....	sm'h	.....	overcast.
Franklin, Norfolk, Va.	30.22	767.6	55	12.8	93	se.	6	2.7	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Galena, Montevideo, Uruguay	29.92	760.0	64	17.8	94	e.	.....	.....	3	.....	5	.....	e.	.....	.....	.....	.....	fair.
Hartford, S. 36° 33′, W. 55° 11′*	29.85	758.2	53	11.7	100	ese.	.....	.....	3	.....	8	.....	e.	h'vy	h'vy	sm'h	e	cloudy.
Independence, Mare Island, Cal.	30.32	770.1	44	6.7	75	se.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Iroquois, Callao, Peru	29.98	761.5	64	17.8	89	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, Newport, R. I.	30.11	764.8	54	12.2	93	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Kearsarge, Norfolk, Va	30.20	767.1	60	15.6	88	ssw.	.....	.....	2	.....	5	.....	.....	.....	.....	.....	.....	fair.
Lackawanna, Valparaiso, Chili	30.07	763.8	58	14.4	69	n.	.....	.....	1	.....	2	.....	n.	.....	.....	.....	.....	fair.
Lancaster, Valetta, Malta*	30.01	762.2	71	21.7	90	wnw.	.....	.....	2	.....	8	.....	wnw.	0	0	.....	.....	fair.
Michigan, Erie, Pennsylvania	29.84	757.9	63	17.2	72	s.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	raining.
Minnesota, New York, N. Y.	30.15	765.8	53	11.7	93	sw.	3	1.3	.....	.....	10	.....	.....	.....	.....	.....	.....	foggy.
Monocacy, Yokohama, Japan*	30.14	765.5	51	10.6	93	nw.	.....	.....	1	.....	10	.....	calm	.....	.....	.....	.....	cloudy.
New Hampshire, Newport, R. I.	30.12	765.0	56	13.3	94	sw.	.....	.....	4	.....	10	.....	calm	.....	.....	sm'h	.....	cloudy.
Nipsic, Palermo, Sicily*	30.02	762.5	74	23.3	68	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Onward, Callao, Peru†	30.09	764.3	61	16.1	94	ssw.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos, N. 37° 10′, E. 123° 14′*	30.38	771.6	55	12.8	80	ene.	.....	.....	3	.....	2	.....	calm	.....	.....	sm'h	.....	fair.
Pensacola, Callao, Peru*	29.89	759.2	63	17.2	94	sw.	2	0.9	.....	.....	10	.....	.....	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass	30.02	762.5	57	13.9	87	wsw.	.....	.....	2	.....	10?	.....	nw.	.....	.....	.....	.....	cloudy.
Quinnebaug, Syracuse, Sicily*	30.02	762.5	69	20.6	75	e.	.....	.....	1	.....	2	.....	nw.	.....	.....	.....	.....	fair.?
Ranger, N. 18° 28′, W. 104° 19′	29.94	760.5	80	26.7	?	nw.	.....	.....	1	.....	10	.....	w.	0	0	sm'h	.....	fair.
Richmond, Yokohama, Japan*	30.28	769.1	53	11.7	93	n.	.....	.....	1	.....	2	.....	n.	2.0	51.	.....	.....	sprinkling.
Saratoga, N. 24° 41′, W. 83° 08′	30.04	763.0	76	24.4	90	ne.	.....	.....	4	.....	10	.....	ne.	.....	.....	mod.	e.	clear.
St. Louis, League Island, Pa.	30.40	772.1	49	9.4	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	foggy.
Swatara, N. 7° 43′, W. 34° 49′*	29.73	755.1	81	27.2	78	ene.	.....	.....	4	.....	5	.....	e.	.....	.....	mod.	ene.	fair.
Tennessee, Hampton Roads, Va.	30.28	769.1	59	15.0	88	sw.	9	4.0	.....	.....	2	.....	.....	0	0	.....	.....	fair.
Vandalia, Hampton Roads, Va*	30.20	767.1	57	13.9	93	s.	.....	.....	2	.....	1	.....	calm	.....	.....	.....	.....	clear.
Wabash, Boston, Mass.	30.03	762.7	56	13.3	80	sw.	14	6.3	.....	.....	10	.....	sw.	0.02	0.5	.....	.....	cloudy.
Wachusetts, Mare Island, Cal†	30.28	769.1	46	7.8	76	e.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear.
Wyandotte, Washington, D. C	29.89	759.2	82	27.8	87	sw.	.....	.....	1	.....	5	.....	nw.	.....	.....	.....	.....	fair.
Yantic, Norfolk, Va.	30.22	767.6	55	12.8	93	ssw.	.....	.....	0–1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Merchant Marine.																		
S. S. Circassian, N. 49° 18′, W. 66° 10′*	29.90	759.4	37	2.8	90	nnw.	.....	.....	5	.....	10	.....	nw.	5 h'r	5 h'r	2	nnw.	overcast.
S. S. Grecian, Buenos Ayres, Argentine Rep*	29.89	759.2	67	19.4	89	ese.	.....	.....	2	.....	9	.....	ese.	0	0	sm'h	.....	cloudy.
S. S. Polynesian, Liverpool, Eng.	29.97	761.2	48	8.9	.....	se.	.....	.....	2	.....	0	.....	.....	2 h'r	2 h'r	.....	.....	foggy.
S. S. Scandinavian, N. 51° 21′, W. 35° 17′	30.21	767.3	41	5.0	.....	wnw.	.....	.....	2	.....	4	.....	se.	0	0	mod.	nnw.	d. clouds.
S. S. British Crown, N. 38° 53′, W. 71° 50′†	30.18	766.6	61	16.1	.....	ssw.	.....	.....	3	.....	0	.....	.....	0	0	mod.	ene.	clear.
S. S. Indiana, Philadelphia, Pa †	29.97	761.2	50	10.0	86	sw.	.....	.....	3	.....	10	.....	w.	.....	.....	.....	.....	overcast.
S. S. Lord Clive, off Tuskar, Ireland*†	29.93	760.2	.....	.....	.....	ene.	.....	.....	3	.....	4	.....	ene.	0	0	sm'h	.....	fine.
S. S. Lord Gough, N. 42° 08′, W. 63° 38′	30.12	765.0	45	7.2	.....	sw.	.....	.....	3	.....	2	.....	.....	0	0	sm'h	ese.	clear.
S. S. Ohio, N. 49° 20′, W 37° 16′	30.18	766.6	49	9.4	85	ene.	.....	.....	4	.....	9	.....	ene.	.....	.....	long	ne.	cloudy.
S. S. Pennsylvania, Liverpool, Eng †	30.04	763.0	38	3.3	.....	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	foggy.
S. S. Jason, N. 40° 39′, W. 69° 19′*	29.99	761.8	.....	.....	.....	sw.	.....	.....	2	.....	6 K	.....	.....	.....	.....	2	nw.	cloudy.
S. S. Stella, N. 51° 03′, W. 26° 37′	30.10	764.4	55.4	13	.....	calm	.....	.....	0	.....	7	.....	n.	.....	.....	3	nw.	drizzling.
S. S. Bolivia, N. 46° 46′, W. 48° 52′	.....	.....	43	0.1	92	sse.	.....	.....	1	.....	2	.....	se.	0	0	sm'h	.....	fine.
S. S. Devonia, N. 55° 17′, W. 14° 07′†	30.07	763.8	51	10.6	.....	nw.	.....	.....	1	.....	2	.....	wnw.	.....	.....	sli't	wnw.	clear.
S. S. Dorian, N. 41° 39′, W. 40° 40′ *	29.91	759.7	61	16.1	.....	ese.	.....	.....	3	.....	6	.....	ese.	sli's	sh's	hv'y	ne.	cloudy.
S. S. Galatia, Calcutta, India†	29.85	758.2	78.3	25.7	.....	n.	.....	.....	2	.....	1	.....	n.	0	0	.....	.....	fair.
S. S. Utopia, Suez Canal, Egypt	.....	.....	74	23.3	76	nnw.	.....	.....	1	.....	1	.....	calm	0	0	sm'h	.....	clear.
S. S. Ailsa, Kingston, Jamaica, W. I†	30.02	762.5	84	28.9	83	ne.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	fair.
S. S. Alpin, Maracaribo, Venezuela	29.93	760.2	.....	.....	.....	ne.	.....	.....	2	.....	.....	.....	n.	0	0	.....	.....	
S. S. Antillas, St. John's, Porto Rico, W. I†	29.85	758.2	76	24.4	.....	n.	.....	.....	4	.....	10	.....	n.	sq 'lls	sq 'lls	h'vy	n.	squally.
S. S. Ambrose, N. 1° 24′ W. 47° 24′†	29.88	758.9	.....	.....	.....	e.	.....	.....	3	.....	0	.....	.....	0	0	sm'h	.....	fine.
British Merchant, N. 3° 49′ W. 120° 50′	29.92	760.0	76	24.4	91	e.	.....	.....	3	.....	7	.....	.....	.....	.....	.....	.....	misty.
Dynomene, N. 0° 40′ E. 88° 50′	29.85	758.2	79.0	26.1	95	wnw.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	.....	misty.
May Hulse, N. 1° 45′, W. 26° 03′	29.87	758.7	81	27.2	78	ese.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	blue sky.
S. S. Olympus, N. 30° 37′, E. 32° 18′	.....	.....	88	31.1	43	w.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Mertola, N. 44° 17′, W. 13° 17′	.....	.....	60.0	15.6	100	sse.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	.....	raining.
S. S. Mexico, N. 22° 51′ W. 108° 18′†	29.90	759.4	74.6	23.7	79	n.	.....	.....	4	.....	0	.....	.....	.....	.....	mod.	nw.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Bothnia, N. 43° 05′ W. 53° 55′	30.01	762.2	51	10.6	?	ne.			4		8		ne.	0	0	mod.	e.	overcast.
S. S. Marathon, Malta, Mediterranean	30.11	764.8	79	26.1		w.			3		4		w.	0	0	sm'h	w.	cloudy.
S. S. Parthia, N. 50° 00′, W. 26° 41′*†	30.08	764.0	49	9.4		nnw.			5		3		n.	0	0	mod.	wnw.	clear.
S. S. Pavonia, N. 48° 09′, W. 32° 08′*	30.20	767.1	54	12.2	74	ne.			3		10		ne.	0	0	long	ene.	cloudy.
S. S. Colina. N 38° 40′, W. 67° 05′†	30.20	767.1				sse.			1		3		w.	0	0	mod.	ese.	clear.
S. S. France, N. 43° 36′, W. 56° 17′†	29.91	759.7	46.4	8		ene.			4	ck	0	ne.		0	0	sm'h	ne.	overcast.
S. S. Labradore, N. 46° 00′, W. 49° 57′*†	30.20	767.0	51.8	11		ese.			3		4		ese.			sm'h		clear.
S. S. Abyssinia, N. 44° 11′, W. 53° 40′*	29.99	761.7	50	10.0	86	ne			4		10		ne.	0	0	r'gh	e.	overcast.
S. S. Wyoming, N. 51° 30′, W. 8° 30′*	29.86	758.4	45	7.2		nne.			4		5		nw.	0	0	cross	se.	fair
S. S. Bohemia, Hamburg, Germany †	29.93	760.2				ese.			1		1		se.	0	0			foggy.
S. S. Frisia, N. 42° 39′, W. 58° 49′	30.15	765.8	55	12.8		ne.			3		1		ne.	0	0	long	ne.	fair.
S. S. Gellert, Plymouth, Eng	29.94	760.5	47	8.3		nne.			5		10		se.	0	0			covered.
S. S. Silesia, N. 47° 46′, W. 32° 36′†	30.24	768.1	51.2	10.7		n.			1		10			0	0	3-4	ne.	d. clouds.
S. S. Vandalia, N. 45° 12′, W. 47° 16′	30.14	765.5	57.0	13.9		e.			4		5		e.	0	0	mod.	e.	fair.
S. S. City of Berlin, N. 50° 30′, W. 27° 15′	30.18	766.6	52	11.1	86	nne.			2		10					slt't	ese.	overcast.
S. S. Mentmore, N. 51° —′, W. 14° —′*	29.98	761.5				ene.			5		2		ne.	0	0	sm'h	ne.	clear
S. S. Nessmore, Barrow, Eng *...	29.82	757.4	48	8.9	92	ne.			2		0			0	0			clear.
S. S. Archimedes, N. 42° 40′, W. 55° 35′	29.91	759.7				nne.			5		10		ne.	0	0	long	ne.	overcast.
S. S. Hevelius, Montevideo, Uruguay*†	30.00	762.0	68	20.0		ene.			4		6?		nw.	0	0			clear?
S. S. Ptolmey, S. 5° 30′, W. 35° 15′†	29.93	760.2	80	26.7	82	ese.			3		6		w.ie.	0	0	2	con	d. clouds.
S. S. City of San Antonio, Matanzas, Cuba †	30.12	765.0	74	23.3		ne.			3		0			0	0			clear.
S. S. Colorado, New York, N. Y	30.10	764.5	55	12.8		sse.			1		10		e.	0	0			cloudy.
S. S. Rio Grande, N. 25° 39′, W 85° 15′ †	30.14	765.5	78	25.6		ese.			3		2		ese.	0	0	short	ese.	
S. S. San Marcos, N. 29° 22′, W. 94° 30′	30.16	766.1	76	24.4		s.			5		1		s.				s.	fine.
S. S. Archimede, Palermo, Sicily *†	30.09	764.3	74	23.3	72	ne.			2		2		wnw.	0	0			clear.
S. S. Hermod, N. 45° 34′, W. 48° 26′†	29.96	761.0	50.0	10		se.			1		4		w.	0	0	sm'h	e.	clear.
S. S. Glenapp, Pernambuco, Brazil †	29.97	761.2				se.			3	5 ck	0	se.		0	0			fine.
S. S. Chalmette, N. 31° 02′, W. 79° 18′ †	30.25	768.3	75	23.9		sse.			3		4		ne.	0	0	long	ne.	fair.
S. S. Lone Star, N. 27° 10′ W. 80° 03′ †	30.22	767.6	75	23.9		ese.			2		4		e.	0	0	sm'h		fair
S. S. Denmark, N. 42° 00°, W. 51° 16′			60	15.6		ene.			8		10		e.	9 h'r	9 h'r	r'gh	ene.	raining.
S. S. England, N. 47° 49′, W. 40° 57′	30.13	765.3				s.			1		5?		s.	0	0	mod.	ese.	cloudy.?
S. S. Erin, N. 40° 35′, W. 70° 45′	30.13	765.3	56	13.3		sw.			5		10		sw.	0	0	mod.	w.	misty.
S. S. Greece, N. 48° 26′, W. 36° 09′	30.12	765.0				w.			3		5		w.	0	0	mod.	e.	fair.
S. S. Helvetia, N. 50° 16′, W. 27° 30′	30.18	766.6	50	10.0		n.			7		10		ese.	0	0	short	se.	overcast.
S. S. Santiago, N. 19° 50′ W. 75° 05′	30.13	765.3	80	26.7	78	nne.			3		0			0	0	sm'h		fine
S. S. City of Alexandria, New York, N. Y†	30.18	766.6	53	11.7		ssw.			5									
S. S. City of Merida, N. 21° 20′, W. 89° 40′*†	29.96	761.0	77.0	25		ene.			2		10		ene.	0	0	cross	ene.	cloudy.
S. S. City of Washington, N. 24° 36′, W. 80° 35′ *†	30.30	769.6	81	27.2		ne.			5		8		ne.	0	0	mod.	ne.	fine.
S. S. City of Chester, N. 40° 50′, W. 69° 40′*†	29.96	761.0	50	10.0		ssw.			3							sm'h		hazy.
S. S. Elbe, N. 45° 58′, W. 49° 07′	30.06	763.4	43.7	6.5	100	ene.			4		4		ene.	0	0	long	ene.	hazy.
S. S. Oder, N. 50° 17′, W. 29° 17′	30.20	767.1	50.0	10.0		calm			0		7		nnw.	0	0	mod.	var.	cloudy.
S. S. Ohio, Galveston Roads, Texas	30.06	763.5				se.			4		3		se.	0	0	mod.	se.	fair.
S. S. Salier, N. 48° 45′, W. 35° 32′	30.23	767.8	46.4	8.0		ene.			2		10		ene.	0	0	long	e.	cloudy.
S. S. Werra, N. 50° 33′, W. 17° 30′*	30.08	764.0	50.0	10.0		ne.			5		8		ne.	0	0	mod	ne.	overcast.
S. S. Belgic, Hong Kong, China †	30.12	765.0	70	21.1	75	n.			4		10		ene.	0	0			overcast.
S. S. Oceanic, N. 37° 51′, W. 125° 46′*	30.25	768.3	53	11.7	93	s.			3		8		se.			sm'h		cloudy.
S. S. City of Augusta, N. 39° 07′, W. 74° 19′†	30.17	766.3				s.			6		6		ssw.	0	0	chop	s.	foggy.
S. S. Oregon, N. 40° 50′, W. 124° 40′ †	30.33	770.4	51.5	10.8	82													
S. S. Ancon, San Francisco, Cal †	30.24	768.1	49	9.4	57	se.			2		10		se.					cloudy.
S. S. Dakota, N. 44° 54′, W. 124° 37′ †	30.23	767.8	58	14.4	76	ese.			3		5?		se.			mod	se.	clear?
S. S. Orizaba, N. 33° 43′, W. 118° 15′ †	30.22	767.6	58	14.4	70	se.			6		0					mod.	w.	clear.
S. S. Australia, Sydney, N. S. W.	30.08	764.0	71	21.7	90	ne.			4		1?		ne.	0	0			cloudy?
S. S. City of New York, S. 34° 50′, E. 176° 13′†	30.08	764.0	62	16.7	72	sse.			2		0			0	0	mod.	se.	clear.
S. S. City of Pekin, Yokahama, Japan†	30.55	776.0	50	10.0	86	n.			4		10		ne.	0	0			overcast.
S. S. City of Sydney, S. 14° 21′ W. 169° 40′†	29.95	760.7	81	27.2	83	wnw.			3		2		nw.	0	0	long	se.	fair.
S. S. Colima, N. 22° 58′ W. 108° 24′†	29.99	761.7	78	25.6	91	nnw.			6		1		nnw.	0	0	r'gh	nnw.	hazy.
S. S. Grenada, Acapulco, Mexico†	29.87	758.7	77	25.0	86	calm			0		0			0	0			clear.
S. S. San Jose, N. 8° 54′ W. 79° 30′ *†	30.09	764.3				wnw.			2		2		nw.	0	0	light	ssw.	
S. S. Bermuda, N. 11° 05′, W. 61° 25′†	29.86	758.4	80	26.7		s.			1		4		sse.	0	0	gentle	ne.	fine.
S. S. Muriel, N. 28° 55′, W. 67° 46′	30.09	764.3	74	23.3		nne.			6		10			0	0	r'gh	nne.	fair.
S. S. Belgenland, N. 40° 41′, W. 68° 15′†	30.29	769.4	50	10.0	93	s.			4		1		s.	0	0	long	e.	fair.
S. S. Nederland, N. 50° 28′ W. 1° 07′†	30.32	770.1	51	10.6		ese.			4		8		w.	1 h'r	1 h'r	sm'h	w.	cloudy.
S. S. Peunland, Antwerp, Belgium	30.08	764.0	50.5	10.3	86	s.			1		7		ne.	5 h'r	5 h'r			cloudy.
S. S. Rhynland, N. 47° 40′, W. 46° 00′	30.03	762.7	54	12.2	67	se.			6		4		s.	0	0	long	sse.	fair.
S. S. Switzerland, N. 50° 45′, W. 25° 09′†	30.20	767.1				nne.			2		8		nne.	0	0	long	e.	fair.
S. S. Waesland, Jersey City, N. J	30.14	765.5	53	11.7	93	ssw.			2		10		s.	0	0			overcast.
S. S. Maas, New York, N. Y	29.86	758.5	51.1	10.6	89													
S. S. P. Culand, Rotterdam, Holland	29.84	757.9	74	23.3	90	calm			0		10							raining.
S. S. Schiedam, N. 49° 00′, W. 27° 28′	30.15	765.8	51.8	11.0	86	n.			3		9		wsw.	0	0	long	ne.	cloudy.
S. S. W. A. Scholten, N. 41° 27′, W. 66° 13′	30.23	767.8	55.4	13.0	94	sw.			5		3		w.	0	0	sm'h	nne.	
S. S. State of Florida, N. 53° 36′, W. 16° 24′	29.98	761.5	49	9.4		ne.			2		2?		ene.	1 h'r	1 h'r	sm'h		cloudy?
S. S. State of Georgia, N. 43° 05′, W. 60° 25′†	30.13	765.3	46	7.8		wsw.			3		5			0	0	long	ene.	fine.
S. S. State of Nevada, N. 47° 03′, W. 47° 32′†	30.16	766.1	42	5.6		var.					2		w.	0	0	sm'h		clear.
S. S. Hekla, N. 40° 10′, W. 70° 30′*†	30.18	766.5	66.6	19.2		s.			2		1		s.			mod.	se.	hazy.
S. S. Thingvalla, Copenhagen, Denmark†	30.07	763.8	39.2	4.0		ne.			3		2		ne.	0	0			clear.
S. S. Baltic, N. 49° 13′, W. 37° 01′	30.23	767.8	51	10.6	72	calm			0		0		w.	0	0	sm'h		overcast.
S. S. Celtic, New York, N. Y †	30.09	764.3	53	11.7	80	w.			2		5		wnw.	0	0			fair.
S. S. Romano, N. 49° 43′, W. 12° 18′	29.75	755.6	53	11.7		ne.			5		10		ene.	2 h'r	2 h'r	h'vy	ene.	fine.
S. S. Salerno, Odessa, Russia			40	4.4		nw.			2		10		nw.	5 h'r	5 h'r			raining.
S. S. Catherine Whiting, Fire Island, N. Y †	30.14	765.5				sw.			1							light	e.	
S. S. Norman, N. 39° 56′, W. 75° 08′	30.20	767.1				nne.			4		fg.			0	0			foggy.
S. S. Saxon, N. 42° 10′, W. 70° 10′*†	30.14	765.5	57	13.9		sw.			9		10		sw.			sm'h		
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 37° 30′, W. 73° 46′			62	16.7		wsw.			3		2					long	ne.	
Bk. Adelaid, N. 14° 45′, W. 54° 51′ *†	29.85	758.2	84	28.9		s.			4				ssw.	5 h'r	5 h'r	light	s.	clear.
Bg. Alcira, N. 15° 45′, W. 67° 50′	29.91	759.7	81	27.2		ne.			6		8		n.	0	0	short	n.	cloudy
Sch. Anna A. Holton, N. 38° 16′, W. 74° 32′†	30.17	766.3	63	17.3		ssw.			4		2		s.	0	0	mod.	s.	hazy.
S. Annie M. Law, Kobe, Japan *†	30.34	770.6	53	11.7		nne.			2		0			0	0			fine.
Bk. Anna Thormann, S. 10° 15′ E. 112° 31′*	29.91	759.8	82.0	27.8	78	sse.			3		3 k		s.	0	0	long	ssw.	clear.
S. S. Antonio Lopez, N. 30° 48′, W. 12° 59′ *	30.06	763.5	73.5	23.1	85	s.			1		1			0	0	sm'h		clear.
Bk. Aquidneck, N. 7° 38′ W. 33° 30′*†	30.00	762.0				ene.			4				ene.			light	e.	clear.
Bk. Aureola, N. 46° 43′, W. 21° 10′*†	30.10	764.5	60	15.6		nne.			6		9		nne.	sleet	sleet	h'vy	ene.	cloudy.
Bk. Alba, N. 53° 06′, E. 3° 41′*†	30.15	765.7	48.2	9.0		wnw.			3									cloudy.
Bk. Bayonnaise, N. 21° 42′, W. 48° 17′ *†	29.92	760.0				s.			2		10		s.	10 h'r	10 h'r	large	se.	raining.
Sch. Bonny Doon, N. 40° 23′ W. 68° 20′*†	29.91	759.7				wsw.			3		2		sw.	0	0	long	e.	
S. S. Burswell, N. 52° 10′, E. 1° 50′*†	29.98	761.5	52	11.1		nnw.			2		5?		nnw.	0	0	sm'h		clear?
Bk. Champion, Maassluis, Netherlands †	29.99	761.7	50.0	10.0		nne.			4		2		e.	10 h'r	10 h'r			clear.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.23	767.8	71	21.7	85	ese.			1	0	0			0	0			clear.
Schr. C. R. Flint, N. 27° 37′. W. 84° 25′†	30.25	768.3	73	22.8		e.			3		2		ese	0	0	mod.	ese.	clear.
S. Cornelius, N. 39° 05′, W. 71° 06′			65.3	18.3		sw.			3		2			0	0	long	ene.	clear.
Bkt. David Preston, N. 24° 05′ W. 81° 29′*†	30.05	763.3	76	24.4		ene.					5		n.	4 h'r	4 h'r	sm'h		
Bk. Don Quixote, Pasocroen Roads, Java*	29.72	754.9	88	31.1		se.			3		4		se.			sm'h		fair.
Bk. E. D. Bigelow, N. 40° 49′, W. 48° 36′*†	29.70	754.4				se.			8		8		sse.	3 h'r	3 h'r	cross	sse.	hazy.
Schr. Edith R. Seward, Wilmington, N. C.*†	30.28	769.1	60	15.6		nw.			1		7			0	0			cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
S. E. J. Spicer, New York, N. Y.	30.25	768.3	54	12.2	87	sw.			4		10		ssw.	0	0			overcast.
Bk. Eliza Barss, Bermuda, W. I†	30.07	763.8				nne.			1		5?		nne.	0	0			cloudy.?
S. Enoch Train, N. 19° 16′ W. 54° 30′*†	29.87	758.7				w.			2		8		w.	sh'rs	sh'rs	long	n.	showery.
Bk. Essex, Muscat, Arabia*†	29.98	761.5	87	30.6		ne.			3									
Schr. F. E. McDonald, Mt. Vernon, Va†	30.19	766.8				calm			0		0							fine.
S. S. Foscolia, S. 21° 15′, W. 40° 12′†	29.50	749.3				var.			2		1		ene.	0	0	cross		fine.
Bk. Freya, N. 39° 05′, W. 15° 16′			68	20.0		ssw.			5		0			5 h'r	5 h'r	mod.	wsw.	hazy.
S. Glendon, S. 39° 50′ W. 87° 10′†	29.91	759.7	68	20.0		nw.			5		10		nw.	3 h'r	3 h'r	sm'h		misty.
S. Grecian, N. 12° 14′, W. 51° 25′†	29.92	760.0	83	28.3	83	ese.			5		5		e.	0	0	long	n.	hazy.
Bk. Gronsvaer, S. 44° 50′ E. 142° 25′†	30.16	766.1	60.0	15.6	94	wsw.			5		3		w.	2 h'r	2 h'r	5	wsw.	squally.
Bk. Hattie G. McFarland, N. 36° 35′, W. 74° 06′†	30.34	770.6	65	18.3		calm			0		2			0	0	long	ne.	fine.
Schr. Hattie Weston, Mayaro Bay, Trinidad, W. I*†.	29.93	760.2	81	27.2		se.			3		10		se.	0	0	mod.	ese.	cloudy.
S. Hedwig, N. 25° 27′, W. 69° 41′	30.07	763.7	74.7	23.7	80	nne.			6		4		nne.	1 h'r	1 h'r	4	nne.	squally.
Schr. Isabel Alberto, N. 28° 55′ W. 83° 06′†	30.21	767.3				e.			2		0			0	0	sm'h		clear.
S. Ivy, Cork, Ireland†	30.19	766.8	44	6.7		ene.			3		2		ene.	0	0			clear.
Schr. Jennie N. Huddell, Philadelphia, Pa†	30.10	764.5				sw.			1		8			0	0			fair.
S. S. John Hopkins, Boston, Mass			42	5.6		sw.			5		10			0	0			overcast
Schr. John L. Thomas, Vivorilla Cays, C. A *†	30.03	762.7				ne.			3		2		e.	¼ h'r	¼ h'r			fair.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.98	761.5				se.			1		1			0	0			clear.
Bk. Joseph A. Ropes, N. 22° 46′. E. 60° 08′*†	29.99	761.7	80	26.7	82	se.			1		1					sm'h		fair.
Light House Tender, Laurel, Key West, Fla.†	30.12	765.0	74	23.3		ne.			2		2		ene.	0	0			clear.
Bk. Liberia, N. 15° 11′, W. 28° 44′*	29.97	761.2	79	26.1	82	ene.			4		1			0	0			fine.
Bg. Lilian, Demerara, Brit. Guiana†	29.90	759.4	82	27.8		e.			3		3			0	0			clear.
Bg. L. & W. Armstrong, N. 34° 24′, W. 73° 01′*†	30.32	770.1				calm			0		1		n.	0	0	mod.	ne.	clear.
S. S. Madrid, Fayal, Azores*†	30.06	763.5	63	17.2	94	nne.			5		2		ne.	shr's	shr's	sm'h		fine.
S. S. Malabar, N. 9° 44′ E. 68° 43′*†	29.92	760.0				calm			0		0			0	0	sm'h		clear.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	30.04	763.0	72	22.2		ene.			6		0			½ h'r	½ h'r			clear.
Bg. Mattie B. Russell, Off Aligator Light, Fla*†	30.28	769.1				ene.			5		3		ene.	0	0	large	ne.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	29.93	760.2				ne.							ne.	0	0	long	ne.	fair.
S. M. P. Grace, N. 29° 27′, W. 122° 02′*	30.27	768.8	59	15.0		nnw.			4		5?		n.	0	0	sm'h	nnw.	cloudy?
Bg. Myrtle, N. 31° 01′, W. 73° 23′†	30.32	767.6				ne.			1		1		ne.	0	0	long	ne.	clear.
Bk. Norena, N. 35° 00′, W. 75° 00′*†	30.30	769.6				nw.			1		0			0	0	light	ne.	fine.
S. Orealia, N. 5° 38′, E. 83° 04′*	29.87	758.7				nne.			4		6		nne.	3 h'r	3 h'r	light	s.	fine.
Bk. Orpheus, N. 37° 05′ W. 58° 00′	30.19	766.8	70	21.1		nne.			4		8 k		n.	0	0	mod.	n.	fair.
S. Paramita, San Francisco, Cal†	29.94	760.5	57	13.9		nne.			3				n.	0	0			foggy.
S. S. Peconic, N. 36° 50′, W. 22° —′*†	29.74	755.4	67	19.4		w.			6		2		w.	1 h'r	1 h'r	long	cross	fair.
S. S. Radnorshire, N. 31° 15′, E. 32° 20′*†	30.08	764.0				n.			2		0			0	0	mod	wnw.	clear.
Bk. Rebus, N. 37° 08′, W. 73° 47	30.09	764.3	58	14.4		sw.			3		4		sw.	0	0		ne.	fair.
S. St. Francis, S. 28° 45′ W. 86° 45′†	30.51	774.9	65	18.3		sse.			6		4		sse.	0	0	mod.	ssw.	squally.
Schr. S. B. Hubbard, N. 30° 49′, W. 80° 00′†	30.31	769.9	70	21.1		nnw.			4		5			0	0	long	ne.	fine.
S. S. Strathleven, N. 37° 40′, W. 9° 14′	29.98	761.5	62.2	16.8	98	sse.			5		4		sw.			con.	w.	clear.
Bg. Teneriffe, N. 34° 40′, W. 75° 02′	30.09	764.3				nne.			2					0	0	mod.		fine.
Bk. Truro, N. 45° 00′ W. 23° 00′*†	30.01	762.2				nne.			5–6		10		nne.	11 h'r	11 h'r	mod.	nne.	cloudy.
U.S.F.C.S.S. Fish Hawk, Washington, D. C†	30.37	771.4	52	11.1	86	e.			1		10		e.	0	0			cloudy.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.01	762.3	68.0	20		sw.			3		10		sw.	0	0			covered.
Schr. Viola Reppard, N. 32° 30′ W. 78° 03′†	30.18	766.6	72	22.2		calm			0		0			0	0	small	ene.	
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†.	30.00	762.0				sse.			1		2		sse.	0	0			fine.
Bk. Wandering Jew, S. 10° 41′, W. 33° 08′†	29.85	758.2	80	26.7		ne.			4		9		e.	0	0	mod	e.	cloudy.
Bk. Warden Law, S. 43° 50′, W. 81° 18′	30.22	767.6				wsw.			5		2		wsw.	0	0	sm'h	wsw.	fair.
Bgt. Willie, S. 38° 38′, E. 2° 00′*†	30.13	765.3	66	18.9		nw.			4		8		nw.	0	0	long	wsw.	cloudy.

International Chart I. November 12, 1882. Isobars and Isotherms.

UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 13, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.09	764.2	66.9	19.4	79	se.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.11	764.7	69.1	20.6	66	wsw.	.....	.....	1	.....	4	.....	.....	0	0	cloudy	Thève.
La Calle	.....	.....	30.10	764.4	68.4	20.2	89	wsw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair	Fonfréde.
Tunis	.....	.....	30.11	764.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.23	767.9	78.1	25.6	44	sw.	.....	.....	2	.....	2	.....	.....	0	0	fair	Pérès.
Tebessa	.....	.....	30.25	768.4	71.2	21.8	43	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	75.6	24.2	8	nw.	.....	.....	2	.....	4	.....	.....	0	0	cloudy	Lonchamp.
Laghouat	.....	.....	30.34	770.6	73.4	23.0	31	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.28	769.1	73.0	22.8	29	.....	.....	.....	.....	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	30.05	763.3	30.14	765.5	55.1	12.8	83	s.	4	1.8	.....	.....	1	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.62	752.4	30.19	766.7	46.4	8.0	55	e.	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.44	747.7	30.24	768.1	34.0	1.1	79	n.	3.8	1.7	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.24	742.7	30.16	766.0	37.8	3.2	70	n.	.....	.....	2	.....	9 ks	.....	s.	0	0	.....	Julius Mikolik.
Gratz	28.93	734.9	30.23	767.8	40.8	4.9	71	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.65	727.8	30.13	765.3	40.5	4.7	64	nnw.	.....	.....	4	.....	6	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.74	730.1	30.13	765.4	38.7	3.7	73	ene.	.....	.....	2	.....	9	.....	.....	0	0	cloudy	The Staff.
Lemberg	29.12	739.6	30.15	765.8	35.2	1.8	84	nw.	.....	.....	3	.....	10	.....	.....	0.028	0.7	.....	Dr. T. Stanecki.
Pola	29.95	760.8	30.07	763.7	55.8	13.2	48	e.	.....	.....	2	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.65	753.2	30.12	765.1	41.0	5.0	60	n.	.....	.....	3	.....	4	.....	.....	0.004	0.1	.....	Joseph Midlinszky, S. J.
Szegedin	.....	.....	.....	.....	45.5	7.5	60	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.99	761.8	30.10	764.4	52.5	11.4	37	ne.	.....	.....	3	.....	10	.....	.....	0	0	.....	Royal Academy.
Vienna	29.49	749.0	30.23	767.9	40.6	4.8	62	ne.	.....	.....	1	.....	8	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	30.20	767.1	30.30	769.6	39.2	4.0	89	w.	4	1.8	.....	.....	7	.....	.....	0.045	1.1	misty	W. Boswell
Armagh, Observatory	29.99	761.7	30.24	768.1	36.3	2.3	96	ne.	1	0.4	.....	.....	7	.....	.....	.....	.....	foggy	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.12	765.0	44.3	6.8	93	ene.	20	8.9	.....	.....	2	.....	.....	.....	.....	misty	John Hartnup.
Bolton, Sharples	29.60	751.8	30.14	765.5	42.6	5.9	76	e.	12	5.4	.....	.....	7	.....	.....	.....	.....	d. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.75	755.6	30.14	765.5	42.5	5.8	82	ne.	.....	.....	4	.....	10	.....	.....	0.05	1.3	overcast	McLandsborough & Preston
Bridgetown, Barbadoes	29.81	757.2	29.84	757.9	79.0	26.1	86	se.	.....	.....	2	.....	6	.....	.....	.....	.....	gloomy	Corpl. J. Surgenor, A. H. C.
Cardington	29.86	758.4	29.98	761.5	45.0	7.2	60	e.	.....	.....	4.0	.....	3	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E.	29.83	757.7	29.96	761.0	42.5	5.8	93	e.	.....	.....	2	.....	10	.....	.....	blank	blank	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.65	753.1	29.88	758.9	44.9	7.2	71	nne.	.....	.....	6	.....	9	.....	.....	.....	.....	gloomy	The Staff.
Fort Napier, Natal	27.38	695.4	29.60	751.8	96.0	35.6	24	w.	.....	.....	1	.....	9	.....	.....	.....	.....	showery	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	87.0	30.6	72	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	29.98	761 5	30.04	763.0	70.0	21.1	90	e.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	30.05	763.3	30.26	768.6	36.4	2.4	85	ene.	.....	.....	1	.....	7	.....	.....	.....	.....	foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.78	756.4	29.96	761.0	44.6	7.0	75	ene.	.....	.....	5	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.42	747.3	29.72	754.9	48.2	9 0	98	ne.	.....	.....	3	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	29.92	760.0	29.96	761.0	44.5	6.9	74	ne.	24	10.7	.....	.....	10	.....	.....	.....	.....	threatening	The Staff.
Leicester, Museum	29.81	757.2	30.08	764.0	45.6	7.6	90	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	blue sky	J. C. Smith.
Malta, Mediterranean	30.00	762 0	30.07	763.8	68.8	20.4	97	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.07	763.8	30.11	764.8	76.2	24.6	66	ne.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.54	750.3	30.08	764.0	44.4	6.9	67	ene.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.76	755.9	29.99	761.7	43.2	6.2	76	ne.	.....	.....	6	.....	8	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.77	756.1	29.85	758.2	46.2	7.9	85	ne.	.....	.....	6	.....	10	.....	.....	.....	.....	overcast	John Merrifield.
Sandwick Manse, Orkneys	30.15	765.8	30.26	768 6	36.4	2.4	95	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.04	763.0	30.11	764.8	53.0	11.7	56	ne.	.....	.....	1	.....	0	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.74	755.4	30.02	762.5	43.9	6.6	84	ne.	.....	.....	1	.....	6	.....	.....	0.04	1.0	d. clouds	W. F. Cooper.
Silloth, Rectory	30.19	766.8	30.22	767.6	41.0	5.0	84	ne.	.....	.....	1	.....	3	.....	.....	0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.16	766.1	43.0	6.1	79	ne.	7	3.1	.....	.....	5	.....	.....	.....	.....	d. clouds	I. New.
Strathfield Turgiss	29.73	755.1	29.95	760.7	43.0	6.1	81	ne.	.....	.....	3	.....	9	.....	.....	.....	.....	showery	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.86	758.4	29.91	759.7	46	7.8	76	ne.	.....	.....	6	.....	10	.....	.....	.....	.....	gloomy	W. Newcombe.
Valencia, Observatory	30.15	765.8	30.17	766.3	44.4	6.9	77	nne.	7	3.1	.....	.....	1	.....	.....	.....	.....	misty	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.02	762.5	30.06	763.5	38	3.3	81	e.	8	3.6	.....	.....	10 n	.....	calm	0.185	4.7	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	30.02	762.5	30.08	764.0	35	1.7	82	e.	1	0.4	.....	.....	10 s	.....	e.	0.10	2.5	cloudy	G. A. Blair.
Father Point, Quebec*	29.96	761.0	29.98	761.5	31	— 0.6	96	e.	5	2.2	.....	.....	10 n	.....	calm	0.13	3.3	threatening	J. McWilliams.
Fort Garry, Manitoba*	29.02	737.1	29.92	760.0	7	—13.9	100	w.	12	5.4	.....	5 cs	0	n.	.....	0	0	fair	James Stewart.
Halifax, N. S*	29.91	759.7	30.04	763.0	43	6.1	100	e.	8	3.6	.....	.....	fg	.....	.....	0.058	1.5	foggy	A. Allison.
Kingston, Ontario*	29.37	746.0	29.70	754.4	52	11.1	93	sw.	8	3.6	.....	5 ck	5 s	sw.	sw.	0.34	8.6	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	29.58	751.3	29.79	756.7	36	2.2	100	n.	9	4.0	.....	.....	fg	.....	.....	0.15	3.8	foggy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.01	736.8	29.72	754.9	40	4.4	92	w.	17	7.6	.....	.....	10 n	.....	sw.	0.10	2.5	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.15	740 4	29.86	758.4	34	1.1	100	sw.	4	1.8	.....	.....	10 n	.....	.....	0.59	15.0	light snow	H. Morgan.
Port Stanley, Ontario	29.20	741.7	29.87	758.7	33	0.6	96	w.	10	4.5	.....	.....	10 n	.....	w.	0.55	14.0	light snow	M. Payne.
Quebec, Quebec*	29.52	749.8	29.85	758.2	33	0.6	88	ne.	.....	.....	6	.....	10 n	.....	.....	0.18	4.6	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.20	741.7	29.66	753.4	42	5.6	92	sw.	2	0.9	.....	.....	10 n	.....	sw.	0.11	2.8	light rain	W. H. McIntyre.
Saugeen, Ontario*	29.02	737.1	29.75	755.6	39	3.9	89	sw.	15	6.7	.....	.....	10 n	.....	w.	0	0	cloudy	.....
St. Andrews, N. B	29.93	760.2	29.98	761.5	40	4.4	92	ese.	3	1.3	.....	.....	10 n	.....	.....	0.11	2.8	.....	.....
Sydney, C. B*	30.04	763.0	30.11	764.8	40	4.4	86	ne.	4	1.8	.....	.....	10 n	.....	.....	0.01	0.3	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.41	747.0	29.80	756.9	40	4.4	92	w.	25	11.2	.....	.....	10 n	.....	.....	0.63	16.0	heavy rain	Magnetic Observatory.
Yarmouth, N. S*	29.88	758.9	29.95	760.7	48	8.9	96	calm	0	0	.....	fg.	fg.	.....	.....	0	0	foggy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.33	719.6	29.78	756.4	34.0	1.1	95	w.	.....	.....	5	.....	10 s	.....	nw.	0.110	2.8	snowing	Wm. Wylie.
St. Johns, Newfoundland	30.03	762.7	30.29	769.4	34	1.1	90	n.	1	0.4	.....	0	0	.....	.....	0.23	5.8	clear	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.97	761.2	30.00	762.0	69.0	20.6	73	s.	5.5	2.5	.....	.....	10 ks	.....	.....	0	0	dull	John Duthie.
Cape Town, C. G. H. Obs'y	29.91	759.7	29.95	760.7	73.5	23.1	63	sse.	41	18.3	.....	0	4	.....	.....	0	0	.....	The Staff, for D.Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
Chinese (*Sub-series*).																			
Tchang-kia-tchouang			30.34	770.7	48.2	9.0	89	ne.	3.6	1.6			10			0	0	foggy	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.22	767.6	30.24	768.2	58.3	14.6	97	ene.	20.6	9.2			10 n			0.902	22.9	raining	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	30.30	769.6	30.35	770.8	34.5	1.4	66	e.			2		0						Oversergent Fischer.
Fanöe	30.31	769.9	30.34	770.5	36.1	2.3	87	e.			4		6						Overloerer Lauridsen.
Godthaab, Greenland	29.22	742.3	29.27	743.4	19.6	— 6.9	97	nnw.			2		10					snowing	S. Kleinschmidt.
Ivigtut	29.25	743.0	29.27	743.5	25.3	— 3.7		nw.			6		5						
Stykkisholm, Iceland	29.47	748.6	29.52	749.7	38.5	3.6	87	s.			7		10					raining	A. O. Thorlacius.
Thorshavn	30.14	765.6	30.18	766.5	44.1	6.7	76	ssw.	7	3			4						Overloerer Bergh.
Vestervig	30.25	768.4	30.35	770.8	32.5	0.3	78	se.			2		0						Loerarer Oesterbol.
Jacobshavn	29.19	741.3	29.23	742.5	13.3	—10.4		calm			0		4						
French.																			
Agen, Normal School	29.24	742.6	29.88	758.9	57.2	14	86	se.			1		ckn		w.	0	0		M. Labroue, Director.
Alençon, Normal School	29.30	744.3	29.85	758.3	52.2	11.2	97	s.			1		fg	n.	n.	0.094	2.4	foggy	M. Nicot, Director.
Arras, Engineer School	29.26	743.3	29.52	749.9	40.3	4.6	80	ne.			4		10 n			1.043	26.5	heavy rain	M. Fénéon, Command't.
Avignon, Normal School	29.91	759.8	29.99	761.8	57.2	14	76	n.			1					0	0		M. Giraud, Director.
Bar-sur-Seine	29.27	743.4	29.83	757.6	50.4	10.2	78	s.			1	0	8 k		nw.	0.264	6.7	very cloudy	M. Saillard, Director.
Beauvais, Normal School	29 53	750.0	29.80	757.0	42.3	5.7	97	e.			1		10		e.	0.713	18.1	raining	M. Frère Eugène Marie.
Besançon, Normal School	28.97	735.7	29.86	758.5	50.0	10	86	e.			1		10 n		sw.	0.08	2.	raining	M. Gobin, Director.
Bordeaux, Observatory	29.53	750.0	29.78	756.4	66.6	19.2	46	sw.			1		2			0	0	slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.28	743.7	29.83	757.7	57.9	14.4	74	calm			0		k		ene.	0.091	2.3		M. Malet, Director.
Brest, Naval Observatory	29.46	748.3	29.71	754.5	55.4	13.0	93	e.			1		9	e.		1.181	30.0		M. de Kermaree, Dir.
Caen, Normal School	29.60	751.7	29.67	753.6	54.0	12.2	84	sw.			1		10			1.22	31.	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.49	749.0	29.81	757.2	42.3	5.7	88	se.			2		10			0.327	8.3	covered	M. Jadot, Director.
Charleville, Normal School	29.39	746.5	29.91	759.7	37.0	2.8	82	se.			1		10			0.047	1.2	raining	M. Grimard, Director
Clermont-Ferrand Obs'y	28.47	723.2	29.79	756.6	64.8	18.2	52	sw.			2		8		sw.	0.004	0.1	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.03	737.3	29.88	758.9	52.0	11.1	71	s.			2		7		sw.	0	0		M. de Villemontée, Dir.
Commercy, Normal School	28.85	732.8	29.72	754.9	39.2	4	93	ese.			3		10	ese.	ese.	0.150	3.8	covered	Dr. Coulet, Director.
Gap, Normal School	27.50	698.5	30.07	763.7	47.8	8.8	73						7		s.	0	0		M. Jeangirard, Director.
Gréasque, du Rhone	28.89	733.7	30.00	761.9	59.9	15.5	62	s.			3		5		s.	0	0		M. Kiss, Director.
Grenoble, Normal School	29.20	741.6	29.98	761.5	48.9	9.4	76	ese.			1	ck	0	nnw.		0	0		M. Ablard, Director.
Guéret	28.24	717.3	29.87	758.7	55.8	13.2	65	sw.			1		5		ssw.	0	0	cloudy	M. Delorme, Dir.
Lamballe, Normal School	29.37	746.0	29.65	753.0	57.2	14	98	se.			1		10 n		se.	0.43	11.	raining	M. Olliffrault, Director.
Lescar, Normal School	29.22	742.2	29.76	756.0	72.0	22.2	41	ne.			1	5 ck	0			0	0	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.58	751.3	29.68	753.9	57.9	14.4	93	s.			1		10			0.984	25.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.86	733.0	29.91	759.7	56.3	13.5	66	s.			3	0	8 n		w.	0	0	very cloudy	M. André, Director.
Mans, Normal School	29.43	747.6	29.73	755.2	53.6	12.0	97	sw.			1					0.831	21.1		M. Piboeu, Director.
Marseille, Observatory	29.72	755.0	29.99	761.8	62.6	17.0	71	se.			2		8		sw.	0	0		M. Stephan, Director.
Mt. Louis	24.76	629.0	29.61	752.0	46.4	8.0	60	wsw.	16.8	7.5			7			0	0		M. Caré for Dr. Fines.
Montpellier, Normal School	29.82	757.4	29.95	760.6	57 6	14.2	78	nne.			3		5	e.	e.	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	29.89	759.3	29.90	759.4	38.5	3.6	93	nne.			1		n			0	0		M. Hasse, Director
Nantes, Observatory	29.61	752.2	29.74	755.3	58.3	14.6	94	ssw.			0-1		10 n		ssw.	0.378	9.6	raining	M. Larocque, Director.
Perpignan, Observatory	29.82	757.4	29.93	760.2	59.0	15.0	85	ne.	5.6	2 5			10		var.	0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.16	537.6			30.7	— 0.7		w.			2		5		w.	0	0	cloudy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.93	734.7	30.00	762.0	55.4	13	86	s.			1		5	s.	s.	0	0	cloudy	M. Tailleu.
Puy de Dôme Obs'y, Summit	24.99	634.7			44.8	7.1	74	wsw.			4		2		wsw.	0.024	0.6	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	29.78	756.4	29.81	757.2	63.5	17.5	78	ssw.			1		2		w.	0.32	8.	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.54	750.2	29.75	755.6	56.8	13.8	93	ssw.			1		10		sw.	0.126	3.2	covered	M. Brotier, Director.
Rodez, Normal School	27.76	705.2	29.91	759.7	51.8	11	95	ne.			1		10		w.	0	0	covered	M. Seger, Director.
Rouen, Normal School	29.71	754.6	29.76	755.8	45.3	7.4	91	e.			1		10	e.		1.122	28.5	covered	M. Mouillot.
Saint Lô					55.8	13.2	98	se.			1				s.	1.083	27.5		M. Delaplanche, Dir.
Saint Maur, Observatory	29.59	751 5	29.75	755.7	48.0	8.9	97	se.			1					0.772	19.6		M. Renou, Director.
Toulouse, Observatory	29.21	742.0	29.93	760.3	62.2	16.8	75	sse.			3		5	w.		0	0	cloudy	M. Baillaud, Director.
Tours	29.56	750.9	29.74	755.4	59.0	15.0	78	ssw.			1		10	sw.	ssw.	0.453	11.5	covered	M. de Tastes.
Versailles, Observatory	29.25	743.0	29.74	755.4	48.2	9.0	97	s.			2					0.957	24.3		Dr. A. Bérigny, Director.
German.																			
Ansbach	28.64	727.4	30.14	765.6	37.4	3.0	67	se.			2		8	se.		0	0		Prof. Jnedt.
Bamberg	29.28	743.7	30.13	765.2	41.9	5.5	70	e.			1	0	7 ks		e.	0	0	foggy	Prof. Dr. Hoh.
Berlin	30.12	765.0	30.30	769.7	36.9	2.7	85	ne.			2		7			0.063	1.6		Prof. Dr. Arndt.
Breslau	29.76	756.0	30.30	769.6	35.4	1.9	64	nne.			2		9			0.075	1.9		Royal University Obs'y.
Carlsruhe	29.60	751.9	30.05	763.3	42.8	6.0	61	e.			2		10	e.		1.240	31.5		Albert Senz.
Cassel	29.39	746.4	30.10	764.5	41.0	5.0	74	e.			2		8	e.		0	0		Dr. H. Möhl.
Frankfort-on-the-Main	29.72	755.0	30.10	764.6	39.9	4.4	74	w.			2		10			0	0		Physical Society.
Friedrichshafen	28.58	725.8	30.06	763 4	40.3	4.6	87	nne.			2		10	nw.		0.209	5.3		Wilhelm, Chief Tel.
Hamburg	30.22	767 6	30.31	769.9	38.8	3.8	82	ene.			2		2			0	0	hazy	E. Preller.
Kiel	30.28	769.2	30.30	769.6	39.0	3.9	78	ne.			2		9			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29 83	757.6	30.27	768.8	38.8	3.8	69	e.			3		6			0	0		H. Leppig, Asst.
Magdeburg	30.08	763.9	30.27	768.9	40.6	4.8	84	e.			1	c	3 ks	w.	e.	0.012	0.3		Weather Observatory.
Memel	30.26	768.7	30.31	769.9	30.4	— 0.9	63	ene.			1	0	2 s						Issermann.
Munich	28.22	716.9	30.09	764.3	35.8	2.1	72	e.			4		10	ne.		0	c		Central Station.
Neufahrwasser	30.32	770.2	30.34	770.6	34.0	1.1	83	calm			0		2	nne.		0.087	2.2		A. Lothes.
Neustadt, Palatinate	29.50	749.3	30.03	762.7	40.1	4.5	78	nw.			2		10			0	0		Dicknether.
Stuttgart	29.08	738.7	30.00	762.1	41.0	5.0	64	e.			1		10			0.717	18.2		Prof. Dr. Schoder.
Wustrow	30.33	770.3	30.35	771.0	39.7	4.3	68	e.			2	0	6 k		s.	0	0		Profs. Brandes & Reimer
Greek.																			
Athens	29.67	753.7	30.05	763.3	68.5	20.3		n			1.0	0	8 k			0	0		Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.97	761.2	30.02	762.5	87.0	30.6	41	se.	14.0	6.3			0			0	0	blue sky	
Deesa	29.47	748.4	29.94	760.4	86.1	30.1	24	sse.	2.0	0.9			0			0	0	blue sky	
Bombay	29.87	758.6	29.91	759.6	78.9	26.1	74	nw.	13.0	5.8			0			0	0	blue sky	
Poona, Yarrowda	28.05	712.4	29.89	759.3	82.8	28.2	21	ne.	5.0	2.2			1	e.		0	0	d. clouds	
Trichinopoly	29.61	752.2	29.90	759.3	82.1	27.8	66	e.	1.0	0.4			6			0	0	d. clouds	
Bellary	28.38	720.9	29.84	757.9	84.2	29.0	40	ne.	2.0	0.9			5			0	0	d. clouds	
Belgaum	27.35	694.6	29.88	758.9	78.0	25.6	36	ene.	5.0	2.2			2	e.		0	0	d. clouds	
Lahore	29.26	743.2	30.03	762.6	68.7	20.4	61	calm	0	0			0			0	0	blue sky	
Roorkee	29.07	738.3	29.99	761.8	69.8	21.0	57	calm	0	0			0			0	0		
Agra	29.42	747.1	29.99	761.6	78.7	25.9	29	calm	0	0			0			0	0	blue sky	
Nagpur	28.89	733.9	29.95	760.6	76.9	24.9	35	e.	3.0	1.3			0			0	0	blue sky	
Jubbulpore	28.61	726.6	29.98	761.4	76.0	24.4	28	e.	6.0	2.7			0			0	0	blue sky	
Lucknow	29.59	751.6	29.97	761.2	77.2	25.1	44	calm	0	0			0			0	0	blue sky	
Allahabad	29.65	753.0	29.97	761.2	69.8	21.0	66	calm					0			0	0	blue sky	
Patna	29.78	756.4	29.97	761.2	73.5	23.1	71	n.	1.6	0.7			2	n.	n.	0	0		
Hazaribagh	27 93	709.3	29.98	761.4	70.1	21.2	66	n.	3.2	1.4			10	n.	s.	0	0	overcast	
Cuttack	29.86	758.5	29.94	760.6	75.0	23.9	71	calm	0	0			0			0	0	blue sky	
Calcutta, Alipore	29.92	760.0	29.94	760.6	74.7	23.7	77	calm	0	0			3			0	0	d. clouds	
Dhubri	29.83	757.6	29.95	760.7	74.2	23.4	76	calm	0	0			0			0	0	blue sky	
Chittagong	29.87	758.6	29.96	761.0	75.9	24.4	84	w.	1.3	0.6			2			0	0	blue sky	
Sibsagar	29.60	751.9	29.95	760.6	72.0	22.2	83	e.	2.0	0.9			0			0	0	blue sky	
Zanzibar, Africa	29.91	759.6	29.93	760.2	81.6	27.6	72	n.	4.7	2.1			6		e.			raining	
Jeypore	28.53	724.5	29.98	761.6	76.6	24.8	40	wnw.	2.0	0.9			0			0	0	blue sky	
Italian.																			
Udine	29.70	754.3	30.11	764.9	50.0	10.0	43	ne.	4.9	2.2			10			0	0		Prof. Giovanni Clodig.
Milan	29.58	751.4	30.11	764.8	50.5	10.3	73	s.	3.8	1.7			8	nw.		0	0		Prof. Schiapparelli.
Padua	29.98	761.6	30.10	764.4	53.2	11.8	51	ne.					7	w.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.14	740.1	30.06	763.4	49.1	9.5	70	ene.	1.3	0.6			8	ene.		0	0		Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Genoa	29.84	758.0	30.04	762.9	55.0	12.8	59	ne.	6.3	2.8	.....	.....	10	sw.	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.16	715.2	30.11	764.7	47.1	8.4	71	w.	.....	.....	2	.....	4	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	30.09	764.2	30.13	765.4	54.3	12.4	81	nw.	8.7	3.9	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.78	756.5	30.04	763.0	60.3	15.7	71	se.	.....	.....	2	.....	10	sw.	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	29.87	758.8	29.96	760.9	62.6	17.0	74	sw.	4.3	1.9	.....	.....	10	sw.	.....	0	0	.....	Prof. P. Monte.
Rome	29.83	757.6	30.00	762.1	65.1	18.4	60	ssw.	8.1	3.6	.....	.....	9	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	29.80	756.9	30.05	763.3	64.9	18.3	73	e.	0.9	3.1	.....	.....	8	nw.	.....	0.020	0.5	.....	Prof. G. de Giorgi.
Cosenza	29.16	740.7	30.05	763.3	61.5	16.4	71	sw.	1.8	0.8	.....	.....	9	w.	.....	0.024	0.6	.....	Prof. D. Conti.
Cagliari	29.83	757.6	30.02	762.5	68.0	20.0	58	s.	.....	.....	2	.....	5	nw.	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.82	757.3	30.06	763.6	69.4	20.8	50	wsw.	9.8	4.4	.....	.....	4	.....	.....	0	0	.....	Prof. G. Cacciatore.
Syracuse	29.99	761.7	30.03	762.8	65.5	18.6	71	nne.	4.3	1.9	.....	.....	4	nne.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.51	749.5	30.03	762.7	65.8	18.8	69	se.	0.7	0.3	.....	.....	9	nw.	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.08	560.8	.....	.....	24.4	— 4.2	70	sw.	.....	.....	4	.....	10	.....	.....	0	0	covered	Prof. P. F. Denza.
Valdobbia	22.12	561.8	.....	.....	25.9	— 3.4	72	e.	.....	.....	2	.....	10	.....	.....	0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.46	773.8	30.49	774.6	36.0	2.2	91	calm	.....	.....	0	0	0	.....	.....	0	0	clear	Hattori.
Awomori	30.46	773.7	30.49	774.4	35.0	1.7	88	ssw.	2.3	1.0	.....	0	0	.....	.....	0	0	clear	K. Ogawa.
Hakodate	30.47	774.0	30.49	774.3	31.0	— 0.6	82	nnw.	2.8	1.2	.....	0	0	.....	.....	0	0	clear	
Hiroshima	.....	.....	.....	.....	55.0	12.8	78	nne.	5.5	2.4	.....	.....	10 ck	.....	.....	0	0	covered	Y. Miwa.
Kanazawa	30.31	769.9	30.41	772.5	52.4	11.3	80	se.	4.1	1.8	.....	.....	10	.....	.....	0	0	cloudy	S. Endo.
Kioto	30.22	767.6	30.39	771.9	59.6	15.3	70	ne.	0.8	0.4	.....	.....	10 s	.....	.....	0.143	3.6	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	30.07	763.8	30.27	768.9	60.6	15.9	79	n.	0.9	0.4	.....	.....	10 s	.....	.....	0.015	0.4	.....	S. Takehayashi.
Nemuro	30.44	773.2	30.50	774.7	35.0	1.7	96	n.	2.4	1.1	.....	0	0	.....	.....	0	0	clear	
Niigata	30.40	772.1	30.43	772.9	48.2	9.0	95	calm	0	0	.....	0	8 ck	.....	.....	0	0	cloudy	M. Morita.
Nobiru	30.42	772.8	30.44	773.2	43.6	6.4	98	nw.	3.8	1.7	.....	.....	10 s	.....	.....	0	0	covered	H. Midzushina.
Osaka	30.35	771.0	30.37	771.4	58.7	14.8	73	ne.	11.5	5.1	.....	.....	10s;ks	.....	w.	0.040	1.0	cloudy	
Sapporo	.....	.....	.....	.....	29.8	— 1.2	79	s.	3.6	1.6	.....	1	8	.....	.....	0.095	2.4	overcast	
Tokei Obs'y, Yeddo	30.39	772.0	30.47	774.0	51.0	10.6	89	ne.	2.5	1.1	.....	7cs;ck	0	.....	.....	0	0	cloudy	The Staff.
Wakayama	30.32	770.0	30.37	771.5	58.4	14.7	75	ne.	2.2	1.0	.....	4	0	.....	.....	0.452	11.5	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.88	758.9	30.07	763.8	78.7	25.9	63	ese.	10.5	7.4	.....	0	4 k;n	.....	se.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.70	602.1	29.93	760.1	51.8	11.0	87	e.	inap.	inap.	.....	4 c	0	.....	.....	0	0	light haze	Prof. Vicente Fernandez.
Leon	24.34	618.2	30.14	765.5	48.9	9.4	88	ene.	.....	.....	1	8 c	0	sw.	.....	0	0	cloudy	Prof. M. Leal.
Mazatlan	29.67	753.6	29.92	760.0	67.0	19.4	82	nnw.	5.3	2.3	.....	0	1 s	.....	.....	0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.16	588.2	30.28	769.2	49.1	9.5	71	calm	0	0	.....	4 ck	0	w.	.....	0	0	clear	The Staff.
Morelia	24.87?	619.07	30.32	770.1	50.9	10.5	69	e.	0.9	0.4	.....	1 c	1 k	s.	se.	0	0	clear	M. Tena, M. D.
Orizaba	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Pabellon, Aguascallentes	23.94	608.0	29.97	761.2	54.5	12.5	83	calm	0	0	.....	.....	.....	.....	.....	0	0	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.38	593.9	30.22	767.5	46.4	8.0	88	calm	0	0	.....	0	0	.....	.....	0.004	0.1	clear	Prof. P. Spina.
Zacatecas	22.63	574.7	30.34	770.6	51.3	10.7	69	ne.	2.8	1.2	.....	6 c	3 c	se.	n.	0	0	cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.02	762.4	30.02	762.4	40.3	4.6	.....	e.	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Gronlingen	30.16	766.0	30.21	767.4	37.0	2.8	.....	e.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	30.15	765.8	30.15	765.8	37.8	3.2	.....	e.	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.04	762.9	30.04	762.9	37.0	2.8	81	ene.	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Utrecht	30.06	763.6	30.11	764.8	36.9	2.7	84	ene.	.....	.....	2	.....	8	.....	.....	0	0	very cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	30.27	768.8	30.33	770.4	34.9	1.6	75	calm	0	0	.....	.....	4	.....	.....	0	0	.....	
Brono	30.13	765.4	30.17	766.4	34.2	1.2	92	calm	0	0	.....	.....	10	.....	.....	0	0	.....	
Christiania	30.17	766.3	30.33	770.3	24.8	— 4.0	80	e.	0	0	.....	.....	4	.....	.....	0	c	foggy	
Gjæsvær	29.98	761.4	30.00	762.0	32.9	0.5	.....	nne.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	
Lodingen	30.06	763.6	30.11	764.8	32.5	0.3	71	calm	.....	.....	0	.....	5	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.07	763.8	30.15	765.8	62.2	16.8	78	e.	9.8	4.4	.....	.....	5	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.02	737.0	30.01	762.2	63.7	17.6	78	ssw.	5.6	2.5	.....	.....	10	.....	.....	0.051	1.3	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	29.96	761.0	30.05	763.2	71.1	21.7	71	w.	4.9	2.2	.....	.....	9	wsw.	.....	0.024	0.6	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.67	753.6	30.03	762.7	60.3	15.7	92	ssw.	21.7	9.7	.....	.....	10	.....	.....	0.795	20.2	raining	The Staff.
Ponta Delgada, Azores	30.14	765.6	30.21	767.4	63.7	17.6	82	ne.	6.3	2.8	.....	.....	3	.....	.....	0.138	3.5	.....	
Saint Paul de Loando	29.63	752.7	29.84	757.8	82.0	27.8	87	wsw.	0.7	0.3	.....	.....	3	sse.	.....	0.055	1.4	.....	
Serra da Estrella	25.21	640.3	29.93	760.3	47.7	8.7	99	wsw.	22.4	10.0	.....	.....	10	.....	.....	0.472	12.0	rain & fog	
RUSSIAN.																			
Akmolinski	29.24	742.8	30.39	771.9	25.7	— 3.5	78	se.	11	5	.....	1 c	0	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	30.04	762.9	30.00	763.4	11.5	—11.4	93	nw.	2	1	.....	.....	6 ks	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	29.87	758.7	29.79	756.6	48.2	9.0	58	wsw.	4	2	.....	0	1 s	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	30.00	763.4	30.00	777.3	19.0	— 7.2	78	n.	2	1	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	29.98	761.4	30.24	768.1	18.0	— 7.8	89	w.	4	2	.....	0	0	.....	.....	0.016	0.4	.....	Observatory.
Ekaterinburg	29.13	740.0	30.14	765.5	30.4	— 0.9	76	se.	13	6	.....	.....	10	.....	.....	0	0	light clouds	Meteorological Obs'y.
Kasan	29.54	750.3	29.82	757.4	32.9	0.5	93	nne.	2	1	.....	.....	10	.....	.....	0.134	3.4	light snow	Observatory.
Kertch	29.80	757.0	29.82	757.5	48.4	9.1	76	calm	0	0	.....	0	8 n	.....	.....	0.209	5.3	.....	Lagorio & Sastyres.
Kieff	29.16	740.7	29.82	757.5	32.2	0.1	100	nw.	18	8	.....	.....	10 n	.....	.....	.....	.....	snowing	Observatory.
Lugan	29.54	750.3	29.75	755.6	45.3	7.4	66	wsw.	9	4	.....	.....	8	.....	.....	0.106	2.7	.....	Meteorological Obs'y.
Nikolaiev	29.82	757.4	29.89	759.2	43.3	6.3	71	w.	31	14	.....	0	8 ku	.....	.....	0.008	0.2	.....	Capt. Kurdukow.
Pekin, China	30.31	769.8	30.45	773.4	40.6	8.1	91	calm	0	0	.....	.....	10 n	.....	.....	.....	.....	raining	Physical Observatory.
St. Petersburg	30.15	765.8	30.17	766.2	20.8	— 6.2	95	nw.	2	1	.....	.....	9 n	.....	.....	inap.	inap.	.....	Central Physical Obs'y.
Semipalatinsk	29.03	737.4	30.53	775.5	21.9	— 5.6	90	ne.	7	3	.....	.....	10	.....	.....	0	0	.....	Major Lasarew.
Tashkend, Laboratory	28.38	720.9	29.90	760.9	52.9	11.6	53	calm	0	0	.....	.....	2	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.60	726.5	30.01	762.3	58.8	14.9	44	nw.	2	1	.....	3 cs	0	.....	.....	0	0	.....	Physical Observatory.
Tomsk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vladivostock	30.36	771.2	30.43	772.9	21.6	— 5.8	.....	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Warsaw	29.82	757.4	30.27	768.9	26.4	— 3.1	78	n.	11	5	.....	.....	10	.....	.....	.....	.....	heavy cld's.	Astronomical Obs'y.
Wilna	29.80	756.8	30.24	768.2	24.4	— 4.2	77	sw.	7	3	.....	.....	10	.....	.....	0.091	2.3	.....	Berg, Assistant.
Yeniseisk	30.79	782.0	31.13	790.7	—15.0	—26.1	78	calm	0	0	.....	.....	0	.....	.....	0	0	.....	M. C. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	30.21	767.3	49	9.4	93	s.	.....	.....	4	3	0	s.	.....	0	0	clear	J. Youngclause
North Unst	.....	.....	30.27	768.8	.....	.....	.....	sw.	.....	.....	3	4	0	sw.	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.82	757.4	29.92	760.0	68.4	20.2	66	s.	3.6	1.6	.....	0	2	.....	.....	0	0	clouds	Antonio Reve, Director.
Bilbao, Met. Obs'y	29.77	756.2	29.83	757.7	71.8	22.1	46	w.	5.8	2.6	.....	4	1	n.	.....	0	0	cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.99	685.6	29.95	760.7	55.6	13.1	62	sw.	10.7	4.8	.....	0	6	.....	.....	0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.81	706.4	30.04	763.0	56.5	13.6	71	calm	0.2	0.1	.....	.....	10	.....	.....	0.138	3.5	covered	The Staff.
Murcia, Met. Obs'y	29.89	759.3	30.05	763.2	60.8	16.0	61	sw.	2.0	0.9	.....	5	5	ne.	.....	0	0	covered	Olayo Diaz, Director.
Oviedo	28.85	732.9	29.71	754.6	68.0	20.0	51	s.	15.7	7.0	.....	.....	9 kn	.....	w.	0.069	17.0	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.80	733.0	29.74	755.4	58.5	14.7	98	sw.	9.8	4.4	.....	.....	10	.....	.....	0.547	13.9	raining	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.87	758.7	29.93	760.2	78.2	25.7	89	ne.	3.3	1.5	.....	0	1 ks	.....	.....	0.559	14.2	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.01	762.3	30.11	764.8	69.8	21.0	72	s.	7.7	3.4	.....	5	2	w.	w.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.80	757.0	29.89	759.3	77.7	25.4	95	n.	15.7	7.0	.....	3 cs	3 kn	n.	n.	0	0	.....	Manuel Maese.
Tuguegarao, Philippine Id's	29.84	757.8	29.97	761.1	76.8	24.9	90	calm	0	0	.....	0	1 ks	.....	.....	0	0	clear	José L. Yraetorza.
SWEDISH.																			
Haparanda	29.96	760.9	30.00	761.9	11.1	—11.6	100	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.04	763.1	30.10	764.4	20.5	— 6.4	90	calm	.....	.....	0	.....	1	.....	.....	0	0	.....	

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill	Weather.	Observers.
Swedish—Continued.																			
Hernosand	30.08	764.1	30.13	765.4	34.9	1.6	71	nw.			2		0			0	0		
Stockholm	30.03	762.7	30.21	767.2	30.9	— 0.6	66	w.			2		0			0	0		
Wisby	30.18	766.6	30.24	768.1	34.9	1.6	75	wnw.			4		5			0.071	1.8		
Sub-series.																			
Upsala	30.10	764.5	30.19	766.7	31.3	— 0.4	77	wnw.	2.9	1.3			0			0	0		S. G. Fineman.
Swiss.																			
Geneva	28.57	725.6	30.03	762.7	43.2	6.2	91	ssw.			1		10			0	0	covered	**The Observatory.**
Turkish.																			
Constantinople			30.14	765.6	51.4	10.8	58	ne.	9	4.0			8		n.	0	0		The Observatory.
Valona			30.11	764.9	65.1	18.4		s.			1		5			0	0	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.06	763.6	70.2	21.2	62	w.			1		5 k		se.	0	0		Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	29.75	755.6	29.83	757.7	58.5	14.7	77	s.	3	1.3			10 s		sw.	inap.	inap.	cloudy	J. O. Barnes.
Alpena, Michigan	29.11	739.4	29.81	757.2	30	— 1.1	77	w.	14	6.3		0	4 s		w.	0	0	fair	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.24	641.1	30.34	770.6	24	— 4.4	56	n.	2	0.9			10 s			0	0	cloudy	W. O. Barnes.
Assinnaboine, Ft., Montana	27.16	689.9	30.14	765.5	32	0.0	62	sw.	28	12.5		0	2 s		sw.	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	28.84	732.5	30.06	763.5	64	17.8	84	s.	14	6.3		0	7 ks		s.	0	0	fair	H. C. Smith.
Atlantic City, New Jersey	29.90	759.4	29.91	759.7	57	13.9	93	s.	9	4.0		5 ck	5 s			0	0	cloudy	Jas. M. Watson.
Augusta, Georgia	29.91	759.7	30.11	764.8	57	13.9	93	calm	0	0		0	1 s;fg			0	0	clear	John Healy.
Baltimore, Maryland	29.85	758.2	29.90	759.4	58	14.4	87	calm	0	0			fg.			0	0	dense fog	Geo W **Felger.**
Barnegat, New Jersey	29.89	759.2	29.91	759.7	57.0	13.9	93	sw.	13	5.8		10 cs	0	w.		0	0	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.49	723.6	30.18	766.6	14	—10.0	83	calm	0	0		0	3 s			0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.25	691.9	30.21	767.3	32	0.0	71	sw.	22	9.8		0	0			0	0	clear	S. Wheaton.
Bismarck, Dakota	28.12	714.2	30.04	763.0	21	— 6.1	87	sw.	6	2.7		5 c	0			0	0	fair	Cyrus Cramer.
Block Island, Rhode Island	29.91	759.7	29.94	760.5	56	13.3	93	sw.	12	5.4		3 ck	4 s	nw.	w.	0.02	0.5	fair	J. T. Elker.
Boise City, Idaho	27.76	705.1	30.70	779.8	17.5	— 8.1	91	calm	0	0		0	0			0	0	clear	B. E. Light.
Boston, Massachusetts	29.76	755.9	29.92	760.0	58.0	14.4	81	sw.	16	2.7		10 ck	fg.	sw.		0	0	cloudy	O. B. Cole.
Brownsville, Texas	30.20	767.1	30.25	768.3	44.3	6.8	100	n.	16	7.2			10 n		n.	1.48	37.6	heavy rain	M. McCarty.
Buffalo, New York	29.04	737.6	29.82	757.4	43.3	6.3	89	w.	13	5.8			10 n		w.	0.61	15.5	light rain	W. Finn.
Buford, Fort, Dakota	28.14	714.7	30.12	765 0	23	— 5.0	73	sw.	6	2.7		0	0			0	0	clear	F. A. Mellen.
Burlington, Vermont	29.50	749.3	29.81	757.2	56.0	13.3	83	s.	12	5.4		3 cs	5 s	w.	sw.	0.10	2.5	cloudy	W. B Gates.
Cairo, Illinois	29.86	758.4	30.28	769.1	33.8	1.0	80	nw.	6	2.7		0	5 ks		nw.	0.36	9.1	fair	W. H. Ray.
Cape Henry, Virginia	30.00	762.0	30.02	762.5	61	16.1	84	s.	12	5.4		7 ck	0	s.		0	0	fair	A. K. Alderson.
Cape May, New Jersey	29.88	758.9	29.93	760.2	64.0	17.8	73	s.	15	6.7		5 ck	2 s	w.	sw.	0	0	fair	W. E. Smith.
Cape Mendocino, California	29.80	756.9	30.33	770.4	51	10.6	52	se.	7	3.1		0	0			0	0	clear	J. J. McLean.
Cedar Keys, Florida	30.13	765.3	30.15	765.8	67	19.4	90	se.	6	2.7		0	0			0	0	clear	F. W. Mixer.
Champaign, Illinois	29.28	743.7	30.14	765.5	27.8	— 2.3	54	nw.	19	8.5			10 s		nw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.07	763.8	30.13	765.3	62	16.7	87	sw.	5	2.2		0	fg.			0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.13	739.9	30.01	762.2	59.0	15.0	87	sw.	5	2.2		10 cs	fg.	sw.		0	0	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.19	741.4	30.04	763.0	54.0	12.2	86	nw.	15	6.7			10 n		nw.	0.76	19.3	light rain	B. L. Goulding.
Cheyenne, Wyoming	24.13	612.9	30.34	770.6	19.8	— 6.8	38	nw.	20	8.9		0	0			0	0	clear	E. McGovern.
Chicago, Illinois	29.31	744.5	30.05	763.3	26.1	— 3.3	88	w.	14	6.3			10 s			inap.	inap.	cloudy	J. Mitchell.
Chincoteague, Virginia	29.95	760.7	29.97	761.2	58.5	14.7	96	s.	14	6.3		2 c	2 ks	sw.	s.	0	0	fair	C. F. Dickens.
Cincinnati, Ohio	29.38	746.2	30.08	764.0	36	2.2	79	nw.	10	4.5			10 ks		nw.	0.43	10.9	threatening	R. B. Watkins.
Cleveland, Ohio	29.17	740 9	29.94	760.5	35	1.7	98	w.	16	7.2			10 n			0.50	12.7	light snow	J. B. Newlin.
Coleman City, Texas	28.60	726.4	30.49	774.4	23	— 5.0	88	n.	6	2.7		0	0			0	0	clear	L. Dorman.
Columbus, Ohio	29.09	738.9	29.98	761.5	37	2.8	82	nw.	14	6.3			10 n		nw.	0.17	4.3	light rain	D. Cuthbertson.
Concho, Fort, Texas	28.48	723.4	30.48	774.2	25.0	— 3.9	76	n.	4	1.8		0	0			0	0	clear	J. McGlone.
Custer, Fort, Montana	26.95	684.5	30.27	768.8	5	—15.0	54	e.	8	3.6		0	4 s		calm	0	0	fair	W. B. Lamar.
Davenport, Iowa	29.47	748.5	30.16	766.1	22	— 5.6	87	w.	13	5.8		hz.	4 ks		w.	0	0	fair	R. R. Martin.
Davis, Fort, Texas	25.37	644.4	30.27	768.8	28	— 2.2	61	n.	4	1.8		0	0			0	0	clear	J. Williams.
Dayton, Washington T'y	28.08	728.5	30.46	773.7	22	— 5.6	88	n.	1	0.4		0	0			0	0	clear	H. Clifford.
Deadwood, Dakota	25.40	645.1	30.23	767.8	28	— 2.2	80	ne.	7	3.1		0	0			0	0	clear	G. W. Scott.
Delaware Breakwater, Del.	29.92	760.0	29.94	760.5	60	15.6	87	sw.	21	9.4		7 cs	2 ks	sw.	sw.	0	0	cloudy	T. S. Townsend.
Denison, Texas	29.60	751.8	30.44	773.2	28.0	— 2.2	64	nw.	4	1.8		0	0			0	0	clear	J. W. Byram.
Denver, Colorado	24.87	631.7	30.37	771.4	21.0	— 6.1	53	s.	10	4.5		0	0			0	0	clear	F. M. Neal.
Des Moines, Iowa	29.28	743.7	30.23	767.8	19	— 7.2	84	nw.	6	2.7		0	0			inap.	inap.	clear	F. W. Conrad.
Detroit, Michigan	29.19	741.4	29.93	760.2	37.0	2.8	82	w.	14	6.3			10 s		w.	0.10	2.5	cloudy	G. F. R. Wappenhans.
Dodge City, Kansas	27.69	703.3	30.43	772.9	13	—10.6	66	w.	4	1.8		0	0			0	0	clear	V. P. Temple.
Dubuque, Iowa	29.36	745.7	30.10	764.5	21	— 6.1	70	w.	8	3.6			10 s			inap.	inap.	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.23	742.4	30.02	762.5	20	— 6.7	84	w.	9	4.0		0	9 s		w.	0.11	2.8	cloudy	N. B. Conger.
Eagle Pass, Texas	29.62	752.3	30.45	773 4	48.0	8.9	42	nw.	11	4.9			10 s			0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25.72	653.3	30.58	776.7	—14	—25.6	75	n.	2	0.9		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	29.91	759.7	29.98	761.5	43.0	6.1	100	e.	17	7.6			10n;fog		e.	0.27	6.9	light rain	D. C. Murphy.
Elliott, Fort, Texas	27.53	699.2	30.46	773.7	18	— 7.8	58	nw.	4	1.8		0	0			0	0	clear	W. J. Cundall.
El Paso, Texas	26.51	673.3	30.36	771.1	28	— 2.2	77	w.	1	0.4		0	0			0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.11	739.4	29.87	758.7	44	6.7	83	nw.	16	7.2			10 n		nw.	0.84	21.3	light rain	Peter Wood.
Escanaba, Michigan	29.15	740.4	29.85	758.2	26.0	— 3.3	76	nw.	7	3.1			10 s		nw.	0.01	0.3	cloudy	George Heathcote.
Fredericksburg, Texas	28.60	726.4	30.42	772.7	36	2.2	64	n.	10	4.5		1 cs	0			0	0	clear	Frank Halwegler.
Galveston, Texas	30.20	767.1	30.25	768.3	49	9.4	71	n.	42	18.8		10 cs	0	n.		0.04	1.0	threatening	E. O'C. Macinerney.
Grand Haven, Michigan	29.24	742.7	29.94	760.5	31.5	— 0.3	68	w.	26	11.6			10 s		w.	0.01	0.3	cloudy	J. Mueller.
Grant, Fort, Arizona	25.35	643.9	30.19	766.8	36	2.2	66	n.	2	0.9		8 cs	0			0	0	cloudy	Robert O. Lord.
Hatteras, North Carolina	30.09	764.3	30.11	764.8	62	16.7	93	sw.	8	3.6		3 c	hz.	s.		0	0	clear	R. M. Crawford.
Helena, Montana	26.00	660.4	30.38	771.6	16	— 8.9	83	sw.	2	0.9			10 s		calm	0	0	cloudy	N. C. Smith.
Henrietta, Texas	29.42	747.3	30.46	773.7	22	— 5.6	73	nw.	5	2.2		0	0			0	0	clear	J. P. Sherry.
Huron, Dakota	28.68	728.5	30.16	766.1	14	—10.0	64	w.	7	3.1		0	5 k		w.	0.03	0.8	fair	S. W. Glenn.
Indianapolis, Indiana	29.24	742.7	30.08	764.0	32	0.0	78	w.	8	3.6			10 s		nw.	0.21	5.3	cloudy	O. Schutze
Indianola, Texas	30.24	768.1	30.27	768.8	47.6	8.7	63	n.	36	16.1		10 k	0	n.		0.80	20.3	cloudy	I. A. Reed.
Jacksboro, Texas	29.24	742.7	30.46	773.7	30	— 1.1	67	n.	1	0.4		0	0			0	0	clear	D. J. Carr.
Jacksonville, Florida	30.10	764.5	30.15	765.8	63	17.2	90	calm	0	0		0	fg.			0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.56	700.0	30.23	767.8	23	— 5.0	73	sw.	5	2.2		0	0			0	0	clear	A. Schneider.
Keokuk, Iowa	29.52	749.8	30.21	767.3	23.5	— 4.7	88	w.	4	1.8		0	0			0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.08	764.0	30.10	764.5	72.5	22.5	84	ne	8	3.6		0	0			0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.06	763.5	30.08	764.0	59	15.0	93	sw.	10	4.5		3 c	1 s	ne.		0	0	fair	H. Mc P. Baldwin.
Knoxville, Tennessee	28.89	733.8	29.96	761.0	61.4	16.3	100	w.	6	2.7			10 n		w.	0.73	18.5	heavy rain	J. A. Cody.
La Crosse, Wisconsin	29.23	742.4	30.05	763.3	20	— 6.7	84	w.	8	3.6			10 s			inap.	inap.	cloudy	S. C. Emery.
Leavenworth, Kansas	29.39	746.5	30.33	770.4	22	— 5.6	88	nw.	3	1.3		0	0			0	0	clear	A. W. Browne.
Lewiston, Idaho	29.08	753.9	30.55	776.0	28.5	— 1.9	66	e.	12	5.4		0	7 s			0	0	fair	W. Bell.
Little Rock, Arkansas	30.01	762.2	30.34	770.6	35	1.7	79	nw.	6	2.7		hz.	1 s			0.32	8.1	clear	W. U. Simens.
Los Angeles, California	29.83	757.7	30.23	767.8	46	7.8	54	ne.	8	3.6		0	0			0	0	clear	T. S. Collins.
Louisville, Kentucky	29.50	749.3	30.09	764.3	35	1.7	79	w.	14	6.3			10ks		w.	0.33	8.4	cloudy	L. M. Dey.
Lynchburg, Virginia	29.22	742.2	29.94	760.5	61.2	16.2	78	s.	1	0.4		0	2 s		sw.	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.11	739.4	29.80	756.9	33.0	0.6	88	nw.	19	8.5			10 n		nw.	0.10	2.5	light snow	F. R. Day.
Macon, Fort, North Carolina	30.08	764.0	30.09	764.3	65	18.3	100	sw.	3	1.3		4 cs	4 k		sw.	0	0	cloudy	F. P. Chaffee.
Madison, Wisconsin	28.97	735.8	30.04	763.0	19	— 7.2	84	w.	12	5.4			10 s		w.	0	0	cloudy	C. A. Shaw.
Maginnis, Fort, Montana	25.59	650.0	30.10	764.5	32	— 0.0	62	w.	8	3.6		0	0			0	0	clear	F. Burke.
McKavett, Fort, Texas	28.11	714.0	30.49	774.4	30	— 1.1	51	ne.	5	2.2		0	0			0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.07	738.4	29.84	757.9	27	— 2.8	88	w.	12	5.4			10 s		nw.	0.03	0.8	cloudy	J. Gilligan.
Memphis, Tennessee	29.95	760.7	30.30	769.6	34	1.1	88	w.	4	1.8		0	0			0.22	5.6	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.22	742.2	30.01	762.2	22	— 5.6	73	w.	17	7.6			10 n			inap.	inap.	light snow	W. Line.
Missoula, Fort, Montana	27.10	688.3	30.52	775.2	5	—15.0	31	calm	0	0		0	0			0	0	clear	J. H. Young.
Mobile, Alabama	30.04	763.0	30.08	764.0	69.5	20.8	93	sw.	5	2.2			10 n		sw.	0.29	7.4	light rain	C. A. Read.
Montgomery, Alabama	29.82	757.4	30.06	763.5	67	19.4	93	sw.	7	3.1			10 s		w;sw	inap.	inap.	cloudy	J. B. McLaughlin.

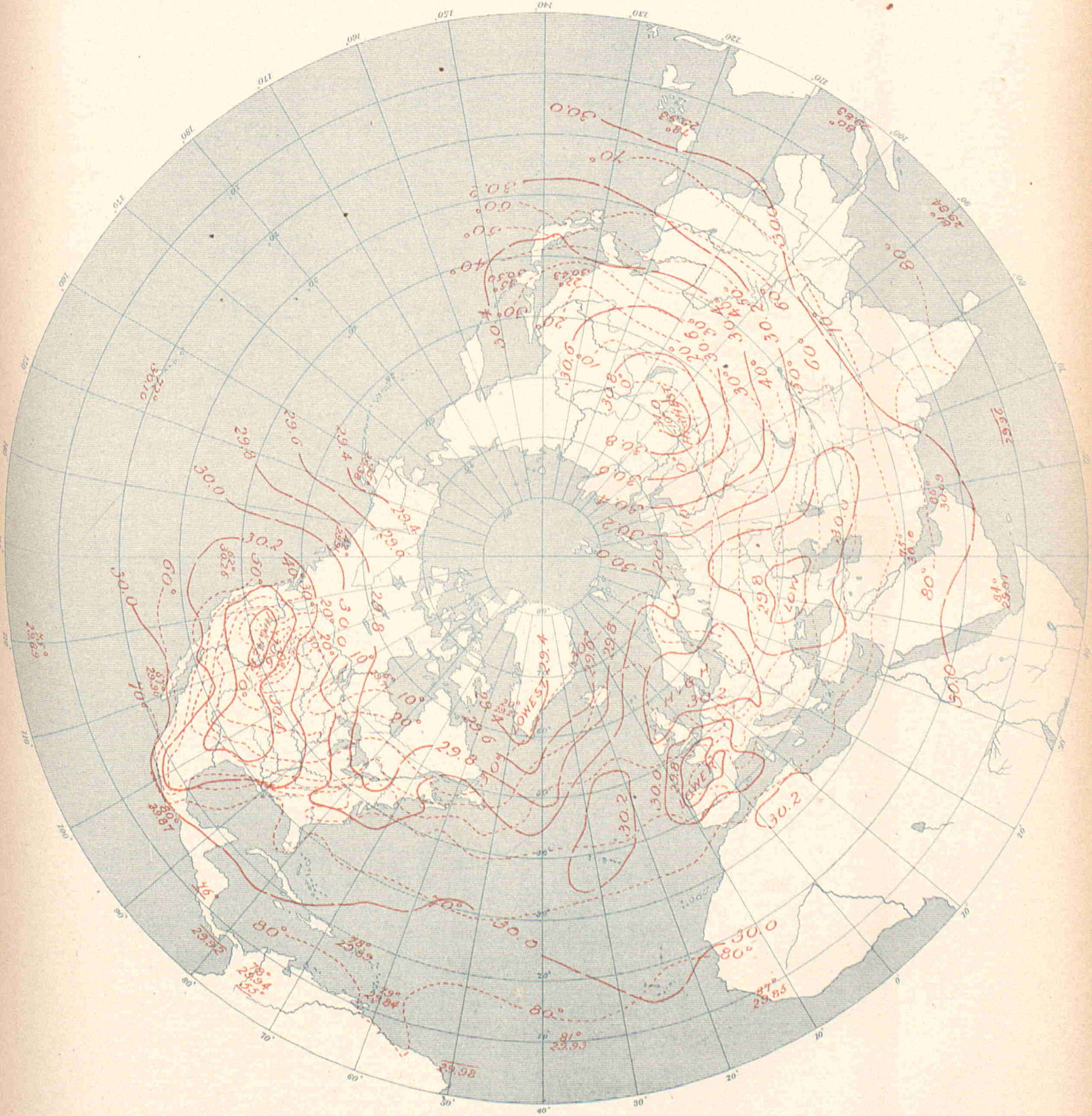
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.00	736.6	30.06	763.5	— 7	—21.7	58	s.	8	3.6		0	0			0.16	4.1	clear	H. Bessant.
Morgantown, W. Virginia	28.81	731.8	29.87	758.7	62.5	16.9	84	sw.	4	1.8		0	9 s		sw.	inap.	inap.	threatening.	J. C. Sprigg, jr
Mt. Washington, N. H.	23.71	602.2	30.27	768.8	38.0	3.3	92	w.	48	21.5		6 cs	4 ks		w.	0.44	11.2	cloudy	J. G. Linsley.
Nashville, Tennessee	29.57	751.1	30.17	766.3	41.0	5.0	73	nw.	14	6.3			10 ks		nw.	0.24	6.1	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	29.78	756.4	29.90	759.4	53	11.7	100	sw.	4	1.8			fg.			0	0	dense fog	J. H. Sherman.
New London, Connecticut	29.88	758.9	29.93	760.2	55	12.8	100	calm	0	0		10 k	fg.	s.		0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.03	762.7	30.09	764.3	66.0	18.9	90	n.	14	6.3			10 n		n.	0.02	0.5	light rain	L. Dunne.
Newport, Rhode Island	29.90	759.4	29.95	760 7	55.3	12.9	95	sw.	3	1.3		2 ok	7ks;ak 10s;fg	nw.	sw.	0	0	cloudy	W. McGillivray.
New York, New York	29.74	755.4	29.92	760.0	55	12.8	100	s.	5	2.2					e.	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.00	762.0	30.03	762.7	59	15.0	87	s.	9	4.0		3 cs	0			0	0	clear	Wm. Davis.
North Platte, Nebraska	27.25	692.1	30.33	770.4	13.6	—10.2	76	nw.	6	2.7		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y.	30.30	769.6	30.34	770.6	38.0	3.3	54	n.	5	2.2			10 s			0	0	cloudy	J. Dascomb.
Omaha, Nebraska	29.05	737.9	30.29	769.4	17.2	— 8.2	80	w.	8	3.6		0	0			inap.	inap.	clear	A. Pollak.
Oswego, New York	29.41	747.0	29.75	755.6	55.0	12.8	84	s.	7	3.1		5 cs	2 s	sw.	sw.	0.26	6.6	fair	S. W. Beall.
Palestine, Texas	29.87	758.7	30.44	773.2	33.5	0.8	60	n.	10	4.5		0	0			0.68	17.3	clear	L. M. Pindell.
Pensacola, Florida	30.05	763.3	30.08	764.0	73.0	22.8	82	s.	12	5.4			10 s		s.	0	0	cloudy	M. McGauran.
Philadelphia, Pa.	29.81	757.2	29.91	759.7	59	15.0	81	sw.	3	1.3			10 ks		sw.	inap.	inap.	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.72	450.1	30.38	771.6	— 1.0	—18.3	79	n.	7	3.1		0	0			0	0	clear	H. Hall.
Floche, Nevada	24.30	617.2	30.44	773.2	15.8	— 9.0	73	nw.	11	4.9		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	28.96	735.6	29.81	757.2	61.0	16.1	78	s.	8	3.6			10 n		sw.	inap.	inap.	light rain	W. Daly.
Poplar River, Montana	27.87	707.9	30.16	766.1				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Fort Eads, Louisiana	30.06	763.5	30.07	763.8	74.1	23.4	85	s.	13	5.8		0	8 s		sw.	0	0	threatening.	M. Herman.
Port Huron, Michigan	29.18	741.2	29.90	759.4	32.8	0.4	88	w.	15	6.7			10 s			0.04	1.0	cloudy	W. O. Bailey.
Portland, Maine	29.89	759.2	29.94	760.5	49	9.4	86	ne.	8	3.6			fg.			0	0	dense fog	W. W. Eichelberger.
Portland, Oregon	30.38	771.6	30.45	773.4	32.0	0.0	78	calm	0	0			10 s		se.	0	0	cloudy	M. L. Hearne.
Portsmouth, N. C.					65	18.3	90	s.	6	2.7		2 c	5 k	n.	s.	0	0	fair	F. S. Coburn.
Prescott, Arizona	24.96	634.0	30.30	769.6	19	— 7.2	87	n.	1	0.4		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	29.91	759.7	29.94	760.5	55	12.8	93	s.	8	3.6		2 ck	5 s	sw.	sw.	0	0	fair	P. T. Jenkins.
Punta Rassa, Florida	30.12	765.0	30.13	765.3	66	18.9	92	ne.	5	2.2		1 ck	0			0	0	clear	W. J. Evans.
Red Bluff, California	29.98	761.5	30.39	771.9	35	1.7	79	n.	3	1.3		0	0			0	0	clear	E. van Dyk.
Rochester, New York	29.96	738.1	29.76	755.9	52	11.1	86	nw.	6	2.7			10 s		sw.	0.13	3.3	threatening.	E. W. McGann
Roseburg, Oregon	29.88	758.9	30.45	773.4	32	0.0	83	s.	1	0.4		4 c	0	nw.		0	0	fair	J. J. Nanry.
Sacramento, California	30.33	770.4	30.41	772.4	36.9	2.7	89	n.	2	0.9		0	0			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.63	752.6	30.26	768.6	26.8	— 2.9	76	w.	13	5.8		0	6 s		w.	0	0	fair	J. H. Weber.
St. Paul, Minnesota	29.12	739.6	30.04	763.0	17.0	— 8.3	91	w.	8	3.6		0	0			inap.	inap.	clear	P. F. Lyons.
St. Vincent, Minnesota	29.01	736.8	29.94	760.5	8	—13.3	87	se.	6	2.7		0	0			0	0	clear	C. B Dilley.
Salt Lake City, Utah	26.11	663.2	30.68	779.3	10	—12.2	61	e	2	0.9		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.67	753.6	30.39	771.9	41.5	5.3	40	nw.	10	4.5			8 s		nw.	0	0	cloudy	T. J. Kenan.
San Diego, California	30.10	764.5	30.18	766.6	45.6	7.6	48	ne.	2	0.9		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.22	742.2	29.94	760.5	35	1.7	89	nw.	20	8.9			10 s		nw.	0.30	7.6	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.88	758.9	29.91	759.7	56.5	13.7	74	s.	3	1.3		10 k	0	s.		0	0	cloudy	B. A. Blundon.
San Francisco, California	30.32	770.1	30.39	771.9	45	7.2	76	w.	4	1.8		0	1 s		w.	0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.35	593.1	30.40	772.1	10	—12.2	48	e.	9	4.0		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.04	763.0	30.13	765.3	62	16.7	87	sw.	4	1.8		0	fg.			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.40	670.5	30.22	767.6	36	2.2	49	sw.	40	17.9		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	30.13	765.3	30.38	771.6	36	2.2	69	nw.	8	3.6		0	1 s			0.58	14.7	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.17	740.9	30.48	774.2	23.5	— 4.7	69	n.	4	1.8		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.34	618.2	30.18	766.6	26.0	— 3.3	58	calm	0	0			10 s			0	0	cloudy	N. D. Lane.
Sitka, Alaska	29.84	757.9	29.91	759.7	41.6	5.3	74	e.	12	5.4			10 ks		e.	0.79	20.1	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.91	759.7	30.40	772.1	26.0	— 3.3	76	w.	4	1.8		0	0			0.06	1.5	clear	J. B. Campbell.
Smithville, North Carolina	30.06	763.5	30.10	764.5	60	15.6	93	sw.	3	1.3		0	2 s			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.37	720.6	30.45	773.4	20	— 6.7	73	ne.	1	0.4		2 k	0			0	0	clear	D. Moore.
Springfield, Illinois	29.48	748.8	30.20	767.1	28	— 2.2	77	nw.	14	6.3			10 s		nw.	0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	29.78	756.4	29.92	760.0	55.5	13.1	88	calm			0		10 n		w	0	0	cloudy	Charles Mayr.
Springfield, Mo.	28.82	732.0	30.33	770.4	23.5	— 4.7	80	nw.	7	3.1		0	0			0	0	clear	J. B. Marbury.
Starkville, Miss.	29.71	754.6	30.21	767.3	43	6.1	83	n.	12	5.4			10 s		n.	1.21	30.7	cloudy	O. Dill.
Stevenson, Fort, Dakota	28.04	712.2	30.01	762.2	18	— 7.8	67	nw.	4	1.8		3 k	0			0	0	clear	W. Burrows
Stockton, Fort, Texas	27.30	693.4	30.42	772.7	23.0	— 5.0	88	sw.	4	1.8		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	29.89	759.2	29.94	760.5	51.0	10.6	93	ne.	2	0.9			fg.			0	0	dense fog	G. Liebmann.
Thomas, Camp, Arizona	27.48	698.0	30.32	770.1	30.5	— 0.8	72	nw.			1	hz.	hz.			0	0	fair	J. T. Fitzgerald.
Toledo, Ohio	29.22	742.2	29.96	761.0	37	2.8	72	w.	13	5.8			10 s		w.	0.17	4.3	cloudy	A. Buell.
Tucson, Arizona	27.70	703.6	30.16	766.1	41	5.0	59	calm	0	0			10 s			0	0	cloudy	J. L. Whiteside.
Umatilla, Oregon	30.16	766.1	30.54	775.7	20	— 6.7	91	se.	4	1.8		0	5 s			0	0	fair	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					27.6	— 2.4	59	n.			2	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	30.02	762.5	30.29	769.4	43.5	6.4	83	nw.	12	5.4			10 s		nw.	0.43	10.9	cloudy	James Kenealy.
Visalia, California	30.00	762.0	30.38	771.6	32.5	0.3	90	calm	0	0		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.68	626.9	30.42	772.7	—15.0	—26.1	90	w.	1	0.4		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	29.79	756.7	29.91	759.7	59.6	15.3	83	s.	3	1.3			10 s		sw.	0.01	0.3	cloudy	B. M. Pursell.
West Las Animas, Colorado	26.31	668.3	30.43	772.9	6.5	—14.2	89	nw.	11	4.9		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.22	742.2	29.80	758.4	54	12.2	93	ne.	1	0.4			fg.			0.01	0.3	dense fog	B. F. Hough.
Wilmington, N. Carolina	30.05	763.3	30.11	764.8	61	16.1	87	sw.	3	1.3		0	7 s			0	0	fair	Samuel A. Haney.
Winnemucca, Nevada	26.04	661.4	30.57	776.5	10	—12.2	70	ne.	3	1.3		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.78	731.0	30.16	766.1	15	— 9.4	69	w.	1	0.4		0	0			inap.	inap.	clear	J. H. Atfield.
Yuma, Arizona	30.10	764.5	30.25	768.3	50.8	10.4	12	n.	24	10.7		0	8 s		n.	0	0	cloudy	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.98	558.3			55.0	12.8	79	ne.	2	0.9		0	6 s		se.	0.06	1.5	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.98	761.5	30.05	763.3	71.2	21.8	87	e.	3	1.3		5 ck	1 s	ne.		inap.	inap.	fair	Chas. Husselbrink.
Kingston, Jamaica, W. I.	29.95	760.7	29.96	761.0	71	21.7	83	calm	0	0		0	0			0	0	fine	Robert Johnston.
Navassa, W. I.	29.80	756.9	29.88	758.9	78	25.6	65	ne.	24	10.7		0	0			0	0	clear	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	79	26.1	87	e.			3	5 k	4 s	e.		0.150	3.8	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.94	760.5	78	25.6	89	calm			0		10 ks		calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					76	24.4	96	ne.			2	9 ck	ck	ne.		0	0	cloudy	Earl Flint.
Santiago de Cuba, W. I.	29.98	761.5	30.00	762.0	75	23.9	76	ne.	7.2	3.2		6 ck	0	ne.		0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.32	744.7	29.38	746.2	35	1.7	89	se.			6	0	8 ks			0.27	6.9	cloudy	W. J. Fisher.
St. Thomas, W. I.	29.78	756.4	29.90	759.4	77	25.0	62	n.				0	3 k		n.	0	0	fine	Aug. Walloe.
York Factory, B. A.	29.65	753.1	29.71	754.6	5.5	—14.7	88	sw.	13	5.8		3 ck	2 s	s.	sw.	0	0	fair	Fortesque & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Shanghai, China	30.22	767.6	60	15.6		ne.			3-5		8	ene.						raining.
H. M. S. Amethyst, Colonia, Uruguay†	30.01	762.2	68.2	20.1	76	sse.			1		1							blue sky.
H. M. S. Audacious, Aden, Arabia	29.91	759.7	84	28.9	83	se.			3		1	se.						blue sky.
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	30.06	763.5	75.5	24.2	72	nnw.			2		1	nnw.						blue sky.
H. M. S. Champion, N. 26° 33′, E. 120° 51′			71	21.7	95	n.			5-6		10					4	ne.	raining.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	30.24	768.1	39	3.9	81	nne.			1-2		10							overcast
H. M. S. Condor, N. 31° 35′, E. 30° 30′	30.13	765.3	72	22.2	85	wsw.			1-2		0					1	wsw.	blue sky.
H. M. S. Crocodile, N. 15° 32′, E. 57° 09′	29.96	761.0	80	26.7	66	ne.			1		0							blue sky.
H. M. S. Curacoa, Kobe, Japan	30.30	769 6	58.5	14.7	76	nne.			2		9							d. clouds.
H. M. S. Diamond, S. 26° 10′, E. 170° 38′ *†	29.88	758.9	67	19.4	84	sse.			1		4					1	se.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I	30.09	764.3	68	20.0	69	nne.			1-3		7	nne.						d. clouds.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.86	758.4	76.5	24.7	92	wsw.			2		3							d. clouds.
H. M. S. Flamingo, N. 11° 40′, W. 61° 52′	29.81	757.2	82	27.8	100	ese.			1-2		4	se.				2	e.	drizzling.
H. M. S. Flying Fish, N. 34° 07′ E. 125° 40′	30.34	770.6	59	15.0	87	e.			2		10	e.				2	e.	drizzling.
H. M. S. Gannet, S. 19° 36′, W. 70° 14′	29.98	761.5	65	18.3	68	s.			1		10							d. clouds.
H. M. S. Griffon, N. 29° 60′ W. 63° 39′	29.98	761.5	73	22.8	85	nne.			4		4	nne.				5	n.	d. clouds.
H. M. S. Iron Duke, N. 29° 03′ E. 124° 27′	30.09	764.3	73	22.8	95	e.			3-4		10	ene.				3	ne	d. clouds.
H. M. S. Kingfisher, N. 25° 30′ W. 115° 00′	30.06	763.5	62	16.7		ne.			4		6	ne.				5	ne.	d. clouds.
H. M. S. Lark, S. 1° 14′, E. 161° 42′	29.78	758.4	78.3	25.7	93	calm			0		8							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.89	759.2	62	16.7		n.			1		10					1	n.	d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.27	768.8	62.5	16.9	83	n.			2		10							misty.
H. M. S. Northampton, Halifax, Nova Scotia	29.99	761.7	45	7.2	100	se.			2		10							drizzling.
H. M. S. Nelson, Melbourne, Australia	29.95	760.7	62	16.7	83	s			1-2									d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.83	757.7	80	26.7	80	nne.			2		4							d. clouds.
H. M. S. Rocket, S. 3° 00′, W. 81° 10′	29.98	761.5	71	21.7	?	sw.			1		2							misty.
H. M. S. Sappho, S. 42° 40′, W. 146° 44′	29.22	742.2	49.2	9.6	85	s.			6-7		10					8	s.	showery.
H. M. S. Superb N. 39° 37′, E. 19° 56′ *	30.07	763.8	70	21.1	75	calm			0		1	ssw.						showery.
H. M. S. Sylvia, off Port Channca, Patagonia	29.89	759.2	43.5	6.4	88	wnw.			2		7	ese.						d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.91	759 7				se.			2		3	ese.						d. clouds.
H. M. S. Woodlark, Bushire, Persia	30.00	762.0	74.5	23.6	68	wnw.			3		0					2	wnw.	misty.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.44	773.2	49	9.4	100	calm			0		10							overcast.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.02	762.5	83.3	28.5	67	ne.			1		9		ne.			1	se.	d. clouds.
Tamega, Macao, China	30.09	764.2	74.3	23.5	71	nnw.			4		0							blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.00	762.0	74	23.3	81	sw.	7	3.1			5?		sw.	0	0			cloudy.
Navy Yard, Portsmouth, N. H	29.94	760 5	49	9.4	85	ne.	17	7.6			10		ne.	0	0			foggy.
Naval Hospital, Yokohama. Japan*	30.32	770.1	53.5	11.9	86	calm			0		10		w.	0	0			gloomy.
Adams, Sitka, Alaska *†	30.00	762.0	39	3.9	91	ene.			1		10							cloudy.
Alaska, Hilo, Hawaii	30.10	764.5	72	22.2	85	nw.			1		10		w.	1.10	27.9	sm'h		cloudy.
Alliance, Hampton Roads, Va	29.98	761 5	58	14.4	100	ssw.			2		5							fair.
Ashuelot, Kobe, Japan	30.39	771.9	64	17.8	94	ne.			2		10		n.					cloudy.
Brooklyn, Keel Point, Patagonia	29.78	756.4	48	8.9	85	ssw.	32	14.3			2		s.	0	0	mod.	ssw.	fair.
Colorado, New York, N. Y	30.00	762.0	56	13.3	93	sw.	2	0.9			10		sw.	0	0			cloudy.
Enterprise, Norfolk, Va	30.03	762.7	62	16.7	94	calm			0		2		calm					clear.
Essex, Callao, Peru	29.97	761.2	65	18.3	89	calm			0		8					sm'h		cloudy.
Franklin, Norfolk, Va	30.04	763.0	58	14.4	100	s.	9	4.0			2		calm	0	0			fair.
Galena, Montevideo, Uruguay	29.87	758.7	65	18.3	89	s.			1		2					sm'h		clear.
Hartford, S. 39° 04′, W. 56° 15′ *	29.71	754.6	55	12.8	93	var.			1		10			0	0	long	e.	clear.
Independence, Mare Island, Cal	30.30	769.6	41	5.0	91	ne.			2		0							clear.
Iroquois, Callao, Peru	30.00	762.0	65	18.3	94	calm			0		10							overcast.
Jamestown, Newport, R. I	29.92	760.0	56	13.3	93	sw.			2		10							cloudy.
Kearsarge, Norfolk, Va	29.98	761.5	61	16.1	94	ssw.			2		2					sm'h		clear.
Lackawanna, Valpariso, Chili*	29.94	760.5	58	14.4	75	nw.			2		8		nw.					cloudy.
Lancaster, Valetta, Malta*	30.01	762.2	77	25.0	60	w.			2		0			0	0	sm'h		clear.
Michigan, Erie, Pa	29.73	755.1	44	6.7	92	nw.			6		10							clearing.
Minnesota, New York, N. Y	29.96	761.0	55	12.8	80	calm	0	0			10							cloudy.
Monocacy, Yokohama, Japan*	30.26	768.6	56	13.3	93	nw.			1		10		nw.					hazy.
New Hampshire, Newport, R. I	29.99	761.7	59	15.0	94	ssw.			1		5		ssw.			sm'h		fair.
Nipsic, Palermo, Sicily*	30.02	762.5	74	23.3	51	w.			2		2					sm'h		clear.
Onward, Callao, Peru†	30.10	764.5	64	17.8	94	sse.			1		10		n.			long	w.	cloudy.
Palos, Che-Foo, China*	30.37	771.4	52	11.1	100	ese.			1		0							clear.
Pensacola, Callao, Peru*	29.91	759.7	64	17.8	94	ene.	1	0.4			10			0	0	sm'h		overcast
Powhatan, Boston, Mass	29.92	760.0	59	15.0	87	wsw.			1		8							cloudy.
Quinnebaug, Syracuse, Sicily*	30.04	763.0	68	20.0	74	ese.			1		2		calm					fair.
Ranger, N. 17° 09′, W. 101° 12′	29.92	760.0	81	27.2	78	e.			3		0			0	0	sm'h		clear.
Richmond, Yokohama, Japan*	30.39	771.9	57	13.9	87	nw.			1		10		nw.	blank	blank			cloudy.
Saratoga, N. 24° 27′, W. 82° 43′	30.01	762.2	77	25.0	77	ene.			3-4		2		e.			sm'h		clear.
St. Louis, League Island, Pa	30.16	766.1	52	11.1	100	w.			1		8		w.					foggy.
Swatara, N. 9° 43′ W. 37° 07′*	29.78	756.4	81	27.2	78	ene.			5		5		ene.			mod.	ene.	fair.
Tennessee, Hampton Roads, Va	29.99	761.7	60	15.6	94	s.	15	6.7			5			0	0			clear. ?
Vandalia, Hampton Roads, Va*	30.01	762 2	58	14.4	100	s.			2		5		se.					fair.
Wabash, Boston, Mass	30.29	769 4	53	11.7	86	ene.	2	0.9			5		ne.	0.11	2.8			fair.
Wachusetts, Mare Island, Cal†	30.37	771.4	41	5.0	83	e.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	29.76	755.9	70	21.1	66	nw.			6		10		w.					cloudy.
Yantic, Norfolk, Va	30.04	763.0	59	15.0	94	ssw.			2		5							fair.
Merchant Marine.																		
S. S. Circassian, N. 48° 50′, W. 59° 12′*	30.24	768.1	26	— 3.3		ne.			4		5		nw.	0	0	1	ne.	d. clouds
S. S. Grecian, Buenos Ayres, Argentine Rep.*	29.86	758.4	74	23.3	86	n.			1		0			5 h'r	5 h'r	sm'h		clear.
S. S. Polynesian, Liverpool, Eng	30.18	766.6	46	7.8		ne.			1		6		e.	0	0			cloudy.
S. S. Scandinavian, N. 52° 37′ W. 30° 12′	29.92	760.0	49	9.4		s.			6		10		s.	8 h'r	8 h'r	mod	s.	overcast
S. S. British Crown, N. 39° 06′, W. 66° 07′†	30.10	764.5	67	19.4		ssw.			2		0			0	0	mod	e.	clear.
S. S. Indiana, Philadelphia, Pa†	29.78	756.4	52	11.1	79	sw.			3		10		sw.					cloudy.
S. S. Lord Clive, Liverpool, Eng*†	29.95	760.7				nne.			2		0			0	0			fine.
S. S. Lord Gough, N. 40° 11′ W. 69° 41′	29.97	761.2	53	11.7		sw.			3		5		sw.	0	0	sm'h		fair.
S. S. Ohio, N. 50° 42′, W. 29° 37′	30.08	764.0	51	10.6	100	s.			5		9		s.			r'gh	s.	cloudy.
S. S. Pennsylvania. Liverpool, England†	30.13	765.3	45	7.2		e.			5		2		e.					fair.
S. S. Jason, N. 41° 30′, W. 62° 13′						wnw.			5-6		7 n					5	sw.	raining.
S. S. Stella, N. 50° 36′ W. 32° 40′			51.8	11		nw.			5		8		nw.			5	nw.	squally.
S. S. Bolivia, N. 44° 33′, W. 55° 05′			49	9.4	100	calm			0		10			driz.	driz.	sm'h		misty.
S. S. Devonia, N. 54° 23′, W. 22° 16′†	30.15	765.8	50	10.0		sw.			4		5?		sw.			mod.	sw.	clear ?
S. S. Dorian, N. 41° 56, W. 45° 10′*	29.93	760.2	68	20.0		sw.			3		4?		w.	0	0	hv'y	ne.	cloudy.?
S. S. Galatia, Calcutta, India†	29.89	759.2	79	26.1		n.			3		0			0	0			clear.
S. S. Utopia, Suez Canal, Egypt			72	22.2	71	nw.			2		6		nnw.	0	0	sm'h		fair.
S. S. Ailsa, Kingston, Jamaica, W. I†	30.02	762.5	84	28.9	91	ne.			2		1		ne.	0	0			fine.
S. S. Alpin, Maracaribo, Venezuela	29.95	760.7				n.			2				n.	4 h'r	4 h'r			
S. S. Antillas, St. John's, Porto Rico, W. I						n.			3		8		n.	0	0	mod.	n	cloudy
S. S. Ambrose, N. 4° 56′, W. 49° 51′†	29.88	758.9				e.			2		0			0	0	sm'h		fine.
British Merchant, N. 5° 50′, W. 120° 50′	29.89	759.2	74.6	23.7	98	e.			2		10							raining.
Bk. Coppename, N. 50° 00′, W. 8° 36′	29.98	761.5	51.5	10.8	53	ene.			6		3							blue sky.
Dynomene, N. 2° 30′ E. 89° 45′	29.84	757.9	80.5	26.9	87	wsw.			1		4							misty.
May Hulse, N. 0° 09, W. 26° 44′	29.88	758.9	82	27.8	79	ese.			4		2							blue sky.
Markland, N. 41° 57′ W. 30° 35′	30.30	769.6	58.8	14.9	78	ese			3		10					5	ne.	d. clouds.
S. S. Olympus. N. 30° 37′, E. 32° 18′	29.83	757.7	89.5	31.9	47	nnw.			1		2							d. clouds.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		WEATHER.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
Inchkeith, S. 26° 39′, W. 27° 24′	30.15	765.8	66.3	19.1	94	ese.			6		10							squally.
S. S. Mertola, N. 43° 10′, W. 12° 58′	29.96	761.0	57.4	14.1	95	n.			6		10							squally.
S. S. Mexico, Mazatlan, Mexico†	29.92	760.0	71.6	22.0		nw.			1		0					sm'h		clear.
S. S. Bothnia, N. 41° 51′, W. 60° 54′	30.02	762.5	70	21.1	90	nw.			2		8					sm'h		cloudy.
S. S. Marathon, N. 36° 08′ E. 19° 30′	30.08	764 0	77	25 0		w.			3		6		w.	0	0	mod.	w.	cloudy.
S. S. Parthia, N. 48° 33′ W. 33° 50′*†	30.06	763.5	54	12.2		sw.			8		8		sw.	9 h'r	9 h'r	r'gh	wnw.	overcast.
S. S. Pavon a. N. 49° 31′, W. 25° 01′*	30.31	769 9	54	12.2	87	sw.			2		9		s.	light	light	mod.	s;e.	overcast.
S. S. Colina, N. 39° 43′, W. 62° 31′ †.	30.00	762.0				w.			2		3		w.	0	0	mod.	e.	clear.
S. S. France, N. 45° 00′, W. 50° 10′†	30.03	762.7	44.6	7		nw.			3	ck	0	ne.		0	0	sm'h	ne.	overcast.
S. S. Labradore, N. 44° 12′, W. 57° 18′†*	30.28	769.0	51.8	11		ese.			2		3		ese.	0	0	sm'h		clear.
S. S. Abyssinia, N. 45° 42′, W. 47° 30′*	30.00	762.0	46	7.8	92	une.			4		10		ne.	1 h'r	1 h'r	mod.	ne.	misty.
S. S. Wyoming, N. 51° 33′ W. 17° 20′ *	30.18	766.6	52	11.1		nw.			3		2		w.	0	0	r'gh	se.	threatening.
S. S. Bohemia, Hamburg, Germany†	30.19	766.8				ese.			1		1		se.	0	0			foggy.
S. S. Frisia, N. 43° 59′, W. 52° 44′	30.08	764.0	47	8.3		calm			0		10			0	0		e.	fair.
S. S. Gellert Plymouth, Eng	29.83	757.7	47	8.3		nnw.			5		9		ne.	2 h'r	2 h'r			covered.
S. S. Silesia, N. 47° 16′, W. 39° 47′†	29.92	760.0	54	12.2		n.			5		10			1 h'r	1 h'r	3–4	w.	raining.
S. S. Vandalia, N. 46° 33′, W. 41° 10′	29.93	760.2	01.9	16.6		ssw.			4		10		ssw.	0	0	mod.	ssw.	hazy.
S. S. City of Berlin, N. 51° —′, W. 17° 45′	30.28	769.1	50	10.0	79	n.			1		3		nne.					fair.
S. S. Mentmore, N. 51° —′, W. 22° —′ *	30.25	768.3				w.			4		5		w.	0	0	sm'h	w.	threatening
S. S. Archimedes, N. 43° 23′, W. 52° 00′	29.98	761.5				calm			0		10		calm	8 h'r	8 h'r	mod.	ese.	overcast.
S. S. Hevelius, Montevideo, Uruguay*†.	30.01	762.2	68	20.0		sw.			2		8?		sw.	0	0			clear?
S. S. Ptolmey, S. 2° 15′, W. 37° 45′	29.92	730.0	80	26.7	82	sse.			4		6			0	0	3	con.	d clouds.
S. S. City of San Antonio, Matanzas, Cuba †	30.10	764.5	74	23.3		calm			0		0			0	0			clear.
S. S. Colorado, New York, N. Y.			60	15.6		s.			1		10			0	0			cloudy.
S. S. Rio Grande, Key West, Flat	30.16	766.1	78	25.6		e.			3		2		ne.	0	0	short		
S. S. San Marcos, N. 29° 22′, W. 94° 46′			54	12.2		n.			6				nnw.					
S. S. Archimede, Messina, Sicily *†	30.10	764.5	76	24.4	82	se.			2		1		se.	0	0			clear.
S. S. Hermod, N. 44° 59′ W. 53° 00′†	30.06	763.5	53.6	12		se.			1		10		se.	0	0	sm'h	se.	misty.
S. S. Glenapp, S. 10° 00′, W. 36° 00′†	29.95	760.7	79	26.1		sse.			2		8 k		se.	8 h'r	8 h'r	light	se.	heavy rain.
S. S. Chalmette, N. 34° 50′ W. 75° 00′†	30.13	765.3	72	22.2		sw.			3		8		w.	1 h'r	1 h'r	long	ne.	light rain
S. S. Lone Star, N. 24° 25′, W. 82° 32′ †	30.16	766.1	75	23.9		ene.			1		0			0	0	sm'h		fine.
S. S. Denmark, N. 42° 53′, W. 48° 00′			57	13.9		n.			5		10		ne.	3 h'r	3 h'r	long	ene.	hazy.
S. S. England, N. 49° 00′, W. 34° 25′	29.86	758.4				ssw.			6		10		ssw.	sh'rs	sh'rs	high	ssw.	squally.
S. S. Erin, N. 41° 06′, W. 65° 01′	29.98	761.5	57	13.9		w.			5		6		w.	0	0	h'vy	ese.	foggy.
S. S. Greece, N. 47° 21′, W. 42° 31′	29.77	756 1				nw.			5		10		nw.	3 h'r	3 h'r	mod.	n.	dull.
S. S. Helvetia, N. 49° 00′ W. 33° 45′			54	12.2		ssw.			1		10		wsw.	4 h'r	4 h'r	long	wsw.	overcast.
S. S. City of Alexandria, New York, N. Y†	29.97	761.2	56	13.3		so.			3									
S. S. City of Merida, N. 21° 20′, W. 89° 40′ *†	29.94	760.5	73.4	23		ene.			1		1		ene.	0	0	light	ene.	fine.
S. S. City of Washington, N. 30° 07′, W. 79° 56′ *†	30.10	764.5	80	26.7		s.			2		2		s.	0	0	sm'h		fine.
S. S. Elbe, N. 48° 04′, W. 40° 38′	29.83	757.6	53.6	12.0	88	nw.			6		10		nw.	11 h'r	11 h'r	long	sw	drizzling.
S. S. Oder, N. 49° 20′, W. 37° 11′	29.76	755.9	57.2	14.0		ssw.			6–7		10		ssw.	3½h'r	3½h'r	r'gh	sw.	covered.
S. S. Ohio, Galveston Roads Texas	30.17	766.3				n.			4–5		8		n.	12 h'r	12 h'r	mod.	n.	cloudy.
S. S. Werra, N. 50° 29′, W 27° 37′ *	30.20	767.1	53.6	12.0		ssw.			4–5		10		ssw.	0	0	r'gh	sw.	cloudy.
S. S. Belgic, Hong Kong, China†	30.17	766.3	74	23.3	63	calm			0		3		ene.	0	0			clear.
S. S. Oceanic, N. 38° 03′ W. 13t° 10′ *	30.36	771.1	62	16.7	94	w.			2		4		sw.			sm'h		clear.
S. S. City of Augusta, New York, N. Y†	29.97	761.2				sw.			1		0			0	0			clear.
S. S. Oregon, N. 45° 57′, W. 124° 03′†	30.37	771.4	50	10.0	58	e.			2		5?		se.			sm'h		clear?
S. S. Ancon, San Francisco, Cal†	30.31	769.9	47	8.3	77	sw.			2		0							clear.
S. S. Dakota, Strait of Fuca †.	30.15	765.8	59	15.0	82	se.			5		8		se.	6 h'r	6 h'r	mod.	se.	cloudy.
S. S. Orizaba, N. 33° 43′, W. 118° 15′†	30.20	767.1	54	12.2	44	ne.			6		0					mod.	nw.	clear.
S. S. Australia, Sydney, N. S. W.	30.20	767.1	64	17.8	94	sw.			2		1		s.	1 h'r	1 h'r			clear.
S. S. City of New York, Auckland, New Zealand †.	29.91	759.7	62	16.7	66	w.			3		10		w.	0	0	sm'h		cloudy.
S. S. City of Pekin, N. 34° 00′, E. 138° 00′ †.	30.63	778.0	65	18.3	78	ne.			4		10		ne.	0	0	small	ne.	cloudy.
S. S. City of Sydney, S. 9° 39′, W. 168° 33′†	29.92	760 0	80	26.7	82	ne.			2		5		nw.			long	ne.	drizzling.
S. S. Colima, N. 24° 13′, W. 111° 47′†	29.96	761.0	67	19.4	60	nw.			3		2		wnw.	0	0	mod.	w.	clear.
S. S. Grenada, N. 15° 38′, W. 96° 08′†	29.87	758.7	80	26.7	82	ne.			1		0			0	0	sm'h	sse.	clear.
S. S. San José, N. 7° 48′, W. 81° 22′*†	30.07	763.8				wsw.			4		10 n		sw.	24 h'r	24 h'r	h'vy	wsw.	squally.
S. S. Bermuda, Port of Spain, Trinidad, W. I †	29.85	758.2	78	25.6		so.			1		5		se.	6 h'r	6 h'r	sm'h		fine.
S. S. Muriel, N. 31° 30′, W. 69° 15′	30.12	765.0	69	20.6		ne.			3		2			0	0	long	ne.	fair.
S. S. Caracas, Curacoa, W. I †	29.92	760.0	82	27.8	79	nne.			3		8		ne.	0	0	sm'h		fair.
S. S. Belgenland, N. 41° 42′, W. 62° 30′†	30.14	765.5	60	18.9	89	calm			0		4		s.	0	0	long	e.	fine.
S. S. Nederland, N. 49° 26′, W. 8° 22′			52	11.1		nne.			6		10		n.	10 h'r	10 h'r	mod.	ne.	squally.
S. S. Pennland, Antwerp, Belgium	30.04	763.0	49	9.4	93	ene.			4		10			6 h'r	6 h'r			raining.
S. S. Rhynland, N. 45° 40′, W. 51° 00′	30.03	762.7	55	12.8	68	ene.			5		10		e.	0	0	long	e.	overcast.
S. S. Switzerland, N. 50° 35′ W. 18° 40′ †	30.34	770.0				n.			1		5		nne.	0	0	long	e.	fair.
S. S. Waesland, Jersey City, N. J	29.93	760.2	57	13.9	94	s.			3		9		sw.	0	0			cloudy.
S. S. Maas, New York, N. Y.	29.93	760.2	50.7	10.4	97													
S. S. P. Caland, Rotterdam, Holland	29.99	761.7	37.6	3.1	89	ene.			4		9		ene.					cloudy.
S. S. Schiedam, N 48° 30′ W. 33° 00′	30.01	762.2	50.3	13.5	89	ssw.			6		9		wsw.	light	light	long	wsw.	hazy.
S. S. W. A. Scholten, N. 40° 39′, W. 71° 45′	30.03	762.7	56.9	13.8	84	sw.			4		7		wsw.	0	0	sm'h	ene.	
S. S. State of Florida, N. 55° 09′, W. 8° 52′	30.11	764.8	47	8.3		e.			2		3		e.	1 h'r	1 h'r	sm'h		hazy.
S. S. State of Georgia, N. 44° 25′, W. 54° 57′†	30.05	763.3	52	11.1		calm			0		10			3 h'r	3 h'r	sl't	ene.	overcast.
S. S. State of Nevada, N. 44° 30′, W. 53° 15′ †	30.10	764.5	49	9.4		ene.			1		10		e.	0	0	sm'h		hazy.
S. S. Rekla, N. 41° —′, W. 65° —′ *†	30.06	763.5	68.4	20.2		w.			3		5		wnw.			long	e.	fair.
S. S. Thingvalla, Copenhagen, Denmark†	30.29	769.4	31.1	—0.5		ne.			1		3		ne.	0	0			clear.
S. S. Iowa, Liverpool, Eng*†	30.15	765.8																
S. S. Baltic, N. 47° 14′, W. 44° 49′	29.98	761.5	45	7.4	84	nne.			4		10		nnw.	4 h'r	4 h'r			drizzling.
S. S. Celtic, New York, N. Y†	29.84	757.9	54	12.2	74	sw.			5		10		sw.	0	0			cloudy.
S. S. Germanic, N. 40° 36′, W. 66° 00′ †	30.18	766.6	63	17.2		sw.			3		3		sw.	0	0	mod	sw.	d. clouds.
S. S. Lepanto, N. 40° 20′, W. 70° 10′*	30.07	763.8	50	13.3		sso.			4		2		s.	0	0			clear.
S. S. Romano, N. 49° 05′, W. 18° 50′	30.19	766.8	54	12.2		w.			1		5		w.	0	0	mod.	e.	fine.
S. S. Salerno, Odessa, Russia			40	4.4		nw.			5		0			0	0			clear.
S. S. Catherine Whiting, Delaware Bay †	29.96	761.0				sw.			1				sw.	0	0			
S. S. Norman, N. 39° 50′, W. 75° 08′	30.15	765.8				n.			4				nne.	3 h'r	3 h'r			cloudy.
S. S. Saxon, Boston, Mass *†	29.96	761.0	58	14.4		ne.			4		8							
MISCELLANEOUS																		
Bg. Abbie Clifford, N. 38° 59′, W. 75° 07′			60	15.6		ssw.			3		8		sw.	0	0			cloudy.
Bk. Adelaid, N. 15° 15′ W. 56° 08′ *†	29.89	759.2	80	26.7		s.			4		4		var.	5 h'r	5 h'r	light	var.	clearing.
Bg. Aleira, N. 13° 15′, W. 68° 55′	29.90	759.4	82	27.8		nne.			6		2		n.	0	0	short	n.	clear.
Schr. Anna A. Holton, off Sandy Hook, N. J †	29.97	761.2	67	19.4		sw.			3		2		s.	0	0	mod	s.	hazy.
S. S. Annie M. Law, Kobe, Japan *†	30.35	770.9	52	11.1		ene.			3		10			0	0			threatening
Bk. Anna Thormann, S. 10° 43′, E. 111° 16′*	29.92	759.0	82.0	27.8	86	sse.			3		8 k		s.	0	0	mod.	s.	cloudy.
S. S. Antonio Lopez, Los Palmas, Canary Islands*.	30.07	763.8	70.5	21.4	90	sse.			1		10			0	0	sm'h		hazy.
Bk. Aquidneck, N. 5° 16′, W. 34° 55′ *†	30.01	762.2				0 to so.			3				se.			h'vy	se.	fair.
Bk. Aureola, N. 46° 14′, W. 20° 50′*†	30.55	776.0	58	14.4		ne.			2		6		ne.	0	0	mod.	ene.	fair.
Bk. Alba, N. 54° 25′, E. 5° 09′ *†	30.32	770.2	43.7	6.5		wsw.			3									raining.
Bk. Bayonnaise, N. 21° 33′, W. 48° 50′*†	30.00	762.0				s.			2		10		s.	12 h'r	12 h'r	large	se.	overcast.
Sch. Bonny Doon, N. 40° 23′, W. 67° 05′						sw.			8		8		sw.	0	0	high	sw.	cloudy.
S. S. Burswell, N. 50° 28′ W. 2° 10′ *†	29.68	753.9	58	14.4		ne.			7		10			10 h'r	10 h'r	high	wsw.	
Bk. Champion, Massilius, Netherlands †	29.96	761.0	52.0	11.1		e.			10		5		ene.	2 h'r	2 h'r			fair.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.12	765.0	71	21.7	85	s.			1	0	0			0	0			clear.
Schr. C. R. Flint, N. 28° 54′, W. 83° 00′†	30.18	766.6	72	22.2		so.			3		2		eso.	0	0	mod.	sse.	clear.
S. S. Cornelius, N. 38° 50′, W. 68° 20′ *†	30.30	769.6	68.0	20.0		wsw.			3		2			0	0	long	var.	clear.
Bkt. David Preston, N. 24° 35′, W. 83° 06′ *†	30.05	763.3	78	25.6		n.			2		2		n.	rain	rain	r'gh	nw.	

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Don Quixote, Pasoeroen Roads, Java*	29.75	755.6	88	31.1		wsw.			6		4		wsw.	0	0	sm'h		fair
Bk. E. D. Bigelow, N. 41° 08′, W. 47° 20′*†	29.90	759.4				sse.			2		2		ese.	0	0	long	e.	fair.
Schr. Edith B. Seward, Wilmington, N. C*†	30.13	765.3	64	17.8		s.			1		4		sse.	0	0			clear.
S. E. J. Spicer, New York, N. Y	29.86	758.4	49	9.4	93	w.			6		10		wsw.	0	0			overcast.
Bk. Eliza Barss, Bermuda, W. I†	30.08	764.0				ne.			5		5?		ne.	0	0			cloudy.*
S. Enoch Train, N. 20° 16′, W. 55° 20′*†	29.98	761.5				var.			1–5		10			shr's	sh'rs	con.		showery.
Bk. Essex, Muscat, Arabia*†	29.99	761.7	86	30.0		ne.			6									
Schr. F. E. McDonald, Mt. Vernon, Va†	29.99	761.7				ssw.			1									hazy.
S. S. Foscolia, S. 18° 46′, W. 38° 55′*†	29.59	751.6				ne.			2		1		ne.	0	0	mod.	e.	clear.
Bk. Freya, N. 38° 28′, W. 16° 07′			69	20.6		n.			4		1		nnw.	3 h'r	3 h'r	mod.	sw.	clear.
S. Glendon, S 36° 00′, W. 88° 40′†	30.33	770.4	68	20.0		sw.			5		9		sw.	3 h'r	3 h'r	sm'h		cloudy.
S. Grecian, N. 13° 34′, W. 53° 00′†	29.96	761.0	83	28.3	83	se.			4		5		se.	0	0	long	n.	hazy.
Bk Hattie G. McFarland, N. 39° 20′, W. 74° 00′†	30.06	763.5	60	15.6		ssw.			3		6		sw.	0	0	sm'h	ne.	threatening
Schr. Hattie Weston, Mayaro Bay, Trinidad W. I*†	29.92	760 0	81	27.2		calm			0		2		e.	3 h'r	3 h'r	mod.	ese	fair
S. Hedwig, N. 27° 23′, W. 72° 29′	30.17	766.3	74.3	23.5	74	nne.			5		4		nne.	0	0	3	nne.	fine.
Schr. Isabel Alberto, Cedar Keys, Florida†	30.19	766.8				se.			1		0			0	0			clear.
S. Ivy, Cork, Ireland†	30.29	769.4	43	6.1		nne.			4		0			0	0			clear.
Schr. Jennie N. Huddell, Philadelphia, Pa†	29.85	758.2				sw.			1		10		calm	0	0			cloudy.
S. S. John Hopkins, N. 40° —′, W. 72° —′			56	13.3		sw.			7		5?		n.	0	0			cloudy.?
Schr. John L. Thomas, Vivorilla Cays, C. A *†	30.04	763.0				ne.			3		2		e.	0	0			fair.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.98	761.5				sse.			1		1			0	0			clear.
Bk. Joseph A. Ropes, N. 23° 25′, E. 59° 12′*†	30.00	762.0	78	25.6	86	ese.			3		1					sm'h		fair.
Light House Tender, Laurel, Key West, Florida†	30.09	764.3	74	23.3		ene.			1–2		3		ene.	0	0			fair.
Bk. Liberia, N. 13° 31′, W. 27° 00′.*..	29.99	761.7	81	27.2	83	ene.			4		2		ene.	0	0			fine.
Bg. Lilian, Demerara, Brit. Guiana†	29.90	759.4	82	27.8		e.			4		3			0	0			clear.
Bg. L. & W. Armstrong, N. 35° 55′, W. 73° 09′*†	30.14	765.5				wnw.			5		1		w.	0	0	long	ne.	clear.
S. S. Madrid, N. 36° 56′, W. 31° 44′*†	30.36	771.1	65	18.3	94	ese.			4		8	sse.	se.	shr's	shr's	mod.	ne.	cloudy.
S. S. Malabar, N. 10° 31′, E. 65° 13′*†	29.86	758.4				ne.			2		2?		ne.	0	0	sm'h		cloudy.?
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	30.00	762.0	71	21.7		ene.			5		0			0	0			clear.
Bk. Matilda C. Smith, Dover, Eng*†	29.80	756 9				e.			7		8		e.	sleet	sleet	r'gh	e.	stormy.
Bg. Mattie B. Russell, Tower Light, Fla						e.			3		4		e.	0	0	h'vy	n.	squally.
Schr. Moravian, N. 12° 33′, W. 81° 43′†	29.93	760.2				ne.							ne.	0	0	long	ne.	fair.
S. M. P. Grace, N. 26° 51′, W. 120° 52′*	30.13	765.3	60	15.6		n.			5		7		nnw.	0	0	sm'h	n.	fair.
Bg. Myrtle, N. 32° 06′, W. 74° 09′†	30.22	767.6				s.			1		0			0	0	long	ne.	clear.
Bk. Norena, N. 37° 17′ W 74° 45′*†	30.10	764.5				ssw.			5		0			0	0	light	ne.	fine.
Bg. O. C. Clary, N. 39° 23′, W. 73° 01′*†	29.90	759.4	64	17.8	89	sw.			4		5		sw.			sm'h	sw.	fair.
S. Orealla, N. 5° 36′, E. 82° 30′*	29.85	758.2				w.			3		6		w.	0	0	sm'h		fine.
Bk. Orpheus, N. 36° 20′, W. 56° 22′	30.02	762.5	74	23.3		e.			3		7 k		ese.	0	0	sm'h		hazy.
S Paramita, San Francisco, Cal†	30.09	764.3	55	12.8		wnw.			1				w.	0	0			misty.
S. S. Peconic, N. 36° 44′, W. 26° 42′*†	30.10	764.5	66	18.9		n.			2		2		nnw.	0	0	mod.	n.	cloudy.
S. S. Radnorshire, Suez Canal, Egypt *†	30.04	763.0				n.			4		0			0	0			
Bk. Rebus, Off Barnegat, N. J.	29.64	752.8				ssw.			5		8		sw.	0	0		e.	cloudy.
S. St. Francis, S. 26° 30′, W. 89° 00′†	30.41	772.4	63	17.2		se.			6		5		se.	0	0	mod.	sse.	fair.
Schr. S. B. Hubbard, N. 31° 30′, W. 78° 15′†	30.19	766.8	70	21.1		ssw.			1		5		ssw.	2 h'r	2 h'r	long	sw.	fine.
Bk. Southern Belle, N. 45° —′, W. 28° —′*†	30.30	769.6	55	12.8		sse.			3		10			0	0	long	ene.	cloudy.
S. S. Strathleven, N. 36° 03′, W. 4° 57′	30.00	762.0	64.0	17.8	97	ne.			1		5?		ene.					clear.?
Bg. Teneriffe, N. 36° 01′ W. 73° 56′	30.03	762.7				w.			6					0	0	h'vy	ene.	
Bk. Truro, N. 44° 50′, W. 25° 55′*†	30.32	770.1				sse.			2–3		10		sw.	0	0	mod	ne.	cloudy.
U. S. F. C. S. S. FishHawk, Washington, D. C†	30.07	763.8	61	16.1	88	s.			2		10		s.	0	0			cloudy.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.05	763.3	68.0	2c		nw.			4		10		nw.	11¼ hours				squally.
Schr. Viola Reppard, N. 33° 10′, W. 77° 10′†	30.13	765.3	74	23.3		se.			3		2		se.	4 h'r	4 h'r	small	ene.	clear.
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762.0									0			0	0			fine.
Bk. Wandering Jew, S. 12° 06′, W. 33° 29′†	29.93	760.2	79	26.1		s.			4		10		sse.	3 h'r	3 h'r	long	ne.	threatening.
Bk. Warden Law S. 42° 52′, W. 80° 50′†	30.24	768.1				calm			0		4		nw.	0	0	sm'h	sw.	fair.
Bgt. Willie, S. 38° 05′, E. 2° 50′*†	30.28	769.1	57	13.9		e.			6		10		e.	22 h'r	22 h'r	rg'h	s.	cloudy.

International Chart I. November 13, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 14, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0-10	0-10	0-10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.98	761.4	74.1	23.4	73	e.	.....	.....	1	.....	3	.....	.....	inap.	inap.	pretty fair...	Malaterre.
Algiers	.....	.....	29.97	761.3	73.0	22.8	71	w.	.....	.....	1	.....	8	.....	.....	0	0	very cloudy.	Thève.
La Calle	.....	.....	30.00	762.0	73.0	22.8	91	ssw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair...	Fonfrède.
Tunis	.....	.....	30.03	762.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	JAcques.
Saida	.....	.....	30.10	764.6	72.3	22.4	47	w.	.....	.....	1	.....	4	.....	.....	0	0	cloudy.....	Pérès,
Tebessa	.....	.....	30.10	764.6	71.6	22.0	59	w.	.....	.....	1	.....	3	.....	.....	0	0	pretty fair..	Dognon.
Geriville	.....	.....	.....	.....	66.6	19.2	20	s.	.....	.....	5	.....	8	.....	.....	0	0	very cloudy	Louchamp.
Laghouat	.....	.....	30.17	766.4	73.4	23.0	31	sw.	.....	.....	1	.....	2	.....	.....	0	0	fair.....	Abraham.
Biskra	.....	.....	30.11	764.8	69.4	20.8	40	.....	.....	.....	.....	.....	2	.....	.....	0	0	fair.....	Malau.
Australian.																			
Melbourne, Victoria	29.82	757.4	29.91	759.7	64.8	18.2	78	w.	3	1.3	.....	.....	0	.....	.....	0	0	.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.51	749.5	30.08	763.9	42.8	6.0	78	e.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.48	748.8	30.29	769.4	31.6	— 0.2	78	e.	9.8	4.4	.....	.....	3	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.32	744.7	30.23	767.8	32.0	0.0	67	n.	.....	.....	3	.....	9 8	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.83	732.3	30.13	765.2	38.1	3.4	87	e.	.....	.....	2	.....	10	.....	.....	0.020	0.5	.....	Andreas Rospini.
Hermannstadt	28.70	728.9	30.17	766.4	40.6	4.8	59	se.	.....	.....	4	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling
Kremsmunster, Obs'y	28.58	725.9	29.97	761.3	34.9	1.6	80	ene.	.....	.....	3	.....	10	.....	.....	0.004	0.1	gloomy.....	The Staff.
Lemberg	29.24	742.8	30.30	769.6	27.7	— 2.6	87	ne.	.....	.....	1	.....	10	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.88	759.0	30.00	761.9	54.3	12.4	81	ne.	.....	.....	1	.....	10	.....	.....	0.315	8.0	.....	I. R.Hydrographic Office.
Szathmar	29.71	754.5	30.18	766.5	38.7	3.7	51	n.	.....	.....	1	.....	9	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.84	757.9	30.13	765.3	39.9	4.4	77	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.83	757.7	29.93	760.3	50.0	10.0	69	e.	.....	.....	2	.....	10	.....	.....	0.409	10.4	.....	Royal Academy.
Vienna	29.40	746.7	30.15	765.8	32.7	0.4	89	se.	.....	.....	2	.....	10	.....	.....	0.248	6.3	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	30.19	766.8	30.29	769.4	42.0	5.6	75	s.	7	3.1	.....	.....	7	.....	.....	0.015	0.4	misty.....	W. Boswell
Armagh, Observatory	29.98	761.5	30.23	767.8	35.6	2.0	91	e.	2	0.9	.....	.....	2	.....	.....	.....	.....	misty.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.15	765.8	42.2	5.7	71	ene.	18	8.0	.....	.....	7	.....	.....	.....	.....	misty.....	John Hartnup.
Bolton, Sharples	29.60	751.8	30.15	765.8	41.9	5.5	59	ene.	18	8.0	.....	.....	7	.....	.....	.....	.....	d. clouds....	Thomas Mackereth.
Bradford, Yorkshire	29.74	755.4	30.14	765.5	41.5	5.3	75	ne.	.....	.....	2	.....	4	.....	.....	0	0	d. clouds....	McLandsborough&Preston
Bridgetown, Barbadoes	29.85	758.2	29.88	758.9	78.0	25.6	86	se.	.....	.....	3	.....	6	.....	.....	.....	.....	gloomy.....	Corpl.J.Surgenor, A. H.C.
Cardington	29.82	757.4	29.94	760.5	41.0	5.0	65	ne.	.....	.....	5.0	.....	6	.....	.....	.....	.....	d. clouds....	John McLaren.
Chatham, School M. E.	29.74	755.4	29.87	758.7	40.1	4.5	81	ne.	.....	.....	3	.....	10	.....	.....	.....	.....	misty.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.80	756.9	30.04	763.0	42.9	6.1	58	n.	.....	.....	5	.....	3	.....	.....	.....	.....	blue sky.....	The Staff.
Fort Napier, Natal	27.64	702.0	29.85	758.2	65.0	18.3	89	e.	.....	.....	1	.....	10	.....	.....	.....	.....	showery.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88.0	31.1	69	w.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds....	Sergt. John Robinson.
Gibraltar, Mediterranean	30.04	763.0	30.09	764.3	66.0	18.9	91	wnw.	.....	.....	4	.....	0	.....	.....	.....	.....	blue sky.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	30.04	763.0	30.25	768.3	33.0	0.6	87	e.	.....	.....	1	c	k	.....	.....	.....	.....	foggy.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.72	754.9	29.90	759.4	39.4	4.1	71	ne.	.....	.....	5	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Guernsey	29.56	750.8	29.87	758.7	41.5	5.3	87	n.	.....	.....	3	.....	10	.....	.....	.....	.....	raining.....	A. Collenette, F. M. S.
Kew, Observatory	29.88	758.9	29.92	760.0	39.9	4.4	67	ne.	32	14.3	.....	.....	9	.....	.....	.....	.....	threatening	The Staff.
Leicester, Museum	29.80	756.9	30.06	763.5	42.0	5.6	61	ne.	.....	.....	3	.....	8	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	29.95	760.7	30.02	762.5	69.6	20.9	94	nw	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.05	763.3	30.09	764.3	77.5	25.3	59	se.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds....	C. S. Duncombe.
Oscott, St. Mary's College	29.53	750.0	30.07	763.8	40.5	4.7	61	ene.	.....	.....	4	.....	4	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.74	755.4	29.97	761.2	40.0	4.4	77	ne.	.....	.....	7	.....	8	.....	.....	.....	.....	squally.....	The Staff.
Plymouth	29.92	760.0	30.00	762.0	42.7	5.9	61	nne.	.....	.....	5	.....	2	.....	.....	.....	.....	d. clouds....	John Merrifield.
Sandwick Manse, Orkneys	30.08	764.0	30.18	766.6	39.9	4.4	77	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky.....	Rev. G. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.09	764.3	30.15	765.8	52.8	11.6	45	ene.	.....	.....	1	.....	9	.....	.....	.....	.....	gloomy.....	W. H. Lyne.
Sheffield	29.84	757.9	30.13	765.3	42.8	6.0	75	ne.	.....	.....	3	.....	8	.....	.....	0	0	overcast.....	W. F. Cooper.
Silloth Rectory	30.19	766.8	30.22	767.6	39.2	4.0	84	n.	.....	.....	1	.....	4	.....	.....	0	0	d. clouds....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.17	766.3	42.0	5.6	61	ne.	14	6.3	.....	.....	7	.....	.....	.....	.....	d. clouds	I. New.
Stratfield Turgiss	29.71	754.6	29.94	760.5	40.0	4.4	97	e.	.....	.....	3	.....	8	.....	.....	.....	.....	squally.....	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	29.98	761.5	30.03	762.7	46	7.8	60	ne.	.....	.....	4	.....	4	.....	.....	.....	.....	d. clouds....	W. Newcombe.
Valencia, Observatory	30.16	766.1	30.18	766.6	45.1	7.3	71	ese.	3	1.3	.....	.....	3	.....	.....	.....	.....	d. clouds	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.50	749.3	29.55	750.6	48.	8.9	92	s.	5	2.2	.....	.....	10 n	.....	calm	0.082	2.1	light rain.....	H. J. Cundall, C. E.
Chatham, N. B*	29.48	748.8	29.54	750.3	41	5.0	86	sw.	9	4.0	.....	.....	10 ks	.....	sw.	0.39	9.9	cloudy	G. A. Blair.
Father Point, Quebec*	29.46	748.3	29.48	748.8	35	1.7	89	sw.	15	6.7	.....	5 k	5 8	w.	w.	0.82	20.8	cloudy..	J. McWilliams.
Fort Garry, Manitoba*	28.88	733.5	29.72	754.9	33	0.6	86	nw.	9	4.0	.....	.....	10 n	.....	nw.	0	0	cloudy	James Stewart.
Halifax, N. S*	29.53	750.0	29.66	753.4	54	12.2	93	w.	5	2.2	.....	.....	10 k	.....	.....	0.045	1.2	cloudy.....	A. Allison.
Kingston, Ontario*	29.48	748.8	29.83	757.7	33	0.6	85	w.	15	6.7	.....	5 c8	5 8	w.	w.	0.68	17.3	cloudy.....	A. P. Knight, M. A.
Montreal, Quebec*	29.50	749.3	29.71	754.6	34	1.1	78	w.	24	10.7	.....	.....	10 8	.....	w.	0.51	13.0	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.12	739.6	29.85	758.2	27	— 2.8	88	nw.	7	3.1	.....	.....	10 n	.....	nw.	0.20	5.1	cloudy.....	Rev. R. Mosley.
Port Dover, Ontario	29.30	744.2	30.03	762.7	26	— 3.3	100	w.	11	4.9	.....	5 c	0	sw.	.....	0.22	5.6	fair.....	H. Morgan.
Port Stanley, Ontario	29.37	746.0	30.05	763.3	30	— 1.1	88	w.	12	5.4	.....	.....	8 k	.....	nw.	0.02	0.5	cloudy	M. Payne.
Quebec, Quebec*	29.29	744.0	29.62	752.3	34	1.1	89	w.	.....	.....	5	.....	10 k	.....	nw.	0.56	14.2	cloudy.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.17	740.9	29.65	753.1	25	— 3.9	88	nw.	5	2.2	.....	5 c	fg.	w.	.....	inap.	inap.	cloudy.....	W. H. McIntyre.
Saugeen, Ontario*	29.16	740.7	29.90	759.4	33	0.6	88	sw.	23	10.3	.....	.....	10 8	.....	.....	0.03	0.8	light snow..	
St. Andrews, N. B	29.61	752.1	29.66	753.4	41	5.0	90	nw.	5	2.2	.....	.....	8 k	.....	.....	0.24	6.1	cloudy.....	
Sydney, C. B*	29.66	751.8	29.66	753.4	54	12.2	100	s.	18	8.0	.....	.....	10 n	.....	s.	0.06	1.5	cloudy.....	T. C. Hill, C. E
Toronto, Ontario*	29.54	750.3	29.94	760.5	30	— 1.1	77	w.	20	8.9	.....	2 ck	8 ks	w.	w.	0.30	7.6	light snow..	Magnetic Observatory.
Yarmouth, N. S*	29.64	752.8	29.71	754.6	42	5.6	96	nw.	8	3.6	.....	.....	10 8	.....	nw.	0.14	3.6	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.47	723.1	29.93	760.2	29.0	— 1.7	89	nw.	.....	.....	6	.....	10	.....	nw.	0.077	2.0	snowing.....	Wm. Wylie.
St. Johns, Newfoundland	29.88	758.9	30.14	765.5	40	4.4	100	s.	2	0.9	.....	.....	fg	.....	.....	0	0	foggy.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.12	765.0	30.15	765.8	64.0	17.8	77	e.	14.5	6.5	.....	.....	10 8	.....	.....	0.050	1.3	light haze...	John Duthie.
Cape Town, C. G. H. Obs'y	29.91	759.7	29.95	760 7	75.0	23.9	59	s.	30	13.4	.....	0	4	.....	.....	0	0	.....	The Staff, for D.Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
Chinese (Sub-series).																			
Tchang-kia-tchouang	.....	.....	30.50	774.7	31.8	— 0.1	100	ne.	17.0	7.6	.....	.....	10	.....	w.	0.591	15.0	covered	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.22	767.6	30.24	768.2	60.8	16.0	96	ene.	6.3	2.8	.....	.....	10	.....	.....	0.134	3.4	covered	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	30.28	769.2	30.33	770.4	37.9	3.3	73	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	30.31	769.9	30.34	770.5	36.5	2.5	84	e.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.52	749.8	29.56	750.9	13.3	—10.4	90	calm	.....	.....	0	.....	10	.....	.....	.....	.....	snowing.....	S. Kleinschmidt.
Ivigtut	29.40	746.7	29.42	747.2	18.0	— 7.8	.....	ne.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	28.80	731.6	28.85	732.7	36.0	2.2	91	s.	.....	.....	6	.....	8	.....	.....	.....	.....	snowing.....	A. O. Thoriacius.
Thorshavn	29.84	758.0	29.88	758.9	46.8	8.2	82	ssw.	25	11	.....	.....	10	.....	.....	.....	.....	..	Overloerer Bergh.
Vestervig	30.27	768.9	30.37	771.3	33.4	0.8	83	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	Loerer Oesterboi.
Jacobshavn	29.34	745.1	29.38	746.3	15.6	— 9.1	.....	sw.	.....	.....	2	.....	9	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.18	741.2	29.84	757.8	51.4	10.8	95	sw.	.....	.....	1	0	8 n	.....	w.	0.020	0.5	very cloudy	M. Labroue, Director.
Alençon, Normal School	29.19	741.3	29.74	755.3	39.6	4.2	97	n.	.....	.....	4	.....	10 n	s.	s.	0.079	2.0	raining	M. Nicot, Director.
Arras, Engineer School	29.42	747.2	29.69	754.0	32.4	0.2	98	.....	.....	.....	4	.....	10	.....	.....	0.472	12.0	rain & snow	M. Fénéon, Command't.
Avignon, Normal School	29.72	754.8	29.80	756.8	58.6	14.8	82	e.	.....	.....	1	.....	10	.....	s.	0	0	covered.....	M. Giraud, Director.
Bar-sur-Seine	29.08	738.7	29.63	752.7	53.4	11.9	86	sw.	.....	.....	1	.....	10	.....	w.	0.472	12.0	covered	M. Saillard, Director.
Beauvais, Normal School	29.41	747.0	29.69	754.0	36.9	2.7	93	nne.	.....	.....	2	.....	10	.....	ne.	1.043	26.5	covered.....	M. Frère Eugène Marie.
Besançon, Normal School	28.78	730.9	29.66	753.3	59.5	15.3	73	sse.	.....	.....	1	.....	n	.....	sw.	0.16	4.	.....	M. Gobin, Director.
Bordeaux, Observatory	29.50	749.3	29.76	755.9	53.6	12.0	82	sw.	.....	.....	1	.....	10	.....	wnw.	0.008	0.2	covered.....	M. Rayet, Director.
Bourges, Normal School	29.10	739.1	29.65	753.0	55.0	12.8	72	sw.	.....	.....	4	.....	k	.....	sw.	0.118	3.0	.....	M. Malet, Director.
Brest, Naval Observatory	29.73	755.2	29.98	761.4	45.7	7.6	83	n.	.....	.....	3	.....	9	.....	n.	0.012	0.3	.....	M. de Kermaree, Dir.
Caen, Normal School	29.65	753.2	29.72	755.0	40.3	4.6	87	sw.	.....	.....	1	.....	10	.....	.....	0.71	18.	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.19	741.5	29.52	749.7	50.2	10.1	98	s.	.....	.....	4	.....	10	.....	.....	1.260	32.0	covered.....	M. Jadot, Director.
Charleville, Normal School	29.05	737.9	29.57	751.1	37.0	2.8	93	e.	.....	.....	3	.....	10	.....	.....	0.843	21.4	raining.....	M. Grimard, Director
Clermont-Ferrand Obs'y	28.34	719.8	29.67	753.6	57.2	14.0	88	ssw.	.....	.....	3	.....	8	.....	.....	0	0	¾ covered...	M. Allnard, Director.
Cluny, Normal School	28.87	733.3	29.72	754.9	59.7	15.4	64	sw.	.....	.....	1	.....	8	.....	w.	0.059	1.5	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.78	731.0	29.65	753.1	47.5	8.6	92	e.	.....	.....	1	.....	10	e.	e.	1.717	43.6	covered.....	Dr. Coulet, Director.
Gap, Normal School	27.50	698.5	29.85	758.2	50.4	10.2	93	.....	.....	.....	.....	.....	8	.....	s.	0.220	5.6	....	M. Jeangirard, Director.
Gréasque, du Rhone	28.71	729.2	29.84	757.8	53.1	11.7	90	e.	.....	.....	2	.....	10	.....	se.	0	0	.....	M. Klus, Director.
Grenoble, Normal School	29.00	736.5	29.77	756.2	55.0	12.8	93	nne.	.....	.....	1	.....	ks	.....	s.	0	0	.....	M. Ablard, Director.
Guéret	28.12	714.3	29.69	754.2	50.4	10.2	92	sw	.....	.....	2	.....	5	.....	sw.	.....	.....	raining.....	M. Delorme, Dir.
Lamballe, Normal School	29.54	750.3	29.82	757.3	44.6	7	91	nnw.	.....	.....	4	.....	10 n	.....	nnw.	0.83	21.	raining.....	M. Ollitrault, Director.
Lescar, Normal School	29.30	744.2	29.87	758.7	50.0	10.0	82	w.	.....	.....	3	.....	10	.....	.....	.....	.....	raining.....	M. Chauvin, Director.
Lorient, Naval Observatory	29.78	750.5	29.89	759.1	48.6	9.2	84	n.	.....	.....	2	.....	10	n.	nw.	.....	.....	raining.....	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.70	728.9	29.73	755.1	57.4	14.1	76	s.	.....	.....	2	0	8 n	.....	w.	0.008	0.2	very cloudy	M. André, Director.
Mans, Normal School	29.39	746.4	29.69	754.2	41.2	5.1	93	ne.	.....	.....	4	.....	.....	.....	.....	2.024	51.4	.....	M. Piboen, Director.
Marseille, Observatory	29.54	750.2	29.80	757.0	62.2	16.8	81	ese.	.....	.....	2.3	.....	9	.....	var.	0.079	2.0	.....	M. Stephan, Director.
Mt. Louis	24.60	624.8	29.44	747.8	42.8	6.0	100	sw.	9.4	4.2	.....	.....	10	w.	.....	0.500	12.7	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.65	753.0	29.84	758.0	58.6	14.8	89	ne.	.....	.....	2	.....	5	.....	.....	0	0	cloudy.....	M. Galzin, Director.
Nancy, Normal School	28.87	733.3	29.62	752.4	41.0	5.0	97	ne.	.....	.....	1	.....	10 n	.....	.....	0.945	24.0	raining.....	M. Basse, Director
Nantes, Observatory	29.63	752.6	29.79	756.7	47.3	8.5	72	nnw.	.....	.....	2–3	.....	10 n	.....	n.	1.079	27.4	.....	M. Larocque, Director.
Perpignan, Observatory	29.73	755.1	29.84	757.9	59.0	15.0	61	nw.	11.2	5.0	.....	.....	10	.....	s.	0.067	1.7	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.00	533.3	.....	.....	25.2	— 3.8	.....	w.	.....	.....	2	.....	10	.....	w.	0.213	5.4	snowy.....	Gen'l de Nansouty, Dir.
Privas, Normal School	28.70	729.0	29.76	756.0	55.4	13.0	88	n.	.....	.....	1	.....	2	n.	n.	0	0	slightly ol'dy	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.80	630.0	.....	.....	37.0	2.8	100	sw.	.....	.....	8	.....	8	.....	sw.	0.051	1.3	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.72	754.9	29.75	755.7	47.8	8.8	89	wnw.	.....	.....	1	.....	10	.....	.....	0.16	4.	overcast.....	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.54	750.2	29.76	755.8	45.7	7.6	86	nw.	.....	.....	1	.....	10	sw.	s.	0.87	22.	covered.....	M. Brotier, Director.
Rodez, Normal School	28.08	713.3	29.88	759.0	45.0	7.2	97	nw.	.....	.....	1	.....	k	.....	e.	0.067	1.7	.....	M. Seger, Director.
Rouen, Normal School	29.67	753 6	29.72	754.8	38.5	3.6	83	nne.	.....	.....	3	.....	10	nne.	.....	0.449	11.4	rain & hail..	M. Moullot.
Saint Lô	.....	.....	.....	.....	42.8	6	91	n.	.....	.....	1	.....	10	.....	ne.	1.378	35.0	raining.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.47	748.5	29.63	752.7	40.1	4.5	94	nnw.	.....	.....	1	.....	10	.....	.....	0.980	24.9	.....	M. Renou, Director.
Toulouse, Observatory	29.19	741.3	29.91	759.6	52.3	11.3	81	w.	.....	.....	3	.....	10	w.	.....	0.094	2.4	covered.....	M. Baillaud, Director.
Tours	29.54	750.2	29.71	754.7	45.0	7.2	85	nnw.	.....	.....	1	.....	10	.....	nnw.	1.658	42.1	raining.....	M. de Tastes.
Versailles, Observatory	29.15	740.3	29.64	752.8	38.5	3.6	93	n.	.....	.....	1	.....	.....	.....	.....	0.685	17.4	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.43	722.0	29.94	760.4	32.4	0.2	89	se.	.....	.....	4	.....	10	se.	.....	0.461	11.7	.....	Prof. Jnedt.
Bamberg	29.12	739.6	29.96	761.0	37.4	3.0	82	sw.	.....	.....	1	.....	10	.....	.....	0.126	3.2	rain & snow	Prof. Dr. Hoh.
Berlin	30.09	704.3	30.28	769.1	33.3	0.7	89	e.	.....	.....	3	.....	2	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.76	756.0	30.30	769.6	29.1	— 1.6	74	ese.	.....	.....	2	.....	4	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.34	745.1	29.78	756.4	39.2	4.0	87	e.	.....	.....	2	.....	10	e.	.....	1.555	39.5	raining.....	Albert Senz.
Cassel	29.22	742.3	29.94	760.4	34.2	1.2	92	e.	.....	.....	4	.....	10	e.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.52	749.7	29.90	759.4	32.5	0.3	100	wnw.	.....	.....	1	.....	10	.....	.....	0.591	15.0	.....	Physical Society.
Friedrichshafen	28.40	721.3	29.85	758.3	44.2	6.8	85	wsw.	.....	.....	3	.....	10	wnw.	.....	0.398	10.1	.....	Wilhelm, Chief Tel.
Hamburg	30.17	766.4	30.26	768.7	34.9	1.6	69	e.	.....	.....	4	.....	6	w.	.....	0	0	.....	E. Preller.
Kiel	30.27	768.8	30.28	769.2	38.5	3.6	68	e.	.....	.....	4	.....	6	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.72	754.8	30.16	766.0	31.6	— 0.2	74	ene.	.....	.....	3	.....	10	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.98	761.5	30.16	766.1	32.5	0.3	81	ene.	.....	.....	3	c	10 ks	w.	.....	0	0	.....	Weather Observatory.
Memel	30.24	768.2	30.29	769.4	33.4	0.8	87	ne.	.....	.....	3	o	3 k	.....	.....	.....	.....	.....	Isserimann.
Munich	28.02	711.7	29.87	758.7	34.3	1.3	85	e.	.....	.....	0	.....	9	ne.	.....	0.114	2.9	.....	Central Station.
Neufahrwasser	30.30	769.7	30.32	770.1	36.0	2.2	79	w.	.....	.....	2	.....	4	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.26	743.3	29.79	756.6	35.6	2.0	98	calm	.....	.....	0	.....	10	.....	.....	2.146	54.5	.....	Dicknether.
Stuttgart	28.85	732 7	29.76	756.0	38.7	3.7	84	e.	.....	.....	1	.....	10	.....	.....	0.756	19.2	.....	Prof. Dr. Schoder.
Wustrow	30.32	770.0	30.34	770.7	37.4	3.0	71	e.	.....	.....	2	o	3 k	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.72	754.8	30.10	764.6	58.6	14.8	.....	ne.	.....	.....	1.5	.....	10	.....	.....	0.402	10.2	covered.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.00	762.0	30.05	763.2	87.1	30.6	34	e.	12.0	5.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Deesa	29.45	748.1	29.92	760.0	84.9	29.4	35	ssw.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky.....	
Bombay	29.89	759.1	29.93	760.1	79.7	26.5	69	nnw.	17.0	7.6	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.07	712.9	29.92	760.0	80.8	27.1	24	ne.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky.....	
Trichinopoly	29.63	752.6	29.91	759 8	82.4	28.0	71	ene.	1.0	0.4	.....	.....	4	.....	.....	0	0	d. clouds....	
Bellary	28.40	721.4	29.86	758.5	83.0	28.3	35	e.	2.0	0.9	.....	.....	3	.....	.....	0	0	d. clouds....	
Belgaum	27.37	695.1	29.90	759.5	77.6	25.3	35	ne.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky.....	
Lahore	29.31	744.4	30.07	763.7	71.2	21.8	42	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Roorkee	29.11	739.4	30.03	762.8	70.8	21.6	45	w.	.....	.....	.....	.....	0	.....	.....	0	0	.....	
Agra	29.47	748.6	30.04	763.1	76.8	24.9	35	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Nagpur	28.93	734.8	29.98	761.6	76.9	24.9	43	calm	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky.....	
Jubbulpore	28.68	728.4	30.05	763.3	76.1	24.5	28	ne.	6.0	2.7	.....	.....	0	.....	.....	0	0	blue sky.....	
Lucknow	29.64	752.8	30.03	762.6	72.2	22.3	44	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Allahabad	29.71	754.7	30.04	762.9	67.0	19.4	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Patna	29.85	758.1	30.04	763 0	74.5	23.6	59	nw.	1.3	0.6	.....	.....	4	nw.	nw.	0	0	d. clouds	
Hazaribagh	27.98	710.7	30.04	763.0	68.6	20.3	63	n.	3.5	1.6	.....	.....	1	.....	.....	0	0	d. clouds. ...	
Cuttack	29 92	759 9	30.00	762.0	76.4	24.7	68	nne.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky.....	
Calcutta, Alipore	29.98	761.5	30.00	762.0	73.9	23.3	74	nnw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Dhubri	29.90	759.4	30.02	762.5	73.0	22.8	77	nw.	3.8	1.7	.....	.....	1	sw.	.....	0	0	d. clouds....	
Chittagong	29.90	759.5	30.00	761.9	76.1	24.5	87	calm	1.4	0.6	.....	.....	2	.....	ssw.	0	0	blue sky.....	
Sibsagar	29.68	753.9	30.03	762.7	71.5	21.9	86	se.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Zanzibar, Africa	29.88	758.8	29.90	759.4	81.5	27.5	72	se.	3.8	1.7	.....	.....	7	.....	.....	0.37	9.4	d. clouds	
Jeypore	28.58	725.8	30.04	763.0	76.2	24.6	44	w.	0.2	0.09	.....	.....	0	.....	.....	0	0	blue sky.....	
Italian.																			
Udine	29.63	752.7	30.05	763.3	47.3	8.5	64	ne.	0.7	0.3	.....	.....	9	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.52	749.7	30.04	763.1	47.8	8.8	76	sw.	1.3	0.6	.....	.....	10	.....	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.92	760.0	30.03	762.8	47.1	8.4	71	n.	4.9	2.2	.....	.....	10	.....	.....	0.012	0.3	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.03	738.7	30.00	762.0	48.7	9.3	73	ene.	2.5	1.1	.....	.....	9	.....	.....	0.043	1.1	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.76	755.9	29.95	760.8	50.0	10.0	76	ne.	8.1	3.6			10	s.		0.228	5.8		Prof. G. M. Garibaldi.
Mondovi	28.66	712.8	30.01	762.3	47.7	8.7	61	nw.			2		9			0.008	0.2		Prof. D. C. Bruno.
Pesaro	30.02	762.4	30.06	763.6	51.8	11.0	83	nw.	8.7	3.9			10			0	0		Prof. Luigi Guidi.
Florence	29.70	754.4	29.96	760.9	57.7	14.3	89	sw.			2		10	sw.		0.071	1.8		Prof. Costantino Pitter
Leghorn	29.79	756.6	29.87	758.7	62.2	16.8	81	ese.	3.1	1.4			10			0	0		Prof. P. Monte.
Rome	29.82	757.4	30.00	761.9	64.8	18.2	67	s.	7.4	3.3			10			0	0		Prof. P. Tachini.
Lecce	29.77	756.1	30.02	762.5	66.2	19.0	65	wsw.	4.0	1.8			4	w.		0.165	4.2		Prof. C. de Giorgi.
Cosenza	29.15	740.4	30.04	763.0	65.5	18.6	71	s.	2.5	1.1			7	sw.		0	0		Prof. D. Conti.
Cagliari	29.72	755.0	29.92	759.9	66.9	19.4	76	se.			2		9			0	0		Prof. A. Pacinotti.
Palermo	29.78	756.4	30.03	762.7	68.0	20.0	44	ne.	1.8	0.8			9			0	0		Prof. G. Cacciatore.
Syracuse	30.00	761.9	30.04	763.0	64.6	18.1	67	wsw.	9.8	4.4			6	wnw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.50	749.2	30.02	762.4	64.9	18.3	72	sw.	0	0			7	sw.		0.024	0.6		Prof. F. Brioschi.
Stelvio	22.02	559.3			23.5	— 4.7	93	sw.			2		8			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.05	560.2			26.6	— 3.0	72	n.			6		10			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.21	767.3	30.24	768.1	46.2	7.9	94	calm			0		10 n		w.	0.134	3.4	raining	Hattori.
Awomori	30.19	766.8	30.23	767.8	42.9	6.1	79	wnw.	7.3	3.3		0	5 ks		wnw.	0.008	1.7	fair	K. Ogawa.
Hakodate	30.19	766.9	30.20	767.2	38.5	3.6	67	nnw.	21.0	9.4		1	0			0.135	3.4	clear	
Hiroshima					59.4	15.2	90	nne.	3.8	1.7			10ck;8			0.500	12.7	cloudy	Y. Miwa.
Kanazawa	30.17	766.2	30.27	768 9	53.5	11.9	82	e.	4.6	1.8			10			0.240	6.1	raining	S. Endo.
Kioto	30.01	762.2	30.19	766.8	56.6	13.7	99	nnw.	1.0	0.4			10 n			0.755	19.2	light rain	M. Tojima.
Nagasaki, I. M. Obs'y	29.95	760.8	30.15	765.9	60.5	15.8	81	ne.	4.8	2.1		0	0			0	0	clear	S. Takehayashi.
Nemuro	30.09	764.3	30.15	765.8	39.8	4.3	98	n.	12.0	5.4		10	0			0	0	cloudy	
Niigata	30.21	767.3	30.25	768.3	49.5	9.7	90	calm	0	0			10 ck		w.	0.030	0.8	covered	M. Morita.
Nobiru	30.16	766.0	30.18	766.4	46 6	8.1	77	nnw.	8.1	3.7			9 s			0	0	cloudy	H. Midzushima.
Osaka	30.16	766.1	30.18	766.5	57.2	14.0	98	ne.	7.1	3.1			10 n			1.196	30.4	light rain	
Supporo					35.5	1.9	87	nw.	22.2	9.9			9			0.095	2.4	overcast	
Tokei Obs'y, Yeddo	30.10	764.6	30.18	766.6	50.8	10.4	99	nnw.	4.4	2.0			10 n			0.899	22.8	raining	The Staff.
Wakayama	30.10	764.5	30.16	766.0	58.5	14.7	92	nne.	4.2	1.9			10			1.039	20.4	raining	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.86	758.4	30.05	763.3	78.0	25.6	61	ene.	16.0	7.2		0	4 k;ks		e.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.76	603.4	29.98	761.4	55.2	12.9	77	n.	Inap.	Inap.		8 c;ck	0			0	0	cloudy	Prof. Vicente Fernandes.
Leon	24.42	620 3	30.21	767.3	50.0	10.0	91	wnw.			1	5 c	3 k	sw.		0	0	cloudy	Prof. M. Leal.
Mazatlan	29.71	754.6	29.97	761.2	70.5	21.4	85	ese.	0.9	0.4		1 c	4 n		sw.	0	0	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23.23	589.6	30.32	770.1	49.8	9.9	89	calm	0	0			10 kn			0.024?	1.6?	covered	The Staff.
Morelia	24.17	614.0	30.00	763.5	50.5	10.3	65	se.	1.8	0.8		3 c	3 k	s.	s.	0.205	5.2	½ cloudy	M. Tena, M. D.
Orizaba																			Prof. M. M. Cházaro.
Pabellon, Aguascalientes	24.02	610.1	30.07	763.8	52.5	11.4	88	calm	0	0						0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.42	594.9	30.20	766.9	52.7	11.5	77	calm	0	0		0	8		ese.	0	0	cloudy	Prof. P. Spina.
Zacatecas	22.69	576.3	30.46	773.6	46.7	8.0	89	e.	5.4	2.4		10	0			0	0	cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.82	757.4	29.82	757.4	32.2	0.1		ene.			6					0.016	0.4		
Groningen	30.07	763.7	30.12	765.1	33.4	0.8		e.			6					0	0		
Helder	30.02	762.6	30.02	762.6	35.6	2.0		ene.			6					0.118	3.0		
Hellevoetsluis	29.87	758.7	29.87	758.7	34.0	1.1	72	ene.			4					0	0		
Utrecht	29.88	759.0	29.93	760.2	34.0	1.1	78	ene.			5		8			0.228	5.8	very cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	30.31	769.8	30.37	771.4	34.5	1.4	74	s.	4	2			0			0	0		
Brono	30.30	769.5	30.34	770.5	34.5	1.4	74	calm	0	0			0			0	0		
Christiania	30.27	768.9	30.43	772.9	28.8	— 1.8	68	e.	2	1			3			0	0	foggy	
Gjesvær	30.16	766.1	30.19	766.7	35.8	2.1		s.			2		10						
Lodingen	30.24	768.0	30.28	769.2	34.5	1.4	93	ssw.			1		10			0.118	3.0	rain & snow	
PORTUGUESE.																			
Angra, Azores	30.09	764.2	30.24	768.2	62.6	17.0	78	se.	8.1	3.6			6			0	0		Dr. J. A. Sampaio.
Campo Major	28.98	730.1	29.98	761.5	59.0	15.0	68	wnw.	8.1	3.6			8			0.480	12.2		Dr. A. M. R. dos Santos
Funchal, Madeira	29.98	761.5	30.07	763.7	70.7	21.5	62	se.	2.5	1.1			4	ne.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.74	755.5	30.11	764.7	56.7	13.7	41	n.	25.5	11.4			1			0.240	6.1		The Staff.
Ponta Delgada, Azores	30.18	766.5	30.25	768.3	65.1	18.4	60	e.	3.1	1.4			3			0	0		
Saint Paul de Loando	29.65	753.2	29.85	758.3	80.6	27.0	86	wsw.	0.7	0.3			10			0	0		
Serra da Estrella	25.21	640.3	30.09	764.3	33.3	0.7	100	nnw.	18.6	8.3			10			2.055	52.2	foggy	
RUSSIAN.																			
Akmolinski	29.30	744.3	30.48	774.1	16.9	— 8.4	85	e.	7	3		0	0			0	0		Major K. Lasarew.
Archangel	30.18	766.7	30.21	767.2	12.9	—10.6	93	n.	2	1			10			0.047	1.2	light fog	Capt. Sselliwerstow.
Astrakhan	30.18	766.5	30.10	764.4	46.9	8.3	73	sw.	2	1		0	7 s			0	0		Capt. Wisganow.
Barnaul	30.00	761.9	30.55	775.9	13.1	—10.5	74	calm	0	0			0			0	0		Meteorological Obs'y.
Dorpat	29.98	761.5	30.24	768.1	24.3	— 4.3	100	se.	4	2			10 n			0.063	1.6	snowing	Observatory.
Ekaterinburg	29.25	743.0	30.27	768.8	28.6	— 1.9	98	sse.	9	4			10			0	0		Meteorological Obs'y.
Kasan	29.72	754.9	30.00	762.0	35.4	1.9	88	s.	2	1			10			0.020	0.5	sleeting	Observatory.
Kertch	30.14	765.5	30.16	766.0	39.4	4.1	71	nw.	4	2		0	8 n			0	0		Lagorio & Sastyrex.
Kieff	29.55	750.6	30.23	767.9	22.1	— 5.5	68	nw.	11	5			10ks;n					light snow	Observatory.
Lugan	29.72	755 0	29.93	760.3	36.9	2.7	91	wnw.	13	6			10			0.154	3.9		Meteorological Obs'y.
Nikolaiev	29.98	761.6	30.00	763.4	38.5	3.6	82	nw.	9	4			10 n			0	0		Capt. Kurdakow.
Pekin, China	30.50	776.1	30.70	779 7	33.3	0.7	92	calm	0	0			9 n			0.630	16.0	snowing	Physical Observatory.
St. Petersburg	30.28	769.1	30.30	769.5	18.3	— 7.6	89	sse.	7	3		c;cs	7 s			0	0		Central Physical Obs'y.
Semipalatinsk	29.89	759.1	30.01	777.6	11.5	—11.4	85	n.	9	4			6			Inap.	Inap.		Major Lasarew.
Tashkend, Laboratory	28.54	725.0	30.11	764.8	55.8	13.2	48	calm	0	0			6						Teich, A. M.
Tiflis	28.72	729.4	30.16	766.0	50.0	10.0	50	nw.	18	8		0	7 ks			0	0		Physical Observatory.
Tomsk																			
Vladivostock	30.52	775.3	30.59	777.0	17.2	— 8.2		ne.	9	4		0	3 k			0	0		
Warsaw	29.90	759.4	30.35	770.9	27.3	— 2.6	70	w.	4	2		0	1 s					heavy clouds	Astronomical Obs'y.
Wilna	29.82	757.3	30.20	768.6	27.9	— 2.3	96	sw.	7	3			10			0	0		Berg, Assistant.
Yeniseisk	30.65	778.0	30.99	787.1	— 9.2	—22.9	81	calm	0	0			0			c	0		M. O. Marks.
SCOTTISH.																			
Monach Lt			30.01	762.2	48	8.9	92	s.			7		10			0	0	overcast	J. Youngclause
North Unst			30.15	765.8				s.			4	3	4	s.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.72	754 9	29.82	757.5	64.0	17.8	77	e.	1.3	0.6			10			0.004	0.1		Antonio Rzve, Director.
Bilbao, Met. Obs'y	29.91	759.8	29.97	761.3	54.1	12.3	77	nw.	5.6	2.5			10			0.390	9.9	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.99	685.6	30.01	762.3	45.9	7.7	76	n.	8.1	3.6			9			0.291	7.4	almost cov	Domingo Martin.
Madrid, Royal Obs'y	27.67	702.8	29.89	759.2	55.6	13.1	67	nw.	13.9	6.2			9			0.154	3.9	almost cov	The Staff.
Murcia, Met. Obs'y	29.73	755.2	29.88	759.0	62.6	17.0	60	ene.	1.3	0.6		5	5	ne.		0	0	covered	Olayo Diaz, Director.
Oviedo	29.21	741.8	30.08	764.1	47.5	8.6	80	e.	7.8	3.5			10 n		n.	0.382	9.7	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.18	741.1	30.09	764.2	50.0	10.0	78	nnw.	15.4	6.9						0.039	1.0	misty	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.86	758.5	29.92	759.9	81.0	27.2	75	ne.	3.3	1.5		0	1 ks			0.571	14.5	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.90	759.5	30.00	762.0	66.2	19.0	88	calm	0	0			10		sw.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.80	756.8	29.89	759.1	75.2	24.0	92	w.	5.6	2.5		5 k	3 kn	ne.	ne.	0.020	0.5	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.86	758.4	29.99	761.8	77.6	25.3	88	calm	0	0		0	8 ks			0.10	2.5	heavy cl'ds.	José L. Yrastorza.
SWEDISH.																			
Haparanda	30.40	772.2	30.44	773.2	16.2	— 8.8	100	calm			0		10			0	0		
Umea	30.34	770.7	30.39	772.0	13..1	—10.5	83	calm			0		0			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
SWEDISH—Continued.																			
Hernosand	30.35	771.0	30.41	772.3	26.6	— 3.0	87	calm	.....	.....	0	.....	5	.....	.....	0	0	.....	
Stockholm	30.18	766.5	30.35	771.0	32.4	0.2	67	n.	.....	.....	2	. .....	1	.....	.....	0	0	.....	
Wisby	30.26	768.5	30.32	770.0	38.1	3.4	63	nne.	.....	.....	4	.....	5	.....	.....	0	0	.....	
Sub-series.																			
Upsala	30.28	769.0	30.36	771.2	30.0	— 1.1	93	nnw.	7.8	3.5	.....	.....	9	.....	ne.	0.024	0.6	.....	S. G. Fineman.
SWISS.																			
Geneva	28.38	720.8	29.83	757.6	46.0	7.8	100	e.	.....	.....	1	.....	10	.....	.....	0.114	2.9	raining	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.20	767.0	52.5	11.4	50	ne.	10	4.5	.....	.....	9	.....	w.	0	0	.....	The Observatory.
Talona	.....	.....	30.07	763.5	61.3	16.3	.....	se.	.....	.....	1	.....	10	.....	.....	0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.01	762.2	70.0	21.1	60	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.86	758.4	29.94	760.5	40	4.4	57	w.	3	1.3	.....	0	0	.....	.....	0.07	1.8	clear	J. O. Barnes.
Alpena, Michigan	29.23	742.4	29.93	760.2	29	— 1.7	88	w.	7	3.1	.....	.....	10 s	.....	.....	0.05	1.3	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.09	637.3	30.19	766.8	21	— 6.1	64	e.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.36	694.9	30.34	770.6	31	— 0.6	71	sw.	5	2.2	.....	.....	10 s	.....	sw.	0	0	cloudy	B. O. Lenoir.
Atlanta, Georgia	29.01	736 8	30.23	767.8	31.5	— 0.3	67	nw.	15	6.7	.....	0	0	.....	.....	1.04	26.4	clear	H. C. Smith.
Atlantic City, New Jersey	30.03	762.7	30.04	763.0	35	1.7	69	nw.	10	4.5	.....	0	0	.....	.....	0.13	3.3	clear	Jas. M. Watson.
Augusta, Georgia	30.02	762.5	30.22	767.0	42	5.6	74	nw.	4	1.8	.....	0	0	.....	.....	0.02	0.5	clear	John Healy.
Baltimore, Maryland	30.08	764.0	30.13	765.3	38	3.3	54	nw.	8	3.6	.....	6 k	0	nw.	.....	0.19	4.8	fair	Geo W Felger.
Barnegat, New Jersey	29.98	761.5	30.00	762.0	36.5	2.5	70	nw.	26	11.6	.....	2 cs	0	.....	.....	0.11	2.8	clear	G. A. Hill.
Bennett, Fort, Dakota	28.54	724.9	30.24	768.1	36	2.2	64	nw.	23	10.3	.....	0	0	.....	.....	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.36	694.9	30.32	770.1	28	— 2.2	77	calm	0	0	.....	0	5 8	.....	.....	0	0	fair	S. Wheaton.
Bismarck, Dakota	28.21	716.5	30.13	765 3	33	0.6	71	nw.	24	10.7	.....	0	0	.....	.....	0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	29.90	759.4	29.94	760.5	41	5.0	57	n.	13	5.8	.....	0	1 ks	.....	nw.	0.18	4.6	clear	J. T. Elker.
Boise City, Idaho	27.47	697.7	30.41	772.4	22	— 5.6	88	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	B. E. Light.
Boston, Massachusetts	29.72	754 9	29.88	758.9	36.0	2.2	71	w.	8	3.6	.....	0	0	.....	.....	0.05	1.3	clear	O. B. Cole.
Brownsville, Texas	30.31	769.9	30.36	771.1	51.7	10.9	47	n.	8	3.6	.....	.....	10 s	.....	n.	1.15	29.2	cloudy	M. McCarty.
Buffalo, New York	29.20	741.7	29.98	761.5	31.8	— 0.1	80	w.	20	8.9	.....	.....	10ks;8	.....	w.	0.56	14.2	cloudy	W. Finn.
Buford, Fort, Dakota	28 35	720.1	30.33	770.4	28	— 2.2	77	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.50	749.3	29.81	757.2	40.7	4.8	66	sw.	12	5.4	.....	7 cs	3 s	w.	sw.	0.94	23.9	cloudy	W. B Gates.
Cairo, Illinois	29.89	759.2	30.31	769.9	32.8	0.4	86	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. H. Ray.
Cape Henry, Virginia	30.08	764.0	30.10	764.5	45	7.2	68	nw.	18	8.0	.....	.....	10 s	.....	nw.	0.83	21.1	cloudy	A. K. Alderson.
Cape May, New Jersey	30.03	762.7	30.06	763.5	43.0	6.1	60	nw.	23	10.3	.....	0.	5 s	.....	nw.	0.14	3.6	fair	W. E. Smith.
Cape Mendocino, California	29.72	754.9	30.25	768.3	52	11.1	59	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. J. McLean.
Cedar Keys, Florida	30.12	765 0	30.14	765.5	63	17.2	93	nw.	14	6.3	.....	hz.	8 k	.....	nw.	0	0	cloudy	F. W. Mixer.
Champaign, Illinois	29.25	742.9	30.11	764.8	27.0	— 2.8	70	s.	14	6.3	.....	.....	10 s	.....	s.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.05	763.3	30.11	764.8	51	10.6	72	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.28	743.7	30.16	766.1	38.0	3.3	72	ne.	3	1.3	.....	0	sk.	.....	.....	inap.	inap.	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.46	748.3	30.31	769.9	33.0	0.6	74	n.	4	1.8	.....	0	0	.....	.....	0.01	0.3	clear	B. L. Goulding.
Cheyenne, Wyoming	24.22	615.2	30.43	772.9	27.2	— 2.7	53	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.28	743.7	30.02	762.5	30.2	— 1.0	78	s.	9	4.0	.....	4 k	0	sw.	.....	inap.	inap.	fair	J. Mitchell.
Chincoteague, Virginia	30.07	763.8	30.09	764.3	38	3.3	72	nw.	23	10.3	.....	hz.	0	.....	.....	0.01	0.3	clear	O. F. Dickens.
Cincinnati, Ohio	29.56	750.8	30.25	768.3	33	0.6	88	sw.	5	2.2	.....	0	hz.	.....	.....	0	0	clear	R. B. Watkins.
Cleveland, Ohio	29.36	745.7	30.13	765 3	28	— 2.2	82	sw.	20	8.9	.....	.....	10 s	.....	w.	0.12	3.0	cloudy	J. B. Newlin.
Coleman City, Texas	28.57	725.7	30.46	773.7	33	0.6	62	sw	2	0.9	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.31	744.5	30.20	767.1	26	— 3.3	88	sw.	3	1.3	.....	0	0	.....	.....	0.05	1.3	clear	D. Cuthbertson.
Concho, Fort, Texas	28.43	722.1	30.44	773.2	25.2	— 3.8	64	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	27.10	688.3	30.42	772.7	21	— 6.1	73	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.28	743.7	29.97	761.2	32	0.0	60	sw.	11	4.9	.....	7 k	0	sw.	.....	0	0	fair	R. R. Martin.
Davis, Fort, Texas	25.42	645 7	30.32	770.1	30	— 1.1	54	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.06	728.0	30.44	773.2	37	2.8	89	sw.	2	0.9	.....	.....	10 n	.....	sw.	0.07	1.8	light rain	H. Clifford.
Deadwood, Dakota	25.52	648.2	30.35	770.9	32	0.0	81	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	G. W. Scott.
Delaware Breakwater, Del	30.07	763.8	30.09	764 3	40	4.4	73	nw.	29	13.0	.....	0	4 ks	.....	nw.	0.09	2.3	fair	T. S. Townsend.
Denison, Texas	29.55	750.6	30.39	771.9	38.0	3.3	45	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24.94	633.5	30.44	773.2	34.0	1.1	55	se.	10	4.5	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.02	737.1	29.97	761.2	33	0.6	68	w.	10	4.5	.....	5 cs	0	w.	.....	0	0	fair	F. W. Conrad.
Detroit, Michigan	29.33	745.0	30.07	763.8	35.2	1.8	69	sw.	16	7.2	.....	3 ck	0	nw.	.....	0.03	0.8	fair	C. F. R. Wappenhans.
Dodge City, Kansas	27.04	7 2.0	30.38	771.6	31	— 0.6	62	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.17	740.9	29.92	760.0	31.5	— 0.3	71	s.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	28.99	736 3	29.78	756 4	24	— 4.4	73	w.	4	1.8	.....	0	2 s	.....	.....	0.01	0.3	clear	N. B. Conger.
Eagle Pass, Texas	29.03	752.6	30.46	773.7	51.0	10.6	47	nw.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25 65	651.5	30.51	774.9	4	—15.6	57	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	29.62	752.3	29.09	754.1	41.0	5.0	73	w.	12	5.4	.....	.....	10 s	.....	w.	0.23	5.8	cloudy	D. O. Murphy.
Elliott, Fort, Texas	27.46	697.5	30.40	772.1	30	— 1.1	60	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.51	673.3	30.36	771.1	30	— 1.1	81	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.29	744 0	30.05	763 3	33	0.6	78	sw.	12	5.4	.....	.....	10 n	.....	w.	0.43	10.9	light snow	Peter Wood.
Escanaba, Michigan	29.20	741.7	29.90	759.4	22.0	— 5.6	88	calm	0	0	.....	0	0	.....	.....	0	0	clear	George Heathcote.
Fredericksburg, Texas	28.62	726.9	30.44	773.2	43	6.1	60	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.35	770.9	30.40	772.1	47	8.3	48	ne.	16	7.2	.....	5 cs	0	.....	.....	0	0	fair	E. O'O. MacInerney.
Grand Haven, Michigan	29.27	743.4	29.97	761.2	36.0	2.2	57	s.	12	5.4	.....	7 ck	3 s	w.	sw.	0.10	2.5	cloudy	J. Mueller.
Grant, Fort, Arizona	25 39	644.9	30.23	767.8	33	0.6	57	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	Robert U. Lord.
Hatteras, North Carolina	30.01	762 2	30.03	762.7	52	11.1	93	ne.	28	12.5	.....	.....	10 n	.....	ne.	0.08	2.0	light rain	R. M. Crawford.
Helena, Montana	25.96	659.4	30.34	770 6	31	— 0.6	88	calm	0	0	.....	0	0	.....	.....	0.02	0.5	clear	N. C. Smith.
Henrietta, Texas	29.37	746.0	30.41	772.4	28	— 2.2	64	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. P. Sherry.
Huron, Dakota	28.00	726.4	30.08	764 0	36	2.2	66	nw.	20	8.9	.....	0	0	.....	.....	0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.33	745.0	30.17	766.3	27	— 2.8	77	s.	5	2.2	.....	2 ck	0	.....	.....	inap.	inap.	clear	O. Schutze
Indianola, Texas	30.37	771.4	30.40	772 1	51.3	10.7	47	ne.	20	8.9	.....	10 ck	0	w.	.....	0	0	cloudy	I. A. Reed.
Jacksboro, Texas	29.19	741.4	30.41	772.4	35	1.7	64	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.08	764.0	30.14	765.5	63	17.2	84	nw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.73	704 3	30.40	772.1	30	— 1.1	80	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	A. Schneider.
Keokuk, Iowa	29.35	745.5	30.04	763.0	32.0	0.0	66	sw.	6	2.7	.....	1 k	0	sw.	.....	0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.07	763 8	30.09	764.3	73.5	23.1	79	n.	7	3.1	.....	3 c	0	sw.	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.05	763.3	30.07	763.8	49.5	9.7	74	n.	32	14.3	.....	0	9 ks	.....	n.	0.07	1.8	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.25	742.9	30.32	770.1	30.1	— 1.1	76	n.	1	0.4	.....	0	sk.	.....	.....	0.85	21.6	clear	J. A. Cody.
La Crosse, Wisconsin	29.01	736 8	29.83	757 7	34	1.1	72	s.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.22	742.2	30.16	766.6	34	1.1	72	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.46	748 3	30.33	770 4	39.0	3.9	68	e.	6	2.7	.....	.....	10 n	.....	.....	0.08	2.0	light rain	W. Bell.
Little Rock, Arkansas	30.00	762.0	30.33	770.4	36	2.2	69	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. U. Simons.
Los Angeles, California	29.76	755.9	30.16	766.1	48	8.9	50	e.	5	2.2	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.64	752.8	30.23	767.8	35	1.7	79	sw.	7	3.1	.....	0	0	.....	.....	0	0	clear	L. M. Dey.
Lynchburg, Virginia	29.45	748.0	30.17	766.3	37.2	2.9	49	nw.	4	1.8	.....	0	0	.....	.....	0.05	1.3	clear	Lewis Duane.
Mackinaw City, Michigan	29.20	741.7	29.89	759 2	33.0	0.6	88	sw.	10	4.5	.....	0	6 k	.....	w.	0.15	3.8	fair	F. R. Day.
Macon, Fort, North Carolina	30.01	762.2	30.02	762.5	52	11.1	100	nw.	17	7.6	.....	.....	10 k	... .	nw.	0	0	cloudy	F. P. Chaffee.
Madison, Wisconsin	28.86	733.0	29.93	760.2	33	0.6	78	s.	12	5.4	.....	.....	10 s	.....	s.	inap.	inap.	cloudy	O. A. Shaw.
Maginnis, Fort, Montana	25.74	653.8	30.25	768.3	27	— 2.8	67	w.	5	2.2	.....	0	5 s	.....	.....	0	0	fair	F. Burke.
McKavett, Fort, Texas	28.06	712 7	30.44	773.2	29	— 1.7	67	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.09	738 9	29.86	758.4	23	— 5.0	73	s.	5	2.2	.....	0	0	.....	.....	inap.	inap.	clear	J. Gilligan.
Memphis, Tennessee	29.98	761.5	30.33	770.4	34	1.1	92	sw.	4	1.8	.....	0	fg.	.....	.....	0	0	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.15	740.4	29.94	760.5	29	— 1.7	77	s.	8	3.6	.....	0	7 s	.....	w.	inap.	inap.	fair	W. Line.
Missoula, Fort, Montana	26.93	684.0	30.34	770.0	31	— 0.6	81	nw.	2	0.9	.....	.....	8 s	.....	.....	0	0	cloudy	J. H. Young.
Mobile, Alabama	30.29	769 4	30.33	770.4	37	2.8	79	n.	7	3.1	.....	0	0	.....	.....	0.23	5.8	clear	C. A. Read.
Montgomery, Alabama	30.07	763.8	30.31	769.9	35.8	2.1	76	nw.	6	2.7	.....	0	0	.....	.....	0.21	5.3	clear	J. B. McLaughlin.

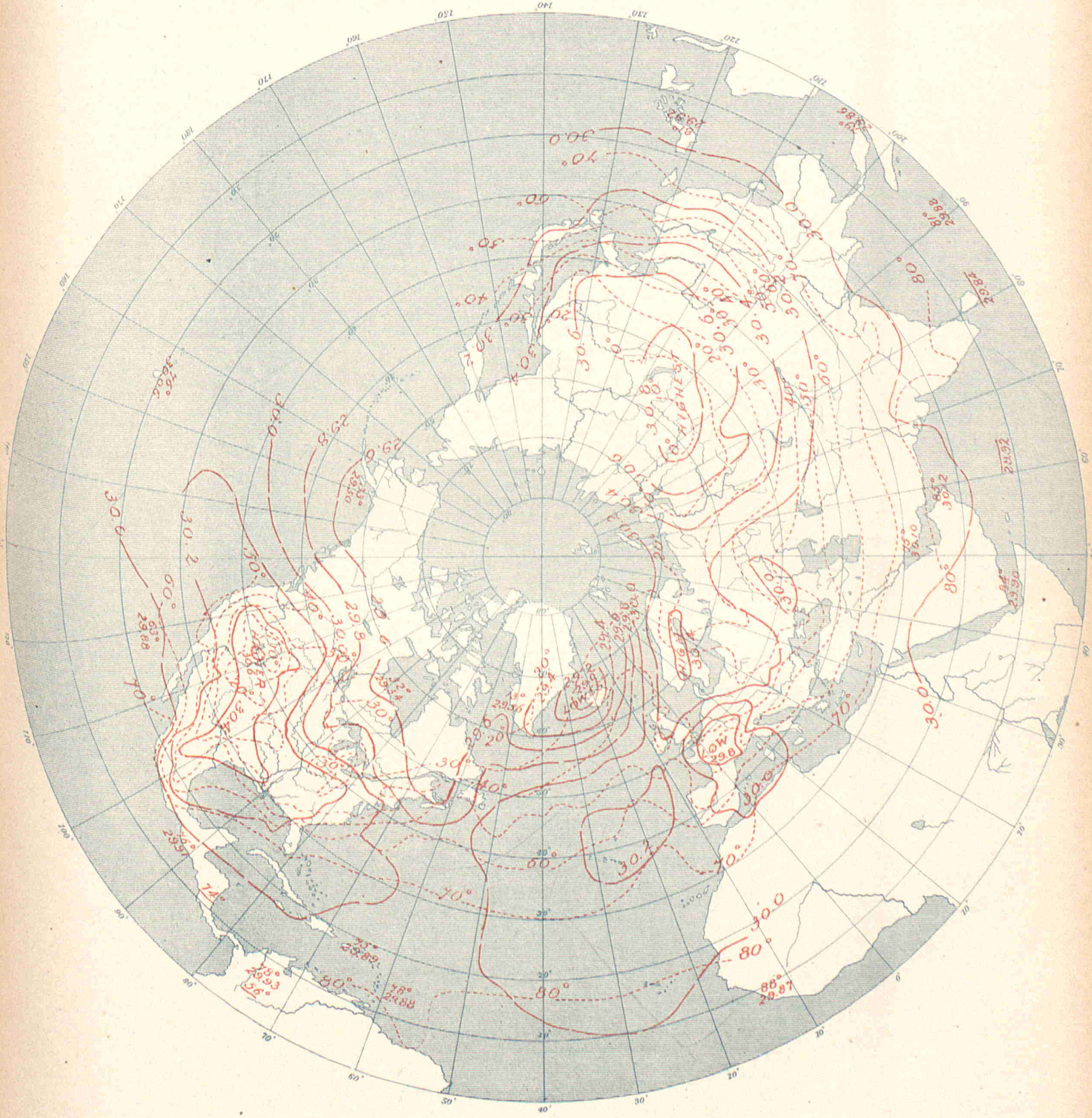
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	28.78	731.0	29.84	757.9	35	1.7	85	nw.	16	7.2			10 s		nw.	0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.17	740.9	30.23	767.8	38.5	3.6	45	w.	12	5.4		0	4 k		w.	0.71	18.0	fair	J. C. Sprigg, jr
Mt. Washington, N. H.	23.29	591.6	29.85	758.2	10.0	—12.2	100	nw.	70	31.3			fg.		nw.	1.19	30.2	dense fog	J. G. Linsley.
Nashville, Tennessee	29.71	754.6	30.31	769.9	31.0	— 0.6	85	ne.	1	0.4			fg.			0	0	dense fog	L. N. Jesunofsky.
New Haven, Connecticut	29.83	757.7	29.95	760.7	35.5	1.9	65	w.	6	2.7		0	0			0.18	4.6	clear	J. H. Sherman.
New London, Connecticut	29.91	759.7	29.96	761.0	40	4.4	65	nw.	3	1.3		2 k	0			0.05	1.3	clear	J. G. Lynch.
New Orleans, Louisiana	30.29	769.4	30.35	770.9	43.0	6.1	60	ne.	12	5.4		1 c	sk.			0 50	12.7	clear	L. Dunne.
Newport, Rhode Island	29.89	759.2	29.94	760.5	40.3	4.6	53	w.	16	7.2		0	0			0.21	5.3	clear	W. McGillivray.
New York, New York	29.83	757.7	30.01	762.2	37	2.8	72	w.	10	4.5		4 cs	4 s	w.	w.	0.14	3.6	cloudy	J. B. Merrill.
Norfolk, Virginia	30.10	764.5	30.13	765.3	43	6.1	68	n.	12	5.4		0	7 k		nw.	0.31	7.9	fair	Wm. Davis.
North Platte, Nebraska	27.27	692.6	30.35	770.9	27.6	— 2.4	74	w.	10	4.5		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.15	765.8	30.19	766.8	47.0	8.3	93	w.	12	5.4			10 n			0.76	19.3	light rain	J. Dascomb.
Omaha, Nebraska	28.87	733.3	30.11	764.8	37.1	2.8	51	w.	18	8.0		0	0			0	0	clear	A. Pollak.
Oswego, New York	29.55	750.6	29.89	759.2	36.8	2.7	53	sw.	12	5.4			10 s		w.	0.64	16.3	cloudy	S. W. Beall.
Palestine, Texas	29.86	758.4	30.43	772.9	36.0	2.2	61	n.	5	2.2		0	0			0	0	clear	L. M. Pindell.
Pensacola, Florida	30.27	768.8	30.30	769.6	39.2	4.0	70	n.	6	2.7		0	0			0.65	16.5	clear	M. McGauran.
Philadelphia, Pa.	29.97	761.2	30.07	763.8	39	3.9	54	nw.	9	4.0			10 ks		w.	0.15	3.8	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.94	455.7	30.60	777.2	16	— 8.9	76	ne.	3	1.3		0	0			0	0	clear	H. Hall.
Roche, Nevada	24.31	617.5	30.45	773.4	26.2	— 3.2	58	nw.	10	4.5		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.32	744.7	30.17	766.3	33.0	0.6	57	sw.	12	5.4			10 s			0.27	6.9	cloudy	W. Daly.
Poplar River, Montana	28.07	713.0	30.36	771.1				w.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.28	769.1	30.29	769.4	52.0	11.1	77	n.	25	11.2		0	0			0.11	2.8	clear	M. Herman.
Port Huron, Michigan	29.33	745.0	30.05	763.3	26.1	— 3.3	91	sw.	9	4.0		0	8 ks		w.	inap.	inap.	cloudy	W. O. Bailey.
Portland, Maine	29.72	754.9	29.77	756.1	40.0	4.4	65	nw.	8	3.6		0	0			0.24	6.1	clear	W. W. Eichelberger.
Portland, Oregon	30.18	766.6	30.25	768.3	42.8	6.0	93	calm	0	0			10 n			0.31	7.9	light rain	M. L. Hearne.
Portsmouth, N. C.					54	12.2	93	ne.	30	13.4			10 s		ne.	0.05	1.3	cloudy	F. S Coburn.
Prescott, Arizona	24.95	633.7	30.29	769.4	20.7	— 6.3	80	s.	3	1.3		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	29.85	758.2	29.88	758.9	39	3.9	65	w.	14	6.3		0	2 s		w.	0.72	18.3	clear	P. T. Jenkins.
Punta Rassa, Florida	30.09	764.3	30.10	764.5	65	18.3	87	n.	5	2.2		1 c	0	w.		0	0	clear	W. J. Evans.
Red Bluff, California	29.90	759.4	30.31	769.9	34	1.1	94	calm	0	0		0	0			0	0	clear	E. van Dyk.
Rochester, New York	29.24	742.7	29.94	760.5	30	— 1.1	78	w.	28	12.5		10 k	0	w.		0.30	7.6	cloudy	E. W. McGann
Roseburg, Oregon	29.75	755.6	30.32	770.1	39.6	4.2	77	n.	1	0.4			10 s			0	0	cloudy	J. J. Nanry.
Sacramento, California	30.24	768.1	30.32	770.1	40.1	4.5	89	se.	4	1.8		0	0			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.54	750.3	30.17	766.3	30.9	— 0.6	87	s.	12	5.4		0	0			0	0	clear	J. H. Weber.
St. Paul, Minnesota	28.87	733.3	29.79	756.7	33.0	0.6	88	sw.	6	2.7			10 s		sw.	0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	28.87	733.3	29.80	756.9	33	0.6	100	nw.	19	8.5			10 n			inap.	inap.	light rain	O. B Dilley.
Salt Lake City, Utah	26.06	661.9	30.63	778.0	12	—11.1	46	calm	0	0		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.72	754.9	30.44	773.2	50.0	10.0	40	n.	2	0.9			10 s			0	0	cloudy	T. J. Kenan.
San Diego, California	29.99	761.7	30.06	763.5	48.3	9.1	31	ne.	4	1.8		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.40	746.7	30.12	765.0	28.4	— 2.0	77	w.	14	6.3		0	0			0	0	clear	M. H. Perry.
Sandy Hook, New Jersey	29.96	761.0	29.99	761.7	39.0	3.9	65	w.	22	9.8		10 k	0	w.		0.20	5.1	cloudy	B. A. Blundon.
San Francisco, California	30.23	767.8	30.30	769.6	47	8.3	86	nw.	8	3.6		0	0			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.41	594.6	30.45	773.4	24	— 4.4	44	ne.	13	5.8		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.06	763.5	30.16	766.1	47	8.3	54	nw.	13	5.8		0	0			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.45	671.8	30.27	768.8	38	3.3	64	sw.	9	4.0		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	30.15	765.8	30.40	772.1	35	1.7	100	n.	1	0.4		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.08	738.6	30.40	772.1	27	— 2.8	67	s.	4	1.8		0	0			0	8	clear	W. M. Mattingly.
Silver City, New Mexico	24.47	621.5	30.31	769.9	25.0	— 3.9	73	s.	2	0.9		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.50	749.3	29.57	751.1	37.6	3.1	82	nw.	6	2.7			10 n		e.	0.16	4.1	light rain	F. W. Fickett.
Smith, Fort, Arkansas	29.85	758.2	30.34	770.6	29.5	— 1.4	88	n.	3	1.3		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.03	762.7	30.07	763.8	50	10.0	77	n.	7	3.1		0	1 s		w.	0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.14	714.7	30.22	767.6	37	2.8	92	sw.	3	1.3			10 s			0.42	10.7	cloudy	D. Moore.
Springfield, Illinois	29.40	746.7	30.12	765.0	32	0.0	78	s.	8	3.6		0	2 s		w.	inap.	inap.	clear	T. B. Jennings.
Springfield, Massachusetts	29.80	756.9	29.94	760.5	40.0	4.4	73	w.			3	0	0			0.23	5.8	clear	Charles Mayr.
Springfield, Mo.	28.74	730.0	30.25	768.3	32	0.0	60	s.	11	4.9		0	0			0	0	clear	J. B. Marbury.
Starkville, Miss.	29.85	758.2	30.35	770.9	32	0.0	71	nw.	6	2.7		0	0			0	0	clear	C. Dill.
Stevenson, Fort, Dakota	28.17	715.5	30.14	765.5	31	— 0.6	81	w.	31	13.9		0	0			0	0	clear	W. Burrows
Stockton, Fort, Texas	27.28	692.9	30.40	772.1	28.0	— 2.2	67	ne.	4	1.8		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	29.81	757.2	29.86	758.4	38.6	3.7	65	nw.	16	7.2		0	0			0.21	5.3	clear	G. Liebmann.
Thomas, Camp, Arizona	27.47	697.7	30.31	769.9	31.5	— 0.3	63	calm			0	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.36	745.7	30.10	764.5	30	— 1.1	78	sw.	9	4.0		0	0			inap.	inap.	clear	A. Buell.
Tucson, Arizona	27.65	702.3	30.11	764.8	50	10.0	28	se.	9	4.0		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.89	759.2	30.27	768.8	34.5	1.4	79	sw.	3	1.3			10 s			0.05	1.3	cloudy	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					25.4	— 3.6	76	n.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	30.13	765.3	30.40	772.1	34.2	1.2	91	calm	0	0		0	0			0	0	clear	James Kenealy.
Visalia, California	29.92	760.0	30.30	769.6	34.0	1.1	92	se.	3	1.3		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.69	627.1	30.43	772.9	3.8	—15.7	87	w.	3	1.3		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	30.03	762.7	30.15	765.8	36.0	2.2	61	nw.	2	0.9		8 k	0	nw.		0.22	5.6	cloudy	B. M. Purssell.
West Las Animas, Colorado	26.32	668.5	30.44	773.2	18	— 7.8	42	w.	4	1.8		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.43	747.5	30.00	763.5	33.2	0.7	78	nw.	13	5.8			10 n			0.29	7.4	light snow	B. F. Hough.
Wilmington, N. Carolina	30.03	762.7	30.09	764.3	50	10.0	64	n.	10	4.5		hz.	0			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.95	659.1	30.48	774.2	18	— 7.8	64	ne.	6	2.7		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.69	728.7	30.07	763.8	38	3.3	73	nw.	10	4.5		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.96	761.0	30.11	764.8	54.0	12.2	15	n.	12	5.4		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.99	558.5			56.0	13.3	77	s.	1	0.4			10 cs; s		ne.	0	0	cloudy	Joaquin Gomez.
Havana, Cuba, W. I.	29.99	761.7	30.05	763.3	64.4	18.0	92	e.	2	0.9		0	1 s; k		e.	0	0	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.98	761.5	29.99	761.7	72	22.2	77	n	1	0.4		0	0			0	0	fine	Robert Johnston.
Navassa, W. I.	29.84	757.9	29.92	760.0	77	25.0	70	ne.	29.5	13.2		2 ks	6 n	e.	se.	0	0	cloudy	F. M. Everett.
Paramaribo, S. A.	29.96	761.0	29.96	761.0	80	26.7	82	se.			3	4 c	5 k	e.		0.200	5.1	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.93	760.2	78	25.6	84	calm			0	7 c	3 k	n.	n.	0.08	2.0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					74	23.3	92	ne.			3		10 ks		ne.	0	0	cloudy	Earl Flint.
Santiago de Cuba, W. I.	29.99	761.7	30.02	762.5	74	23 3	76	calm	0	0		8 ck	0	ne.		0	0	cloudy	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.44	747.8	29.50	749.3	33	0.6	88	nw.			2	6 cs	0			0 09	2.3	fair	W. J. Fisher.
St. Thomas, W. I.	29.81	757.2	29.93	760.2	78	25.6	77	e.				2 c	3 k	n.	e.	0.11	2.8		Aug. Walloe.
York Factory, B. A.	29.47	748.5	29.54	750.3	31.5	— 0.3	100	sw.	18	8.0			2 s		nw.			snowing	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Shanghai, China	30.23	767.8	61	16.1		ne.			2		7	ne.						raining.
H. M. S. Amethyst, Colonia, Uruguay †	30.10	764.5	65.8	18.8	82	ese.			5–6		8					2	se.	squally.
H. M. S. Audacious, Aden, Arabia	29.90	759.4	84	28.9	83	sse			1									blue sky.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	30.03	762.7	72.5	22.5	76	n.			2		1	n.						blue sky.
H. M. S. Champion, N. 24° 09′, E. 118° 29′			74	23.3	81	ne.			3		10					3	ne.	overcast.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C.	29.98	761.5	46	7.8	85	wsw.			3–6		10							squally.
H. M. S. Crocodile, N. 16° 32′, E. 61° 45′	29.95	760.7	79	26.1	65	ene.			3		3	ne.						d. clouds.
H. M. S. Curacoa, Kobe, Japan	30.30	769.6	59.5	15.3	70	ne.			2		10							raining.
H. M. S. Diamond, S. 26° 37′, E. 169° 28′*†	29.92	760.0	68	20.0	69	se.			1–2		2					1	se.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	30.01	762.2	69	20.6	77	calm			0		0							d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.88	758.9	77.5	25.3	88	wsw.			1		8							d. clouds.
H. M. S. Flying Fish, N. 33° 05′, E. 127° 40′	30.15	765.8	66	18.9	94	ene.			5		5					5	ne.	d. clouds.
H. M. S. Gannet, S. 19° 36′, W. 70° 14′	29.99	761.7	66	18.9	68	sw.			1		9							d. clouds.
H. M. S. Griffon, N. 26° 44′ W. 64° 57′	29.90	759.4	73	22.8	81	nne.			4		3	ne.				5	nne.	d. clouds.
H. M. S. Iron Duke, N. 28° 00′, E. 122° 50′	30.11	764.8	72	22.2	100	ne.			3		10	ne.				3	ne.	drizzling.
H. M. S. Kingfisher, N. 24° 16′ W. 113° 32′	29.99	761.7	63	17.2		n.			1		1	n.						blue sky.
H. M. S. Lark, S. 10° 14′, E. 161° 42′	29.78	756.4	78.3	25.7	88	ne.			3		10					1	n.	thnd'r storm.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.90	759.4	63	17.2		calm			0		10							d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.15	765.8	63.5	17.5	79	ne.			2		0							blue sky.
H. M. S. Northampton, Halifax, N. S.	29.65	753.1	55	12.8	80	wsw.			2		10							misty.
H. M. S. Nelson, Melbourne, Australia	29.64	752.8	77	25.0	69	nw.			1									d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.86	758.4	79	26.1	88	nne.			2		3							d. clouds.
H. M. S. Rocket, S. 4° 20′ W. 81° 29′	30.04	763 0	68	20.0	90	s.			1		2							d. clouds.
H. M. S. Sappho, S. 42° 30′, W. 142° 19′	29.43	747.5	49.2	9.6	78	wsw.			6		9	w.				8	sw.	squally.
H. M. S. Superb, N. 39° 37′, E. 19° 56′*	30.08	764.6	65	18.3	83	sse.			2		4	nw.						showery.
H. M. S. Sylvia, Port Tamar, Patagonia	29.96	761.0	45.5	7.5	84	wnw.			2		10							overcast.
H. M. S. Tourmaline, Aden, Arabia	29.96	761.0				e.			2		0							blue sky.
H. M. S. Woodlark, Bushire, Persia	30.00	762.0	74.5	23.6	64	nw.			2–3		4	nw.				2	nw.	misty.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.62	777.7	32	0.0	100	ene.			1		0							blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.14	765.6	82.4	28.0	71	ne.			2		6		ne.			2	se.	d. clouds.
Tamega, Macao, China	30.09	764.2	72.5	22.5	82	nw.			6		6							d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.13	765.3	40	4.4	73	n.	9	4.0			0			0	0			clear.
Navy Yard, Portsmouth, N. H.	29.81	757.2	36	2.2	80	ne.	13	5.8			0			0.3	8.			clear.
Naval Hospital, Yokohama, Japan*	30.10	764.5	51.5	10.8	96	calm			0		10		ne.	0.45	11.4			light rain.
Adams, Sitka, Alaska*†	29.60	751.8	38	3.3	90	ene.			1		10							light rain.
Alaska, N. 21° 06′, W 156° 37′	30.06	763.5	76	24.4	86	n.			1		5		w.	0.3	8.	sm'h		fair.
Alliance, Hampton Roads, Va	30.08	764 0	44	6.7	100	n.			3		8		light	light				cloudy.
Ashuelot, Kobe, Japan	30.23	767.8	61	16.1	94	ne.			2		10		ne.					cloudy.
Brooklyn, Keel Point, Patagonia	29.95	760.7	51	10.6	86	s.	22	9.8			0			0	0	sm'h		clear.
Colorado, New York, N. Y.	30.05	763.3	39	3.9	63	w.	4	1.8			5			0	0			fair.
Enterprise, Norfolk, Va	30.11	764.8	57	13.9	100	nne.	3	1.3			5		sw.					fair.
Essex, Callao, Peru	29.97	761.2	65	18.3	89	calm	0	0			10					sm'h		overcast.
Franklin, Norfolk, Va	30.10	764.5	44	6.7	67	nnw.	18	8.0			8		nnw.	0.41	10.4			fair.
Galena, Montevideo, Uruguay	29.97	761.2	62	16.7	94	se.			4		10		sse.			mod.	sse.	cloudy.
Hartford, S. 40° 15′, W. 56° 15′*	29.91	759 7	51	10.6	93	wnw.			2		2			0	0	long	wsw.	clear.
Independence, Mare Island, Cal.	30.31	769.9	40	4.4	100	calm			0		0							clear.
Iroquois, Callao, Peru	29.98	761.5	65	18.3	89	calm			0		10							overcast.
Jamestown, Newport, R. I	29.93	760.2	41	5.0	73	nnw.			4		2		s.					clear.
Kearsarge, Norfolk, Va	30.08	764.0	46	7.8	74	nnw.			3		10							cloudy.
Lackawanna, Valparaiso, Chili*	30.01	762.2	59	15.0	64	calm			0		0							clear.
Lancaster, Valetta, Malta*	29.93	760.2	72	22.2	85	wsw.			1		2		w.	0	0			fair.
Michigan, Erie, Pa.	29.84	757.9	32	0.0	79	sw.			5		10							cloudy.
Minnesota, New York, N. Y.	30.03	762.7	40	4.4	63	wnw.	4	1.8			8							cloudy.
Monocacy, Yokohama, Japan *	30.02	762.5	54	12.2	100	nw.			1		10		calm					light rain.
New Hampshire, Newport, R. I.	29.97	761.2	41	5.0	65	w.			4		0					sm'h		clear.
Nipsic, Palermo, Sicily*	29.99	761.7	70	21.1	61	ene.			1		8					sm'h		cloudy.
Onward, Callao, Peru	30.09	764.3	63	17.2	94	calm			0		10		n.			long	w.	cloudy.
Palos, Chee Foo, China*	30.39	771.9	44	6.7	92	nne.			4		10		calm					cloudy.
Pensacola, Callao, Peru*	29.92	760.0	65	18.3	83	calm	0	0			10			0	0	sm'h		cloudy.
Powhatan, Boston, Mass.	29.87	758.7	37	2.8	70	wsw.			2		2							clear.
Quinnebaug, N. 37° 01′, E. 15° 30′*	30.03	762.7	68	20.0	65	se.			2		5		calm			sm'h		fair.
Ranger, N. 16° 51′, W. 99° 56′	29.96	761.0	79	26.1	78	calm			0		2			0	0	sm'h		fair.
Richmond, Yokohama, Japan*	30.10	764.5	55	12.8	93	n.			2		10		n.	0.6	15.			raining.
Saratoga, N. 24° 32′ W. 82° 44′	30.04	763.0	72	22.2	85	nne.			2		2		e.			sm'h		clear.
St. Louis, League Island, Pa.	30.26	768.6	37	2.8	71	wnw.			4		5		w.	0.1	3.			fair.
Swatara, N. 12° 01′, W. 39° 52′*	29.84	757.9	81	27.2	78	ene.			5		5		ene.			mod.	ene.	fair.
Tennessee, Hampton Roads, Va	30.07	763.8	47	8.3	69	nne.	12	5.4			8			0.08	2.0			cloudy.
Vandalia, Hampton Roads, Va*	30.00	762.0	44	6.7	75	n.			4		9		nw.					cloudy.
Wabash, Boston, Mass.	29.85	758.2	35	1.7	61	wnw.	9	4.0			10		nw.	0.07	1.8			cloudy.
Wachusetts, Mare Island, Cal†	30.28	769.1	40	4.4	91	var.			0–1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.16	766.1	55	12.8	80	nw.			1		1		w.					clear.
Yantic, Norfolk, Va.	30.09	764.3	45	7.2	76	nnw.			3–4		8							cloudy.
Merchant Marine.																		
S. S. Circassian, N. 52° 27′, W. 52° 24′*	29.98	761.5	31	— 0.6	100	e.			2		10		e.	½ h'r	½ h'r	2	cf'd	snowing.
S. S. Grecian, Buenos Ayres, Argentine, Rep*	29.95	760.7	65	18.3	78	se.			5		9		ese.	0	0	sm'h		cloudy.
S. S. Polynesian, Liverpool, Eng	30.17	766.3	51	10.6		se.			1		4		s.	0	0			clear.
S. S. Scandinavian, N. 53° 51′, W. 23° 24′	30.03	762.7	45	7.2		wnw.			3		10		sw.	8 h'r	8 h'r	cf'd	wnw.	overcast.
S. S. British Crown, N. 40° 08′, W. 60° 24′†	29.98	761.5	70	21.1		ssw.			4		5		sw.	0	0	mod.	sw.	fine.
S. S. Indiana, Philadelphia, Pa.			37	2.8	81	n.			3		8		n.					fine.
S. S. Lord Clive, Liverpool, Eng*†	30.04	763.0				e.			4		4		e.	0	0			fair.
S. S. Lord Gough, Delaware river	30.05	763.3	41	5.0		nw.			6		8		nw.	0	0			cloudy.
S. S. Ohio, N. 51° 10′, W. 21° 03′	30.01	762.2	52	11.1	93	n.			5		8		nne.			mod.	var.	cloudy.
S. S. Pennsylvania, Liverpool, Eng.†	30.16	766.1	42	5.6		se.			2		10		se.					foggy.
S. S. Jason, N. 42° 35′, W. 59° 16′*	29.87	758.7				nnw.			4		8 n							gloomy.
S. S. Stella, N. 44° 45′ W. 37° 30′	30.08	704.0	57.2	14		wsw.			2		0		w.			3	nnw.	d. clouds.
S. S. Bolivia, N. 42° 32′, W. 60° 41′			66	18.9	89	wsw.			4		2?		wsw.	sh'rs	sh'rs	3	w.	cloudy.†
S. S. Devonia, N. 53° 11′, W. 28° 18′†	29.97	761.2	44	6.7		w.			4		9		wsw.			sm'h		cloudy
S. S. Dorian, N. 42° 17′, W. 50° 30′*	30.01	762.2	52	11.1		var.			1		fg.					h'vy	nw.	foggy.
S. S. Galatia, Calcutta, India†	29.89	759.2	78	25.6		n.			1		0					slt	ne.	clear.
S. S. Ailsa, Kingston, Jamacia, W. I†	30.02	762.5	84	28.9	91	ne.			1		1			0	0			fine.
S. S. Alpin, Maracaibo, Venezuela	29.94	760.5				ne.			2				ne.	0	0			
S. S. Antillas, St. John's, Porto Rico, W. I						n.			2		5?		n.	0	0			
S. S. Ambrose, N. 8° 38′, W. 52° 25′†	29.94	760.5				ene.			3		0		n.	0	0	sm'h		cloudy?
British Merchant, N. 8° 13′, W. 120° 50′	29.90	759.4	76	24.4	98	ese.			1		10			1 h'r	1 h'r	3	ene.	fine.
Bk. Commewyne, N. 47° 52′, W. 11° 43′	30.22	767.6	51	10.6	75	nnw.			3		3							raining.
Dynomene, N. 3° 50′, E. 90° 20′	29.88	758.9	80.5	26.9	91	ese.			1		2							blue sky.
May Hulse, S. 2° 28′, W. 27° 16′	29.89	759.2	81	27.2	83	ese.			2		2							blue sky.
Markland, N. 43° 42′, W. 28° 52′	30.28	769.1	66.1	18.9	71	sw.			3		3							blue sky.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.88	758.9	90.1	32.3	41	nne.			1		1					4	ene.	d. clouds.
S. S. Inchkeith, S. 30° 23′, W. 27° 45′	30.31	769.9	64	17.8	73	e.			5		8							blue sky.
S. S. Mertola, N. 40° 30′, W. 12° 20′	30.19	766.8	59.0	15'0	79	nne.			6		9							overcast.
S. S. Mexico, N. 23° 51′, W. 108° 57′†	29.98	761.5	74.6	23.7	70	nw.			2		8					r'gh	nw.	d. clouds. fair.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE—Continued.																		
S. S. Bothnia, N. 40° 41′ W. 67° 11′	29.86	758.4	52	11.1	86	wnw			4		10			4 h'r	4 h'r	mod.	w.	cloudy.
S. S. Marathon, N. 36° 59′, E. 24° 30′	30.09	764.3	72	22.2		e.			5		8		e.	o	o	sm'h	e.	cloudy.
S. S. Parthia, N. 46° 48′, W. 39° 47′*†	30.15	765.8	50	10.0		nnw.			6		4			o	o	mod.	nnw.	misty.
S. S. Pavonia, N. 50° 45′, W. 16° 58′*	30.02	762.5	56	13.3	81	ssw.			6		10		ssw.	1 h'r	1 h'r	mod.	con.	raining.
S. S. Colina, N. 40° 41′, W. 57° 44′†	30.04	763.0				s.			3		4		s.	o	o	mod.	con.	cloudy.
S. S. France, N. 46° 32′, W. 43° 37′†	30.07	763 7	53.6	12		s.			2	ck	o	nw.		o	o	sm'h	ne.	overcast.
S. S. Labradore, N. 42° 34′ W. 64° 23′*†	29.88	759.0	53.6	12		sw.			1		3		ese.	o	o	sm'h		clear.
S. S. Abyssinia, N. 47° 48′, W. 41° 12′ *	30.07	763.8	59	15.0	59	ssw.			1		7		w.	o	o	high	nw.	cloudy.
S. S. Wyoming, N. 51° 19′, W. 24° 38′*	29.95	760.7	48	8.9		nnw.			4		4		w.	o	o	r'gh	wnw.	threatening.
S. S. Bohemia, Hamburg, Germany†	30.14	765.5				ene.			1		1			o	o			foggy.
S. S. Frisia, N. 45° 24′, W. 46° 18′	30.15	765.8	51	10.6		ese.			2		8		e.	o	o	long	n.	fair.
S. S. Gellert, Plymouth, Eng	30.02	762.5	46	7.8		nne.			4		3		n.	o	o			fair.
S. S. Silesia, N. 45° 28′ W. 46° 33′†	30.18	766.6	58.6	14.8		sw.			1		o			3 h'r	3 h'r	3	ne.	fair.
S. S. Vandalia, N. 47° 42′, W. 38° 05′	30.26	769.1	53.6	12.0		ese.			4		10		se.	o	o	mod.	se.	hazy.
S. S. Mentmore, N. 50° —′ W 27° —′*	30.12	765.0				nw.			5		8		w.	2 h'r	4 h'r	high	nw.	threatening.
S. S. Archimedes, N. 44° 31′, W. 47° 36′	30.02	762.5				s.			3		8		s.	3 h'r	3 h'r	light	e.	fine.
S. S. Hevelius, S. 34° 00′, W. 53° —′ *†	30.04	763.0	64	17.8		ssw.			8		8		se.	6 h'r	6 h'r	long	ne.	cloudy.
S. S. Ptoymey, N. 1° —′, W. 40° 30′	29.91	759.7	81.2	27.3	83	se.			5		5			o	o	3	se.	d clouds.
S. S. City of San Antonio, Matanzas, Cuba †	30.08	764.0	70	21.1		calm			0		2			o	o			fair.
S. S. Colorado, New York, N. Y†	29.98	761.5	40	4.4		w.			2		8		w.	1 h'r	1 h'r			cloudy.
S. S. Rio Grande, N. 27° 24′, W. 79° 52′†	30.10	764.5	74	23.3		nw.			2		2		nw.	½h'r	½h'r	long	ne.	
S. S. San Marcos, Galveston, Texas			54	12.2		n.			6									
S. S. Archimede, Messina, Sicily *†	30.12	765.0	74	23.3	72	ne.			3		2		nne.	o	o			clear.
S. S. Hermod, N. 43° 40′, W. 57° 20′†	29.84	757.9	59.0	15		sw.			4		8		wsw.	4 h'r	4 h'r	long	sw.	threatening.
S. S. Glenapp, Bahia, Brazil †	29.93	760 2	79	26.1		ese.			2		o			o	o	sm'h		clear.
S. S. Chalmette, N. 39° 03′, W. 74° 15′ †	29.97	761.2	45	7.2		wnw.			6		3		w.	1½h'r	1½h'r		ne.	clear.
S. S. Lone Star, N. 26° 58′, W. 86° 15′ †	30.18	766.6	71	21 7		nw.			4		10		nw.	o	o	r'gh	nw.	cloudy.
S. S. Denmark, N. 44° 12′, W. 42° 16′	30.04	763.0	61	16.1		ene.			2		8		e.	o	o	sl'it	ne.	hazy.
S. S. England, N. 50° 02′ W. 28° 06′	30.09	764.3				s.			1		o			5 h'r	5 h'r	h'vy	nw.	clear.
S. S. Erin, N. 41° 28′ W. 38° 45′	29.99	761.7	58	14.4		wsw.			4		3		ssw.	o	o	sm'h		fine.
S. S. Greece, N. 45° 39′, W. 45° 21′	29.93	760.2				calm			0		10		nw.	o	o	sm'h	nw.	dull.
S. S. Helvetia, N 47° 25′ W. 40° 15′	30.09	764.3	49	9.4		wsw.			5		10		nw.	8 h'r	8 h'r	long	ne.	cloudy.
S. S. Santiago, Jago, Cuba, W. I	30.18	766.6	77	25.0	82	calm			0		o			o	o			fine.
S. S. City of Alexandria, New York, N. Y †	30.03	762.7	37	2.8		wnw.			5									
S. S. City of Merida, N. 22° 06′, W. 87° 06′*†	30.02	762.5	78.8	26		e.			1		2		se.	o	o	light	ene.	fine.
S. S. City of Washington, N. 34° 15′, W. 75° 25′*†	30.10	764.5	68	20.0		nnw.			4		10		nnw.	4 h'r	4 h'r	large	ne.	
S. S. Leerdam, N. 49° 42′, W. 8° 00′ *	30.02	762.5	52.6	11.4		nnw.			6							sm'h		clear.
S. S. Elbe, N. 49° 12′, W. 32° 21′	30.17	766.3	46.4	8.0	100	e.			1-3		4		sw.	o	o	long	nw.	hazy.
S. S. Oder, N. 47° 52′, W. 44° 41′	30.13	765.3	46.4	8.0		n.			1		10		wnw.	4 h'r	4 h'r	long	nnw.	misty.
S. S. Ohio, Galveston Roads, Texas	30.40	772.1				nne.			5		3		ne.	o	o	mod.	n.	fair.
S. S. Salier, N. 49° 50′ W. 20° 25′	30.05	763.3	50.0	10.0		sw.			6		10		sw.	4 h'r	4 h'r	cross	wsw.	misty.
S. S. Werra, N. 49° 27′, W. 37° 08′ *	30.19	766.8	49.1	9.5		w.			5		8		wsw.	light	light	r'gh	wsw.	fair.
S. S. Belgic, Hong Kong, China†	30.13	765.3	76	24.4	95	calm			0		3		e.	o	o			clear.
S. S. Oceanic N. 38° 03′, W. 136° 34′ *	30.38	771.6	62	16.7	88	wsw.			4		10		ne.			light	wsw.	cloudy.
S. S. City of Augusta, New York, N. Y †	29.89	759.2				w.			6		4		ssw.	o	o			clear.
S. S. Oregon, Portland, Oregon †	30.23	767.8	45	7.2	92	s.			1		10		s.					raining.
S. S. Ancon, San Francisco, Cal†	30.23	767.8	47	8.3	85	n.			3		o							cloudy.
S. S. Dakota, Victoria, B. C†	30.03	762 8	49	9.4	85	calm			0		8		sw.	4 h'r	4 h'r	sm'h		cloudy.
S. S. Orizaba, N. 33° 43′ W. 118° 15′†	30 08	764.0	65	18.3	73	calm			0		o					sm'h	w.	
S. S. Australia, Sydney, N. S. W	30.20	767.1	64	17.8	83	sw.			2		10?		sw.	o	o			clear.?
S. S. City of New York, S. 34° 21′, E. 171° 37′ †	29.95	760.7	62	16.7	61	sw.			5		o			o	o	mod.	sw.	clear.
S. S. City of Pekin, N. 32° 33, E. 133° 28′†	30.29	769 4	68	20.0	90	ne.			4		10		ne.	o	o	small	ne.	cloudy.
S. S. City of Sydney, S. 5° 07′, W. 167° 13′†	29.90	759.4	80	26.7	78	nne.			3		8		nw.	o	o	mod	ne.	cloudy.
S. S. Collma, N. 27° 03′, W. 114° 37′ †	29.94	760.5	63	17.2	46	nnw.			4		o			o	o	mod.	nnw.	clear.
S. S. Grenad i, N. 14° 19′, W. 92° 08′ †	29.91	759.7	70	24 4	86	e.			1		o			o	o	sm'h	s.	clear.
S. S. San Jose, N. 8° 56′. W. 84° 45′ *†	30.07	763.8				w.			5		10 n		wsw	6 h'r	6 h'r	mod	wsw.	squally.
S. S. Bermuda, Port of Spain, Trinidad, W. I †	29.95	760.7	80	26.7		calm			0		9		ese.	2 h'r	2 h'r	sm'h		cloudy.
S. S. Muriel, N. 35° 04′, W. 70° 50′	29.90	759 4	68	20.0		ne.			5		5			o	o	r'gh	sw.	fair.
S. S. Belgenland, N. 43° 03′, W. 57° 08′			67	19.4	95	sse.			4		3		w.	o	o	sm'h	e.	fair.
S. S. Nederland, N. 49° 21′, W. 14° 50′			50	10.0		sw.			4		10		w.	2 h'r	2 h'r	mod.	e.	cloudy.
S. S. Penniand, Antwerp, Belgium	29.88	758.9	33.5	0.8	89	ene.			6		10			snow	snow			snowing.
S. S. Rhyniand, N. 43° 40′, W. 58° 40′	29.91	759.7	57	13.9	87	s.			3		7		sw.			mod.	sw.	rainy.
S. S. Switzerland, N. 50° 13′, W. 12° 10′†	30.22	767.6				sse.			2		5		se.	o	o	long	ene.	fair.
S. S. Waesland, Jersey City N. J	30.01	762.2	40	4.4	73	w.			4		o		w.	0.00	1.5			fair.
S. S. Maas, New York, N. Y	30.20	767.1	52.2	11.2	93													
S. S. P. Caland, Rotterdam, Holland	29.87	758 7	36.5	2.5	82	e.			6		10		e.					cloudy.
S. S. Schiedam, N. 47° 45′, W. 38° 16′	30.14	765.5	54.1	12.3	88	ssw.			3		8		wsw.	4 h'r	4 h'r	cross	se.	cloudy.
S. S. W. A. Scholten, New York, N. Y	30.15	765.8	41.8	5.4	84	nnw.			3		4		nw.	o	o			
S. S. State of Florida, Greenoch, Scotland	30.16	766.1	44	6.7		se.			1		10			o	o			foggy.
S. S. State of Georgia, N. 45° 41′, W 49° 19′†	30.13	765 3	46	7.8		se.			3		9			o	o	long	ne.	overcast.
S. S. State of Nevada, N. 43° 00′, W. 59° 38′†	29.93	760.2	63	17.2		sw.			4		5		sw.	o	o	sm'h		fine.
S. S. Hekla, N 42° 40′ W. 59° 00′*†	29.98	761.5	65.3	18.5		ssw.			1-4		5		s.			mod.	se.	fair.
S. S. Thingvalla, Copenhagen, Denmark†	30.24	768.1	39.2	4.0		n.			1		2		n.	o	o			clear.
S. S. Iowa, Liverpool, Eng *†	30.20	767.1																
S. S. Baltic, N. 44° 19′, W. 52° 20′	30.09	764 3	50	10.0	93	s.			5		10		ssw.	o	o		s.	overcast.
S. S. Celtic, New York, N. Y †	29.91	759.7	44	6.7		nw.			4		2		nw.	8 h'r	8 h'r			fair.
S. S. Germanic, N. 41° 08′. W. 58° 05′†	30.16	766.1	70	21.1		s.			4		4		s.	o	o	mod.	s.	d. clouds.
S. S. Lepanto, N. 40° 20′. W. 65° 28′*	29.90	759.4	61	16.1		nw.			6		10		nw.	6 h'r	6 h'r			raining.
S. S. Romano, N. 48° 31′, W. 24° 27′	30.05	763.3	54	12.2		var.			3		10		nw.	o	o	mod.	w.	fine.
S. S. Salerno, Odessa, Russia*	29.98	761.5	44	6.7		w.			8		10		w.	5 h'r	5 h'r			raining.
S. S. Catherine Whiting, Philadelphia, Pa†	30.04	763 0				wnw.			1		8		nw.	o	o			
S. S. Norman, N. 39° 56′, W. 75° 08′	30.07	763.8				wnw.			5				nw.	4 h'r	4 h'r			cloudy.
S. S. Saxon, Boston, Mass*†	30.14	765.5	56	13.3		w.			9									
MISCELLANEOUS																		
Bk. Adelaid, N. 16° 32′, W. 58° 34′ *†	29.92	760.0	79	26.1		nw.			2		6		var.	8 h'r	8 h'r	long	nne.	clearing.
Bg. Alcira, N. 11° 47′, W. 70° 43′	29.95	760.7	83	28.3		ne.			3		2		ne.	o	o	short	n.	clear.
S. Annie M. Law, Kobe, Japan*†	30.15	765.8	55	12.8		e.			3		10		e	17 h'r	17 h'r			heavy rain.
Bk. Anna Thormann, S. 11° 21′, E. 109° 18′*	29.90	759.5	80.8	27.1	86	sse.			4		2 k		se.	o	o	r'gh	s.	clear.
S. S. Antonio Lopez, N. 27° 09′, W. 19° 59′ *	30.04	763.0	72	22.2	85	nne.			2		7			o	o	mod.	nne.	fair.
Bk. Aquidneck, N. 3° 17′, W. 33° 23′*†	30.00	762.0				se.			2				se.			h'vy	se.	clear.
Bg. Aureola, N. 46° 36′, W. 19° 55′			62	16.7		wsw.			3		10		nw.	o	o	mod.	ene.	overcast.
Bk. Alba, N. 56° 20′, E. 6° 40′ *†	30.43	773.0	40.6	4.8		wsw.			4									
Bk. Bayonnaise, N. 21° 40′, W. 49° 23′ *†	30.09	764.2				sse.			3		5?		s.	o	o	large	se.	clear.?
Sch. Bonny Doon, N. 40° 35′, W. 63° 00′						n.			8		10		n.	drig	driz	long	sw.	cloudy.
S. S. Burswell, N. 48° 32′, W. 7° 33′*†	30.10	764.5	54	12.2		nne.			0		5		nne.	2 h'r	2 h'r	high	ne.	fine.
Bk. Champion, N. 50° 44′, E. 0° 15′			50.0	10.0		0			8		10		sw.	8 h'r	8 h'r	cross	e.n.	sprinkling.
Schr. Chas. F Heyer, Apalachicola, Fla	30.21	767.3	52	11.1	73	nne.			4	3 cs	o			o	o			clear.
Schr. C. R. Flint, Cedar Keys, Fla†	30.19	766.8	62	16.7		nnw.			3		10		nnw.	1 h'r	1 h'r			cloudy.
S. Cornelius, N. 38° 50′, W. 64° 58′			69.8	21.0		ssw.			5		2		sw.	o	o	r'gh	sw.	clear.
Bkt. David Preston, N. 25° 59′, W. 85° 13′*†	30.20	767.1	78	25.6		ene.					o			o	o	r'gh	n.	
Bk. Don Quixote, Pasoeroean Roads, Java*	29.73	755.1	86	30.0		w.			4		4		w.			sm'h		fair.
Bk. E. D. Bigelow, N. 41° 03′ W. 46° 45′*†	30.08	764.0				sse.			1				var.	o	o	long	se.	foggy.
Schr. Edith R. Seward, Wilmington, N. C*†	30.08	764.0	58	14.4		nnw.			2		3		nnw	o	o			clear.
S. E. J. Spicer, New York. N. Y	29.97	761.2	47	8.3	100	nw.			6		8		w.	1 h'r	1 h'r			overcast.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Eliza Barss, Bermuda, W. I†	30.03	762.7	.....	.....	.....	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear.
S. Enoch Train, N. 19° 22′, W. 56° 00′*†	30.08	764.0	.....	.....	.....	s.	.....	.....	1–6	.....	10	.....	s.	hv'y	h'vy	con	.....	showery
Bk. Essex, Muscat, Arabia*†	30.02	762.5	85	29.4	.....	e.	.....	.....	7	.....	.....	.....	nw.	.....	.....	.....	.....	
Schr. F E. McDonald, Douglass Pt, D. C†	30.19	766.8	.....	.....	.....	n.	.....	.....	5	.....	0	.....	ne.	.....	.....	.....	.....	fine.
S. S. Foscolia, S. 16° 07′ W. 37° 42′*†	29.60	751.8	.....	.....	.....	ne.	.....	.....	2	.....	1	.....	ne.	0	0	sm'h	.....	clear.
Bk. Freya, N. 36° 13′ W. 18° 24′	29.63	752.6	73	22.8	.....	ne.	.....	.....	5	.....	1	.....	sw.	2 h'r	2 h'r	mod.	ne.	fair.
S. Glendon, S. 33° 40′ W. 90° 30′†	30.31	769.9	66	18.9	.....	sw.	.....	.....	4	.....	10	.....	se.	0	0	sm'h	.....	misty.
S. Grecian, N. 15° 00′, W. 54° 30′†	29.95	760.7	80	26.7	82	ene.	.....	.....	3	.....	10	.....	nw.	1 h'r	1 h'r	sm'h	se.	overcast.
Bk. Grey Eagle, N. 36° 52′, W. 75° —′	.....	.....	58	14.4	.....	nw.	.....	.....	5	.....	8	.....	.....	0	0	long	ne.	fair.
Bk. Gronsvaer, S. 44° 31′ E. 146° 47′†	29.83	757.6	63.0	17.2	94	n.	.....	.....	3	.....	2	.....	nw.	0	0	5	ne.	fair.
Schr. Hattie Weston, Mayaro Bay, Trinidad,, W. I*†	29.93	760.2	82	27.8	.....	ene.	.....	.....	2	.....	10	.....	ene.	4 h'r	4 h'r	mod.	e.	cloudy.
S. Hedwig, N. 28° 20′, W. 73° 28′	30.11	764.8	72.3	22.4	72	calm	.....	.....	0	.....	0	.....	.....	0	0	3	nne.	
Bk. Heinrich & Tonio, N. 39° 58′, W. 71° 20′	.....	.....	45.5	7.5	.....	wnw.	.....	.....	5	.....	4	.....	nw.	9 h'r	9 h'r	.....	w.	fair.
Schr. Isabel Alberto. Cedar Keys, Fla†	30.13	765.3	.....	.....	.....	n.	.....	.....	1	.....	10	.....	n.	slight	slight	.....	.....	cloudy
S. Ivy, Cork, Ireland†	30.36	771.1	37	2.8	.....	w'sw.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear.
Schr. Jennie N. Huddell, Chester, Pa†	30.04	763.0	.....	.....	.....	wnw.	.....	.....	5	.....	8	.....	wnw.	0	0	.....	.....	cloudy.
S. S. John Hopkins, N. 37° 30′ W. 75° —′	.....	.....	42	5.6	.....	n.	.....	.....	5	.....	5	.....	w.	0	0	.....	.....	fair.
Schr. John L. Thomas, Vivorilla Cays, C. A*†	30.06	763.5	.....	.....	.....	nne.	.....	.....	3	.....	2	.....	ese.	0	0	.....	.....	fair.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.96	761.0	.....	.....	.....	w.	.....	.....	1	.....	8	.....	w.	0	0	.....	.....	cloudy.
Light House Tender, Laurel, Key West, Fla†	30.08	764.0	75	23.9	.....	nne.	.....	.....	1–2	.....	4	.....	nne.	0	0	.....	.....	fair.
Bk. Liberia, N. 12° 17′, W. 26° 00′*	29.94	760.5	82	27.8	79	ene.	.....	.....	3	.....	3	.....	ene.	0	0	.....	.....	fine.
Bg. Lilian, Demerara, Brit. Guiana†	29.90	759.4	82	27.8	.....	ene.	.....	.....	3	.....	9	.....	.....	½h'r	½h'r	.....	.....	rainy.
Bg. L. & W. Armstrong, N. 37° 07′, W. 72° 54′*†	30.04	763.0	.....	.....	.....	nnw.	.....	.....	8	.....	2	.....	n.	0	0	r'gh	n.	clearing
S. S. Madrid, N. 35° 08′, W. 35° 27′*†	30.16	766.1	65	18.3	94	ese.	.....	.....	5	.....	10	.....	.....	5 h'r	5 h'r	sm'h	ne.	heavy rain.
S. S. Malabar, N. 11° 17′, E. 61° 26′*†	29.82	757.4	.....	.....	.....	ne.	.....	.....	3	.....	2?	.....	ne.	0	0	mod.	ne.	cloudy?
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	30.00	762.0	70	21.1	.....	ene.	.....	.....	5	.....	2	.....	ene.	0	0	.....	.....	fair.
Bk. Mattie B. Russell, Off Jupiter, Fla*†	30.28	769.1	.....	.....	.....	wnw.	.....	.....	3	.....	3	.....	n.	light	light	h'vy	ne.	squally.
Schr. Moravian, N. 12° 33′, W. 81° 43†	29.93	760.2	.....	.....	.....	ne.	.....	.....	.....	.....	.....	.....	ne.	0	0	long	ne.	fair.
S. M. P. Grace. N. 24° 35′, W. 119° 50′*	29.98	761.5	63	17.2	.....	nnw.	.....	.....	5	.....	7	.....	nnw.	0	0	sm'h	n.	fair.
Bk. Norena. N. 39° 35′, W. 73° 50′*†	30.02	762.5	.....	.....	.....	wnw.	.....	.....	6	.....	2	.....	n.	5 h'r	5 h'r	light	ne.	fair.
Bg. O. C. Clary, N. 37° 44′, W. 71° 41′*†	29.85	758.2	64	17.8	89	n.	.....	.....	4	.....	10	.....	nne.	.....	.....	.....	w.	cloudy.
S. Orealla, N. 5° 33′, E. 81° 00′*	29.84	757.9	.....	.....	.....	nw.	.....	.....	2	.....	7	.....	ne.	0	0	sm'h	.....	fine.
Bk Orpheus, N. 36° 40′, W. 55° 56′	29.88	758.9	76	24.4	.....	calm	.....	.....	0	.....	8 n	.....	e.	4 h'r	4 h'r	sm'h	.....	clearing.
S.Paramita, San Francisco, Cal†	30.06	763.5	54	12.2	.....	s.	.....	.....	2	.....	.....	.....	s.	0	0	.....	.....	foggy.
S. S. Peconic, N. 36° 44′, W. 31° 24′*†	30.10	764.3	69	20.6	.....	e.	.....	.....	2	.....	10	.....	ene.	0	0	mod.	ene.	clearing.
S. S. Radnorshire, Suez Canal, Egypt*†	30.06	763.5	.....	.....	.....	n.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	
S. St. Francis, S. 23° 15′, W. 91° 10′†	30.31	769.9	65	18.3	.....	se.	.....	.....	5	.....	7	.....	se.	1 h'r	1 h'r	mod.	se.	rainy.
Schr. S. B. Hubbard, N. 34° 01′, W. 76° 05′†	30.01	762.2	65	18.3	.....	n.	.....	.....	8	.....	10	.....	.....	6 h'r	6 h'r	long	ne.	stormy.
Bk. Southern Belle, N. 46° —′ W. 24° —′*†	30.20	767.1	58	14.4	.....	wsw.	.....	.....	4	.....	5	.....	.....	0	0	mod.	w.	fair.
S. S. Strathieven, N. 36° 34′ W. 0° 25′	29.95	760.7	65.8	18.8	95	var.	.....	.....	1	.....	7?	.....	sw.	.....	.....	.....	.....	clear?
Bg. Teneriffe, N. 37° 40′, W. 73° 38′	.....	.....	.....	.....	.....	nnw.	.....	.....	6	.....	.....	.....	.....	0	0	mod.	.....	
Bk. Truro, N. 46° 15′, W. 28° 35′†*	30.22	767.6	.....	.....	.....	ene.	.....	.....	1–2	.....	10	.....	w.	6 h'r	6 h'r	sm'h	.....	clearing.
U.S.F.C.S.S.Fish Hawk, Washington, D. C†	30.23	767.8	40	4.4	73	nw.	.....	.....	2	.....	7	.....	nw.	0.24	6.1	.....	.....	cloudy.
Bk. Vincenzo Accame Lisbon, Portugal†	30.09	764.3	69.8	21.	.....	ne.	.....	.....	5	.....	6	.....	n.	0	0	.....	.....	
Schr Viola Reppard, N. 34° 52′, W. 72° 38′†	29.98	761.5	74	23.3	.....	nnw.	.....	.....	6	.....	10	.....	nnw.	4 h'r	4 h'r	cross	cross	drizzling.
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762.0	.....	.....	.....	sse.	.....	.....	1	.....	1	.....	sse.	0	0	.....	.....	fine.
Bk. Wandering Jew, S. 13° 21′, W. 34° 25′†	29.95	760.7	80	26.7	.....	sse.	.....	.....	3	.....	3	.....	sse.	0	0	long	se.	clear.
Bk. Warden Law, S. 41° 40′, W. 80° 12′	30.12	765.0	.....	.....	.....	nw.	.....	.....	3	.....	10	.....	nw.	1 h'r	1 h'r	sm'h	sw.	drizzling.
Bkt. Willie, S. 39° 30′, E. 2° 58′*†	30.26	768.6	58	14.4	.....	ese.	.....	.....	4	.....	8	.....	ene.	0	0	rg'h	sse	cloudy.

International Chart I. November 14, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.

W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 15, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.07	763.8	67.6	19.8	83	se.	.....	.....	1	.....	2	.....	.....	0	0	fair	Malaterre.
Algiers	.....	.....	30.01	762.2	63.7	17.6	70	n.	.....	.....	3	.....	6	.....	.....	Inap.	Inap.	cloudy	Thève.
La Calle	.....	.....	29.95	760.6	77.4	25.2	73	wnw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair.	Fonfréde.
Tunis	.....	.....	29.93	760.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.08	764.0	71.6	22.0	59	nnw.	.....	.....	1	.....	2	.....	.....	0	0	fair	Pérès.
Tebessa	.....	.....	30.06	763.6	66.6	19.2	59	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	62.6	17.0	31	ne.	.....	.....	2	.....	7	.....	.....	0	0	very cloudy	Lonchamp.
Laghouat	.....	.....	30.10	764.6	73.4	23.0	25	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.06	763.5	70.9	21.6	24	.....	.....	.....	.....	.....	4	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	30.07	763.8	30.16	766.0	56.3	13.5	78	sse.	10	4.5	.....	.....	9	.....	.....	0	0	dull	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.14	740.2	29.71	754.5	39.6	4.2	97	ne.	.....	.....	1	.....	10	.....	.....	0.441	11.2	raining	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.13	739.8	29.93	760.3	28.0	— 2.2	89	e.	15.0	6.7	.....	.....	10	.....	.....	0.051	1.3	snowing	Dr. Wierzbiski.
Eperies	28.99	736 3	29.91	759.7	29.5	— 1.4	92	calm	.....	.....	0	.....	fg	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.84	732.6	30.15	765.7	37.0	2.8	93	sw.	.....	.....	2	.....	10	.....	.....	0.102	2.6	.....	Andreas Rospini.
Hermannstadt	28.38	720.9	29.93	757.7	43.5	6.4	65	s.	.....	.....	2	.....	10	.....	.....	0.126	3.2	.....	Prof. A. Gottschling.
Kremsemunster, Obs'y	28.30	718.9	29.68	753.8	36.5	2.5	93	calm	.....	.....	0	.....	10	.....	.....	0.201	5.1	gloomy	The Staff.
Lemberg	29.02	737.0	30.06	763.5	27.7	— 2.4	85	e.	.....	.....	1	.....	10	.....	.....	0.657	16.7	.....	Dr. T. Stanecki.
Pola	29.52	749.7	29.63	752.5	59.2	15.1	87	ssw.	.....	.....	3	.....	10	.....	.....	0.406	10.3	.....	I. R. Hydrographic Office.
Szathmar	29.38	746.2	29.84	758.0	42.6	5.9	60	se.	.....	.....	3	.....	10	.....	.....	0	0	.....	Joseph Midlinszay, S. J.
Szegedin	29.46	748.3	29.74	755.5	44.4	6.9	87	s.	.....	.....	3	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.52	749.9	29.63	752.5	56.1	13.4	94	sw.	.....	.....	1	.....	10	.....	.....	0.543	13.8	raining	Royal Academy.
Vienna	29.02	737.0	29.76	755.9	31.6	— 0.2	100	se.	.....	.....	3	.....	10	.....	.....	0.500	12.7	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.73	755.1	29.83	757.7	40.4	4.7	77	se.	27	12.1	.....	.....	10	.....	.....	0.190	4.8	showery	W. Boswell
Armagh, Observatory	29.36	745.7	29.61	752.1	35.2	1.8	95	se.	21	9.4	.....	.....	10	.....	.....	.....	.....	raining	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.76	755.9	40.2	4.6	69	ese.	14	6.3	.....	.....	7	.....	.....	.....	.....	misty	John Hartnup.
Bolton, Sharples	29.23	742.4	29.77	756.1	40.0	4.4	74	ene.	6	2.7	.....	.....	7	.....	.....	.....	.....	d. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.39	746.5	29.79	756.7	40.6	4.8	77	e.	.....	.....	2	.....	7	.....	.....	0.04	1.0	d. clouds	McLandsborough & Preston
Bridgetown, Barbadoes	29.87	758.7	29.90	759.4	80.0	26.7	82	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	29.58	751.3	29.70	754.4	41.0	5.0	83	n.	.....	.....	1.0	.....	6	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E	29.58	751.3	29.71	754.6	44.1	6.7	85	nw.	.....	.....	1	.....	7	.....	.....	blank	blank	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.55	750.6	29.78	756.4	44.9	7.2	87	sse.	.....	.....	4	.....	10	.....	.....	.....	.....	rainings	The Staff.
Fort Napier, Natal	27.60	701.0	29.82	757.4	77.0	25.0	60	ne.	.....	.....	1	.....	4	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29 63	752.6	29.86	758.4	88.0	31.1	62	nw.	.....	.....	1	.....	5	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.06	763.5	30.11	764.8	69.2	20.7	92	w.	.....	.....	4	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.54	750.3	29.74	755.4	40.3	4.6	63	ese.	.....	.....	3	.....	9	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.56	750 8	29.74	755.4	41.1	5.1	73	nnw.	.....	.....	4	.....	8	.....	.....	.....	.....	d. clouds	The Staff.
Guernsey	29.56	750.8	29.87	758.7	46.0	7.8	85	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	drizzling	A. Collenette, F. M. S.
Kew, Observatory	29.73	755.1	29.77	756.1	40.6	4.8	77	nw.	15	6.7	.....	.....	7	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.52	749.8	29.78	756.4	41.1	5.1	72	n.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.87	758.7	29.94	760.5	72.4	22.4	91	se.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.00	762.0	30.04	763.0	77.5	25.3	59	sw.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.28	743.7	29.81	757.2	41.0	5.0	69	n.	.....	.....	2	.....	2	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.57	751 1	29.80	756.9	41.0	5.0	82	nnw.	.....	.....	3	.....	4	.....	.....	.....	.....	misty	The Staff.
Plymouth	29.74	755.4	29.82	757.4	39.2	4.0	75	ese.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	John Merrifield.
Sandwick Manse, Orkneys	29.67	753 6	29.77	756.1	39	3.9	90	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	rain & hail	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.91	759.7	29.98	761.5	56.2	13.4	63	sw.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	29.51	749.5	29.79	756.7	41.0	5.0	87	ne.	.....	.....	1	.....	6	.....	.....	0.10	2.5	d. clouds	W. F. Cooper.
Silloth Rectory	29.73	755.1	29.76	755.9	41.8	5.4	78	ene.	.....	.....	3	.....	2	.....	.....	0.020	0.5	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.79	756.7	39.0	3.9	75	ene.	.....	.....	.....	.....	10	.....	.....	.....	.....	d. clouds	I. New.
Stratfield Turgiss	29.59	751.6	29.81	757.2	41.4	5.2	73	nw.	.....	.....	2	.....	2	.....	.....	.....	.....	blue sky	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.64	752.8	29.67	753.6	47	8.3	100	se.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.56	750.8	29.58	751.3	45.5	7.5	89	w.	30	13.4	.....	.....	10	.....	.....	.....	.....	raining	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.74	755.4	29.78	756.4	33	0.6	85	w.	10	4.5	.....	0	0	.....	.....	0.070	1.8	clear	H. J. Cundall, C. E.
Chatham, N. B*	29.71	754.6	29.78	756.4	28	— 2.2	80	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear	G. A. Blair.
Father Point, Quebec*	29.66	753.4	29.68	753.9	32	0.0	92	w.	45	20.1	.....	.....	10 8	.....	W.	0.03	0.8	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.12	739.6	29.97	761.2	26	— 3.3	88	w.	4	1.8	.....	.....	10 n	.....	W.	.....	.....	light snow	James Stewart.
Halifax, N. S*	29.74	755 4	29.87	758.7	31	— 0.6	92	sw.	2	0.9	.....	0	0	.....	.....	0.120	3.0	clear	A. Allison.
Kingston, Ontario*	29.61	752.1	29.96	761.0	31	— 0.6	81	nw.	2	0.9	.....	2 ck	2 k	w.	.....	0	0	fair	A. P. Knight, M. A.
Montreal, Quebec*	29.67	753.6	29.88	758.9	34	1.1	71	w.	17	7.6	.....	0	2 ks	.....	.....	0.01	0.3	clear	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.17	740 9	29.88	758.9	35	1.7	89	se.	5	2.2	.....	5 k	5 ks	w.	w.	0.15	3.8	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.29	744.0	30.01	762.2	30	— 1.1	100	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	H. Morgan.
Port Stanley, Ontario	29.32	744.7	30.01	762.2	24	— 4.4	92	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	M. Payne.
Quebec, Quebec*	29.51	749.5	29.85	758.2	28	— 2.2	88	nw.	.....	.....	3	.....	10 n	.....	nw.	0.05	1.3	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.36	745.7	29.84	757.9	28	— 2.2	80	calm	0	0	.....	.....	10 08	.....	W.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.18	741.2	29.90	759.4	40.	4.4	89	w.	10	4.5	.....	.....	10 k8	.....	.....	0	0	cloudy	.....
St. Andrews, N. B	29.79	756 7	29.84	757.9	34	1.1	79	w.	5	2.2	.....	0	0	.....	.....	0	0	clear	.....
Sydney, C. B*	29.72	754.9	29.78	756.4	37	2.8	89	sw.	8	3.6	.....	0	0	.....	.....	0.20	5.1	clear	T. C. Hill, C. E
Toronto, Ontario*	29.59	751.6	29.99	761.7	29	— 1.7	80	w.	2	0.9	.....	0	hz.	.....	.....	0	0	clear	Magnetic Observatory.
Yarmouth, N. S*	29.83	757.7	29.90	759.4	37	2.8	66	nw.	5	2.2	.....	2 k	0	nw.	.....	0	0	clear	Lt. F. E. Wilmot, R. N.
Sub-arctics.																			
Mount Forest	28.52	724.4	30.00	762.0	23.0	— 5.0	60	sw.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Johns, Newfoundland	29.58	751.3	29.83	757.7	53	11.7	100	s.	1	0.4	.....	2	8 k	.....	.....	0	0	cloudy	Wm. Wylie.
Cape Colony.																			
Cape St. Francis Lt. House	29.77	756.1	29.80	756.9	69.0	20.6	83	ene.	18.8	8.4	.....	0	2 k	.....	.....	0.10	2.5	overcast	John Delany.
Cape Town, C. G. H. Obs'y	29.75	755.6	29.79	756.7	85.5	29.7	38	nw.	15	6.7	.....	0	10	.....	.....	0	0	clear	John Duthie.
												6	6	.....	.....	0	0	.....	The Staff, for D.G.H.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.54	775.8	33.4	0.8	94	e.	0.2	0.1	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.35	770.8	30.37	771.4	55.0	12.8	92	nne.	10.1	4.5	.....	.....	10 n	.....	.....	0.378	9.6	raining	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	30.03	762.8	30.08	764.0	35.6	2.0	78	e.	.....	.....	6	.....	5	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	29.98	761.4	30.00	762.0	36.1	2.3	85	e.	.....	.....	6	.....	7	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.32	744.6	29.36	745.7	20.1	— 6.6	76	ene.	.....	.....	6	.....	9	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.39	746.6	29.41	747.1	25.7	— 3.5	.....	se.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....
Stykkisholm, Iceland	29.21	741.9	29.25	743.0	36.7	2.6	67	sw.	.....	.....	7	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.66	753.4	29.70	754.3	44.8	7.1	65	sse.	22	10	.....	.....	10	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	30.00	762.1	30.10	764.5	33.8	1.0	83	ene.	.....	.....	6	.....	1	.....	.....	.....	.....	.....	Loerer Oesterbol.
Jacobshavn	29.65	753.0	29.69	754.2	13.6	—10.2	.....	e.	.....	.....	6	.....	7	.....	.....	.....	.....	snowing	
French.																			
Agen, Normal School	29.50	749.3	30.16	766.1	47.8	8.8	78	w.	.....	.....	1	.....	kn	.....	w.	0.091	2.3	.....	M. Labroue, Director.
Alençon, Normal School	29.37	745.9	29.92	759.9	42.1	5.6	75	nw.	.....	.....	1	.....	s	se.	se.	0.236	6.0	.....	M. Nicot, Director.
Arras, Engineer School	29.29	743.9	29.55	750.5	38.1	3.4	94	.....	.....	.....	2	.....	10 n	.....	.....	0.252	6.4	light rain	M. Fénéon, Command't.
Avignon, Normal School	29 86	758.5	29.94	760.5	51.4	10.8	54	nnw.	.....	.....	1	.....	5	.....	nnw.	0.130	3.3	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.25	743.0	29.83	757.6	39.6	4.2	99	wsw.	.....	.....	1	.....	10	.....	w.	0.047	1.2	covered	M. Saillard, Director.
Beauvais, Normal School	29.48	748.8	29.76	755.8	40.3	4.6	84	w.	.....	.....	1	.....	10	.....	nw.	0	0	covered	M. Frère Eugène Marie.
Besançon, Normal School	28.93	734.8	29.83	757.7	39.2	4	90	s.	.....	.....	2	.....	n	.....	sw.	0.728	18.5	foggy	M. Gobin, Director.
Bordeaux, Observatory	29.80	756.9	30.06	763.6	52.5	11.4	52	wsw.	.....	.....	1	.....	5	.....	.....	0.126	3.2	cloudy	M. Rayet, Director.
Bourges, Normal School	29.37	746.1	29.93	760.1	45.9	7.7	56	w.	.....	.....	4	.....	k	.....	w.	0.047	1.2	.....	M. Malet, Director.
Brest, Naval Observatory	29.67	753.6	29.91	759.7	49.6	9.8	89	w.	.....	.....	2	.....	10	.....	w.	0.039	1.0	raining	M. de Kermaree, Dir.
Caen, Normal School	29.78	756.5	29.86	758.4	45.3	7.4	64	w.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.36	745.8	29.69	754.0	39.7	4.3	97	sw.	.....	.....	2	.....	10	.....	.....	0.157	4.0	covered	M. Jadot, Director.
Charleville, Normal School	29.13	739.8	29.65	753.0	35.2	1.8	82	s.	.....	.....	1	.....	10	.....	.....	0.583	14.8	covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.58	725.8	29.97	761.2	40.8	4.9	71	w.	.....	.....	2	.....	8	.....	wnw.	0.028	0.7	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.08	738.6	29.93	760.2	41.2	5.1	69	w.	.....	.....	3	.....	9	.....	.....	0.08	2.	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.88	733.5	29.75	755.7	37.0	2.8	97	wsw.	.....	.....	4	.....	10	wsw.	wsw.	c.12	3.	covered	Dr. Coulet, Director.
Gap, Normal School	27.52	699.1	29.93	760.1	41.4	5.2	46	nw.	.....	.....	1	.....	5	.....	s.	0.31	8.	.....	M. Jeanginard, Director.
Gréasque, du Rhone	28.76	730.4	29.89	759.3	48.2	9	55	nw.	.....	.....	4	.....	3	.....	nw.	0.185	4.7	.....	M. Kina, Director.
Grenoble, Normal School	29.18	741.1	29.96	760.9	42.4	5.8	75	nnw.	.....	.....	1	.....	10 kn	.....	nw.	0.512	13.0	raining	M. Ablard, Director.
Guéret	28.38	720.9	29.97	761.3	40.6	4.8	87	wsw.	.....	.....	2	.....	5	.....	w.	0.429	10.9	cloudy	M. Delorme, Dir.
Lamballe, Normal School	29.61	752.2	29.89	759.2	47.5	8.6	78	nw.	.....	.....	3	0	2 kn	.....	.....	0.406	10.3	rain & hail	M. Ollitrault, Director.
Lescar, Normal School	29.55	750.5	30.12	765.0	48.6	9.2	86	w.	.....	.....	1	.....	5 kn	w.	sw.	0.295	7.5	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.85	758.3	29.96	760.9	52.7	11.5	65	w.	.....	.....	1	.....	10	w.	s.	0.270	7.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.95	735.3	30.04	763.1	39.4	4.1	74	nw.	.....	.....	2	0	8 n	.....	nnw.	0.055	1.4	very cloudy	M. André, Director.
Mans, Normal School	29.59	751.5	29.89	759.3	43.0	6.1	72	nw.	.....	.....	1	.....	.....	.....	.....	0.268	6.8	.....	M. Piboen, Director.
Marseille, Observatory	29.63	752.5	29.90	759.4	52.9	11.6	74	wnw.	.....	.....	4.5	.....	5	.....	wnw.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.75	628.7	29.60	751.7	39.2	4.0	38	sw.	13.0	5.8	.....	.....	0	.....	.....	0	0	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29.80	756.9	29.93	760.2	51.4	10.8	62	w	.....	.....	3	.....	2	.....	w.	0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	28.94	735.1	29.74	755.4	36.7	2.6	89	sw.	.....	.....	1	.....	kn	.....	.....	0.134	3.4	.....	M. Hasse, Director
Nantes, Observatory	29.85	758.3	30.01	762.3	49.5	9.7	62	s.	.....	.....	2–3	0	8 k; kn	.....	wnw.	0.098	2.5	.....	M. Lurocque, Director.
Perpignan, Observatory	29.95	760.7	30.06	763.5	54.3	12.4	53	nw.	24.2	10.8	.....	.....	7	.....	nnw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.08	535.4	.....	.....	14.4	— 9.8	.....	w.	.....	.....	2–3	.....	10	.....	w.	0.433	11.0	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.81	731.8	29.89	759.1	46.4	8	59	s.	.....	.....	1	.....	5	s.	s.	0.287	7.3	cloudy	M. Taillen.
Puy de Dôme Obs'y, Summit	24.91	632.6	.....	.....	23.5	— 4.7	100	w.	.....	.....	8	.....	10	.....	w.	0.386	9.8	foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.00	762.0	30.03	762.8	50.0	10.0	85	sw.	.....	.....	1	.....	8	.....	w.	0.98	25.	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.79	756.6	30.01	762.2	48.6	9.2	73	wnw.	.....	.....	1	.....	2	.....	wnw.	0	0	slightly cl'dy	M. Brotier, Director.
Rodez, Normal School	28.22	716.9	30.07	763.7	38.1	3.4	97	nw.	.....	.....	2	.....	ks	.....	s.	0	0	.....	M. Seger, Director.
Rouen, Normal School	29.74	755 3	29.78	756.5	43.9	6.6	70	wnw.	.....	.....	1	.....	5	wnw.	.....	0.20	5.	cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	44.2	6.8	61	nw.	.....	.....	1	.....	.....	.....	nw.	0.354	9.0	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.62	752.3	29.78	756.5	41.9	5.5	73	w.	.....	.....	2	.....	10	.....	wnw.	0.028	0.7	.....	M. Renou, Director.
Toulouse, Observatory	29.41	746.9	30.13	765.3	49.1	9.5	72	w.	.....	.....	4	.....	5	nw.	.....	0.102	2.6	cloudy	M. Baillaud, Director.
Tours	29.76	756.0	29.94	760.5	45.3	7.4	66	wnw.	.....	.....	2	.....	2	.....	.....	0.354	9.0	slightly cl'dy	M. de Tastes.
Versailles, Observatory	29.29	743.9	29.78	756.4	41.4	5.2	71	nw.	.....	.....	3	.....	.....	.....	.....	0.067	1.7	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.25	717.6	29.74	755.4	35.6	2.0	86	.....	.....	.....	.....	.....	10	.....	.....	0.524	13.3	.....	Prof. Jnedt.
Bamberg	28.89	733.8	29.72	755.0	35.6	2.0	96	.....	.....	.....	.....	.....	10	.....	.....	0.610	15.5	snowing	Prof. Dr. Hoh.
Berlin	29.70	754.3	29.88	759.0	34.0	1.1	72	ne.	.....	.....	3	.....	7	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.38	746.2	29.91	759.6	30.4	— 0.9	59	e.	.....	.....	3	.....	10	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.28	743.6	29.72	754.8	44.2	6.8	82	sw.	.....	.....	3	.....	9	.....	var.	0.181	4.6	.....	Albert Senz.
Cassel	28.98	736.0	29.69	754.2	31.3	— 0.4	96	e.	.....	.....	1	.....	10	s.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.34	745.3	29.72	755.0	36.7	2.6	94	sw.	.....	.....	1	.....	10	.....	.....	0.713	18.1	.....	Physical Society.
Friedrichshafen	28.34	719.8	29.80	756.8	42.8	6.0	79	w.	.....	.....	4	.....	10	w.	.....	0.118	3.0	.....	Wilhelm, Chief Tel.
Hamburg	29.81	757.1	29.90	759.4	35.2	1.8	57	e.	.....	.....	5	.....	2	.....	.....	0	0	.....	E. Preller.
Kiel	29.95	760.6	29.96	761.0	37.4	3.0	61	e.	.....	.....	6	.....	5	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.37	746.1	29.82	757.3	26.6	— 3.0	96	ne.	.....	.....	5	.....	10	.....	.....	.....	.....	snowing	H. Leppig, Asst.
Magdeburg	29.63	752.5	29.82	757.5	33.8	1.0	60	e.	.....	.....	2	.....	10 ks	.....	.....	0	0	.....	Weather Observatory.
Memel	30.23	767.9	30.28	769.1	26.6	— 3.0	89	ene.	.....	.....	2	.....	10 s	.....	.....	.....	.....	.....	Issermann.
Munich	27.89	708.4	29.73	755.2	36.1	2.3	91	n.	.....	.....	6	.....	10	.....	.....	0.201	5.1	raining	Central Station.
Neufahrwasser	30.17	766.2	30.18	766.6	33.1	0.6	64	e.	.....	.....	2	.....	5	.....	.....	0.075	1.9	.....	A. Lothes.
Neustadt, Palatinate	29.16	740.6	29.68	753.8	40.5	4.7	86	w.	.....	.....	2	.....	10	w.	.....	0	0	.....	Dicknether.
Stuttgart	28.77	730.7	29.67	753.7	44.1	6.7	54	w.	.....	.....	5	.....	7	w.	.....	0.083	2.1	.....	Prof. Dr. Schoder.
Wustrow	30.03	762.8	30.06	763.4	35.6	2.0	71	se.	.....	.....	3	0	5 s	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.73	755.1	30.11	764.8	65.7	18.7	.....	ne.	.....	.....	2.0	0	5 k	.....	.....	0	0	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.07	763.8	30.12	765.1	86.0	30.0	42	ene.	20.0	8.9	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.55	750.5	30.02	762.5	85.0	29.4	29	nne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.91	759.6	29.94	760.6	80.2	26.8	67	nnw.	12.0	5.4	.....	.....	5	w.	.....	0	0	d. clouds	
Poona, Yarrowda	28.09	713.4	29.94	760.4	82.3	27.9	20	ne.	9.0	4.0	.....	.....	8	ene.	.....	0	0	d. clouds	
Trichinopoly	29.64	752.8	29.92	759.9	81.0	27.2	73	ne.	2.0	0.9	.....	.....	6	.....	.....	0	0	d. clouds	
Bellary	28.44	722.2	29.90	759.4	83.1	28.4	50	e.	8.0	3.6	.....	.....	9	.....	.....	0	0	gloomy	
Belgaum	27.38	695.3	29.90	759.5	79.6	26.4	40	ene.	12.0	5.4	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.33	745.0	30.10	764.4	70.9	21.6	46	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.13	739.8	30.05	763.2	71.2	21.8	49	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.50	749.2	30.07	763.7	78.2	25.7	29	w.	2.0	0.9	.....	.....	0	.....	.....	c	0	blue sky	
Nagpur	28.97	735.8	30.03	762.7	76.5	24.7	44	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.69	728.8	30.07	763.8	75.0	23.9	33	n.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.67	753.6	30.05	763.3	78.2	25.7	38	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.73	755.0	30.05	763.3	67.3	19.6	63	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.87	758.6	30.06	763 4	74.3	23.5	56	n.	1.4	0.6	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	28.01	711.4	30.07	763.8	67.6	19.8	58	nw.	3.4	1.5	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.94	760.5	30.02	762.6	76.0	24.4	73	ne.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	30.00	762.1	30.03	762.6	71.6	22.0	71	n.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.90	759.3	30.02	762.4	71.6	22.0	79	nne.	2.9	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.94	760.5	30.03	762.8	76.5	24.7	66	nw.	1.5	0.7	.....	.....	3	.....	.....	0	0	blue sky	
Sibsagar	29.70	754.4	30.05	763.2	71.0	21.7	85	ene.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.91	759.6	29.93	760.2	85.8	29.9	60	sse.	8.3	3.7	.....	.....	6	.....	se.	0	0	d. clouds	
Jeypore	28.63	727.1	30.09	764.2	76.9	24.9	30	n.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.21	741.8	29.62	752.4	47.7	8.7	81	ne.	3.8	1.7	.....	.....	10	.....	.....	1.256	31.9	.....	Prof. Giovanni Clodig.
Milan	29.14	740.1	29.67	753.5	45.1	7.3	91	nw.	4.3	1.9	.....	.....	9	nw.	.....	0.799	20.3	.....	Prof. Schiapparelli.
Padua	29.49	749.1	29.60	751.9	50.0	10.0	94	nw.	1.8	0.8	.....	.....	10	.....	.....	0.874	22.2	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.69	728.7	29.61	752.0	48.6	9.2	62	s.	3.1	1.4	.....	.....	2	nw.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Genoa	29.43	747.4	29.62	752.3	54.9	12.7	56	ne.	4.3	1.9	.....	.....	4	w.	.....	0.539	13.7	.....	Prof. G. M. Garibaldi.
Mondovi	27.69	703.3	29.64	752.8	46.8	8.2	59	nw.	.....	.....	2	.....	0	.....	.....	0.094	2.4	.....	Prof. D. C. Bruno
Pesaro	29.64	752.8	29.69	754.0	54.3	12.4	80	ssw.	3.8	1.7	.....	.....	10	.....	.....	0.476	12.1	.....	Prof. Luigi Guidi.
Florence	29.41	747.1	29.67	753.6	60.1	15.6	62	sw.	.....	.....	7	.....	7	sw.	.....	0.445	11.3	.....	Prof. Costantino Pitter.
Leghorn	29.56	750.9	29.65	753.0	59.0	15.0	56	wsw.	14.3	6.4	.....	.....	4	.....	.....	0.398	10.1	.....	Prof. P. Monte.
Rome	29.62	752.4	29.80	756.9	62.8	17.1	81	sw.	13.0	5.8	.....	.....	10	.....	.....	0.094	2.4	.....	Prof. P. Tachini.
Lecce	29.67	753.6	29.92	760.0	66.2	19.0	72	ssw.	21.7	9.7	.....	.....	7	s.	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.99	738.8	29.98	761.4	66.6	19.2	72	w.	3.1	1.4	.....	.....	4	sw.	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.66	753.3	29.85	758.2	63.1	17.3	63	nw.	.....	.....	6	.....	7	w.	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.63	752.5	29.87	758.8	73.0	22.8	38	sw.	23.0	10 3	.....	.....	9	.....	.....	0	0	.....	Prof. G. Cacciatore.
Syracuse	29.91	759.8	29.96	760.9	67.3	19.6	86	s.	6.3	2.8	.....	.....	9	wsw.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.33	744.9	29.84	758.0	65.8	18.8	80	w.	3.1	1.4	.....	.....	9	sw.	.....	0.004	0.1	.....	Prof. F. Brioschi.
Stelvio	21.72	551.8	.....	.....	25.7	— 3.5	94	w.	.....	.....	2	.....	10	.....	.....	1.508	38.3	misty	Prof. P. F. Denza.
Valdobbia	21.74	552.1	.....	.....	21.7	— 5.7	73	ne.	.....	.....	2	.....	4	.....	.....	1.575	40.0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.25	768.3	30.28	769.1	36.4	2.4	66	nw.	.....	.. ..	2	.....	10 ck	.....	nw.	0	0	cloudy	Hattori.
Awomori	30.22	767.6	30.26	768.6	33.8	1.0	72	wnw.	13.1	5.9	.....	.....	10 ks	.....	.....	0.005	0.1	overcast	K. Ogawa.
Hakodate	30.20	767.0	30.21	767.3	31.5	— 0.3	89	wnw.	12.0.	5.4	.....	.....	10	.....	.....	0	0	overcast	
Hiroshima	.....	.....	.....	.....	53.2	11.8	68	nne.	6.4	2.9	.....	1 cs	3 ck	.....	ne.	0	0	cloudy	Y. Miwa.
Kanazawa	30.18	766.5	30.29	769.2	44.0	6.7	91	e.	1.1	0.4	.....	0	0	.....	.....	0.030	0.8	fair	S. Endo.
Kioto	30.07	763.8	30.25	768.3	50.9	10.5	87	nnw.	0.4	0.2	.....	0	4 s	.....	ne.	0	0	fair	M. Tojima.
Nagasaki, I. M. Obs'y	30.00	762.0	30.20	767.1	60.4	15.8	64	ne.	8.4	3.8	.....	.....	10 s	.....	.....	0	0	overcast	S. Takehayashi.
Nemuro	30.10	764.5	30.16	766.0	29.5	— 1.4	75	nw.	12.0	5.4	.....	0	0	.....	.....	0	0	clear	
Niigata	30.24	768.1	30.28	769.1	45.7	7.6	65	n.	2.4	1.1	.....	0	5 ck	.....	n.	0.020	0 5	cloudy	M. Moritta.
Nobiru	30.21	767.4	30.23	767.8	39.1	3.9	65	nnw.	9.1	4.0	.....	0	2 s	.....	.....	0	0	fair	H. Midzushima.
Osaka	30.24	768 c	30.25	768.4	53.2	11.8	78	nnw.	4.2	1.9	.....	.....	10-;ks	.....	.....	0	0	cloudy	
Sapporo	.....	.....	.. ..	.....	26.3	— 3.2	94	w.	1.2	0.5	.....	0	5	.....	.....	0.210	5.3	fair	
Tokei Obs'y, Yeddo	30.11	764.9	30.19	766.9	47.4	8.6	83	ene.	1.8	0.8	.....	.....	9 s	.....	.....	0	0	cloudy	The Staff.
Wanayama	30.18	766.5	30.24	768.0	55.1	12.8	68	ne.	5.0	2.2	.....	0	0	.....	.....	0	0	clear	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.86	758.4	30.04	763.0	79.0	26.1	58	ene.	14.5	6.5	.....	5ck;cs	4 k;ks	ne.	ese.	0.07	1.8	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.72	602.4	29.94	760.4	54.5	12.5	84	nne.	inap.	inap.	.....	5 c	0	.....	.....	0	0	fair	Prof. Vicente Fernandez.
Leon	24.38	619.2	30.15	765.8	51.8	11.0	93	nnw.	.....	.....	1	6 c	2 k	sw.	sw.	0	0	cloudy	Prof. M. Leal.
Mazatlan	29.74	755.4	30.00	762.0	70.5	21.4	87	ene.	0	0	.....	8 cs	0	se.	.....	0	0	foggy	F. Quijano, U. E.
Mexico, Central Obs'y	23.15	588.1	30.30	769.7	46.4	8.0	94	n.	0.9	0.4	.....	5 ck	4 ks	nw.	.....	inap.	inap.	cloudy	The Staff.
Morelia	24.23	615.3	30.07	763.7	50.4	10.2	61	ne.	0.9	0.4	.....	3 c	1 k	s.	se.	0	0	½ cloudy	M. Tena, M. D.
Orizaba	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Chazaro.
Pabellon, Aguascallentes	24.00	609.5	30.04	763.1	55.9	13.3	74	w.	.....	.....	1	.....	.....	.....	.....	0	0	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.39	771.9	41.7	5.3	87	calm	0	0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.76	578.2	30.50	774.6	49.5	9.5	91	sse.	6.9	3.1	.....	6	4	s.	s.	0	0	cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.61	752.1	29.61	752.1	35.4	1.9	.....	se.	.....	.....	4	.....	.....	.....	.....	0.315	8.0	.....	
Groningen	29.72	754 9	29.78	756.3	33.6	0.9	.....	se.	.....	.....	5	.....	.....	.....	.....	0	0	.....	
Helder	29.70	754.4	29.70	754.4	32.0	0.0	.....	e.	.....	.....	5	.....	.....	.....	.....	0.260	6.6	.....	
Hellevoetsluis	29.64	752.8	29.64	752.8	33.1	0.6	88	e.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	29.63	752.6	29.68	753.8	33.1	0.6	90	e.	.....	.....	3	.....	10	.....	.....	0.067	1.7	dull	H. van der Brink
NORWEGIAN.																			
Bergen	30.12	765.1	30.19	766.7	34.2	1.2	75	sw.	4	2	.....	.....	1	.....	.....	0	0	.....	
Brono	30.26	768.5	30.30	769.5	34.2	1.2	43	e.	4	2	.....	.....	0	.....	.....	0	0	.....	
Christiania	30.20	767.1	30.36	771.1	27.7	— 2.4	79	ne.	4	2	.....	.....	9	.....	.....	0	0	.....	
Gjæsvær	30.30	769.5	30.32	770.1	36.0	2.2	.....	ssw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	
Lodingen	30.31	769.8	30.35	771.0	37.9	3.3	73	calm	.....	.....	0	.....	4	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.17	766.2	30.32	770.2	63.3	17.4	68	ese.	3.8	1.7	.....	.....	5	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.13	740.0	30.14	765.5	58.6	14.8	50	se.	1.8	0.8	.....	.....	3	.....	.....	0	0	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	30.04	763.0	30.13	765.3	66.7	19.3	58	se.	7.4	3.3	.....	.....	2	nne.	.....	0.205	5.2	.....	Capt. D. A. de Ounha.
Lisbon, Observatory	29.85	758.3	30.22	767.6	55.4	13.0	37	ne.	7.4	3.3	.....	.....	1	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.24	768.1	30.31	769.9	66.9	19.4	63	ese.	7.4	3.3	.....	.....	4	.....	.....	0	0	.....	
Saint Paul de Loando	29.64	752.9	29.84	758.0	82.4	28.0	84	calm	0	0	.....	.....	4	se.	.....	0	0	.....	
Serra da Estrella	25.36	644.1	30.14	765.6	46.4	8.0	26	nne.	9.4	4.2	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN.																			
Akmollinski	29.25	742.9	30.43	772.8	14.5	— 9.7	91	e.	9	4	.....	0	0	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	30.23	767.8	30.25	768.3	18.0	— 7.8	94	n.	2	1	.....	.....	10	.....	.....	.....	.....	light snow	Capt. Sseliwerstow.
Astrakhan	30.41	772.4	30.33	770.3	37.2	2.9	61	wnw.	9	4	.....	.....	10 s;n	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	30.11	764.7	30.68	779.3	— 3.6	—19.8	87	calm	0	0	.....	.....	4	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	30.11	764.9	30.38	771.7	11.7	—11.3	100	calm	0	0	.....	6 c	0	.....	.....	0	0	light haze	Observatory.
Ekaterinburg	29.16	740.6	30.19	766.9	19.2	— 7.1	98	se.	9	4	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Kasan	29.60	751.7	29.88	758.9	28.6	— 1.9	89	wnw.	4	2	.....	.....	10	.....	.....	0.394	10.0	snowing	Observatory.
Kertch	30.18	766.5	30.20	767.0	44.4	6.9	93	e.	4	2	.....	0	2 ks	.....	.....	0	0	.....	Lagorio & Sastyrex.
Kieff	29.54	750.4	30.22	767.7	23.7	— 4.6	72	sse.	7	3	.....	cs	10ks;n	.....	.....	.....	.....	light snow	Observatory.
Lugan	30.06	763.6	30.28	769.1	27.7	— 2.4	73	wsw.	4	2	.....	.....	8	.....	.....	blank	blank	.....	Meteorological Obs'y.
Nikolaiev	30.17	766.4	30.24	768.2	32.0	0.0	89	e.	4	2	.....	.....	10 n	.....	.....	0.154	3.9	snowing	Capt. Kurdakow.
Pekin, China	30.44	773.1	30.58	776 7	35.2	1.8	91	calm	0	0	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	30.28	769.0	30.29	769.4	21.4	— 5.9	90	nnw.	4	2	.....	.....	10ks;n	.....	.....	inap.	inap.	.....	Central Physical Obs'y.
Semipalatinsk	29.99	761.8	30.74	780.7	4.3	—15.4	86	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Major Lasarew.
Tashkend, Laboratory	28.59	720.2	30.15	765.8	62.2	16.8	51	calm	0	0	.....	.....	6	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.81	731.8	30.24	768.2	53.8	12.1	52	calm	0	0	.....	0	7 k	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.35	770.8	30.67	779.0	— 6.0	—21.2	84	se.	2	1	.....	0	0	.....	.....	.....	.....	.....	
Vladivostock	30.29	769.4	30.36	771.1	23.0	— 5.0	.....	calm	0	0	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.66	753.3	30.10	764.6	24.4	— 4.2	74	ese.	7	3	.....	ck	4 s	.....	.....	.....	.....	light clouds	Astronomical Obs'y.
Wilna	29.79	756.6	30 24	768.0	25.3	— 3.7	89	ne.	16	7	.....	.....	5	.....	.....	0	0	.....	Berg, Assistant.
Yeniseisk	30.51	775 0	30.85	783.5	—12.3	—24.6	80	calm	0	0	.....	.....	0	.....	.....	0	0	.....	M. C. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.47	748.5	44	6.7	92	s.	.....	.....	8	.....	10	.....	.....	0	0	overcast	J. Youngclause.
North Unst	.....	.....	30.04	763.0	.....	.....	.....	s.	.....	.....	7	.....	6	.....	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.90	759.4	30.00	762.0	57.2	14	53	w.	3.8	1.7	.....	0	0	.....	.....	0	0	clear	Antonio Reve, Director.
Bilbao, Met. Obs'y	30.15	765.9	30.17	766.4	49.3	9.6	87	nw.	3.8	1.7	.....	.....	10	.....	.....	0.567	14.4	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.21	691.1	30.27	768.9	44.1	6.7	63	w.	5.4	2.4	.....	0	0	.....	.....	0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	27.91	708.9	30.19	766.8	48.4	9.1	52	calm	0.7	0.3	.....	0	0	.....	.....	0.008	0.2	clear	The Staff.
Murcia, Met. Obs'y	29.93	760.3	30.08	763.9	62.6	17.0	52	nw.	3.8	1.7	.....	0	1	.....	.....	0	0	almost clear	Olayo Diaz, Director.
Oviedo	29.33	745.0	30.21	767.3	49.6	9.8	88	e.	14.1	6.3	.....	.....	10 n	.....	w.	0.012	0.3	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.30	744.2	30.22	767.6	48.6	9.2	78	e.	.....	.....	.....	.....	10	.....	.....	0.008	0.2	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.88	758.9	29.94	760.4	81.2	27.3	74	nne.	3.5	1.6	.....	0	1 ks	.....	.....	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.01	762.3	30.11	764.8	60.1	15.6	53	n.	2.4	1.1	.....	0	0	.....	.....	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.84	758.0	29.93	760.3	75.9	24.4	90	w.	12.5	5.6	.....	3 cs	4 k	w.	w.	0.059	1.5	.....	Manuel Maese.
Tuguegarao, Philippine Id's	29.87	758.8	30.00	762.1	76.9	24.9	91	nw.	3.6	1.7	.....	0	0	.....	.....	0	0	clear	José If. Yrastorza.
SWEDISH.																			
Haparanda	30.49	774.4	30.53	775.4	3.2	—16.0	100	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	30.42	772.7	30.47	774.0	21.9	— 5.6	100	calm	.....	.....	0	.....	10	.....	.....	0.035	0.9	.....	

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	30.35	771.0	30.41	772.3	23.4	— 4.8	90	nne.	.....	.....	2	.....	10	.....	.....	0	0	....	
Stockholm	30.15	765.9	30.33	770.4	27.3	— 2.6	66	nne.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Wisby	30.22	767.6	30.28	769.1	32.4	0.2	92	ene.	.....	.....	2	.....	7	.....	.....	0.102	2.6	.....	
Sub-series.																			
Upsala	30.24	768.2	30.33	770.4	27.0	— 2.8	92	nne.	5.4	2.4	.....	.....	10	.....	e.	0.012	0.3	.....	S. G. Fineman.
Swiss.																			
Geneva	28.48	723.5	29.95	760.8	40.3	4.6	75	s.	.....	.....	6	.....	10	.....	.....	1.595	40.5	covered.....	The Observatory.
Turkish.																			
Constantinople	.....	.....	30.13	765.2	55.0	12.8	64	ene.	2	1.0	.....	.....	4	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	30.01	762.3	66.6	19.2	.....	se.	.....	.....	1	.....	10	.....	.....	0	0	covered.....	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.06	763.4	70.0	21.1	69	nw.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	29.93	760.2	30.01	762.2	43	6.1	51	w.	2	0.9	.....	.....	10 8	.....	w.	inap.	inap.	cloudy	J. O. Barnes.
Alpena, Michigan	29.20	743.2	29.96	761.0	35	1.7	79	w.	8	3.6	.....	.....	10 8	.....	.....	0	0	cloudy.....	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.02	635.5	30.12	765.0	18	— 7.8	61	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	W. C. Barnes.
Assinnaboine, Ft., Montana	27.16	689.9	30.14	765.5	31	— 0.6	62	sw.	15	6.7	.....	0	0	.....	.....	0	0	clear.....	B. O. Lenoir.
Atlanta, Georgia	28.93	734.8	30.15	765.8	38	3.3	61	w.	7	3.1	.....	0	fg.	.....	.....	0	0	clear.....	H. C. Smith.
Atlantic City, New Jersey	30.02	762.5	30.03	762.7	35	1.7	79	n.	3	1.3	.....	3 c	2 s	.....	.....	0	0	fair.....	Jas. M. Watson.
Augusta, Georgia	29.91	759.7	30.11	764.8	41	5.0	73	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	John Healy.
Baltimore, Maryland	30.00	762.0	30.06	763.5	38	3.3	73	ne.	4	1.8	.....	5 cs	fg.	w.	.....	0	0	fair.....	Geo W Felger.
Barnegat, New Jersey	30.00	762.0	30.02	762.5	36.5	2.5	70	nw.	4	1.8	.....	5 cs	0	nw.	.....	0	0	fair.....	G. A. Hill.
Bennett, Fort, Dakota	28.24	717.3	29.93	760.2	25	— 3.9	88	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	A. Pritchard.
Benton, Fort, Montana	27.25	692.1	30.21	767.3	36	2.2	58	sw.	8	3.6	.....	0	7 ks	.....	sw.	0	0	fair.....	S. Wheaton.
Bismarck, Dakota	28.03	711.9	29.95	760.7	33	0.6	81	se.	4	1.8	.....	.....	10 n	.....	.....	inap.	inap.	light rain.....	Cyrus Cramer.
Block Island, Rhode Island	29.98	761.5	30.01	762.2	38	3.3	72	n.	13	5.8	.....	4ck;cs	0	n.	.....	0	0	fair.....	J. T. Elker.
Boise City, Idaho	27.41	696.2	30.35	770.9	21	— 6.1	96	calm	0	0	.....	.....	10 s	.....	.....	0.05	1.3	cloudy.....	B. E. Light.
Boston, Massachusetts	29.82	757.4	29.98	761.5	32.0	0.0	73	w	7	3.1	.....	3 ck	0	.....	.....	0	0	clear.....	O. B. Cole.
Brownsville, Texas	30.16	766.1	30.21	767.3	50.5	10.3	64	n.	4	1.8	.....	0	4 s	.....	.....	0	0	fair.....	M. McCarty.
Buffalo, New York	29.23	742.4	30.01	762.2	36.4	2.4	60	w.	4	1.8	.....	2 ck	4 ks	w.	w.	inap.	inap.	fair.....	W. Finn.
Buford, Fort, Dakota	28.01	711.4	29.99	761.7	35	1.7	82	n.	12	5.4	.....	.....	10 s	.....	nw.	0.14	3.6	cloudy	F. A. Mellen.
Burlington, Vermont	29.65	753.1	29.96	761.0	38.0	3.3	72	w.	11	4.9	.....	0	2 s	.....	sw.	inap.	inap.	clear.....	W. B. Gates.
Cairo, Illinois	29.82	757.4	30.24	768.1	40.8	4.9	66	n.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	W. H. Ray.
Cape Henry, Virginia	29.99	761.7	30.01	762.2	42	5.6	82	s.	8	3.6	.....	0	6 s	.....	.....	0	0	fair.....	A. K. Alderson.
Cape May, New Jersey	30.00	762.0	30.03	762.7	39.0	3.9	46	ne.	9	4.0	.....	2 ck	0	n.	.....	0	0	clear.....	W. E. Smith.
Cape Mendocino, California	29.60	751.8	30.13	765.3	47	8.3	77	nw.	22	9.8	.....	0	0	.....	.....	inap.	inap.	clear.....	J. J. McLean.
Cedar Keys, Florida	30.14	765.5	30.16	766.1	49	9.4	100	n.	14	6.3	.....	2 c	0	.....	.....	0	0	clear.....	F. W. Mixer.
Champaign, Illinois	29.30	744.2	30.16	766.1	40.0	4.4	65	nw.	11	4.9	.....	.....	10 s	.....	nw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.00	762.0	30.06	763.5	43	6.1	68	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	J. H. Smith.
Charlotte, N. Carolina	29.16	740.7	30.04	763.0	37.0	2.8	72	n.	4	1.8	.....	0	fg.	.....	.....	0	0	clear.....	D. O'Donoghue.
Chattanooga, Tennessee	29.33	745.0	30.18	766.6	38.0	3.3	61	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	B. L. Goulding.
Cheyenne, Wyoming	23.88	606.5	30.09	764.3	34.1	1.2	44	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	E. McGovern.
Chicago, Illinois	29.36	745.7	30.10	764.5	37.0	2.8	82	nw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. Mitchell.
Chincoteague, Virginia	29.95	760.7	29.97	761.2	41	5.0	82	e.	2	0.9	.....	4 c;k	3 ks	w;se.	.....	0	0	fair.....	C. F. Dickens.
Cincinnati, Ohio	29.45	748.0	30.14	765.5	42	5.6	82	w.	4	1.8	.....	.....	10 s	.....	sw.	0	0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.28	743.7	30.05	763.3	31	— 0.6	82	s.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	J. B. Newlin.
Coleman City, Texas	28.38	720.8	30.27	768.8	32	0.0	71	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	L. Dorman.
Columbus, Ohio	29.20	741.7	30.08	764.0	35	1.7	69	w.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	D. Cuthbertson.
Concho, Fort, Texas	28.23	717.0	30.24	768.1	35.0	1.7	66	calm	0	0	.....	0	5 s	.....	.....	0	0	fair.....	J. McGlone.
Custer, Fort, Montana	26.83	681.5	30.15	765.8	36	2.2	92	w.	7	3.1	.....	.....	10 s	.....	calm	0	0	cloudy.....	W. B. Lamar.
Davenport, Iowa	29.40	748.3	30.15	765.8	40	4.4	73	w.	4	1.8	.....	.....	10 s	.....	w.	0	0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.22	640.6	30.12	765.0	32	0.0	65	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	J. Williams.
Dayton, Washington T'y	28.55	725.2	30.33	770.4	34.8	1.6	93	sw.	2	0.9	.....	.....	10 s	.....	sw.	0.82	20.8	threatening.	H. Clifford.
Deadwood, Dakota	25.22	640.6	30.06	763.5	36	2.2	72	se.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	G. W. Scott.
Delaware Breakwater, Del	30.00	762 0	30.02	762.5	44	6.7	76	ne.	12	5.4	.....	0	2 s	.....	.....	0	0	clear.....	T. S. Townsend.
Denison, Texas	29.40	746.7	30.24	768.1	42.0	5.6	50	w.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	J. W. Byram.
Denver, Colorado	24.58	624.3	30.08	764.0	38.0	3.3	51	s.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	F. M. Neal.
Des Moines, Iowa	29.23	742.4	30.18	766.6	30	— 1.1	78	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	F. W. Conrad.
Detroit, Michigan	29.29	744 0	30.03	762.7	35.0	1.7	64	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	C. F. R. Wappenhans.
Dodge City, Kansas	27.42	696.5	30.16	766.1	32	0.0	52	sw.	.....	.....	.....	0	0	.....	.....	0	0	clear.....	V. P. Temple.
Dubuque, Iowa	29.30	745.7	30.11	764.8	38.7	3.7	65	nw.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.28	743.7	30.07	763.8	35	1.7	69	s.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy.....	N. B. Conger.
Eagle Pass, Texas	29.41	747.0	30.24	768.1	52.1	11.2	42	s.	1	0.4	.....	0	6 s	.....	.....	0	0	fair.....	F. Belford.
Eagle Rock, Idaho	25.33	643.4	30.19	766.8	7	—13.9	80	n.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	J. M. Clifford.
Eastport, Maine	29.81	757.2	29.88	758.9	33.c	0.6	68	sw.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	D. C. Murphy.
Elliott, Fort, Texas	27.32	693.9	30.25	768.3	36	2.2	42	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	W. J. Cundall.
El Paso, Texas	26.20	667.0	30.11	764.8	49	9.4	100	e.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.26	743.2	30.02	762.5	36	2.2	69	s.	6	2.7	.....	0	5 s	.....	s.	inap.	inap.	fair	Peter Wood.
Escanaba, Michigan	29.36	745.7	30.06	763.5	33.0	0.6	88	nw.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy.....	George Heathcote.
Fredericksburg, Texas	28.44	722.4	30.26	768.6	40	4.4	82	w.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	Frank Halwegler.
Galveston, Texas	30.22	767.6	30.27	768.8	55	12.8	69	n.	8	3.6	.....	0	hz.	.....	.....	0	0	clear.....	E. O'C. MacInerney.
Grand Haven, Michigan	29.34	745.2	30.04	763.0	41.0	5.0	65	n.	5	2.2	.....	.....	10 s	.....	w.	0	0	cloudy.....	J. Mueller.
Grant, Fort, Arizona	25.19	639.8	30.03	762.7	46	7.8	39	nw.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	Robert C. Lord.
Hatteras, North Carolina	30.00	762.0	30.02	762.5	46	7.8	76	ne.	7	3.1	.....	0	hz.	.....	.....	0.04	1.0	clear.....	R. M. Crawford.
Helena, Montana	25.83	656.1	30.21	767.3	33	0.6	87	sw.	20	8.9	.....	0	0	.....	.....	0.01	0.3	clear.....	N. C. Smith.
Henrietta, Texas	29.19	741.4	30.23	767.8	33	0.6	68	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	J. P. Sherry.
Huron, Dakota	28.45	722.6	29.93	760.2	30.2	— 1.0	74	se.	20	8.9	.....	0	1 s	.....	.....	0	0	clear.....	S. W. Glenn.
Indianapolis, Indiana	29 30	744.2	30.14	765.5	40	4.4	73	nw.	4	1.8	.....	.....	10 s	.....	nw.	0	0	cloudy.....	O. Schutze
Indianola, Texas	30.21	767.3	30.24	768.1	55.9	13.3	51	calm	0	0	.....	0	3 s	.....	.....	0	0	clear.....	I. A. Reed.
Jacksboro, Texas	29.00	736.6	30.22	767.6	45	7.2	54	s.	2	0.9	.....	0	4 s	.....	sw.	0	0	fair.....	D. J. Carr.
Jacksonville, Florida	30.09	764.3	30.14	765.5	45	7.2	76	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	J. W. Smith.
Keogh, Fort, Montana	27.41	696.2	30.08	764 0	39	3.9	82	s.	6	2.7	.....	.....	10 s	.....	.....	0.05	1.3	cloudy.....	A. Schneider.
Keokuk, Iowa	29.46	748.3	30.15	765.8	32.0	0.0	81	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	F. Z. Gosewisch.
Key West, Florida	30.03	762.7	30.05	763.3	73.0	22.8	82	n.	9	4.0	.....	0	8 k	.....	n.	0	0	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	30.00	762.0	30.02	762.5	42.5	5.8	78	sw.	4	1.8	.....	2 ck	1 s	w.	.....	0	0	clear.....	H. Mc P. Baldwin.
Knoxville, Tennessee	29.12	739.6	30.18	766.6	35	1.7	69	w.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	J. A. Cody.
La Crosse, Wisconsin	29.28	743.7	30.10	764.5	37	2.8	61	n.	4	1.8	.....	.....	10 s	.....	.....	inap.	inap.	cloudy.....	S. C. Emery.
Leavenworth, Kansas	29.28	743.7	30.22	767.6	32	0.0	78	n.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	A. W. Browne.
Lewiston, Idaho	29.49	749.0	30.36	771.1	34.0	1.1	88	e.	1	0.4	.....	.....	10 s	.....	.....	0.39	9.9	cloudy	W. Bell.
Little Rock, Arkansas	29.92	760.0	30.24	768.1	41	5.0	92	w.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	W. U. Simons.
Los Angeles, California	29.50	749.3	29.90	759.4	53	11.7	31	ne.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	T. S. Collins.
Louisville, Kentucky	29.54	750.3	30.13	765.3	44	6.7	68	w.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy.....	L. M. Dey.
Lynchburg, Virginia	29.31	744.5	30.03	762.7	35.3	1.8	74	s.	1	0.4	.....	3 c	0	.....	.....	0	0	clear.....	Lewis Duane.
Mackinaw City, Michigan	29.32	744.7	30.01	762.2	37.0	2.8	82	nw.	12	5.4	.....	.....	10 s	.....	nw.	0	0	cloudy.....	F. R. Day.
Macon, Fort, North Carolina	29.99	761.7	30.00	762.0	45	7.2	83	ne.	4	1.8	.....	hz	0	.....	.....	0	0	clear.....	F. P. Chaffee.
Madison, Wisconsin	29.04	737.6	30.11	764.8	34	1.1	79	nw.	13	5.6	.....	.....	10 s	.....	nw.	0	0	cloudy..	C. A. Shaw.
Maginnis, Fort, Montana	25.51	647.9	30.02	762.5	32	0.0	71	w.	29	13.0	.....	.....	10 s	.....	w.	0	0	cloudy	F. Burke.
McKavett, Fort, Texas	27.87	707.9	30.25	768.3	38	3.3	72	s.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	J. E. Thatcher.
Marquette, Michigan	29.28	743.7	30.05	763.3	32	0.0	88	nw.	12	5.4	.....	.....	10 n	.....	.....	0.01	0.3	light snow...	J. Gilligan.
Memphis, Tennessee	29.89	759.2	30.24	768 1	43	6.1	83	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	D. T. Flannery.
Milwaukee, Wisconsin	29.29	744.0	30.08	764.0	35	1.7	79	nw.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	W. Line.
Missoula, Fort, Montana	26.85	682.0	30.26	768.6	28	— 2.2	67	ne.	4	1.8	.....	0	5 s	.....	n.	0.15	3.8	fair.....	J. H. Young.
Mobile, Alabama	30.19	766.8	30.23	767.8	39	3.9	86	n.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	U. A. Read.
Montgomery, Alabama	29.98	761.5	30.22	767.6	38	3.3	92	w.	2	0.9	.....	0	fg.	.....	.....	0	0	clear.....	J. B. McLaughlin.

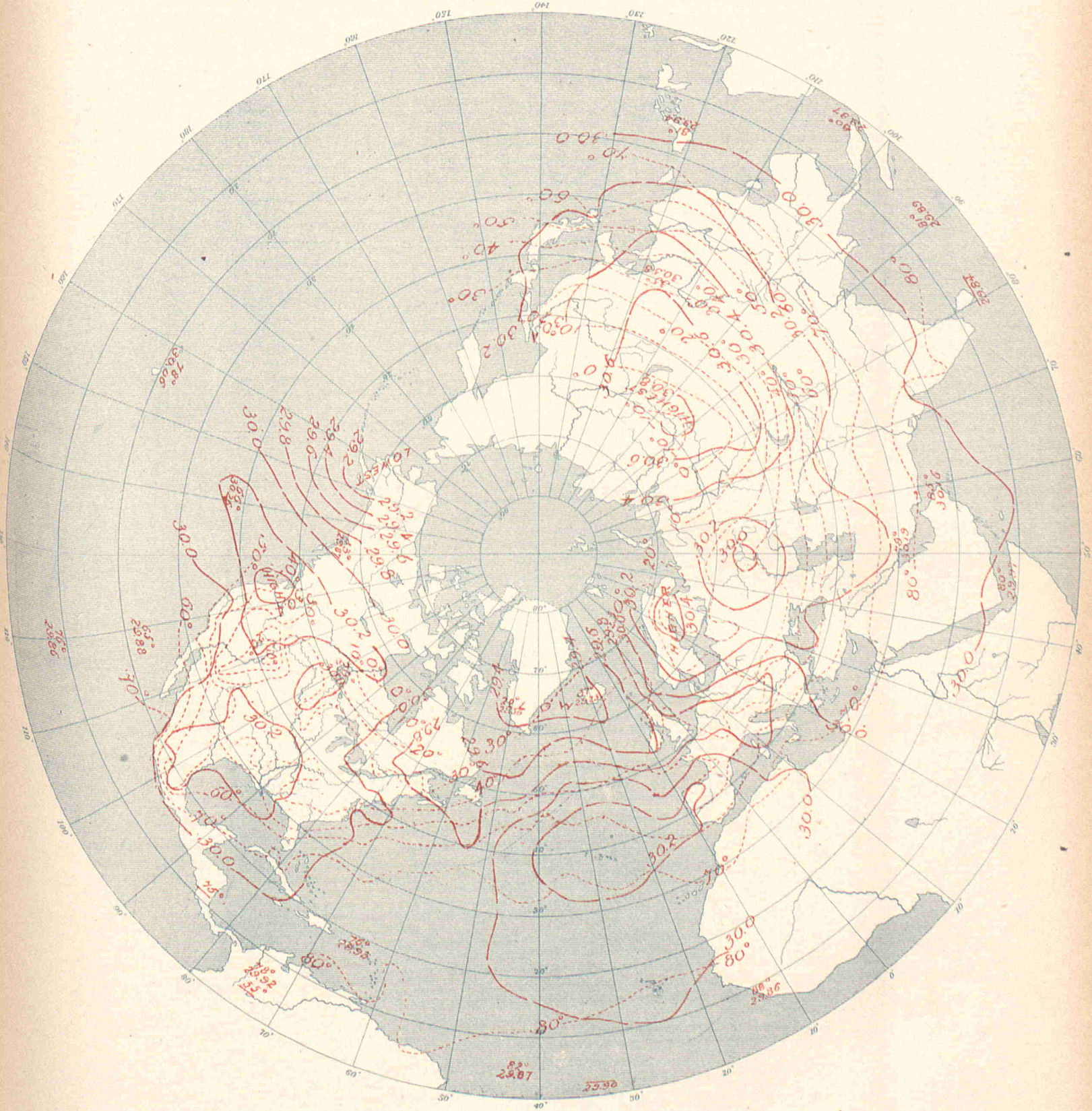
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	28.96	735.6	30.02	762.5	28	— 2.2	88	se.	6	2.7	.....	.....	10 s	.....	.....	inap	inap.	cloudy	H. Bessant.
Morgantown, W. Virginia	29.03	737.3	30.09	764.3	32.5	0.3	86	calm	0	0	.....	0	hz.	.....	.....	0	0	clear	J. O. Sprigg, jr
Mt. Washington, N. H.	23.47	596.1	30.03	762.7	10.0	—12.2	83	nw.	48	21.5	.....	.....	fg.	.....	nw.	0	0	dense fog	J. G. Linsley.
Nashville, Tennessee	29.59	751.6	30.19	766.8	40.0	4.4	73	nw.	5	2.2	.....	.....	sk.	.....	.....	0	0	dense smoke	L. N. Jesunofsky.
New Haven, Connecticut	29.89	759.2	30.01	762.2	31.5	— 0.3	73	nw.	1	0.4	.....	5 cs	3s;fg	sw.	.....	0	0	cloudy	J. H. Sherman.
New London, Connecticut	29.98	761.5	30.03	762.7	34	1.1	71	calm	0	0	.....	9 ck	0	s.	.....	0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.19	766.8	30.25	768.3	52.5	11.4	56	n	4	1.8	.....	0	sk.	.....	.....	0	0	clear	L. Dunne.
Newport, Rhode Island	29.96	761.0	30.01	762.2	37.2	2.9	74	w.	6	2.7	.....	3 ck	1 ks	nw.	w.	0	0	fair	W. McGillivray.
New York, New York	29.84	757.9	30.02	762.5	37	2.8	72	n.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	29.96	761.5	30.01	762.2	42	5.6	83	s.	4	1.8	.....	3 ck	0	sw.	.....	0	0	clear	Wm. Davis.
North Platte, Nebraska	27.03	686.5	30.11	764.8	31.6	— 0.2	78	s.	7	3.1	.....	0	0	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y.	30.38	771.6	30.42	772.7	33.0	0.6	88	e.	1	0.4	.....	0	0	.....	.....	0.13	3.3	clear	J. Dascomb.
Omaha, Nebraska	28.92	734.6	30.16	766.1	33.0	0.6	68	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	A. Pollak.
Oswego, New York	29.63	752.6	29.97	761.2	38.0	3.3	61	s.	4	1.8	.....	0	5 k	.....	nw.	0.01	0.3	fair	S. W. Beall.
Palestine, Texas	29.70	754.4	30.27	768.8	42.0	5.6	65	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	L. M. Pindell.
Pensacola, Florida	30.17	766.3	30.20	767.1	43.3	6.3	55	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	M. McGauran.
Philadelphia, Pa.	29.94	760.5	30.04	763.0	39.5	4.2	68	calm	0	0	.....	6 cs	fg.	s.	.....	0	0	fair	T. T. Townsend.
Pike's Peak, Colorado	17.68	449.1	30.34	770.6	16	— 8.9	35	n.	36	16.1	.....	0	0	.....	.....	0	0	clear	H. Hall.
Pioche, Nevada	23 97	608.8	30.11	764.8	28.2	— 2.1	61	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.22	742.2	30.07	763.8	33.0	0.6	88	nw.	2	0.9	.....	.....	fg.	.....	.....	0	0	dense fog	W. Daly.
Poplar River, Montana	27.72	704.1	30.01	762.2	.....	.....	.....	nw.	.....	.....	1	.....	10 s	.....	.....	0.18	4.6	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.22	767.6	30.23	767.8	56.0	13.3	60	n.	19	8.5	.....	0	0	.....	.....	0	0	clear	M. Herman.
Port Huron, Michigan	29.31	744.5	30.03	762.7	26.2	— 3.2	90	sw.	5	2.2	.....	0	0	.....	.....	0	0	clear	W. O. Bailey.
Portland, Maine	29.89	759.2	29.94	760.5	38	3.3	62	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. W. Eichelberger.
Portland, Oregon	30.38	771.6	30.44	773.2	40.0	4.4	89	s.	2	0.9	.....	0	2 s	.....	.....	0.31	7.9	clear	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	46	7.8	83	calm	0	0	.....	hz.	hz.	.....	.....	0	0	light haze	F. S Coburn.
Prescott, Arizona	24.71	627.6	30.05	763.3	26.4	— 3.1	88	s.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass.	29.94	760.5	29.97	761.2	38	3.3	72	w.	5	2.2	.....	1 ck	2 s	sw.	nw.	0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	30.06	763.5	30.07	763.8	63	17.2	93	n.	9	4.0	.....	0	3 ks	.....	n.	0	0	clear	W. J. Evans.
Red Bluff, California	29.71	754.6	30.12	765.0	50	10.0	100	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	E. van Dyk.
Rochester, New York	29.29	744.0	29.99	761.7	32	0.0	78	sw.	10	4.5	.....	10 k	hz.	w.	.....	0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.87	758.7	30.44	773.2	38	3.3	89	sw.	1	0.4	.....	.....	fg.	.....	.....	0.25	6.3	dense fog	J. J. Naury.
Sacramento, California	29.83	757.7	29.91	759.7	43.1	6.2	83	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. A. Barwick
St. Louis, Missouri	29.60	751.8	30.23	767.8	34.5	1.4	94	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. H. Weber.
St. Paul, Minnesota	29.15	740.4	30.07	763.8	36.0	2.2	69	nw.	2	0.9	.....	.....	10 s	.....	nw.	0.01	0.3	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.06	738.1	29.99	761.7	28	— 2.2	94	se.	5	2.2	.....	.....	10 n	.....	.....	inap.	inap.	light snow	C. B Dilley.
Salt Lake City, Utah	25.64	651.2	30.21	767.3	19	— 7.2	44	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. Craig.
San Antonio, Texas	29.51	749 5	30.23	767.8	49.5	9.7	71	calm	0	0	.....	0	1 s	.....	.....	0	0	clear	T. J. Kenan.
San Diego, California	29.82	757.4	29.89	759.2	47.3	8.5	38	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.35	745.5	30.07	763.8	32.3	0.2	78	w.	11	4.9	.....	0	0	.....	.....	0.01	0.3	clear	M. H. Perry.
Sandy Hook, New Jersey	30.00	762 0	30.02	762.5	39.0	3.9	65	n.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	B. A. Blundon.
San Francisco, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	N. Gorom.
Santa Fé, New Mexico	23.21	589.5	30.25	768.3	39	3.9	46	calm	0	0	.....	0	0	.....	.....	0	0	clear	H. U. Jones.
Savannah, Georgia	30.01	762.2	30.10	764.5	44	6.7	57	w.	7	3.1	.....	0	hz.	.....	.....	0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.42	671.1	30.24	768.1	30	— 1.1	80	sw.	14	6.3	.....	8 k	0	.....	.....	0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	30.02	762.5	30.27	768.8	37	2.8	100	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	28.94	735.1	30.25	768.3	35	1.7	69	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.24	615.7	30.08	764.0	42.0	5.6	44	ne.	2	0.9	.....	0	3 s	.....	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	29.80	756 9	29.87	758.7	42.6	5.9	74	e.	28	12.5	.....	.....	10 n	.....	e.	0.20	5.1	heavy rain	F. W. Fickett.
Smith, Fort, Arkansas	29.75	755.6	30.24	768.1	35.8	2.1	79	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. B. Campbell.
Smithville, North Carolina	29.96	761.0	30.00	762.0	43	6.1	60	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.22	716.8	30.30	769.6	34	1.1	81	sw.	1	0.4	.....	.....	10 s	.....	.....	0.03	0.8	cloudy	D. Moore.
Springfield, Illinois	29.46	748.3	30.18	766.6	36.5	2.5	72	nw.	7	3.1	.....	0	0	.....	.....	0	0	clear	T. B. Jennings.
Springfield, Massachusetts	29.88	758.9	30.02	762.5	38	3.3	82	sw.	.....	.....	1	ck	9 n	.....	nw.	0	0	cloudy	Charles Mayr.
Springfield, Mo.	28.74	730.0	30.25	768.3	34	1.1	71	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. B. Marbury.
Starkville, Miss.	29.74	755.4	30.24	768.1	41	5.0	73	n.	7	3.1	.....	0	0	.....	.....	0	0	clear	C. Dill.
Stevenson, Fort, Dakota	27.94	709.7	29.92	760.0	34	1.1	86	e.	2	0.9	.....	.....	10 s	.....	.....	0.12	3.0	cloudy	W. Burrows
Stockton, Fort, Texas	27.06	687.3	30.18	766.6	47.0	8.3	80	sw.	2	0.9	.....	0	8 ks	.....	sw.	0	0	cloudy	J. F. Marshall.
Thatcher's Island, Mass.	29.91	759.7	29.96	761.0	36.0	2.2	64	nw.	12	5.4	.....	2 c	0	w.	.....	0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.24	691.9	30.08	764.0	48.5	9.2	59	sw.	.....	.....	1	1 k	4 ks	sw.	sw.	0	0	fair	J. T. Fitzgerald.
Toledo, Ohio	29.31	744.5	30.04	763.0	32	0.0	68	sw.	5	2.2	.....	2 ck	sk	w.	.....	0	0	clear	A. Buell.
Tucson, Arizona	27.46	697.5	29.92	760.0	58	14.4	60	s.	6	2.7	.....	.....	9 n	.....	.....	inap.	inap.	light rain	J. L. Whiteside.
Umatilla, Oregon	30.00	762.0	30.38	771.6	36	2.2	83	w.	1	0.4	.....	0	1 s	.....	.....	0.03	0.8	clear	J. Daly.
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. C. Imlay.
Verde, Fort, Arizona	.....	.....	.....	.....	28.1	— 2.2	59	ne.	.....	.....	1	5 k	0	nw.	.....	0	0	fair	D. Brooks.
Vicksburg, Mississippi	30.02	762.5	30.29	769.4	42.5	5.8	88	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	James Kenealy.
Visalia, California	29.62	752.3	30.00	762.0	35.7	2.1	93	se.	1	0.4	.....	0	3 s	.....	.....	0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.32	617.7	30.06	763.5	6.8	—14 0	87	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	T. M. Ambler.
Washington, D. C.	29.93	760.2	30.05	763.3	36.0	2.2	81	ne.	4	1.8	.....	3 c	2 k	sw.	ne.	0	0	fair	B. M. Pursell.
West Las Animas, Colorado	25.92	658.4	30.04	763.0	14	—10.0	74	nw.	7	3.1	.....	0	0	.....	.....	0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.38	746.2	30.01	762.2	37	2.8	61	calm	0	0	.....	0	fg.	.....	.....	inap.	inap.	clear	B. F. Hough.
Wilmington, N. Carolina	29.97	761.2	30.03	762.7	42	5.6	92	nw.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog	Samuel A. Haney.
Winnemucca, Nevada	25.73	653.5	30.20	768.6	30	— 1.1	84	sw.	10	4.5	.....	0	3 s	.....	sw.	inap.	inap.	clear	J. Grover.
Yankton, Dakota	28.60	728.0	30.04	763.0	29	— 1.7	77	se.	7	3.1	.....	0	0	.....	.....	0	0	clear	J. H. Atfield.
Yuma, Arizona	29.69	754.1	29.84	757.9	48.9	9.4	50	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.99	558.5	.....	.....	54.5	12.5	74	w.	4	1.8	.....	4 ck	6ks;s	s.	w.	0	0	foggy	Joaquin Gomez.
Havana, Cuba, W. I.	29.96	761.0	30.02	762.5	65.0	18.3	90	se.	2	0.9	.....	0	3k; s	.....	n.	inap.	inap.	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.97	761.2	29.98	761.5	72	22.2	76	n	2	0.9	.....	0	4 s	.....	ne.	0	0	fair	Robert Johnston.
Navassa, W. I.	29.82	757.4	29.90	759.4	76.5	24.7	77	ne.	15	6.7	.....	2 cs	3 ks	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	29.95	760.7	29.95	760.7	79	26.1	87	se.	.....	.....	2	3 c	4 k	e.	.....	0	0	.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.36	745.7	29.92	760.0	78	25.6	84	calm	.....	.....	0	6 c	2 k	n.	calm	0	0	fair	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	75	23.9	94	ne.	.....	.....	4	0	3 ks	.....	ne.	0.04	1.0	clear	Earl Flint.
Santiago de Cuba, W. I.	29.96	761.0	29.99	761.7	73	22.8	81	ne.	4.8	2.1	.....	3 ck	0	.....	.....	0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	28.94	735.1	29.00	736.6	36	2.2	89	se.	.....	.....	3	0	7 ks	.....	.....	1.13	28.7	fair	W. J. Fisher.
St. Thomas, W. I.	29.85	758.2	29.97	761.2	76	24.4	82	n.	.....	.....	.....	2 k	4 k	n.	n.	0.03	0.8	.....	Aug. Walloe.
York Factory, B. A.	30.15	765.8	30.21	767.3	— 5.5	—20 8	81	nw.	20	8.9	.....	1 c	1 s	nw.	nw.	0.15	3.8	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Force. 0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill	Character.	Direction from	
British Naval.																		
H. M. S. Albatross, Shang-Hia, China	30.35	770.9	57	13.9	.....	ne.	.....	.....	3-4	.....	7	ne.	.....	.....	.....	.....	.....	raining
H. M. S. Amethyst, Colonia, Uruguay†	30.17	766.3	61.5	16.4	82	s.	.....	.....	4	.....	4	sw.	.....	.....	.....	3	s.	d. clouds.
H. M. S. Audacious, N. 12° 32′, E. 46° 04′	29.87	758.7	80	26.7	91	e.	.....	.....	4	.....	2	e.	.....	.....	.....	2	e.	d. clouds.
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	30.07	763.8	67.5	19.7	90	nnw.	.....	.....	3	.....	1	nnw.	.....	.....	.....	.....	.....	blue sky
H. M. S. Champion, N. 22° 38′ E. 116° 11′	.....	.....	75	23.9	90	ene.	.....	.....	1-2	.....	10	.....	.....	.....	.....	2	ese.	overcast.
H. M. S. Comus, Esquimalt, Vancouver Island	30.41	772.4	31	— 0.6	89	calm	.....	.....	0	.....	6	w.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Crocodile, N. 17° 35′, E. 66° 00′	29.98	761.5	80	26.7	66	ene.	.....	.....	3	.....	2	nne.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Curacoa, Kobe Japan	30.08	764.0	56.5	13.6	74	n.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Diamond, S. 28° 24′ E. 168° 33′ *†	29.95	760 7	69	20.6	65	sw.	.....	.....	1	.....	4	.....	.....	.....	.....	1	se.	d. clouds.
H. M. Dock Yard, Bermuda, W. I.	29.83	757.7	70	21.1	71	wsw.	.....	.....	1	.....	4	wsw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.89	759.2	76.5	24.7	86	ssw.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flamingo, Port of Spain, Trinidad, W. I.	29.84	757.9	80	26.7	100	ne.	.....	.....	1	.....	4	ne.	.....	.....	.....	.....	.....	d clouds.
H. M. S. Flying Fish, N. 32° 44′, E. 129° 52′	30.16	766.1	64	17.8	89	n.	.....	.....	2-3	.....	9	.....	.....	.....	.....	1	n.	misty.
H. M. S. Gannet, S. 21° 00′, W. 70° 20′	29.99	761.7	65.5	18.6	76	sse.	.....	.....	2	.....	0	.....	.....	.....	.....	2	ssw.	blue sky.
H. M. S. Griffon, N. 24° 56′, W. 65° 39′	29.86	758.4	72	22.2	80	n.	.....	.....	1	.....	.....	.....	.....	.....	.....	3	nne.	d clouds.
H. M. S. Iron Duke, N. 25° 14′, E. 120° 53′	30.15	765.8	73	22.8	100	nne.	.....	.....	5	.....	10	ne.	.....	.....	.....	5	ne.	d. clouds.
H. M. S. Kingfisher, N. 23° 21′, W. 112° 20′	29.96	761.0	68	20.0	.....	w.	.....	.....	2	.....	2	w.	.....	.....	.....	1	w	d clouds.
H. M. S. Lark, S. 10° 14′, E. 161° 42′	29.91	759.7	78.3	25.7	93	ne.	.....	.....	3	.....	10	.....	.....	.....	.....	1	ne.	raining.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.89	759.2	64	17.8	.....	nw.	.....	.....	2	.....	10	.....	.....	.....	.....	1	n.	d. clouds.
H. M. S. Magpie, Nagasaki, Japan	30.22	767.6	63.6	17.6	68	ne.	.....	.....	4-5	.....	10	.....	.....	.....	.....	5	ne.	d. clouds.
H. M. S. Northampton, Halifax, N. S.	29.84	757.9	36	2.2	80	wsw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Nelson, Melbourne, Australia	29.88	758.9	63	17.2	78	se	.....	.....	2-3	.....	.....	.....	.....	.....	.....	.....	.....	overcast.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.87	758.7	80	26.7	89	wsw.	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S Rocket, S. 5° 05′, W. 81° 10′	30.02	762.5	63	17.2	100	se.	.....	.....	1	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sappho. S. 42° 40′, W. 139° 30′	29.77	756.1	51.2	10.7	93	nnw.	.....	.....	4-5	.....	10	nw.	.....	.....	.....	6	sw.	misty.
H. M. S Superb, N. 39° 37′ E. 19° 56′*	30.10	764.5	68	20.0	84	se.	.....	.....	3	.....	5	s.	.....	.....	.....	3	ese.	d. clouds.
H. M. S. Sylvia, Port Tamar, Patagonia	29.97	761.2	44.2	6.8	88	wnw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Tourmaline, Aden, Arabia	29.97	761 2	.....	.....	.....	e.	.....	.....	2	.....	1	e.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, Bushire, Persia	30.09	764.3	78.5	25.8	73	wsw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.66	778 7	28	— 2.2	?	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.01	762.3	82.4	28.0	88	ne.	.....	.....	1	.....	2	ne.	.....	.....	.....	1	se.	d. clouds.
Tamega, Macao, China	30.14	765.5	75.9	24.4	71	nnw.	.....	.....	5	.....	8	.....	.....	.....	.....	.....	.....	d. clouds.
Swedish Naval.																		
Vanadis, N. 36° 48′, W. 9° 08′	30.13	765.4	58.8	14.9	76	nne.	.....	.....	5	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.15	765.8	44	6.7	67	n.	3	1.3	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Navy Yard, Portsmouth, N. H.	29.96	761.0	30	— 1.1	?	calm	0	0	.....	.....	2	n.	0	0	.....	.....	.....	fair.
Naval Hospital, Yokohama, Japan*	30.04	763.0	53	11.7	48	n.	.....	.....	2	.....	1	w.	0.44	11.2	.....	.....	.....	clear.
Adams, Sitka, Alaska *†	30.08	764.0	44	6.7	75	e.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Alaska, Honolulu, Sandwich Island	30.06	763.5	78	25.6	82	ene.	.....	.....	2	.....	5	.....	ne.	0	0	sm'h	.....	fair.
Alliance, Hampton Roads, Va.	29.97	761.2	46	7.8	92	s.	.....	.....	2	.....	2	.....	.....	0	0	.....	.....	clear.
Ashuelot, Kobe, Japan	30.28	769.1	57	13.9	81	nnw.	.....	.....	1	.....	8	.....	nnw.	.....	.....	.....	.....	cloudy.
Brooklyn, Keel Point, Patagonia	29.87	758.7	57	13.9	75	w.	13	5.8	.....	.....	10	.....	calm	0	0	sm'h	.....	cloudy.
Colorado, New York, N. Y.	30.07	763.8	38	3.3	63	wnw.	0	0	.....	.....	10	.....	.....	0	0	.....	.....	cloudy.
Enterprise, Norfolk, Va.	30.05	763.3	44	6.7	?	calm	.....	.....	0	.....	5	.....	sw.	.....	.....	.....	.....	fair.
Essex, Callao, Peru	29.95	760.7	64	17.8	83	se.	.....	.....	1	.....	8	.....	se.	.....	.....	sm'h	se.	cloudy.
Franklin, Norfolk, Va.	29.99	761.7	42	5.6	83	s.	4	1.8	.....	.....	5	.....	wsw.	0	0	.....	.....	fair.
Galena, Montevideo, Uruguay	29.99	761.7	63	17.2	88	ssw.	.....	.....	3	.....	10	.....	ssw.	.....	.....	mod.	ssw.	cloudy.
Hartford, S. 39° 58′, W. 57° 14′*	29.96	761.0	53	11.7	86	ssw.	.....	.....	1	.....	2	.....	.....	light	light	long	wsw.	clear.
Independence, Mare Island, Cal.	30.01	762.2	47	8.3	85	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	.....	clear.
Iroquois, Callao, Peru	30.01	762.2	63	17.2	88	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, Newport, R. I.	29.97	761.2	38	3.3	100	nw.	.....	.....	1	.....	5	.....	nw.	.....	.....	.....	.....	clear?
Kearsarge, Norfolk, Va.	29.97	761.2	45	7.2	84	sw.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear.
Lackawanna, Valparaiso, Chili*	29.92	760.0	57	13.9	69	var.	.....	.....	1	.....	2	.....	se.	.....	.....	.....	.....	clear.
Lancaster, Valetta, Malta*	29.89	759.2	77	25.0	82	sw.	.....	.....	2	.....	8	.....	sw.	0	0	.....	.....	fair.
Michigan, Erie, Pennsylvania	29.92	760.0	37	2.8	62	se.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Minnesota, New York, N. Y.	30.05	763.3	37	2.8	80	nw.	1	0.4	.....	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Monocacy, Yokohama, Japan*	29.95	760.7	55	12.8	68	nnw.	.....	.....	2	.....	8	.....	calm	.....	.....	.....	.....	fair.
New Hampshire, Newport, R. I.	30.04	763.0	39	3.9	73	nnw.	.....	.....	3	.....	5	.....	.....	.....	.....	sm'h	.....	fair.
Nipsic, Palermo, Sicily*	29.85	758.2	77	25.0	79	ssw.	.....	.....	2	.....	8	.....	sw.	.....	.....	sm'h	.....	hazy.
Onward, Callao, Peru†	30.10	764 5	62	16.7	94	sse.	.....	.....	1	.....	10	.....	n.	.....	.....	long	w	cloudy.
Palos, Che Foo, China*	30.45	773.4	42	5.6	65	nnw.	.....	.....	3	.....	2	.....	calm	.....	.....	.....	.....	fair.
Pensacola, Callao, Peru*	29.91	759.7	63	17.2	83	se.	3	1.3	.....	.....	10	.....	.....	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass	29.93	760.2	33	0.6	89	w.	.....	.....	2	.....	5	.....	.....	.....	.....	.....	.....	fair.
Quinnebaug, N. 35° 06′, E. 14° 34′	29.97	761.2	75	23.9	?	ssw.	.....	.....	2	.....	5	.....	ssw.	.....	.....	.....	.....	fair.
Ranger, Acapulco, Mexico	29.95	760.7	77	25.0	82	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
Richmond, Yokohama, Japan*	30.10	764.5	60	15.6	66	nnw.	.....	.....	3	.....	5	.....	.....	0.2	5.	.....	.....	fair.
Saratoga, N. 24° 28′, W. 82° 49′	30.00	762.0	75	23.9	76	nnw.	.....	.....	3	.....	5	.....	nw.	.....	.....	sm'h	.....	clear.
St. Louis, League Island, Pa.	30.28	769.1	34	1.1	90	nw.	.....	.....	1	.....	5	.....	nw.	.....	.....	.....	.....	misty.
Swatara, N. 13° 51′, W. 42° 56′*	29.81	757.2	79	26.1	78	ene.	.....	.....	5	.....	0	.....	.....	.....	.....	mod.	ene.	clear.
Tennessee, Hampton Roads, Va.	29.96	761.0	48	8.9	85	sse.	6	2.7	.....	.....	2	.....	.....	0	0	.....	.....	clear.
Vandalia, Hampton Roads, Va*	29.97	761.2	45	7.2	92	s.	.....	.....	2	.....	2	.....	s.	.....	.....	.....	.....	fair.
Wabash, Boston, Mass.	29.98	761.5	31	— 0.6	79	w.	4	1.8	.....	.....	5	.....	w.	0	0	.....	.....	fair.
Wachusetts, Mare Island, Cal†	30.06	763.5	45	7.2	92	se.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear
Wyandotte, Washington, D. C	30.20	767.1	54	12.2	93	nw.	.....	.....	2	.....	5	.....	w.	.....	.....	.....	.....	clear.
Yantic, Norfolk, Va.	29.98	761.5	44	6.7	84	s.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear.
Merchant Marine.																		
S. S. Circassian, N. 54° 05′, W. 44° 36′*	29.56	750.8	45	7.2	100	ssw.	.....	.....	5	.....	10	.....	sw.	22 h'r	22 h'r	3	sw.	raining.
S. S. Grecian, Buenos Ayres, Argentine Rep*	30.02	762.5	61	16.1	77	sse.	.....	.....	3	.....	4	.....	sse.	0	0	sm'h	.....	clear.
S. S. Scandinavian, N. 54° 40′, W. 16° 12′	29.51	749.5	48	8.9	.....	w.	.....	.....	6	.....	7	.....	w.	13 h'r	13 h'r	cf'd	wnw.	rain & hail.
S. S. British Crown, N. 41° 24′, W. 54° 04′†	29.77	756.1	65	18.3	.....	ese.	.....	.....	2	.....	8	.....	sw.	0	0	cf'd	.....	cloudy.
S. S. Indiana, Philadelphia, Pa †.	29.89	759.2	39	3.9	91	n.	.....	.....	3	.....	2?	.....	n.	.....	.....	.....	.....	cloudy?
S. S. Lord Clive, Liverpool, Eng*†	29.80	756.9	.....	.....	.....	ese.	.....	.....	2	.....	7	.....	e.	0	0	.....	.....	hazy.
S. S. Lord Gough, Philadelphia, Pa.	30.07	763.8	39	3.9	.....	calm	.....	.....	0	.....	2	.....	.....	0	0	.....	.....	fair.
S. S. Ohio, N. 51° 34′. W 12° 37′	29.70	754.4	49	9.4	93	wsw.	.....	.....	6	.....	10	.....	v.	.....	.....	mod.	wsw.	cloudy.
S. S. Pennsylvania, Liverpool, Eng †	29.75	755.6	39	3.9	.....	se.	.....	.....	2	.....	10	.....	se.	.....	.....	.....	.....	foggy.
S. S. Jason, N. 43° 11′, W. 55° 03′	.....	.....	.....	.....	.....	nw.	.....	.....	4	.....	6 k	.....	.....	.....	.....	3	n.	gloomy.
S. S. Stella, N 48° 20′, W. 41° 50′	29.88	758.9	57.2	14	.....	sew.	.....	.....	2	.....	9	.....	sw.	.....	.....	3	sw.	misty.
S. S. Bolivia, N. 41° 10′, W. 66° 30′	.....	.....	44	6.7	76	w.	.....	.....	3	.....	10	.....	w.	sh's	sh's	sm'h	w.	dull.
S. S. Devonia, N. 51° 47′, W. 33° 10′†	30.05	763.3	46	7.8	.....	wsw.	.....	.....	3	.....	9	.....	wsw.	.....	.....	hv'y	w.	cloudy.
S. S. Dorian, N. 42° 29′, W. 55° 08′ *	29.61	752.1	62	16.7	.....	w	.....	.....	2	.....	10	.....	w.	4 h'r	4 h'r	mod.	w.	cloudy.
S. S. Galatia, Calcutta, India†	29.94	760.5	77.3	25.2	.....	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	fair.
S. S. Ailsa, N. 18° 23′, W. 75° 26′†	30.06	763.5	82	27.8	67	ne.	.....	.....	5	.....	5	.....	ne.	0	0	r'gh	ne.	fair.
S. S. Alpin, Maracaibo, Venezuela	29.92	760.0	.....	.....	.....	n.	.....	.....	1	.....	.....	.....	n.	0	0	.....	.....	
S. S. Alvo, off Long Branch, N. J	30.09	764.3	54	12.2	.....	sw.	.....	.....	3	1 ck	0	.....	.....	0	0	sli't	nnw.	hazy.
S. S. Ambrose, N. 11° 33′ W. 55° 00′†	29.96	761.0	.....	.....	.....	var.	.....	.....	3-5	.....	10	.....	e.	12 h'r	12 h'r	4	e.	
British Merchant, N. 9° 03′ W. 120° 50′	29.86	758.4	76.2	24.6	89	calm	.....	.....	0	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
Bk. Coppename, N. 45° 46′ W. 12° 10′	29.93	760.2	56	13.3	90	wnw.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
Dynomene, N. 4° 56′ E. 90° 40′	29.89	759 2	80.5	26.9	87	ne.	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	showery.
S. S. Gordon Castle, N. 22° 30′, E. 115° 41′	30.11	764.8	75.5	24.2	81	ene.	.....	.....	4-6	.....	7	.....	.....	.....	.....	high	.....	squally.
May Hulse, S. 5° 11′, W. 28° 34′	29.89	759.2	80.5	26.9	82	ese.	.....	.....	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.
Markland, N. 44° 54′, W. 27° 03′	30.29	769.4	60.5	15.8	98	wsw.	.....	.....	4	.....	10	.....	.....	.....	.....	4	nw.	misty.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.91	759.7	.....	.....	29	nne.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	blue sky.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
Inchkeith, S. 33° 40′, W. 27° 27′	30.28	769.1	63	17.2	78	se.			5		5							gloomy.
S. S. Mertola, N. 37° 38′, W. 10° 55′	30.21	767.3	58.7	14.8	91	nne.			6		6							d clouds.
S. S. Mexico, La Paz, Lower California †	29.96	761.0	74.6	23.7	56	s.			1		10		s.			sm'h		sprinkling.
S. S. Marathon, Syra, Greece	30.09	764.3	65	18.3		s.			2		7?		s.			sm'h	s.	clear?
S. S. Parthia, N. 44° 56′ W. 45° 27′*†	30.00	762.0	60	15.6		s.			4		2		wnw.	11 h'r	11 h'r	sli't	nnw.	overcast.
S. S. Pavonia, N. 51° 40′, W. 8° 12′*	29.63	752.6	55	12.8	80	w.			2		8		w.	8 h'r	8 h'r	sli't	var.	fair.
S. S. Colina, N. 41° 58′, W. 52° 48′ †	29.79	756.7				nw.			1		6		sw.	2 h'r	2 h'r	mod.	s.	cloudy.
S. S. France, N. 48° 01′, W. 36° 00′†	30.15	765.7	53.6	12		wsw.			3	c	0	w.				sm'h	nw.	clear.
S. S. Labradore, N. 40° 50′, W. 70° 41′*†	30.12	765.0	66.2	19		sw.			1		3		ese.	0	0	sm'h		clear.
S. S. Abyssinia, N. 49° 18′, W. 34° 07′*	30.05	763.3	57	13.9	87	ssw.			3		9		w.	0	0	h'vy	nw.	misty.
S. S. Wisconsin, N. 41° 00′, W. 67° 50′	29.85	758.2	47	8.3		wnw.			3		10		nne.	0	0	sm'h		cloudy.
S. S. Wyoming, N. 50° 44′ W. 31° 00′*	30.05	763.3	46	7.8		wnw.			8		8		nw.			h'vy	wnw.	drizzling.
S. S. Bohemia, Hamburg, Germany†	29.87	758.7				ne.			3		1		ne.	0	0			foggy.
S. S. Frisia, N. 46° 35′, W. 39° 41′	30.19	766.8	61	16.1		e.			3		7		se.	0	0	long	n.	cloudy.
S. S. Gellert Plymouth, Eng	29.87	758.7	44	6.7		n.			2		0			0	0			clear.
S. S. Silesia, N. 44° 12′, W. 53° 30′			51	10.6		wsw.			3-5		9		nw.	0	0	3-4	wsw.	fair.
S. S. Vandalia, N. 48° 33′, W. 31° 10′	30.30	769.6	54.5	12.5		nnw.			5		8		nw.	0	0	mod.	nnw.	cloudy.
S. S. Mentmore, N. 49° —′, W. 53° —′*†	30.30	769.6				sw.			4		8		sw.	0	0	mod.	w.	cloudy.
S. S. Nessmore, Barrow, England			44	6.7	95	ne.			2		5		ne.	0	0			fine.
S. S. Archimedes, N. 45° 38′, W. 42° 38	29.98	761.5				ssw.			4		3		sw.	2 h'r	2 h'r	light	n.	light haze.
S. S. Hevelius, S. 31° —′ W. 48° —′*†	29.94	760.5	70	21.1		sw.			6		10		sw.	20 h'r	20 h'r	long	e.	raining.
S. S. Ptolmey, N. 4° 15′, W. 43° 15′	29.87	758.7	81.5	27.5	87	ese.			6		5			0	0	3	se.	d, clouds.
S. S. City of San Antonio, Havana, Cuba, W. I †	30.08	764 0	71	21.7		calm			0		2			0	0			fair.
S. S. Colorado, New York, N. Y†	30.08	764 0	35	1.7		nw.			2		10		nw.	0	0			overcast.
S. S. Rio Grande, N. 31° 44′, W. 78° 15′†	29.99	761.7	74	23.3		wnw.			2		2		nw.	0	0	sli't	n.	clear.
S. S. San Marcos, Galveston, Texas			60	15.6		n.			1		0							
S. S. Archimede, Messina, Sicily *†	29.97	761.2	70	21.1	70	ssw			5		4		ssw.	0	0			fair.
S. S. Hermod, N. 42° 32′ W. 61° 16′†	29.86	758.4	60.8	16		wnw.			2		4		w.	6 h'r	6 h'r	mod.	sw	clearing.
S. S. Glenapp, Bahia, Brazil †	29.95	760.7	78	25.6		var.			1		0			0	0			
S. S. Chalmette, New York, N. Y †	29.95	760.7	41	5.0		wnw.			1		10		nw.	0	0			cloudy.
S. S. Denmark, N. 45° 32′, W. 38° 15′	30.16	766.1	61	16.1		se.			2		8		s.	0	0	sli't	wnw.	hazy.
S. S. Egypt, Mersey River, Eng*†	29.6c	751.8				se.			3		10		s.	0	0			hazy.
S. S. England, N. 50° 20′, W. 20° 50′	29.95	760.7				wnw.			6		8		wnw.	0	0	h'vy	nw.	cloudy.
S. S. Erin, N. 41° 52′, W. 52° 30′	29.76	755.9	64	17.8		wsw.			7		10		sw.	10 h'r	10 h'r	mod.	wsw.	squally.
S. S. Greece, N. 44° 17′, W. 53° 55′						w.			4		10		sw.	6 h'r	6 h'r	mod.	sw.	foggy.
S. S. Helvetia, N. 45° 40′ W. 47° 00′	29.83	757.7	55	12.8		s.			4		5		sw.	3 h'r	3 h'r	sm'h	nnw.	fair.
S. S. Santiago, N. 20° 30′, W. 78° 24′	30.13	765.3	78	25.6	82	ne.			4		2		n.	0	0	small	n.	fine.
S. S. City of Alexandria, New York, N. Y†	30.03	762 7	37	2.8		wnw.			2									
S. S. City of Merida, N. 23° 02′, W. 81° 22′ *†	29.96	761.0	77.0	25		ene.			2		0			1 h'r	1 h'r	light	ne.	fine.
S. S. City of Washington, N. 38° 58′, W. 74° 12′ *†	30.12	765.0	46	7.8		nw.			2		2		w.	0	0	sm'h		fine.
S. S. Leerdam, N. 50° 05′ W. 13° 56′*	29.68	753 9	54.2	12.3		w.			6							r'gh		squally.
S. S. Donau, N. 49° 45′. W. 7° 53′	29.76	755.9				w.			4-5		8		w.	3 h'r	3 h'r	long	w.	cloudy.
S. S. Elbe, N. 49° 42′, W. 22° 16′	30.07	763.7	50.9	10.5	100	nw.			6		4		nw.	0	0	high	nw.	cloudy.
S. S. Oder, N. 45° 12′, W. 51° 48′	29.72	754.9	51.8	11.0		sse.			4		10		sse.			mod.	sse.	foggy.
S. S. Ohio, Galveston Texas	30.31	769.9				ne.			3		0			0	0	sm'h	ne.	clear.
S. S. Salier, N. 49° 43′ W. 12° 40′	29.81	757.2	49.1	9.5		w.			0		8		w.	1 h'r	1 h'r	r'gh	w.	drizzling.
S. S. Werra, N. 47° 10′, W 45° 33′ *	30.02	762.5	48.2	9.0		sw.			4-5		10		sw.	0	0	mod.	sw.	hazy.
S. S. Belgic, Hong Kong, China†	30.17	766.3	78	25.6	65	calm			0		5		n.	0	0			fair.
S. S. Oceanic, N. 38° 03′ W. 142° 00′ *	30.26	768.6	66	18.9	84	ssw.			5		0					light	wsw.	fine.
S. S. City of Augusta, N. 37° 14′. W. 74° 34′†	29.99	761.7				ssw.			3		5?			0	0	sm'h		clear?
S. S. Oregon, Portland, Oregon†	30.39	771.9	38	3.3	63	calm			0		0							clear.
S. S. Ancon, San Francisco, Cal†	29.93	760.2	49	9.4	85	n.			3		0							clear.
S. S. Dakota, Port Townsend, Wash. Ter.†	29.83	757.7	49	9.4	71	n.			2		10		nw.	0	0	sm'h		cloudy.
S. S. Orizaba, N. 34° 35′, W. 120° 40′†	29.86	758.4	54	12.2	74	nw.			8		0					r'gh	wsw.	clear.
S. S. Australia, Sydney, N. S. W	30.20	767.1	64	17.8	78	n.			4		10		n.	0	0			misty.
S. S. City of New York, S. 34° 06′, E. 166° 00′†	30.19	766.8	60	15.6	71	s.			2		0			0	0	med.	sw.	clear.
S. S. City of Pekin, N. 30° 35′, E. 129° 43′ †	30.35	770.9	67	19.4	79	nw.			4		2		n.	0	0	small	ne.	clear.
S. S. City of Sydney, S. 0° 38′, W. 165° 52′†	29.95	760.7	77	25 0	77	ene.			4		5?		ne.	0	0	sm'h		cloudy?
S. S. Colima, N. 30° 23′, W. 116° 57′†	29.88	758.9	59	15.0	88	nw.			4		1		calm	0	0	mod.	wnw.	misty.
S. S. Grenada, Champerico, Mexico†	29.92	760.0	80	26.7	82	e.			1		0			0	0	sm'h	s.	clear.
S. S. San José, N. 11° 49′, W. 88° 24′*†	30.08	764.0				n.			4		0			0	0	mod.	nne.	
S. S. Bermuda, N. 12° 17′, W. 61° 30′ †	29.86	758.4	79	26.1		ne.			1		8		ne.	2 h'r	2 h'r	cross	ene.	cloudy.
S. S. Muriel, N. 38° 00′, W. 72° 40′	30.01	762.2	57	13.9		nnw.			4		8			0	0	mod.	nw.	fair.
S. S. Caracas, N. 13° 10′, W. 67° 14′ †	29.93	760.2	82	27.8	67	nne.			2		2			0	0		n.	fine.
S. S. Valencia, N 37° 15′. W. 72° 59′†	30.04	763.0	58	14.4	76	nnw.			3		8		ese.	0	0	sm'h		fine.
S. S. Belgenland, N. 44° 31′, W. 51° 10′†	29.83	757.7	54	12.2	?	s.			4		fg.		w.	rain	rain	mod	s.	foggy.
S. S. Nederland, N. 49° 33′, W. 20° 35′ †	30.20	767.1	53	11.7		wnw.			6		10		wsw.	5 h'r	5 h'r	long	w.	covered.
S. S. Pennland, Antwerp, Belgium	29.74	755.4	36.5	2.5	95	se.			2		10		se.	10 h'r	10 h'r			overcast.
S. S. Rhyniand, N. 41° 50′, W. 62° 30′	29.88	758.9	50	10.0	?	nw.			4		9		nw.	0	0	mod.	nw.	cloudy.
S. S. Switzerland, N. 49° 54′ W. 5° 48′ †	29.77	756 1				sw.			5		10		wsw.	4 h'r	4 h'r	mod.	sw.	cloudy.
S. S. Waesland, Jersey City, N. J	30.01	702.2	43	6.1	67	wnw.			3		1		nw.	0	0			clear.
S. S. Maas, N. 40° 38′, W. 69° 30′	30.21	767.4	50.7	10.4	89	nne.			3		2			0	0	2	ne.	clear.
S. S. P. Caland, Rotterdam, Holland	29.64	752.8	36.5	2.5	71	e.			3		10		e.					cloudy.
S. S. Schiedam, N 46° 40′ W. 44° 10′	29.98	761.5	56.8	13.8	95	ssw.			4		10		w.	5 h'r	5 h'r	mod.	s.	rain & fog.
S. S. W. A. Scholten, New York, N. Y	30.16	766.1	38.6	3.7	94	w.			2		10		wsw.	0	0			foggy.
S. S. State of Florida, Greenoch, Scotland	29.66	753.4	46	7.8		sse.			4		10			0	0			foggy.
S. S. State of Georgia, N. 47° 58′, W. 43° 31′†	30.00	762.0	50	10.0		s.			3		fg.			0	0	sm'h		dense fog.
S. S. State of Nevada, N. 41° 16′, W. 63° 45′ †	29.92	760 0	51	10.6		nw.			1		10		wnw.	0	0	sm'h		overcast.
S. S. Hekla, N. 44° 40′, W. 52° 50′ *†	29.82	757.4	57.6	14.2		w.			1-2		8			1 h'r	1 h'r	sm'h		foggy.
S. S. Thingvalla, Copenhagen, Denmark†	30.06	763.5	30.2	—1.0		e.			4		3		e.	0	0			clear.
S. S. Iowa, Liverpool, Eng*†	29.81	757.2																
S. S. Plantyn, N. 39° 21′, W. 64° 41′	29.87	758.7																
S. S. Baltic, N. 43° 01′, W. 59° 21′	29.85	758.2	47	8.3	85	nnw.			3		4?		nnw.	0	0	sm'h	nw	cloudy?
S. S. Celtic, New York, N. Y †	29.95	760.7	41	5.0	91	n.			4		8		nnw.	1 h'r	1 h'r	sli't	wnw.	d. clouds.
S. S. Germanic, N. 42° 11′, W. 49° 59′†	30.03	762.7	64	17.8		sse.			2		10			0	0			overcast.
S. S. Lepanto, N. 40° 20′, W. 60° 05′†	29.90	759.4	56	13.3		n.			4		5		s.	sh'rs	sh'rs	mod	s.	d. clouds.
S. S. Romano, N. 47° 54′, W. 29° 30′	30.18	766.6	56	13.3		n.			6		8		n.	0	0	h'vy	n.	cloudy.
S. S. Salerno, Odessa, Russia			39	3.9		w.			4		3		w.	0	0	h'vy	nw.	fine.
S. S. Aries, N. 40° 18′, W. 73° 10′*†	29.93	760.2				ne.			8		10		ne.	5 h'r	5 h'r			snow & sleet
S. S. Catherine Whiting, Philadelphia, Pa†	30.06	763.5				nnw.			1		9			0	0	short	nw.	cloudy.
S. S. Norman, N. 39° 46′, W. 73° 59′	30.06	763.5				sw.			1									
S. S. Saxon, Boston, Mass *†	30.14	765.5	55	12.8		ne.			5				n.	0	0	sm'h		overcast.
MISCELLANEOUS.						w.			4		0							
Bk. Adelaid, N. 16° 41′ W. 59° 37′ *†	29.91	759.7	82	27.8		e.			4		1		var.	0	0	mod.	ne.	fair.
Bg. Alcira, N. 11° 15′, W. 71° 32′	29.95	760.7	83	28.3		e.			2		2		ne.	0	0	short	nne.	clear.
Bk Annie, M. Law, Kobe, Japan *†	30.25	768.3	54	12.2		ne.			1		0			0	0			fine.
S. S. Anna Thormann, S. 12° 09′, E. 106° 38′*	29.97	761.3	78.8	26.0	79	se.			6		2 k		se.	0	0	r'gh	s.	clear.
Bk. Antonio Lopez, N. 26° 24′, W. 25° 47′*	29.99	761.7	70	21.1	87	ne.			2		10			0	0	mod.	ne.	cloudy.
Bk. Aquidneck, N. 1° 41′, W. 33° 53′ *†	30.00	762.0				se.			2				se.			light	se.	clear.
Bk. Aureola, N. 48° 17′, W. 16° 35′*†	30.25	768.3	60	15.6		wnw.			6		4		nw.	2 h'r	2 h'r	h'vy	nw.	fair.
Bk. Alba, N. 57° 57′, E. 6° 49′ *†	30.22	767.5	40.1	4.5		wsw.			8									
Bk. Bayonnaise, N. 20° 35′, W. 50° 54′*†	30.08	764.0				se.			3		5?		se.	0	0	large	se.	clear?
Bkt. Bonny Doon, N. 40° 40′, W. 61° 18′	29.81	757.2				ne.			5		10		ne.	4 h'r	4 h'r	mod.	ne.	drizzling.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
S. S. Burswell, N. 46° 42′, W. 12° 05′*†	30.00	762.0	56	13.3		wsw.			5		10			6 h'r	6 h'r	high	wnw.	stormy.
Bk. Champion. N. 50° 13′, W. 3° 42′†..	29.66	753.4	55.0	12.8		s.			11		10		nnw.	0	0	r'gh	ene.	dull.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.19	766.8	50	10.0	65	nne.			3		0			0	0			clear.
Schr. C. R. Flint, Cedar Keys, Fla†	30.13	765.3	51	10.6		n.			2		1		nw.	0	0			clear.
S. Cornelius, N. 38° 54′, W. 62° 19′ *†..	30.01	762.2	68.0	20.0		n.			4		10		nne.	11 h'r	11 h'r	cross	var.	cloudy.
Bkt. David Preston, N. 26° 56′ W. 85° 56′*†	30.20	767.1				e.					5		e.	0	0	mod.	ne.	
Bk. Don Quixote, Pasoeroen Roads, Java*	29.88	758.9	87	30.6		se.			4		4		se.			sm'h		fair.
Bk. E. D. Bigelow, N. 42° 08′, W. 44° 48′*†	30.07	763.8				s.			6		2		s.	0	0	long	s.	fair.
Schr. Edith R. Seward, N. 33° 45′. W. 77° 30′*†	30.02	762.5	60	15.6		w.			1		3		nw.	0	0	sm'h	nnw.	clear.
S. E. J. Spicer, New York, N. Y	30.07	763.8	48	8.9	92	ssw.			4		10		nw.	0	0			overcast
Bk. Eliza Barss, Bermuda, W. I†	29.83	757.7				w.			2		5?		nw.	4 h'r	4 h'r			cloudy?
S. Enoch Train, N. 19° 07′ W. 57° 00′*†	30.08	764.0				se.			2		8		se.	h'vy	h'vy	light	s.	cloudy.
Bk. Essex, Muscat, Arabia*†	30.06	763.5	85	29.4		ene.			6				ne.					
Schr. F. E. McDonald, Smith Pt., Va†	30.07	763.8				sw.			4									fine.
S. S. Foscolia, S. 13° 26′, W. 36° 26′*†	29.57	751.1				nne.			2		1		ne.	1 h'r	1 h'r	sm'h		clear.
Bk. Freya, N. 33° 14′, W. 20° 18′			74	23.3		ene.			5		5		e.	2 h'r	2 h'r	mod.	ese.	fair.
Bg. George, N. 40° 58′ W. 68° 30′*†	30.05	763.3				n.			5		8			0	0	sm'h		clearing
S. Glendon, S. 30° 50′ W. 91° 40′†	30.05	763.3	66	18.9		wsw.			6		10		wsw.	1 h'r	1 h'r	sm'h		misty.
S. Grecian, N. 16° 16′, W. 56° 40′†	29.99	761.7	79	26.1	86	ese.			6		9		se.	12 h'r	12 h'r	long	n.	cloudy.
Bk. Grey Eagle, N. 36° 41′ W. 72° —′*†	29.85	758.2	58	14.4		ene.			2		5		n.	0	0			fair.
Bk. Gronsvaer, S. 44° 16′ E. 148° 59′†	30.18	766.6	62.5	16.9	97	s.			4		1		s.	0	0	4	sw.	fair.
Bk. Hattie G. McFarland, New York City, N. Y†...	30.19	766.8	48	8.9		nw.			1		8		nw.	0	0			clearing
Schr. Hattie Weston, Mayaro Bay, Trinidad, W. I*†.	29.90	759.4	81	27.2		ne.			3		8		ne.	4 h'r	4 h'r	mod.	ene.	clearing
S. Hedwig, N. 29° 25′, W. 73° 39′	29.95	760.7	72.0	22.2	91	nnw.			4		9		nnw.	2 h'r	2 h'r	3	nne.	showery.
Bk. Heinrich & Tonio, N. 39° 53′, W. 68° 08′..			46	7.8		n.			4		10		n.	0	0	mod.	w.	cloudy.
Schr. Isabel Alberto, Cedar Keys, Fla†	30.16	766.1				n.			3		0			0	0			clear.
S. Ivy, Cork, Ireland†	29.87	758.7	44	6.7		sw.			2		8		wsw.	4 h'r	4 h'r			cloudy.
Schr. James Slater. S. 1° 25′, W. 48° 30′*†	30.10	764.5	82	27.8		calm			0		0			0	0			
Schr. Jennie N. Huddell, N 38° 20′ W. 74° 55′†	30.02	762.5	51	10.6	86	e.			1		5		sw.	0	0	long	e.	fair.
S. S. John Hopkins, Baltimore, Md			48	8.9		n.			2		10			0	0			overcast.
Schr. John L. Thomas, Vivorilla Cays, C. A	30.06	763.5				nne.			3		2		e.	0	0			fair.
Bg. John Wesley, Cardenas, Cuba, W. I†	30.10	764.5				ene.			3		7		e.	0	0			cloudy.
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.10	764.5	79	26.1	74	e.			4		0							clear.
Light House Tender, Laurel, Key West, Fla.†	30.03	762.7	75	23.9		n.			2		9		n.	0	0			cloudy.
Bk. Liberia, N. 11° 02′, W. 25° 00′*	29.91	759.7	82	27 8	79	ene.			1–3		4		ene.	0	0			fine.
Bg. Lilian, Demerara, British Guiana†	29.90	759.4	83	28.3		e.			3		2			0	0			clear.
Bg. L. & W. Armstrong, N. 37° 57′, W. 72° 05′*†	30.04	763.0				nnw.			3		4		nnw.	0	0	sm'h	n.	fine.
S. S. Madrid, N. 33° 48′. W. 39° 17′*†	30.26	768.6	68	20.0	79	ene.			5		1		ene.	0	0	sm'h	ene.	fine.
S. S. Malabar, N. 11° 59′ E. 57° 29′*†	29.92	760.0				ne.			3		0			0	0	mod	ne.	clear.
Bg. Mary Gibbs, N. 22° 40′, W. 79° 13′*†	30.00	762.0	70	21.1		sw.			3		0			0	0			clear.
Bg. Mattie B. Russell, N. 29° 00′, W. 78° 40′*†	30.21	767.3				nw.			5		1		nw.	0	0	light	ne.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	29.88	758.9				ne.							ne.	0	0	long	ne.	fair.
S. M. P. Grace, N. 22° 57′, W. 119° 37′*	29.98	761.5	65	18.3		nnw.			3		8		n.	0	0	sm'h	n.	fair.
Bg. Myrtle, N. 34° 46′, W. 71° 48′†	29.97	761.2				n.			1		8		ne.	6 h'r	6 h'r	r'gh	nw.	fair.
Bg. O. C. Clary, N. 36° 09′ W. 69° 23′*†	29.90	759.4	62	16.7	88	nne.			3		4		ne.			sm'h	n.	fair.
S. Orealla, off Point de Galle, Ceylon, India*	29.84	757.9				nw.			3		8		nw.	0	0	sm'h		
Bk. Orpheus, N. 36° 48′ W. 54° 15′	29.85	758.2	80	26.7		n.			2		8 k			0	0	mod.	se.	squally.
S. Paramita, San Francisco, Cal†	29.85	758.2	52	11.1		nw.			1				nw.	0	0			foggy.
S. S. Peconic, N. 36° 49′, W. 36° 21′*†	30.20	767.1	70	21.1		e.			5		5?		e.	0	0	mod.	e.	cloudy.?
S. S. Radnorshire, Suez Canal, Egypt*†	30.03	762.7				n.			2		0			0	0			
S. St. Francis, S. 22° 16′ W. 93° 15′†	30.31	769.9	68	20.0		se.			4		7		se.	0	0	sm'h	se.	cloudy.
Schr. S. B. Hubbard, N. 34° 53′, W. 74° 03′†	30.04	763.0	63	17.2		nnw.			5		5		nw.	0	0	long	nw.	clearing
Bk. Southern Belle, N. 46° 15′, W. 20° 30′*†	30.10	764.5	50	13.3		wnw.			4		8		nw.	1 h'r	1 h'r	long	wnw.	cloudy.
S. S. Strathleven, N. 37° 12′, E. 5° 13′	29.99	761.7	66.0	18.9	93	nnw			5		5		wnw.			3	wnw.	showery.
Bg. Teneriffe, N. 38° 10′, W. 73° 30′	29.89	759.2				nnw.			4					0	0	mod	n.	
Bk. Truro, N. 46° 14′ W. 30° 35′*†	30.27	768.8				ene.			1–2		10			0	0	long	n.	foggy.
U.S.F.C.S. S. Fish Hawk, Washington, D. C†	30.12	765.0	41	5.0	74	ne.			2		3		ne.	0	0			clear.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.25	768.3	66.2	19		ne.			3		6?		nw.	0	0			clear.?
Schr. Viola Reppard. N. 36° 05′ W 73° 28′†	30.03	762.7	65	18.3		nw.			1		1		calm	0	0	mod	cross	fair.
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762.0				sse.			1		1		sse.	0	0			fine.
Bk. Wandering Jew, S. 14° 21′, W. 35° 18′†	29.89	759.2	82	27.8		ne.			3		3		ne.	0	0	long	se.	clear.
Bk. Warden Law, S. 40° 11′, W. 77° 30′	30.04	763.0				nne.			1		10		n.	4 h'r	4 h'r	sm'h	sw.	foggy.
Bgt. Willie, S. 39° 30′, E. 4° 40′*†	30.21	767.3	50	10.0		s.			4		3		s.	5 h'r	5 h'r	mod.	e.	fair.

International Chart I. November 15, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 16, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.16	766.1	70.5	21.4	75	sw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.10	764.6	66.2	19.0	43	w.	.....	.....	4	.....	0	.....	.....	0.768	19.5	clear	Thève.
La Calle	.....	.....	30.06	763.4	78.8	26.0	39	nnw.	.....	.....	3	.....	4	.....	.....	0.079	2.0	cloudy	Fonfréde.
Tunis	.....	.....	30.06	763.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.16	766.0	72.3	22.4	63	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	Pérès.
Tebessa	.....	.....	30.13	765.3	63.3	17.4	54	sw.	.....	.....	3	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	66.2	19.0	26	w.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair	Lonchamp.
Laghouat	.....	.....	30.17	766.4	73.4	23.0	18	ne.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.14	765.6	69.4	20.8	37	n.	.....	.....	2	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	30.04	763.0	30.13	765.3	60	15.6	87	calm	0	0	.....	.....	10	.....	.....	0	0	dull	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.17	741.0	29.73	755.2	43.5	6.4	85	w.	.....	.....	3	.....	8	.....	.....	0.354	9.0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.98	736.0	29.78	756.5	24.4	— 4.2	86	e.	6.9	3.1	.....	.....	10	.....	.....	0.016	0.4	.....	Dr. Wierzbiski.
Eperies	28.81	731.8	29.72	755.0	31.1	— 0.5	83	calm	.....	.....	0	.....	10 n	.....	.....	1.071	27.2	.....	Julius Mikolik.
Gratz	28.45	722.6	29.73	755.1	39.4	4.1	84	wnw.	.....	.....	2	.....	5	.....	.....	0.421	10.7	.....	Andreas Rospini.
Hermannstadt	28.33	719.5	29.77	756.2	43.2	6.2	81	nw.	.....	.....	3	.....	10	.....	.....	0.008	0.2	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.18	715.8	29.54	750.2	40.8	4.9	76	ne.	.....	.....	1	.....	6	.....	.....	0	0	gloomy	The Staff.
Lemberg	28.72	729.4	29.76	756.0	22.5	— 5.3	85	ne.	.....	.....	1	.....	10	.....	.....	0.118	3.0	.....	Dr. T. Stanecki.
Pola	29.60	751.9	29.83	757.7	61.5	16.4	72	wnw.	.....	.....	2	.....	5	.....	.....	0.354	9.0	.....	I. R. Hydrographic Office.
Szathmar	29.25	742.9	29.71	754.7	40.6	4.8	71	sw.	.....	.....	3	.....	8	.....	.....	0	0	.....	Joseph Midlinszay, S. J.
Szegedin	29.50	749.2	29.78	756.5	43.5	6.4	76	sw.	.....	.....	1	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.63	752.5	29.73	755.1	54.0	12.2	74	sw.	.....	.....	1	.....	10	.....	.....	0.138	3.5	.....	Royal Academy.
Vienna	28.93	734.8	29.65	753.2	42.4	5.8	69	e.	.....	.....	2	.....	0	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.69	754.1	29.79	756.7	41.2	5.1	68	e.	29	13.0	.....	.....	7	.....	.....	0.060	1.5	squally	W. Boswell
Armagh, Observatory	29.38	746.2	29.63	752.6	40.2	4.6	90	n.	8	3.6	.....	.....	10	.....	.....	.....	.....	gloomy	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.46	748.3	41.3	5.2	83	nne.	16	7.2	.....	.....	8	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	28.92	734.6	29.46	748.3	39.8	4.3	81	ne.	18	8.0	.....	.....	10	.....	.....	.....	.....	overcast	Thomas Mackereth.
Bradford, Yorkshire	29.05	737.9	29.45	748.0	38.9	3.8	91	ne.	.....	.....	2	.....	10	.....	.....	0.10	2.5	raining	McLandsborough&Preston
Bridgetown, Barbadoes	29.87	758.7	29.90	759.4	82.0	27.8	74	ne.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H.C.
Cardington	29.08	738.6	29.20	741.7	37.4	3.0	96	n.	.....	.....	3–0	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E.	29.03	737.3	29.16	740.7	40.7	4.8	95	nw.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	Corpl. G. A. Pickles.
Falmouth, Observatory	29.28	743.7	29.51	749.5	44.5	6.9	71	nw.	.....	.....	6	.....	7	.....	.....	.....	.....	squally	The Staff.
Fort Napier, Natal	27.34	694.4	29.56	750.8	94	34.4	36	w.	.....	.....	2	.....	2	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	81.0	27.2	91	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.06	763.5	30.12	765.0	66.2	19.0	71	nw.	.....	.....	3	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.48	748.8	29.68	753.9	40.4	4.7	77	ene.	.....	.....	5	.....	10 n	.....	.....	.....	.....	gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.02	737.1	29.20	741.7	37.2	2.9	93	n.	.....	.....	5	.....	10	.....	.....	.....	.....	raining	The Staff.
Guernsey	29.06	738.1	29.36	745.7	40.0	4.4	91	nw.	.....	.....	5	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	29.18	741.2	29.22	742.2	38.1	3.4	90	n.	25	11.2	.....	.....	10	.....	.....	.....	.....	raining	The Staff.
Leicester, Museum	29.08	738.6	29.34	745.2	39.0	3.9	94	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	J. C. Smith.
Malta, Mediterranean	29 91	759 7	29.98	761.5	68.6	20.3	92	w.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.11	764.8	30.16	766.1	73.0	22.8	61	ne.	.....	.....	4	.....	7	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.84	732.5	29.38	746.2	36.5	2.5	95	n.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	Warren Middleton.
Oxford, Radcliffe Obs'y	29.07	738.4	29.30	744.2	36.0	2.2	100	nnw.	.....	.....	5	.....	10	.....	.....	.....	.....	drizzling	The Staff.
Plymouth	29.35	745.5	29.43	747.5	41.7	5.4	91	nw.	.....	.....	4	.....	10	.....	.....	.....	.....	overcast	John Merrifield.
Sandwick Manse, Orkneys	29.81	757.2	29.91	759.7	39.2	4.0	81	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.80	756.9	29.86	758.4	63.6	17.6	65	sw.	.....	.....	.....	.....	9	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	29.15	740.4	29.43	747.5	40.0	4.4	95	ne.	.....	.....	3	.....	10	.....	.....	0.13	3.3	drizzling	W. F. Cooper.
Silloth Rectory	29.63	752.6	29.66	753.4	42.0	5.6	89	ne.	.....	.....	2	.....	5	.....	.....	0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.48	748.8	40.4	4.7	80	ne.	14	6.3	.....	.....	10	.....	.....	.....	.....	overcast	I. New.
Stratfield Turgiss	29.06	738.1	29.27	743.4	35.8	2.1	95	n.	.....	.....	3–4	.....	10	.....	.....	.....	.....	rain & snow	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.46	748.3	29.50	749.3	48	8.9	77	nw.	.....	.....	8	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.75	755.6	29.78	756.4	46.1	7.8	69	nnw.	26	11.6	.....	.....	7	.....	.....	blank	blank	squally	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charlottetown, P. E. Island	30.02	762.5	30.06	763 5	35	— 1.7	76	w.	8	3.0	.....	.....	10 s	.....	w.	0	0	cloudy	Hon. J. Ferguson.
Chatham, N. B*	30.04	763.0	30.11	764 8	30	— 1.1	81	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	H. J. Cundall, C. E.
Father Point, Quebec*	30.13	765.3	30.16	766.1	26	— 3.3	80	nw.	17	7.6	.....	.....	10 s	.....	nw.	0	0	cloudy	G. A. Blair.
Fort Garry, Manitoba*	29.59	751.6	30.49	774.4	5	—15.0	76	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. McWilliams.
Halifax, N. S*	30.00	762.0	30.13	765.3	33	0.6	81	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	James Stewart.
Kingston, Ontario*	29.94	760.5	30.29	769.4	35.0	1.7	82	ne.	8	3.6	.....	.....	10 ks	.....	nw.	0	0	clear	A. Allison.
Montreal, Quebec*	30.04	763.0	30.26	768.6	30	— 1.1	74	nw.	4	1.8	.....	.....	10 ks	.....	nw.	inap.	inap.	cloudy	A. P. Knight, M. A.
Perry Sound, Ontario*	29.57	751.1	30.30	769.6	28	— 2.2	88	n.	12	5.4	.....	2 k	5 ks	nw.	nw.	0	0	cloudy	C. H. McLeod, C. E.
Port Dover, Ontario	29.55	750 6	30.27	768.8	38	3.3	100	calm	0	0	.....	10 c	0	.....	.....	0	0	clear	Rev. R. Mosley.
Port Stanley, Ontario	29.61	752.1	30.28	769.1	37	2.8	79	nw.	3	1.3	.....	.....	10 n	.....	sw.	0	0	cloudy	H. Morgan.
Quebec, Quebec*	29.85	758.2	30.19	766.8	26	— 3.3	77	w.	.....	.....	1	0	2	.....	w.	0	0	fair	M. Payne.
Rockliffe, Ontario*	29.87	758.7	30.36	771.1	19	— 7.2	84	nw.	2	0.9	.....	2 ck	0	w.	.....	0	0	fair	Capt. Ashe, R. N.
Saugeen, Ontario*	29.50	749.3	30.24	768.1	30	2.2	89	e.	10	4.5	.....	.....	10 s	.....	.....	0.1	0.3	cloudy	W. H. McIntyre.
St. Andrews, N. B	30.08	764.0	30.13	765 3	37	2.8	70	nw.	4	1.8	.....	.....	10 n	.....	.....	0	0	cloudy	
Sydney, C. B*	30.00	762.0	30.06	763.5	20	— 6.7	27	sw.	2	0.9	.....	0	8 k	.....	w.	0	0	fair	T. C. Hill, C. E
Toronto, Ontario*	29.91	759.7	30.31	769.9	38	3.3	79	w.	5	2.2	.....	.....	10ks	.....	w.	0	0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	30.08	764.0	30.15	765.8	40	4.4	76	nw.	4.0	1.8	.....	2 k	0	w.	.....	0	0	clear	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	29.82	757.4	30.26	768.6	34	1.1	90	w.	.....	.....	2	.....	10	.....	.....	0.031	0.8	overcast	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	33	0.6	89	w.	1	0.4	.....	0	0	.....	.....	0	0	fair	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.94	760.5	29.97	761.2	63.0	17.2	82	s.	15.7	7.0	.....	.....	10 n	.....	.....	0	0	drizzling	John Duthie.
Cape Town, C. G. H. Obs'y	30.05	763.3	30.09	764.3	59.5	15.3	100	s.	21	9.4	.....	.....	10	.....	.....	0	0	.....	The Staff, for D.Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction Upper.	Clouds. Direction Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.30	769.6	38.5	3.6	80	calm	0.7	0.3	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.35	770.9	30.38	771.6	47.7	8.7	93	nne.	1.1	0.5	.....	4 ck	0	.....	.....	0.201	5.1	cloudy	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.76	756.0	29.81	757.2	33.6	0.9	89	se.	.....	.....	7	.....	9	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	29.66	753.4	29.69	754.0	32.7	0.4	90	ene.	.....	.....	6	.....	8	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.27	743.5	29.32	744.6	33.1	0.6	76	s.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.46	748.3	29.48	748.8	32.4	0.2	.....	s.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	
Stykkisholm, Iceland	29.79	756.6	29.83	757.7	33.8	1.0	90	e.	.....	.....	7	.....	0	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	30.02	762.4	30.05	763.3	42.8	6.0	72	sse.	16	7	.....	.....	4	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.72	754.9	29.82	757.3	31.3	— 0.4	92	ene.	.....	.....	6	.....	6	.....	.....	.....	.....	.....	Loearer Oesterbol.
Jacobshavn	29.32	744.8	29.37	746.0	30.6	— 0.8	.....	se.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.16	740.7	29.58	751.3	48.9	9.4	92	w.	.....	.....	2	0	8 n	.....	w.	0.031	0.8	very cloudy	M. Labroue, Director.
Alençon, Normal School	28.80	731.4	29.35	745.4	38.5	3.6	93	sw.	.....	.....	4	.....	10 n	.....	ne.	0.354	9.0	raining	M. Nicot, Director.
Arras, Engineer School	28.90	734.1	29.16	740.6	41.9	5.5	88	.....	.....	.....	4	.....	cn; n	.....	.....	0.079	2.0	.....	M. Fénéon, Command't.
Avignon, Normal School	29.65	753.2	29.73	755.2	47.8	8.8	94	s.	.....	.....	1	.....	10	.....	wsw.	.....	.....	raining	M. Giraud, Director.
Bar-sur-Seine	28.86	733.1	29.43	747.4	42.1	5.6	88	w.	.....	.....	2	0	8 k	.....	w.	0.030	16.0	very cloudy	M. Saillard, Director.
Beauvais, Normal School	28.97	735.8	29.24	742 6	43.3	6.3	70	wsw.	.....	.....	3	.....	2	.....	wsw.	0.386	9.8	slightly cl'dy	M. Frère Eugène Marie.
Besançon, Normal School	28.57	725.6	29.46	748.2	45.0	7.2	97	ssw.	.....	.....	2	.....	10 n	.....	sw.	.....	.....	al. covered	M. Gobin, Director.
Bordeaux, Observatory	29.43	747.6	29.70	754.3	49.6	9.8	56	w.	.....	.....	3	.....	8	.....	.....	0.205	5.2	rain & hail	M. Rayet, Director.
Bourges, Normal School	28.93	734.8	29.48	748.7	42.3	5.7	80	wsw.	.....	.....	1	.....	10	.....	.....	0.346	8.8	.....	M. Malet, Director.
Brest, Naval Observatory	29.37	746.1	29.62	752.3	47.8	8.8	63	nw.	.....	.....	4	.....	4	.....	nw.	0.323	8.2	.....	M. de Kermaree, Dir.
Caen, Normal School	29.14	740.1	29.21	742.0	41.0	5	78	w.	.....	.....	1	.....	10	.....	.....	0.47	12.	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.01	736.8	29.32	744.8	43.0	6.1	88	s.	.....	.....	2	.....	5	.....	.....	0.512	13.0	cloudy	M. Jadot, Director.
Charleville, Normal School	28.74	730.1	29.26	743.3	42.8	6	67	ssw.	.....	.....	1	.....	8	.....	.....	0.374	9.5	¾ covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.23	717.1	29.60	751.8	45.0	7.2	60	wsw.	.....	.....	3	.....	8	.....	.....	0.209	5.3	¾ covered	M. Allnard, Director.
Cluny, Normal School	28.76	730.5	29.57	751.0	46.6	8.1	53	sw.	.....	.....	4	.....	9	.....	w.	0.16	4.	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.51	724.1	29.37	746.0	41.7	5.4	84	w.	.....	.....	3	.....	8	w.	w.	0.969	24.6	very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.44	696.9	29.08	753.9	32.4	0.2	96	.....	.....	.....	.....	.....	10	.....	.....	0.413	10.5	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.61	726.6	29.73	755.2	50.9	10.5	77	sw.	.....	.....	3	.....	10	.....	sw.	0	0	rainy	M. Kina, Director.
Grenoble, Normal School	28.89	733.7	29.66	753.4	45.7	7.6	83	sw.	.....	.....	1	.....	kn	.....	sw.	0.047	1.2	.....	M. Ablard, Director.
Guéret	28.06	712.6	29.66	753.4	40.6	4.8	87	w.	.....	.....	4	.....	5	.....	w.	0.335	8.5	cloudy	M. Delorme, Dir.
Lamballe, Normal School	29.25	742.9	29.52	749.9	41.0	5	93	nw.	.....	.....	6	.....	8 kn	.....	nw.	0.587	14.9	very cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.25	742.9	29.82	757.4	48.9	9.4	84	w.	.....	.....	4	.....	10	w.	.....	0.217	5.5	raining	M. Chauvin, Director.
Lorient, Naval Observatory	29.46	748.3	29.56	750.9	50.7	10.4	54	nw.	.....	.....	4	.....	8	nw.	w.	0.039	1.0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.57	725.0	29.63	752.6	43.9	6.6	82	wsw.	.....	.....	2	.....	5	.....	w.	0.087	2.2	cloudy	M. André, Director.
Mans, Normal School	29.08	738.5	29.38	746.2	43.7	6.5	95	sw.	.....	.....	3	.....	.....	.....	nw.	0.402	10.2	.....	M. Piboen, Director.
Marseille, Observatory	29.47	748.6	29.74	755.4	56.3	13.5	77	wsw.	.....	.....	2.3	.....	10	.....	wsw.	0.028	0.7	.....	M. Stephan, Director.
Mt. Louis	24.67	626.7	29.52	749.7	40.3	4.6	65	nw.	16.8	7.5	.....	.....	8	w.	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.56	750.9	29.69	754.2	59.0	15	88	w.	.....	.....	2	.....	5	.....	.....	0.252	6.4	light rain	M. Galzin, Director.
Nancy, Normal School	28.94	735.0	29.33	745.0	40.6	4.8	84	s.	.....	.....	1	.....	kn	.....	w.	0.402	10.2	.....	M. Hasse, Director
Nantes, Observatory	29.47	748.6	29.56	750.7	48.7	9.3	53	wnw.	.....	.....	2–3	0	8 k; kn	.....	wnw.	0.315	8.0	.....	M. Larocque, Director.
Perpignan, Observatory	29.67	753.5	29.78	756.3	57.7	14.3	61	w.	3.8	1.7	.....	.....	10	.....	nw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.92	531.4	.....	.....	19.8	— 6.8	.....	nw.	.....	.....	4–5	.....	10	.....	nw.	0.866	22.0	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.63	727.1	29.70	754.4	43.2	6.2	85	s.	.....	.....	1	.....	5	s.	s.	0.252	6.4	cloudy	M. Taillen.
Puy de Dôme Obs'y, Summit	24.65	626.1	.....	.....	27.1	— 2.7	100	w.	.....	.....	6	.....	10	.....	.....	0.382	9.7	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.61	752.1	29.64	752.9	49.6	9.8	82	wsw.	.....	.....	4	.....	10	.....	.....	1.14	29.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.36	745.7	29.57	751.1	44.2	6.8	74	wnw.	.....	.....	1	.....	5	.....	wnw.	0.67	17.	raining	M. Brotier, Director.
Rodez, Normal School	27.75	704.8	29.95	760.8	37.9	3.3	97	nw.	.....	.....	2	.....	10	.....	.....	0.47	12.	raining	M. Seger, Director.
Rouen, Normal School	29.17	740.8	29.21	742.0	42.1	5.6	78	sw.	.....	.....	1	.....	10	wsw.	.....	0.228	5.8	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	40.6	4.8	90	nw.	.....	.....	2	.....	10	.....	nw.	0.335	8.5	raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.15	740.3	29.31	744.5	44.8	7.1	68	sw.	.....	.....	3	.....	9	.....	sw.	0.303	7.7	.....	M. Renou, Director.
Toulouse, Observatory	29.12	739.7	29.84	758.0	48.7	9.3	87	w.	.....	.....	4	.....	10	w.	.....	0.283	7.2	raining	M. Baillaud, Director.
Tours	29.28	743.7	29.46	748.1	47.1	8.4	75	sw	.....	.....	3	.....	5	w	.....	0.264	6.7	cloudy	M. de Tastes.
Versailles, Observatory	28.79	731.3	29.28	743.8	41.0	5.0	75	w.	.....	.....	8	.....	.....	.....	.....	0.327	8.3	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.01	711.4	29.48	748.9	35.2	1.8	85	sw.	.....	.....	4	.....	9	sw.	.....	0.276	7.0	.....	Prof. Jnedt.
Bamberg	28.69	728.8	29.52	749.9	38.1	3.4	82	.....	.....	.....	.....	.....	10	.....	.....	0.197	5.0	snowing	Prof. Dr. Hoh.
Berlin	29.45	747.9	29.63	752.6	30.9	— 0.6	70	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.22	742.3	29.75	755.6	25.9	— 3.4	87	ese.	.....	.....	2	.....	9	.....	.....	0.205	5.2	.....	Royal University Obs'y.
Carlsruhe	28.94	735.0	29.37	745.9	45.7	7.6	77	sw.	.....	.....	3	.....	10	sw.	.....	0.228	5.8	rain & snow	Albert Senz.
Cassel	28.61	726.8	29.33	744.9	35.2	1.8	89	se.	.....	.....	2	.....	10	s.	.....	.....	.....	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.03	737.3	29.39	746.5	39.4	4.1	93	s.	.....	.....	1	.....	10	.....	.....	0.236	6.0	.....	Physical Society.
Friedrichshafen	28.08?	713.2?	29.54	750.3	39.9	4.4	75	wsw.	.....	.....	6	.....	10	w.	.....	0.402	10.2	rain & snow	Wilhelm, Chief Tel.
Hamburg	29.48	748.8	29.57	751.1	28.9	— 1.7	96	ese.	.....	.....	6	.....	10	.....	.....	0.008	0.2	snowy	E. Preller.
Kiel	29.63	752.7	29.65	753.1	31.5	— 0.3	94	e.	.....	.....	7	.....	10	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.11	739.4	29.55	750.5	30.9	— 0.6	86	ene.	.....	.....	3	.....	10	.....	.....	0.205	5.2	.....	H. Leppig, Asst.
Magdeburg	29.33	745.0	29.53	750.0	29.3	— 1.5	87	e.	.....	.....	3	.....	10	.....	.....	0.161	4.1	snow and fog	Weather Observatory.
Memel	30.07	763.8	30.12	765.0	18.7	— 7.4	86	ene.	.....	.....	3	0	1 k	.....	.....	.....	.....	.....	Issermann.
Munich	27.66	702.5	29.49	749.0	40.8	4.9	65	se.	.....	.....	2	.....	9	n.	.....	0.075	1.9	.....	Central Station.
Neufahrwasser	29.95	760.8	29.97	761.2	26.6	— 3.0	78	e.	.....	.....	3	.....	6	se.	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	28.75	732.1	29.34	745 2	43.7	6.5	83	ssw.	.....	.....	3	.....	10	.....	.....	0.295	7.5	.....	Dicknether.
Stuttgart	28.46	722.9	29.35	745.6	45.1	7.3	70	w.	.....	.....	3	.....	8	w.	.....	0.150	3.8	.....	Prof. Dr. Schoder.
Wustrow	29.72	755.0	29.75	755.6	30.6	— 0.8	81	se.	.....	.....	4	.....	10 s	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.59	751.5	29.97	761.1	68.5	20.3	.....	sw.	.....	.....	1.0	.....	9	.....	.....	0	0	covered	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.06	763.6	30.11	764.9	84.0	28.9	57	wsw.	12.0	5.4	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.55	750.5	30.02	762.5	83.1	28.4	27	n.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.91	759.7	29.95	760.7	80.3	26.8	71	nnw.	20.0	8.9	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.09	713.6	29.93	760.2	86.3	30.2	28	nne.	6.0	2.7	.....	.....	2	.....	ene.	0	0	d. clouds	
Trichinopoly	29.69	754.1	29.98	761.4	73.4	23.0	99	nne.	1.0	0.4	.....	.....	10	.....	.....	1.92	48.8	overcast	
Bellary	28.49	723.6	29.97	761.2	77.5	25.3	66	e.	6.0	2.7	.....	.....	7	.....	.....	0	0	d. clouds	
Belgaum	27.41	696.2	29.96	761.0	75.1	23.9	68	e.	9.0	4.0	.....	.....	7	se.	ne.	0	0	d. clouds	
Lahore	29.30	744.2	30.07	763.7	68.7	20.4	56	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.12	739.7	30.05	763.2	69.8	21.0	56	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.50	749.3	30.07	763.7	77.7	25.4	28	w.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.97	735.8	30.02	762.6	78.5	25.8	44	e.	2.0	0.9	.....	.....	1	.....	.....	0	0	blue sky	
Jubbulpore	28.70	729.0	30.08	764.0	74.1	23.4	33	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.67	753.7	30.06	763.4	76.2	24.6	36	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.73	755.1	30.06	763.4	65.3	18.5	61	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.87	758.8	30.06	763.6	70.9	21.6	55	n.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	28 00	711.3	30.08	764.0	65.5	18.6	59	nnw.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.96	760.8	30.04	763.0	73.7	23.2	72	ne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Allpore	30.01	762.2	30.03	762.7	70.5	21.4	71	nnw.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.91	759.6	30.03	762.7	71.8	22.1	82	nw.	2.8	1.2	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.91	759.8	30.01	762.1	74.6	23.7	87	nw.	1.5	0.7	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.71	754.5	30.05	763.3	71.4	21.9	73	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.91	759.7	29.93	760.3	84.1	28.9	68	ssw.	3.7	1.6	.....	.....	5	.....	se.	0	0	threatening	
Jeypore	28.61	726.7	30.07	763.8	75.9	24.4	36	n.	4.2	1.9	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.31	744.4	29.72	755.0	50.0	10.0	67	calm	0	0	.....	.....	8	.....	.....	0.500	12.7	.....	Prof. Giovanni Clodig.
Milan	29.13	740.0	29.66	753.4	45.3	7.4	83	e.	6.9	3.1	.....	.....	10	wsw.	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.61	752.0	29.72	754.8	50.4	10.2	78	se.	2.5	1.1	.....	.....	3	sw.	.....	0.102	2.7	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.72	729.6	29.64	752.9	46.0	7.8	68	e.	1.8	0.8	.....	.....	6	ene.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	BAROMETER. Corrected for instrumental error and for temperature		BAROMETER. Reduced to sea-level.		Temperature of the air.		Relative humidity.	WIND. Direction.	WIND. Velocity.		WIND. Force.	CLOUDS. Amount and kind.		CLOUDS. Direction.		Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Genoa	29.47	748.4	29.66	753.3	56.5	13.6	60	se.	12.3	5.6	.....	.....	10	s.	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.71	703.7	29.65	753.2	42.8	6.0	54	w.	.....	.....	2	.....	1	sw.	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.73	755.2	29.78	756.4	56.1	13.4	62	ssw.	7.4	3.3	.....	.....	2	wsw.	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.50	749.3	29.76	755.8	57.2	14.0	67	sw.	.....	.....	4	.....	9	sw.	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	29.65	753.1	29.73	755.2	57.9	14.4	63	sw.	20.6	9.2	.....	.....	3	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.67	753.7	29.85	758.2	59.7	15.4	61	w.	0	0	.....	.....	9	.....	.....	0.055	1.4	.....	Prof. P. Tachini.
Lecce	29.61	752.2	29.87	758.6	64.0	17.8	60	nw.	4.9	2.2	.....	.....	4	nw.	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.04	737.7	29.93	760.3	59.4	15.2	68	wsw.	2.5	1.1	.....	.....	9	s.	.....	0.118	3.0	.....	Prof. D. Conti.
Cagliari	29.71	754.5	29.90	759.4	64.0	17.8	57	calm	.....	.....	0	.....	7	nw.	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.74	755.4	29.99	761.7	64.4	18.0	31	wsw.	10.5	4.7	.....	.....	.....	.....	.....	0	0	.....	Prof. G. Cacciatore.
Syracuse	29.85	758.2	29.89	759.3	69.6	20.9	43	w.	9.8	4.4	.....	.....	6	wnw.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.39	746.5	29.91	759.7	60.4	15.8	55	wsw.	13.0	5.8	.....	.....	4	wnw.	.....	0.457	11.6	.....	Prof. F. Brioschi.
Stelvio	21.72	551.6	.....	.....	19.2	— 7.1	57	se.	.....	.....	6	.....	10	.....	.....	0.382	9.7	misty	Prof. P. F. Denza.
Valdobbia	21.75	552.4	.....	.....	21.9	— 5.6	70	ne.	.....	.....	6	.....	9	.....	.....	0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.19	766.8	30.22	767.6	43.1	6.2	70	wnw.	.....	.....	2	.....	10 n	.....	w.	0.047	1.2	raining	Hattori.
Awomori	30.16	766.0	30.20	767.1	37.5	3.1	73	wnw.	3.7	1.7	.....	.....	9 ks	.....	nw.	0.031	0.8	cloudy	K. Ogawa.
Hakodate	30.17	766.4	30.18	766.7	33.5	0.8	76	n.	6.0	2.7	.....	.....	10	.....	.....	0	0	covered	
Hiroshima	.....	.....	.....	.....	52.6	11.4	87	s.	2.3	1.6	.....	0	5 ck	.....	.....	0	0	.....	Y. Miwa.
Kanazawa	30.17	766.4	30.28	769.1	37.9	3.3	92	ese.	2.9	1.2	.....	0	0	.....	.....	0	0	clear	S. Endo.
Kioto	30.07	763.8	30.25	768.3	43.3	6.3	82	nnw.	0.9	0.4	.....	0	0	.....	.....	0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.05	763.2	30.25	768.4	54.6	12.6	79	s.	0.6	0.3	.....	0	0	.....	.....	0.005	0.1	clear	S. Takehayashi.
Nemuro	30.08	764.0	30.15	765.8	32.5	0.3	78	nw.	18.0	8.0	.....	0	4	.....	.....	0	0	fair	
Niigata	30.23	767.8	30.27	768.8	45.7	7.6	65	wnw.	1.4	0.6	.....	0	0	.....	.....	0	0	clear	M. Morita.
Nobiru	30.19	766.8	30.20	767.2	43.2	6.2	79	nw.	7.9	3.6	.....	0	3 ks	.....	nw.	0	0	fair	H. Midzushima.
Osaka	30.22	767.7	30.24	768.1	47.8	8.8	76	n.	4.5	2.0	.....	0	0	.....	.....	0	0	clear	
Supporo	.....	.....	.....	.....	31.0	— 0.6	67	w.	7.2	3.2	.....	.....	10	.....	.....	0.015	0.4	covered	
Tokei Obs'y, Yeddo	30.13	765.2	30.20	767.2	44.8	7.1	92	nne.	5.4	2.4	.....	0	0	.....	.....	0	0	clear	The Staff.
Wakayama	30.18	766.5	30.24	768.0	51.8	11.0	66	ne.	4.2	1.9	.....	1	4	w.	.....	0	0	fair	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.87	758.7	30.06	763.5	78.7	25.9	63	ene.	14.5	6.5	.....	2ck;cs	4 k;ks	sw.	ese.	0.01	0.3	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.70	601.8	29.92	759.8	57.0	13.9	82	ssw.	lmap.	lmap.	.....	1 c	7 ks;kn	.....	e.	0	0	foggy	Prof. Vicente Fernandes.
Leon	24.35	618.5	30.11	764.8	51.8	11.0	89	nw.	.....	.....	1	5 c	1 k	sw.	sw.	0	0	cloudy	Prof. M. Leal.
Mazatlan	29.75	755.6	30.01	762.2	72.0	22.2	83	ene.	0.9	0.4	.....	0	0	.....	.....	0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.14	587.7	30.29	769.3	45.5	7.5	84	calm	0	0	.....	6 ck	2 k	w.	.....	0	0	cloudy	The Staff.
Morelia	24.41	620.0	30.41	772.5	50.0	10.0	75	ne.	1.8	0.8	.....	0	0	.....	.....	0	0	foggy	M. Tena, M. D.
Orizaba	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Pabellon, Aguascallentes	23.96	608.5	29.99	761.8	52.1	11.2	73	w.	.....	.....	2	.....	.....	.....	.....	0	0	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.7	30.30	769.7	45.3	7.4	89	calm	0	0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.687	577.77	30.44	773.0	51.5	11.0	95	w.	7.3	3.3	.....	10	0	w.	.....	0	0	covered	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.10	739.1	29.10	739.1	40.1	4.5	.....	sse.	.....	.....	1	.....	.....	.....	.....	0.543	13.8	.....	
Groningen	29.32	744.6	29.37	746.0	30.0	— 1.1	.....	e.	.....	.....	6	.....	.....	.....	.....	0.087	2.2	.....	
Helder	29 25	742.9	29.25	742.9	33.4	0.8	.....	ene.	.....	.....	6	.....	.....	.....	.....	0.307	7.8	.....	
Hellevoetsluis	29.13	739.8	29.13	739.8	33.1	0.6	96	e.	.....	.....	3	.....	.....	.....	.....	0.028	0.7	.....	
Utrecht	29.10	739.2	29.15	740.4	34.0	1.1	96	e.	.....	.....	3	.....	10	.....	.....	0.244	6.2	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.96	761.1	30.03	762.7	30.2	— 1.0	54	sw.	4	2	.....	.....	1	.....	.....	0	0	.....	
Brono	30.33	770.4	30.37	771.4	25.0	— 3.9	62	ne.	4	2	.....	.....	1	.....	.....	0	0	.....	
Christiania	29.97	761.2	30.13	765.2	26.6	— 3.0	68	ne.	4	2	.....	.....	8	.....	.....	0	0	.....	
Gjesvær	30.27	768.8	30.29	769.4	38.7	3.7	.....	sw.	.....	.....	2	.....	7	.....	.....	.....	.....	.....	
Lodingen	30.32	770.2	30.37	771.4	30.7	— 0.7	85	calm	.....	.....	0	.....	8	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.28	769.1	30.44	773.1	63.5	17.5	63	e.	8.7	3.9	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.22	742.1	30.22	767.7	58.3	14.6	61	sw.	4.9	2.2	.....	.....	9	.....	.....	0	0	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	30.17	766.3	30.26	768.5	67.5	19.7	56	ene.	4.3	1.9	.....	.....	9	nne.	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.90	759.5	30.26	768.7	60.4	15.8	70	nne.	13.0	5.8	.....	.....	9	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.38	771.7	30.45	773.5	65.8	18.8	89	calm	0	0	.....	.....	3	.....	.....	0	0	.....	
Saint Paul de Loando	29.76	755.8	29.96	760.9	71.2	21.8	85	wnw.	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	
Serra da Estrella	25.28	642.1	30.08	764.0	42.1	5.6	100	nw.	47.2	21.1	.....	.....	10	.....	.....	0.787	20.0	rain & fog	
RUSSIAN.																			
Akmollinski	29 24	742.6	30.39	772.0	20.3	— 6.5	79	sse.	7	3	.....	0	1 s	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	29.99	761.7	30.01	762.2	23.4	— 4.8	90	nne.	4	2	.....	.....	10	.....	.....	0.165	4.2	snowing	Capt. Sselliwerstow.
Astrakhan	30.40	772 2	30.32	770.1	40.8	4.9	64	se.	16	7	.....	cs	8 s	.....	.....	0	0	light clouds	Capt. Wisganow.
Barnaul	30.19	766.9	30.77	781.6	— 6.7	—21.5	80	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	29.92	759.9	30.18	766.6	16.9	— 8.4	100	w.	2	1	.....	.....	10 n	.....	.....	0.020	0.5	.....	Observatory.
Ekaterinburg	29.25	743.0	30.28	769.0	24.6	— 4.1	94	se.	4	2	.....	.....	10	.....	.....	0.004	0.1	light clouds	Meteorological Obs'y.
Kasan	29.80	758.4	30.15	765.7	22.8	— 5.1	85	se.	2	1	.....	.....	10	.....	.....	0.083	2.1	snowing	Observatory.
Kertch	29.74	755.3	29.76	755.8	56.1	13.4	91	se.	4	2	.....	0	8 n	.....	.....	0.091	2.3	.....	Lagorio & Sastyres.
Kieff	29.04	737.6	29.71	754.7	21.9	— 5.6	90	nne.	11	5	.....	.....	10 n	.....	.....	.....	.....	.....	Observatory.
Lugan	29.02	752.4	29.84	757.8	35.2	1.8	88	sse.	4	2	.....	.....	10	.....	.....	0.339	8.6	.....	Meteorological Obs'y.
Nikolaiev	29.04	752.9	29.71	754.7	53.6	12.0	85	ssw.	9	4	.....	.....	10 n	.....	.....	0.083	2.1	.....	Capt. Kurdakow.
Pekin, China	30.21	767.3	30.35	770.9	39.2	4.0	88	calm	0	0	.....	0	6 ks	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	30.06	763 5	30.08	763.9	21.2	— 6.0	90	nnw.	9	4	.....	.....	10 n	.....	.....	0.039	1.0	.....	Central Physical Obs'y.
Semipalatinsk	30.05	763.3	30.80	782.2	4.6	—15.2	86	e.	9	4	.....	.....	0	.....	.....	0	0	.....	Major Lasarew.
Tashkend, Laboratory	28.72	729.4	30.30	769.6	56.3	13.5	64	calm	0	0	.....	.....	10	.....	.....	.....	.....	light clouds	Teich, A. M.
Tiflis	28.91	734.3	30.34	770.5	58.1	14.5	42	se.	4	2	.....	0	4 s	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.43	772.8	30.75	781.1	—13.9	—25.5	82	calm	0	0	.....	0	0	.....	.....	.....	.....	.....	
Vladivostock	30.14	765.6	30.21	767.3	30.6	— 0.8	.....	n.	2	1	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.43	747.4	29.87	758.7	25.9	— 3.4	74	ese.	16	7	.....	.....	10	.....	.....	.....	.....	heavy cld's	Astronomical Obs'y.
Wilna	29.63	752.6	30.08	764.1	19.0	— 7.2	81	ene.	11	5	.....	.....	9	.....	.....	0	0	heavy cl'ds	Berg, Assistant.
Yeniseisk	30.47	773.8	30.79	782.1	— 2.2	—19.0	91	calm	0	0	.....	.....	5	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.80	756.9	45	7.2	84	se.	.....	.....	6	.....	10	.....	.....	0.2	5.	overcast	J. Youngclause.
North Unst	.....	.....	30.00	762.0	.....	.....	.....	se.	.....	.....	6	.....	7	.....	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.69	754.1	29.80	756.8	60.4	15.8	48	w.	4.7	2.1	.....	0	4	.....	.....	0	0	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.90	759 5	29.96	761.0	51.8	11.0	94	nw.	2.0	0.9	.....	.....	10	.....	.....	0.283	7.2	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.01	686.0	30.04	762.9	44.8	7.1	89	sw.	8.3	3.7	.....	.....	10	.....	.....	0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.81	706.3	30.06	763.4	52.3	11.3	66	sw.	11.0	4.9	.....	.....	10	.....	.....	0	0	covered	The Staff.
Murcia, Met. Obs'y	29.87	758.6	30.00	762.1	62.0	17.0	63	w.	2.7	1.2	.....	0	2	.....	.....	0	0	almost clear	Olayo Diaz, Director.
Oviedo	29.14	740.2	30.02	762.5	51.4	10.8	77	e.	18.6	8.3	.....	.....	10 n	.....	w.	0.500	12.7	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.19	741.4	30.10	764.4	53.6	12.0	86	w.	2.5	1.1	.....	.....	10	.....	.....	0.224	5.7	misty	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.92	759 9	29.97	761.3	80.0	26.7	71	nne.	3.3	1.5	.....	2 c	1 ks	.....	.....	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.12	765.0	30.22	767.6	60.6	15.9	48	n.	6.8	3.0	.....	0	0	.....	.....	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.88	758.9	29.97	761.2	75.2	24.0	84	calm	0	0	.....	7 cs	5 kn	ne.	ne.	0.079	2.0	cloudy	Manuel Muese.
Tuguegarao, Philippine Id's	29.89	759.2	30.02	762.6	77.8	25.4	86	nnw.	2.4	1.1	.....	0	2 ks	.....	se.	0	0	fair	José L. Yrastorza.
SWEDISH																			
Haparanda	30.60	771.8	30.43	772.8	1.0	—17.2	89	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	30.39	769.5	30.35	770.8	20.1	— 6.6	95	ne.	.....	.....	4	.....	10	.....	.....	0	0	.....	

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	30.21	767.4	30.26	768.7	25.5	— 3.6	91	nne.	.....	.....	4	.....	10	.....	.....	0.091	2.3	.....	
Stockholm	29.96	760.9	30.13	765.4	28.0	— 2.2	69	ese.	.....	.....	2	.....	3	.....	.....	0.004	0.1	.....	
Wisby	30.06	763.6	30.12	765.1	28.4	— 2.0	76	sse.	.....	.....	2	.....	3	.....	.....	0	0	.....	
Sub-series.																			
Upsala	30.06	763.4	30.14	765.6	29.1	— 1.6	84	se.	8.5	3.8	.....	.....	4	.....	ese.	0.020	0.5	.....	S. G. Fineman.
Swiss.																			
Geneva	28.18	715.7	29.64	752.8	42.8	6.0	84	ssw.	.....	.....	5	.....	9	.....	.....	0.146	3.7	covered	The Observatory.
Turkish.																			
Constantinople	.....	.....	29.91	759.6	64.6	18.1	66	sw.	20	9.0	.....	.....	9	.....	sw.	0	0	.....	The Observatory.
Yalona	.....	.....	29.97	761.1	63.0	17.2	.....	s.	.....	.....	1	.....	10	.....	.....	0.20	5.	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.10	764.5	74.5	23.6	65	w.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.21	767.3	30.29	769.4	43	6.1	60	sw.	5	2.2	.....	.....	10 s	.....	nw	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.58	751.3	30.28	769.1	34	1.1	89	nw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.88	631.9	29.98	761.5	19	— 7.2	61	ne.	2	0.9	.....	.....	10 s	.....	.....	0.56	14.2	cloudy	W. U. Barnes.
Assinnaboine, Ft., Montana	27.59	700.8	30.57	776.5	25	— 3.9	64	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.13	739.9	30.35	770.9	41	5.0	70	n.	8	3.6	.....	3 c	0	.....	.....	0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.34	770.6	30.35	770.9	33	0.6	68	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.22	767.6	30.42	772.7	37.5	3.1	89	nw.	1	0.4	.....	0	tg.	.....	.....	0	0	clear	John Healy.
Baltimore, Maryland	30.34	770.6	30.40	772.1	38	3.3	82	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	Geo W Felger.
Barnegat, New Jersey	30.32	770.1	30.34	770.6	38.0	3.3	72	nw.	11	4.9	.....	0	0	.....	.....	0	0	clear	G. A. Hill.
Bennett, Fort, Dakota	28.75	730.2	30.44	773.2	26	— 3.3	88	nw.	7	3.1	.....	0	1 s	.....	nw.	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.03	701.8	30.59	777.0	17	— 8.3	70	calm	0	0	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.49	723.6	30.41	772.4	27	— 2.8	88	nw.	4	1.8	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.25	768.3	30.28	769.1	42	5.6	74	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. T. Elker.
Boise City, Idaho	27.59	700.8	30.53	775.4	22	— 5.6	92	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	B. E. Light.
Boston, Massachusetts	30.10	764.5	30.20	768.6	35.0	1.7	69	w.	9	4.0	.....	2 c	hz.	.....	.....	0	0	clear	O. B. Cole.
Brownsville, Texas	29.94	760.5	29.99	761.7	70.7	21.5	90	s.	7	3.1	.....	.....	10 s	.....	s.	0.04	1.0	cloudy	M. McCarty.
Buffalo, New York	29.52	749.8	30.30	769.6	40	4.4	66	w.	3	1.3	.....	.....	10 s	.....	w.	0	0	cloudy	W. Finn.
Buford, Fort, Dakota	28.47	723.1	30.45	773.4	28	— 2.2	88	nw.	16	7.2	.....	.....	10 s	.....	.....	0	0	cloudy	F. A. Mellen.
Burlington, Vermont	29.97	761.2	30.28	769.1	36.3	2.4	71	n.	12	5.4	.....	.....	10 n	.....	w.	inap.	inap.	light rain	W. B. Gates.
Cairo, Illinois	29.87	758.7	30.29	769.4	46.7	8.2	71	s.	1	0.4	.....	10 ck	0	w.	.....	0	0	cloudy	W. H. Ray.
Cape Henry, Virginia	30.37	771.4	30.39	771.9	48	8.9	56	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.32	770.1	30.35	770.9	50.5	10.3	67	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	29.51	749.5	30.04	763.0	53	11.7	72	se.	16	7.2	.....	c	0	.....	.....	0	0	clear	J. J. McLean.
Cedar Keys, Florida	30.27	768.8	30.29	769.4	51	10.6	93	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	F. W. Mixer.
Champaign, Illinois	29.34	745.2	30.20	767.1	38.6	3.7	74	s	11	4.9	.....	.....	10 s	.....	s.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.30	769.6	30.36	771.1	48	8.9	63	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.50	749.3	30.38	771.6	36.0	2.2	79	n.	4	1.8	.....	0	fg.	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.51	749.5	30.36	771.1	34.5	1.4	94	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	B. L. Goulding.
Cheyenne, Wyoming	24.19	614.4	30.40	772.1	21.7	— 5.7	76	ne.	12	5.4	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	E. McGovern.
Chicago, Illinois	29.43	747.5	30.17	766.3	40.0	4.4	76	se.	7	3.1	.....	7 k	0	sw.	.....	0	0	fair	J. Mitchell.
Chincoteague, Virginia	30.33	770.4	30.35	770.9	42	5.6	74	nw.	10	4.5	.....	hz.	0	.....	.....	0	0	clear	C. F. Dickens.
Cincinnati, Ohio	29.05	753.1	30.34	770.0	40	4.4	86	s.	2	0.9	.....	5 k;ck	0	sw.	.....	0	0	fair	R. B. Watkins.
Cleveland, Ohio	29.58	751.3	30.35	770.9	38.7	3.7	68	s.	8	3.6	.....	.....	10 s	.....	sw.	0	0	cloudy	J. B. Newlin.
Coleman City, Texas	28.22	716.8	30.11	764.8	51	10.6	93	se.	4	1.8	.....	.....	10 s	.....	.....	0.74	18.8	cloudy	L. Dorman.
Columbus, Ohio	29.43	747 5	30.32	770.1	40	4.4	73	s.	4	1.8	.....	6 ck	3 s	sw.	.....	0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.00	712.7	30.07	763.8	48.8	9.3	93	se.	2	0.9	.....	.....	10 s	.....	.....	0.38	9.7	cloudy	J. McGlone.
Custer, Fort, Montana	27.24	691.9	30.56	776.2	20	— 6.7	73	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.40	746.7	30.10	764.5	44	6.7	60	sw.	6	2.7	.....	.....	10 s	.....	sw.	0	0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.21	640.3	30.11	764.8	46	7.8	86	calm	0	0	.....	0	0	.....	.....	0.23	5.8	clear	J. Williams.
Dayton, Washington T'y	28.78	731.0	30.56	776.2	26.8	— 2.9	89	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	H. Clifford.
Deadwood, Dakota	25.60	650.2	30.43	772.9	26	— 3.3	88	calm	0	0	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	G. W. Scott.
Delaware Breakwater, Del.	30.33	770.4	30.35	770.9	44	6.7	76	nw.	11	4.9	.....	0	hz.	.....	.....	0	0	clear	T. S. Townsend.
Denison, Texas	29.29	744.0	30.13	765.3	52.0	11.1	86	calm	0	0	.....	.....	10 n	.....	.....	0.12	3.0	light rain	J. W. Byram.
Denver, Colorado	24.93	633.2	30.43	772.9	27.0	— 2.8	100	nw.	9	4.0	.....	.....	10 n	.....	.....	0.27	6.9	light snow	F. M. Neal.
Des Moines, Iowa	29.16	740 7	30.12	765.0	40	4.4	65	nw.	6	2.7	.....	.....	10 s	.....	nw.	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.56	750.8	30.30	769.6	44.0	6.7	75	sw.	4	1.8	.....	.....	10 s	.....	sw.	0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.48	698.0	30.22	767.6	35	1.7	72	n.	.....	.....	4	.....	10 ks	.....	w.	0.03	0.8	cloudy	V. P. Temple.
Dubuque, Iowa	29.33	745.0	30.08	764.0	41.3	5.2	70	s.	3	1.3	.....	.....	10 s	.....	se.	0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.49	749 0	30.28	769.1	34	1.1	89	ne.	24	10.7	.....	.....	10 n	.....	ne.	0.08	2.0	light snow	N. B. Conger.
Eagle Pass, Texas	29.24	742.7	30.07	763.8	62.0	16.7	56	nw.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25.50	647.7	30.36	771.1	3	—16.1	79	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	30.08	764.0	30.15	765.8	37.0	2.8	72	w.	6	2.7	.....	.....	10 s	.....	w.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.23	691.6	30.16	766.1	37	2.8	82	nw.	20	8.9	.....	.....	10 n	.....	nw.	0.23	5.8	light rain	J. O'Dowd.
El Paso, Texas	26.27	667.2	30.12	765.0	43.0	0.1	83	e.	4	1.8	.....	0	0	.....	.....	0.16	4.1	clear	Peter Wood.
Erie, Pennsylvania	29.55	750.6	30.31	769.9	42	5.6	74	sw.	6	2.7	.....	.....	10 s	.....	sw.	0	0	cloudy	George Heathcote.
Escanaba, Michigan	29.54	750.3	30.24	768.1	32.0	0.0	88	ne.	10	4.5	.....	.....	10 n	.....	ne.	inap.	inap.	light snow	Frank Hulwegler.
Fredericksburg, Texas	28.26	717.8	30.08	764.0	62	16.7	100	sw.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	E. O'C. Machenney.
Galveston, Texas	30.05	763.3	30.10	764.5	70	21.1	84	s.	14	6.3	.....	.....	10 s	.....	.....	0	0	cloudy	J. Mueller.
Grand Haven, Michigan	29.52	749.8	30.22	767.6	39.0	3.9	82	se.	5	2.2	.....	0	8 s	.....	sw.	0	0	fair	Robert U. Lord.
Grant, Fort, Arizona	25.22	640.6	30.06	763.5	40.5	4.7	46	ne.	4	1.8	.....	0	1 s	.....	.....	0	0	clear	R. M. Crawford.
Hatteras, North Carolina	30.31	769.9	30.33	770.4	50	10.0	77	n.	16	7.2	.....	0	0	.....	.....	0	0	clear	N. C. Smith.
Helena, Montana	26.16	664.5	30.54	775.7	17	— 8.3	83	calm	0	0	.....	0	0	.....	.....	0.03	0.8	clear	J. P. Sherry.
Henrietta, Texas	29.05	737.9	30.09	764.3	47	8.3	100	nw.	1	0.4	.....	.....	10 n	.....	.....	0.38	9.7	light rain	S. W. Glenn.
Huron, Dakota	28.86	733.0	30.34	770.6	27	— 2.8	70	nw.	14	6.3	.....	.....	10 s	.....	.....	0	0	cloudy	O. Schutze
Indianapolis, Indiana	29.42	747.3	30.26	768.6	39	3.9	76	se.	6	2.7	.....	6 ck	0	w.	.....	0	0	fair	I. A. Reed.
Indianola, Texas	29.98	761.5	30.01	762.2	71.6	22.2	82	s.	14	6.3	.....	4 k	0	sw.	.....	0	0	fair	D. J. Carr.
Jacksboro, Texas	28.85	732.8	30.07	763.8	50	10.0	77	w.	3	1.3	.....	.....	10 n	.....	w.	0.50	12.7	light rain	J. W. Smith.
Jacksonville, Florida	30.26	768.6	30.31	769.9	48	8.9	71	nw.	6	2.7	.....	4 k	0	ne.	.....	0	0	fair	A. Schneider.
Keogh, Fort, Montana	27.90	708.6	30.57	776.5	28	— 2.2	77	nw.	11	4.9	.....	.....	10 s	.....	nw.	0	0	cloudy	F. Z. Gosewisch.
Keokuk, Iowa	29.41	747.0	30.10	764.5	45.5	7.5	55	sw.	2	0.9	.....	.....	10 s	.....	sw.	0	0	cloudy	R. H. Paxton.
Key West, Florida	30.12	765.0	30.14	765.5	69.0	20.6	76	ne.	12	5.4	.....	0	0	.....	.....	0	0	clear	H. Mc P. Baldwin.
Kittyhawk, North Carolina	30.34	770.6	30.36	771.1	50	10.0	64	ne.	19	8.5	.....	hz.	2 k	.....	ne.	0	0	clear	J. A. Cody.
Knoxville, Tennessee	29.29	744.0	30.36	771.1	32.6	0.4	93	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	S. C. Emery.
La Crosse, Wisconsin	29.27	743.4	30.09	764.3	35	1.7	69	nw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	A. W. Browne.
Leavenworth, Kansas	29.18	741.2	30.12	765.0	46	7.8	93	s.	2	0.9	.....	.....	10 n	.....	.....	0.30	7.6	light rain	W. Bell.
Lewiston, Idaho	29.75	755.6	30.62	777.7	28.5	— 1.9	88	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. U. Simons.
Little Rock, Arkansas	29.85	758.2	30.18	766.6	50	10.0	71	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	T. S. Collins.
Los Angeles, California	29.65	753.1	30.05	763.3	53	11.7	80	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	L. M. Dey.
Louisville, Kentucky	29.69	754.1	30.28	769.1	41	5.0	73	sw.	1	0.4	.....	.....	10s;sk	.....	.....	0	0	cloudy	Lewis Duane.
Lynchburg, Virginia	29.66	753.4	30.38	771.6	33.8	1.0	72	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	F. R. Day.
Mackinaw City, Michigan	29.60	751.8	30.28	796.1	37.0	2.8	82	e.	12	5.4	.....	.....	10 s	.....	e.	0	0	cloudy	F. P. Chaffee.
Macon, Fort, North Carolina	30.33	770.4	30.34	770.6	45	7.2	93	nw.	16	7.2	.....	hz.	0	.....	.....	0	0	clear	C. A. Shaw.
Madison, Wisconsin	29.06	738.1	30.13	765.3	40	4.4	82	se.	7	3.1	.....	.....	10 s	.....	se.	0	0	cloudy	F. Burke.
Maginnis, Fort, Montana	.....	.....	.....	.....	20	— 6.7	58	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	J. E. Thatcher.
McKavett, Fort, Texas	27.80	706.1	30.18	766.6	55	12.8	86	sw.	4	1.8	.....	.....	8 ks	.....	sw.	inap.	inap.	cloudy	J. Gilligan.
Marquette, Michigan	29.53	750.0	30.30	769.6	33	0.6	88	ne.	12	5.4	.....	.....	10 n	.....	.....	0.02	0.5	light snow	D. T. Flannery.
Memphis, Tennessee	29.86	758.4	30.21	767.3	48	8.9	86	se.	1	0.4	.....	0	8 s	.....	.....	0	0	cloudy	W. Line.
Milwaukee, Wisconsin	29.37	746.0	30.16	766.1	40	4.4	89	se.	7	3.1	.....	0	9s;fg	.....	.....	0	0	cloudy	J. H. Young.
Missoula, Fort, Montana	27.13	689.1	30.54	775.7	26	— 3.3	67	ne.	2	0.9	.....	.....	8 s	.....	.....	0	0	cloudy	C. A. Read.
Mobile, Alabama	30.22	767.6	30.26	768.6	43	6.1	87	n.	4	1.8	.....	3 cs	0	sw.	.....	0	0	clear	J. B. McLaughlin.
Montgomery, Alabama	30.09	764.3	30.33	770.4	36.8	2.7	86	n.	1	0.4	.....	0	fg.	.....	.....	0	0	clear	

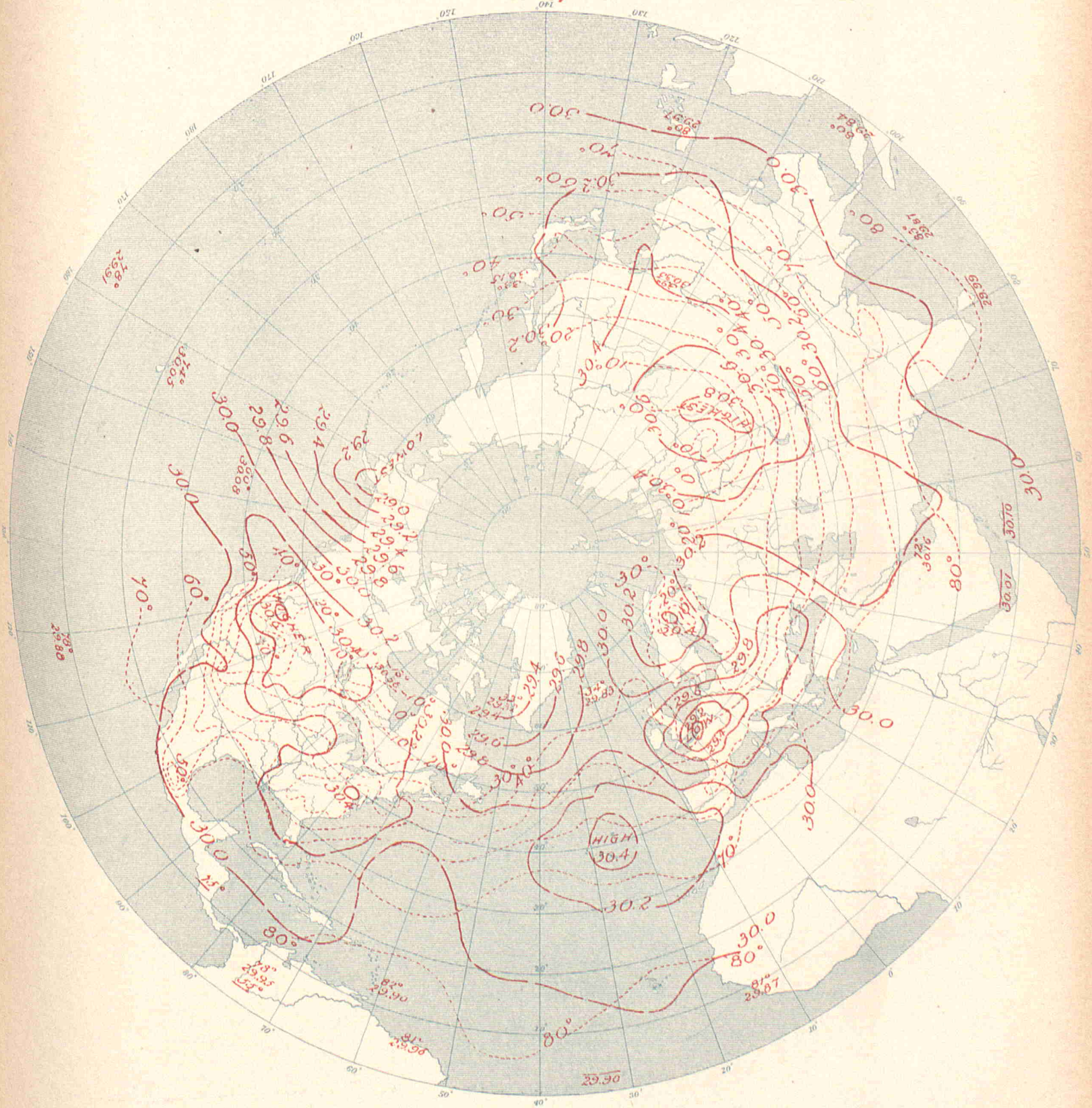
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.25	742.9	30.31	769.9	28	— 2.2	88	n.	6	2.7			10 s			inap.	inap.	cloudy	H. Bessant.
Morgantown, W. Virginia	29.35	745.5	30.41	772.4	31.5	— 0.3	87	calm	0	0			fg.			0	0	dense fog	J. C. Sprigg, jr
Mt. Washington, N. H.	23.66	601.0	30.22	767.6	16.5	— 8.6	87	nw.	65	29.0			fg.		nw.	0	0	dense fog	J. G. Linsley.
Nashville, Tennessee	29.70	754.4	30.30	769.6	37.0	2.8	86	e.	2	0.9		7 ck	0	w.		0	0	fair	L. N. Jesunofsky.
New Haven, Connecticut	30.18	766.6	30.30	769.6	34	1.1	71	nw.	3	1.3		1 c	fg.			0	0	clear	J. H. Sherman.
New London, Connecticut	30.28	769.1	30.33	770.4	37	2.8	82	nw.	4	1.8		0	0			0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.16	766.1	30.22	767.6	55.2	12.9	85	e.	2	0.9		3 c	sk.	w.		0	0	clear	L. Dunne.
Newport, Rhode Island	30.23	767.8	30.28	769.1	39.4	4.1	69	nw.	4	1.8		0	hz.			0	0	clear	W. McGillivray.
New York, New York	30.16	766.1	30.34	770.6	39	3.9	82	sw.	4	1.8		3 cs	fg.			0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.36	771.1	30.39	771.9	45	7.2	76	n.	1	0.4		0	hz.			0	0	clear	Wm. Davis.
North Platte, Nebraska	27.30	693.4	30.38	771.6	32.6	0.3	78	ne.	12	5.4		0	8 s			0	0	cloudy	E. F. Brady.
Olympia, Washington T'y	30.40	772.1	30.44	773.2	33.0	0.6	88	ne.	1	0.4			10 s			0	0	cloudy	J. Dascomb.
Omaha, Nebraska	28.98	736.1	30.22	767.6	35.1	1.7	75	n.	18	8.0			10 s			0	0	cloudy	A. Pollak.
Oswego, New York	29.93	760.2	30.27	768.8	44.0	6.7	68	n.	4	1.8			10 s		nw.	0	0	cloudy	S. W. Beall.
Palestine, Texas	29.54	750.3	30.11	764.8	58.0	14.4	70	se.	10	4.5			10 n		s.	inap.	inap.	light rain	L. M. Pindell.
Pensacola, Florida	30.24	768.1	30.27	768.8	47.1	8.4	68	ne.	9	4.0		4 cs	0			0	0	fair	M. McGauran.
Philadelphia, Pa	30.26	768.6	30.36	771.1	42.5	5.8	58	w.	2	0.9		1 cs	sk.	n.		0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.63	447.8	30.29	769.4	5	—15.0	100	calm	0	0			10 n		sw.	0.06	1.5	light snow	H. Hall.
Pioche, Nevada	23.97	608.8	30.11	764.8	19.8	— 6.8	76	n.	13	5.8		0	0			inap.	inap.	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.53	750.0	30.38	771.6	41.0	5.0	65	sw.	4	1.8			10 s		sw.	c	0	cloudy	W. Daly.
Poplar River, Montana	28.28	718.3	30.58	776.7				sw.			1		10 s			0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.20	767.1	30.21	767.3	60.0	15.6	75	e.	7	3.1		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.59	751.6	30.31	769.9	37.4	3.0	91	sw.	3	1.3			10 s			0	0	cloudy	W. O. Bailey.
Portland, Maine	30.13	765.3	30.18	766.6	40.0	4.4	82	w.	8	3.6		0	9 s		w.	0	0	cloudy	W. W. Eichelberger.
Portland, Oregon	30.38	771.6	30.44	773.2	32.0	0.0	100	nw.	10	4.5		0	fg.			0	0	light fog	M. L. Hearne.
Portsmouth, N. C.					50	10.0	77	n.	24	10.7		0	hz.			0	0	clear	F. S Coburn.
Prescott, Arizona	24.65	626.1	29.99	761.7	32.3	0.2	57	s.	1	0.4		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	30.21	767.3	30.24	768.1	40	4.4	73	nw.	4	1.8		2 cs	0			0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	30.19	766.8	30.20	767.1	55.5	13.1	69	n.	10	4.5		0	0			0	0	clear	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.59	751.6	30.29	769.4	39	3.9	73	sw.	10	4.5			10k; hs		w.	0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.78	756.4	30.35	770.9	36.2	2.3	88	ne.	1	0.4			10 s			0	0	cloudy	J. J. Nanry.
Sacramento, California	30.05	763.3	30.13	765.3	43.7	6.5	51	nw.	12	5.4		0	0			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.57	751.1	30.20	767.1	44.5	6.9	88	s.	13	5.8			10 s		s.	0	0	cloudy	J. H. Weber.
St. Paul, Minnesota	29.23	742.4	30.15	765.8	35.0	1.7	79	nw.	12	5.4		9 k	0		ne.	0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.48	748.8	30.41	772.4	20	— 6.7	84	n.	5	2.2		0	0			0.16	4.1	clear	C. B Dilley.
Salt Lake City, Utah	25.66	651.8	30.23	767.8	34	1.1	56	n.	12	5.4			10 s			inap.	inap.	cloudy	J. Craig.
San Antonio, Texas	29.31	744.5	30.03	762.7	64.0	17.8	84	e	1	0.4			10 s			0	0	clear	T. J. Kenan.
San Diego, California	29.94	760.5	30.01	762.2	51.5	10.8	92	ne.	6	2.7		0	1 s			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.61	752.1	30.33	770.4	41	5.0	73	sw.	4	1.8			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.32	770.1	30.35	770.9	41.0	5.0	82	w.	8	3.6		3 c	0			0	0	clear	B. A. Blundon.
San Francisco, California	30.00	762.0	30.08	764.0	52	11.1	52	n.	15	6.7		0	0			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.13	587.5	30.17	766.3	38	3.3	67	se.	3	1.3			10 n		se.	0.11	2.8	light snow	H. U. Jones.
Savannah, Georgia	30.26	768.6	30.35	770.9	41.5	5.3	72	n.	8	3.6		0	0			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.74	679.2	30.56	776.2	14	—10.0	66	w.	3	1.3		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.91	759.7	30.16	766.1	53	11.7	72	n.	3	1.3			10 s			0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.79	731.3	30.10	764.5	47	8.3	89	se.	4	1.8			10 n		s.	0.34	8.6	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.24	615.7	30.08	764.0	37.0	2.8	89	calm	0	0		3 ck	5 s	sw.		0.01	0.3	cloudy	N. D. Lane.
Sitka, Alaska	29.56	750.8	29.63	752.6	43.2	6.2	83	sw.	10	4.5			10 ks		sw.	2.39	60.7	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.65	753.1	30.14	765.5	52.0	11.1	80	s.	3	1.3			10 n			inap.	inap.	light rain	J. B. Campbell.
Smithville, North Carolina	30.33	770.4	30.37	771.4	38	3.3	89	n.	8	3.6		0	0			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.48	723.4	30.56	776.2	21	— 6.1	87	sw.	2	0.9			10 s			0	0	cloudy	D. Moore.
Springfield, Illinois	29.45	748.0	30.17	766.3	43	6.1	64	s.	11	4.9			10 s		w.	0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.17	766.3	30.31	769.9	33.5	0.8	54	calm			0		10 n			0	0	cloudy	Charles Mayr.
Springfield, Mo.	28.71	729 2	30.22	767.6	48.5	9.2	86	s.	7	3.1			10 n		s.	0.14	3.6	light rain	J. B. Marbury.
Starkville, Miss.	29.79	756.7	30.29	769.4	46	7.8	76	se.	7	3.1		3 c	3 s	sw.		0	0	fair	C. Dill.
Stevenson, Fort, Dakota	28.46	722.9	30.43	772.9	28	— 2.2	100	e.	6	2.7			10 s			0	0	cloudy	W. Burrows
Stockton, Fort, Texas	26.99	685.5	30.11	764.8	44.0	6.7	86	sw.	4	1.8		0	0			0.50	12.7	clear	J. F. Marshall.
Thatcher's Island, Mass.	30.19	766.8	30.24	768.1	42.0	5.6	65	w.	15	6.7		5 k	0	w.		0	0	fair	G. Liebmann.
Thomas, Camp, Arizona	27.20	690.9	30.04	763 0	47	8.3	66	s.			1	2 cs	5 ks	sw.	sw.	inap.	inap.	fair	J. T. Fitzgerald.
Toledo, Ohio	29.57	751.1	30.30	769.6	41	5.0	65	s.	2	0.9			10 s		sw.	0	0	cloudy	A. Buell.
Tucson, Arizona	27.56	700.0	30.02	762.5	47	8.3	77	calm	0	0		0	0			inap.	inap.	clear	J. L. Whiteside.
Umatilla, Oregon	30.24	768.1	30.62	777.7	24	— 4.4	94	se	2	0.9		0	0			0	0	clear	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					44.6	7.0	63	w.			1	4 k	4 s	sw.	w.	0	0	cloudy	D. Brooks.
Vicksburg, Mississippi	29.96	761.0	30.23	767.8	47.0	8.3	68	e.	8	3.6		6 ck	0	sw.		0	0	fair	James Kenealy.
Visalia, California	29.68	753.9	30.06	763.5	36.0	2.2	89	e.	2	0.9		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.71	627.6	30.45	773.4	15.9	— 8.9	87	nw.	1	0.4		0	3 s			0.25	6.3	clear	T. M. Ambler.
Washington, D. C.	30.28	769.1	30.40	772.1	33.2	0.7	86	calm	0	0		2 c	fg.	nw.		0	0	clear	B. M. Purssell.
West Las Animas, Colorado	26.20	665.5	30.32	770.1	33	0.6	66	ne.	16	7.2			10 s		ne.	0	0	cloudy	F. H. Brandenburg.
Williamsport, Pa.	29.73	755.1	30.36	771.1	37.5	3.1	78	w.	1	0.4			10 ks		n.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.32	770.1	30.38	771.6	40	4.4	82	n.	4	1.8		0	sk.			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.87	657.1	30.40	772.1	19	— 7.2	70	ne.	4	1.8		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.91	734.3	30.29	769.4	32	0.0	68	n.	19	8.5			10 s			0	0	cloudy	J. H. Atfield.
Yuma, Arizona	29.83	757.7	29.98	761.5	52.0	11.1	34	n.	7	3.1		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8			55.0	12.8	74	se.	1	0.4		2 cs	1 s		nw.	0	0	fair	Joaquin Gomez.
Havana, Cuba, W. I.	30.01	762.2	30.08	764.0	67.1	19.5	90	se.	1	0.4		0	9 ks		e.	0	0	cloudy	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	30.01	762.2	30.02	762.5	72	22.2	78	n.	3	1.3		0	0			0	0	fine	Robert Johnston.
Navassa, W. I.	29.89	759.2	29.97	761.2	79	26.1	63	ne.	14	6.3		0	2 ks		e.	0	0	clear	F. M. Everett.
Paramaribo, S. A.	29.96	761.0	29.96	761.0	81	27.2	83	se.			3	5 ck	5 k	e.		0.810	20.6	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	78	25.6	89	calm			0	5 ck	5 ks	n.	n.	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75	23.9	92	ne.			4	0	1 ks		ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.01	762.2	30.04	763.0	73	22.8	76	n.	6	2.7		0	1 n		ne.	0	0	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	28.90	734.0	28.96	735.6	35	1.7	79	s.			2	7 cs	0			0.11	2.8	fair	W. J. Fisher.
St. Thomas, W. I.	29.90	759.4	30.02	762.5	80	26.7	67	ne.				0	2 k		ne.	0	0	fine	Aug. Wallee.
York Factory, B. A.	30.31	769.9	30.38	771.6	—13.0	—25.0	74	sw.	16	7.2		0	0			0	0	clear	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Shang-Hai, China	30.36	771.1	53	11.7		ne.			2		5	ne.						d. clouds.
H. M. S. Amethyst, Colonia, Uruguay†	30.28	769.1	62.5	16.9	72	calm			0		2	se.						d. clouds.
H. M. S. Audacious, N. 12° 32′, E. 48° 18′	30.06	763.5	81	27.2	87	e.			2		2	e.				2	e.	d. clouds.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	30.08	764.0	76	24.4	60	nne.			2		3	nnw.				2	nne.	d. clouds.
H. M. S. Carysfort, N. 29° 56′, E 32° 33′	30.09	764.3	74.5	23.6	68	nnw.			2		2	nnw.						d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	30.43	772.9	31	— 0.6	89	nne.			1		10							overcast
H. M. S. Crocodile, N. 18°20′, E. 70° 20′	29.96	761 0	81	27.2	66	ene.			3		3	nne.						d. clouds.
H. M. S. Curacoa, Kobe, Japan	30.09	764.3	56.5	13.6	74	calm			0		0							blue sky.
H. M. S. Diamond, S. 28° 59′, E. 167° 42′ *†	29.98	761.5	65	18.3	89	se.			5		2					2	se.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I	29.69	754.1	66	18.9	76	calm			0		0							d. clouds.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.87	758.7	77	25.0	88	s.			3		3	nne.						d. clouds.
H. M. S. Flamingo, Port of Spain, Trinidad, W. I	29.85	758.2	80	26.7	95	ne.			1		3	ne.						misty.
H. M. S. Flying Fish, N. 32° 44′ E.129° 52′	30.22	767.6	58	14.4	81	calm			0		6					2	ssw.	blue sky.
H. M. S. Gannet, S. 22° 06′, W. 70° 13′	29.94	760.5	62	16.7	83	sse.			1		0					2	n.	blue sky.
H. M. S. Griffon, N. 23° 01′ W. 66° 16′	29.88	758 9	72	22.2	75	w.			3		1	w.				7	ne.	raining.
H. M. S. Iron Duke, N. 23° 27′ E. 118° 33′	30.16	766.1	68	20.0	94	nne.			6–7		10	ne.				1	nw.	d. clouds.
H. M. S. Kingfisher, N. 22° 09′ W. 111° 36′	29.99	761.7	67	19.4		nw.			1		2	nw.				2	ne	d. clouds.
H. M. S. Lark. S. 9° 59′, E. 161° 26′	29.95	760.7	79.3	26.3	88	nne.			2		9							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.90	759.4	60	15.6		n.			1		10							blue sky.
H. M. S. Magpie, N. 34° 43′, E. 128° 36′	30.24	768.1	56	13.3	64	n.			2		0							misty.
H. M. S. Northampton, Halifax, Nova Scotia	29.94	760.5	37	2.8	80	nnw.			1		1							d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.89	759.2	64	17.8	89	calm			0									d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.84	757.9	80	26.7	89	nw.			1		4							drizzling.
H. M. S. Rocket, S. 5° 05′, W. 81° 10′	29.97	761.2	70	21.1	95	s.			1		2							d. clouds.
H. M. S. Sappho, S. 43° 30′, W. 135° 00′	29.77	756.1	51.2	10.7	86	nne.			4–5		9	nne.				4	sw.	d. clouds.
H. M. S. Superb N. 39° 37′, E. 19° 56′ *	29.91	759.7	69	20.6	75	wsw.			3–4		4	ssw.				3	wsw.	misty.
H. M. S. Sylvia, Port Tamar, Patagonia	29.46	748.3	47.0	8.3	82	wnw.			3–5		10							blue sky.
H. M. S. Tourmaline, Aden, Arabia	30.01	762.2				e.			2		1	e.						d. clouds.
H. M. S. Woodlark, N. 26° 39′, E. 50° 42′	30.16	766.1	71.5	21.9	67	sse.			2–3		6	sw.				1	sse.	overcast.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.31	769.9	37	2.8	100	calm			0		10							
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.03	762.7	81.5	27.5	80						5		ne.			2	sw.	d. clouds.
Tamega, Macao, China	30.15	765.8	77.0	25.0	72	nnw.			2		9							d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.08	764.0	5"	13.9	52	ne.	10	4.5			2		ne.	0	0			fair.
Navy Yard, Portsmouth, N. H	30.20	767.1	35	1.7	80	nw.	7	3.1			2		nw.	0	0			fair.
Naval Hospital, Yokohama, Japan*	30.04	763.0	48.5	9.2	85	n.			1		8		w.	sli't	sli't			clearing.
Adams, Sitka, Alaska *†	29.54	750.3	45	7.2	84	ene.			3		10		sse.					light rain.
Alaska, Honolulu, Sandwich Islands	30.05	763 3	74	23.3	76	nne.			2		2			0	0	sm'h		fair.
Alliance, Hampton Roads, Va*†	30.33	770.4	46	7.8	92	nnw			1–2		2			0	0			clear.
Ashuelot, Kobe, Japan	30.24	768.1	56	13.3	74	calm			0		2		calm					clear.
Brooklyn, Keel Point, Patagonia	29.60	751.8	55	12.8	87	wsw.	3	1.3			10		calm	0	0	sm'h		cloudy.
Colorado, New York, N. Y	30.42	772.7	39	3.9	71	w.	3	1.3			5		calm	0	0			fair.
Enterprise, Norfolk, Va	30.40	772.1	40	4.4	100	nw.			1		2		calm					clear.
Essex, Callao, Peru	29.94	760.5	63	17.2	94	ene.			1		10		ne.			sm'h	se.	cloudy.
Franklin, Norfolk, Va	30.39	771.9	41	5.0	91	nne.	0.2	0.1			0			0	0			clear.
Galena, Montevideo, Uruguay	30.16	766.1	60	15.6	76	ssw.			1		2		sw.			sm'h		clear.
Hartford, S 41° 20′, W. 59° 45′ *	29.93	760.2	54	12.2	86	nnw.			5		5?		w.	0	0	sm'h	sw.	clear. ?
Independence, Mare Island, Cal	30.07	763.8	52	11.1	53	nnw.			6		0							clear.
Iroquois, Callao, Peru	29.98	761.5	63	17.2	88	ene.			1		10							overcast.
Jamestown, Newport, R. I	30.22	767.6	41	5.0	91	nw.			1		2					sm'h		clear.
Kearsarge, Norfolk, Va	30.36	771.1	45	7.2	84	nw.			2									clear.
Lackawanna, Valpariso, Chili*	29.94	760.5	58	14.4	81	ne.			1		8		se.					cloudy.
Lancaster, Valetta, Malta*	29.94	760.5	69	20.6	60	nnw.			3		0					sm'h		clear.
Michigan, Erie, Pa	30.20	767.1	48	8.9	56	sw.			3		10		w.					cloudy.
Minnesota, New York, N. Y	30.37	771.4	45	7.2	76	sw.	4	1.8			2							foggy.
Monocacy, Yokohama, Japan*	29.96	761.0	52	11.1	93	nnw.			2		5		n.					fair.
New Hampshire, Newport, R. I	30.28	769.1	44	6.7	67	wnw.			2		0					sm'h		clear.
Nipsic, Palermo, Sicily*	29.96	761.0	68	20.0	38	wnw.			4		2		nw.			sm'h		clear.
Onward, Callao, Peru	30.09	764.3	62	16.7	94	ne.			2		10		n.			long	w.	cloudy.
Palos, N. 37° 53′, E. 121° 00′ *	30.32	770.1	46	7.8	76	wsw.			3		2		calm			sm'h		fair.
Pensacola, Callao, Peru*	29.90	759.4	62	16.7	88	ene.	4	1.8			10		sse.	0	0	sm'h		misty.
Powhatan, Boston, Mass	30.22	767.6	32	0.0	89	wnw.			1		2							hazy.
Quinnebaug, Valetta, Malta*	29.96	761.0	68	20.0	60	nw.			3		0					sm'h		clear.
Ranger, Acapulco, Mexico	29.96	761.0	76	24.4	81	calm			0		8					sm'h		fair.
Richmond, Yokohama, Japan*	30.11	764.8	51	10.6	86	nw.			2		8		nw.	0.1	3.			cloudy.
Saratoga, Key West, Florida	30.08	764.0	70	21.1	75	ne.			3		2		ne.	0	0	sm'h		clear.
St. Louis, League Island, Pa	30.56	776.2	38	3.3	71	wnw.			1		5							cloudy.
Swatara, N. 15° 18′ W. 45° 09′ *	29.81	757.2	77	25.0	77	ene.			3		8		e.			sm'h		fair.
Tennessee, Hampton Roads, Va	30.34	770.6	45	7.2	84	n.	8	3.6			2			0	0			fair.
Vandalia, Hampton Roads, Va*	30.32	770.1	44	6.7	92	nnw.			3		0							clear.
Wabash, Boston, Mass	30.23	767.8	34	1.1	69	w.	5	2.2			2		w.	0	0			fair.
Wachusetts, Mare Island, Cal†	30.05	763.3	53	11.7	100	n.	5	2.2			0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.37	771.4	59	15.0	87	sw.			1		2		calm					fair.
Yantic, Norfolk, Va	30.36	771.1	42	5.6	91	nnw.			1		0							clear.
Merchant Marine.																		
S. S. Circassian, N. 55° 41′, W. 36° 14′*	29.86	758.4	44	6.7	76	wnw.			5		10		w.	20 h'r	20h'r	3	wsw.	snowing.
S. S. Grecian, Buenos Ayres, Argentine Rep.*	30.13	765.3	71	21.7	71	var.			1		1		ne.	0	0	sm'h		clear.
S. S. Polynesian, Liverpool, Eng	29.51	749 5	44	6.7		nne.			2		10		ene.	sleet	sleet			overcast
S. S. Scandinavian, N. 55° 05′ W. 8° 56′	29.72	754.9	47	8.3		nne.			5		2		nne.	sh'rs	sh'rs	high	wnw.	showery
S. S. British Crown, N. 42° 04′, W. 47° 53′			65	18.3		ese.			4		10		se.	0	0	mod	se.	overcast
S. S. Indiana, N. 39° 27′, W. 70° 57 †	30.14	765.5	49	9.4	85	n.			3		2		n.			mod.	n	fine.
S. S. Lord Clive, Liverpool, Eng*†	29.60	751.8				ne.			2		4		ne.	3 h'r	3 h'r			fine.
S. S. Lord Gough, Philadelphia, Pa	30.38	771.6	42	5.6		w.			2		2			0	0			clear.
S. S. Ohio, N. 52° 45′, W. 4° 47′	29.49	749 0	46	7.8	92	nne.			5		9		nne.			mod.	n.	squally.
S. S. Pennsylvania, off Galley Head, Ireland†	29.66	753.4	45	7.2		nne.			6		4		nw.			sm'h	w.	fair.
S. S. Jason, N. 43° 33′. W. 50° 08′*	30.15	765.7				nw.			4	5 ck	4					4	nw.	cloudy.?
S. S. Stella, N. 46° 58′ W. 46° 37′	29.94	760.5	46.4	8		nne.			2		0		nw.			2	sw.	d. clouds
S. S. Bolivia, N. 40° 29′, W. 67° 30′			58	14.4	85	wnw.			3		1		wnw.	0	0	sm'h		fine.
S. S. Devonia, N. 50° 00′, W. 39° 50′†	29.86	758.4	55	12.8		s.			4		10		ssw.			short	ssw.	heavy rain
S. S. Dorian, N. 42° 41, W. 60° 00′*	29.94	760.5	46	7.8		nw.			3		5		nw.	0	0	sli't	w.	fine.
S. S. Galatia, Calcutta, India†	29.99	761.7	77	25.0		n.			1		2		n.	0	0			fair.
S. S. Utopia, N. 33° 07′ E. 28° 13′			71	21.7	85	w.			1		5		w.	0	0	sm'h		fair.
S. S. Ailsa, N. 21° 19′, W. 74° 08′†	30.09	764.3	78	25.6	65	nne.			5		2		nne.	2 h'r	2 h'r	r'gh	ne.	fair.
S. S. Alpin, Maracaribo, Venezuela	29.92	760.0				ne.			2				ne.	0	0			
S. S. Alvo, N. 36° 30′, W. 74° 05′†	30.36	771.1	58	14.4		var.			2	4 ck	0			0	0	sli't	n.	fine.
S. S. Antillas, Aguadilla, Porto Rico, W. I			75	23.9		n.			2		5?		n.	sh'rs	shr's	mod.	n.	cloudy.?
S. S. Ambrose, N. 14° 28′, W. 57° 35′†	30.02	762.5				e.			2		6		e.	8 h'r	8 h'r	2	e.	fine.
British Merchant, N. 9° 23′, W. 120° 00′	29.88	758.9	78	25.6	91	w.			1		7							showery.
Bk. Coppename, N 43° 10′, W. 14° 22′	30.26	768.6	58	14.4	79	nnw.			4		8							d. clouds.
Dynomene, N. 6° 58′ E. 90° 15′	29.87	758.7	82.5	28.1		ne.			3		5							d. clouds.
S. S. Gordon Castle, N. 24° 14′, E. 118° 06′	30.19	766.8	74 5	23.6	68	ne.			6		5					high		d. clouds.
May Hulse, S. 7° 54, W. 29° 43′	29.90	759.4	82	27.8	82	e.			3		4							d. clouds.
Markland, N. 45° 28′ W. 25° 44′	30.42	772.1	57.5	14.2	100	wnw.			3							5	nnw.	foggy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Olympus, N. 30° 37′, E. 32° 18′					41	n.			3		0							blue sky
Mertola, N. 36° 53′, W. 7° 50′	30.21	767.3	64.2	17.9	78	wsw.			1		4							d clouds.
S. S. Mexico, N. 27° 16′ W 110° 48′†	30.02	762.5	66.6	19.2	87	ene.			3		0					sm'h		clear.
S. S. Marathon, Smyrna, Turkey	30.08	764.0	64	17.8		ssw.			5		3		sw.	1 h'r	1 h'r	mod.	sw.	squally.
S. S. Parthia, N. 42° 55′, W. 51° 06′*†	29.90	759.4	48	8.9		w.			6		6?		wnw.	14 h'r	14 h'r	sli't	nnw.	overcast?
S. S. Pavonia, off Liverpool, Eng*	29.44	747.8	46	7.8	77	ne.			5		10		ne.	3 h'r	3 h'r	sli't	nne.	cloudy.
S. S. Scythia, N. 40° 40′, W. 67° 41′	30.19	766.8	49	9.4	85	nne.			1		0			0	0	sm'h		clear.
S. S. Colina, N. 42° 58′, W. 48° 16′†	29.82	757.4				ene.			2		10			1 h'r	1 h'r	long	ese.	foggy.
S. S. France, N. 49° 07′, W. 28° 00′			57.2	14		w.			3		ck		w.			sm'h	nw.	hazy.
S. S. Labradore, New York, N. Y *†	30.47	774.0	53.6	12		w.			3		3		w.	0	0	sm'h		clear.
S. S. Abyssinia, N. 50° 30′, W. 26° 15′ *	30.10	764.5	58	14.4	88	wsw.			4		10		w.	0	0	mod.	var.	dense fog.
S. S. Wisconsin, N. 42° 35′ W. 61° 15′	30.01	762.2	46	7.8		n.			3		1		ne.	0	0	sm'h		clear.
S. S. Wyoming, N. 49° 35′, W. 38° 04′*	29.87	758.7	55	12.8		ssw.			7		9		w.	0	0	h'vy	wsw.	threatening.
S. S. Bohemia, Hamburg, Germany†	29.52	749.8				se.			3		2		se.	0	0			foggy.
S. S. Frisia, N. 47° 42′, W. 31° 40′	30.28	769.1	59	15.0		sw.			5		7		wsw.	0	0	sm'h	ssw.	fair.
S. S. Gellert, Plymouth, Eng	29.43	747.5	42	5.6		nw.			7		9		n.	5 h'r	5 h'r			covered.
S. S. Silesia, N. 42° 55′ W. 60° —′†	30.15	765.8	46.3	7.9		wnw.			3		6		w.	0	0	3	wnw.	fair.
S. S. Vandalia, N. 49° 00′, W. 22° 52′	30.32	770.1	56.7	13.7		w.			6		10		w.	0	0	mod.	w.	cloudy.
S. S. Mentmore, N. 48° —′ W 38° —′ *	30.10	764.5				wsw.			6		8		sw.	2 h'r	2 h'r	high	sw.	cloudy.
S. S. Archimedes, N. 46° 50′, W. 37° 07′	30.00	762.0				ssw.			5		4		ssw.	0	0	mod.	s.	light haze.
S. S. Hevelius, S. 27° —′, W. 45° —′ *†	30.04	763.0	70	21.1		s.			7		10?		sse.	6 h'r	6 h'r	long	sse.	clear.
S. S. Ptolmy, N. 7° —′, W. 45° 30′	29.91	759.7	79.2	26.2	95	w.			2		10					3	se.	raining.
S. S. Bulgarian, N. 51° 44′, W. 7° 47′ *	29.64	752.8				w.			7		1		w.	9 h'r	9 h'r			
S. S. City of San Antonio, Havana, Cuba, W. I.†	30.14	765.5	72	22.2		calm			0		8		ne.	0	0			cloudy.
S. S. Colorado, New York, N. Y†	30.35	770.9	36	2.2		sw.			1		1		sw.	0	0			clear.
S. S. Rio Grande, N. 35° 05′, W. 74° 40′†	30.25	768.3	68	20.0		nne.			4		10		n.	0	0	sli't	n.	overcast.
S. S. San Marcos, Galveston, Texas	30.10	764.5	73	22.8		sse.			5				se.					
S. S. Archimede, Palermo, Sicily *†	30.00	762.0	66	18.9	64	w.			4		2		w.	0	0			fair.
S. S. Hermod, N. 41° 40′, W. 65° 30′†	30.18	766.6	59.0	15		n.			2		4		w.	0	0	sm'h		clear.
S. S. Glenapp, S. 16° 00′, W. 38° 00′†	29.95	760.7	78	25.6		var.			1		7 k		var.	0	0	sm'h		cloudy.
S. S. Chalmette, New York, N. Y†	30.24	768.1	41	5.0		wsw.			2		1		nw.	0	0			clear.
S. S. New York, N. 38° 00′, W. 74° 30′			48.0	8.9		nnw.			3		0			0	0	sm'h		clear.
S. S. Denmark, N. 47° 00′, W. 32° 11′	30.30	769.6	60	15.0		sw.			5		10		sw.	0	0	sli't	wsw.	cloudy.
S. S. Egypt, N. 51° 35′, W. 8° 37′*†	29.67	753.6				nnw.			6		5		nnw.	2 h'r	2 h'r	mod.	nw.	squally.
S. S. England, N. 50° 54′ W. 13° 28′	29.96	761.0				nw.			6		2		nw.	0	0	h'vy	nw.	clear.
S. S. Erin, N. 43° 38′ W. 47° 10′	29.95	760.7	50	10.0		ne.			4		10		w.	22 h'r	22 h'r	sm'h	sw.	raining.
S. S. Greece, N. 42° 37′, W. 60° 27′	29.97	761.2				nw.			4		8		nw.	0	0	sm'h	nw.	fine.
S. S. Helvetia, N. 44° 18′ W. 53° 20′	30.01	762.2	45	7.2		n.			1		2		n.	6 h'r	6 h'r	light	nw.	clear.
S. S. The Queen, N. 40° 21′ W. 69° 00′ *†	30.20	767.1	44	6.7		nne.			4		5		calm	0	0	sm'h		fine.
S. S. Santiago, Cienfuegos W. I.	30.15	765.8	74	23.3	90	nne.			3		0			0	0			fine.
S. S. City of Alexandria, New York, N. Y †	30.34	770.6	37	2.8		nw.			3									
S. S. City of Merida, N. 23° 09′, W. 82° 22′*†	30.02	762.5	73.4	23		ne.			3		10		ne.	1 h'r	1 h'r	cross	ne.	squally.
S. S. Knickerbocker, N. 27° 10′, W. 86° 57′ *†	30.16	766.1	66	18.9		ese.			6								ssw	overcast.
S. S. Leerdam, N. 50° 00′. W. 17° 04′ *	30.04	763.0	57.8	14.3		nw.			6							r'gh		squally.
S. S. Donau, N. 49° 52′, W. 13° 10′	30.03	762.7				nw.			6–8		8		nw.	8 h'r	8 h'r	light	nw.	squally.
S. S. Elbe, N. 49° 45′, W. 12° 09′	29.95	760.8	50.9	10.5	100	nnw.			6		8		nnw	2 h'r	2 h'r	high	nw.	cloudy.
S. S. Oder, N. 43° 19′, W. 58° 05′	30.07	763.8	45.0	7.2		nnw.			1–2		6		wsw.			mod.	e.	fair.
S. S. Ohio, Galveston Roads, Texas	30.14	765.5				se.			4		9		se.	0	0	mod.	se.	cloudy.
S. S. Salier, N. 49° 41′ W. 4° 38′	29.47	748 5	43.7	6.5		wnw.			9		10		wnw.	7 h'r	7 h'r	h'vy	wnw.	cloudy.
S. S. Werra, N. 44° 13′, W. 53° 27′ *	30.08	764.0	44.6	7.0		nnw.			4		8		nnw.	rain	rain	mod.	n.	raining.
S. S. Belgic, Hong Kong, China†	30.20	767.1	76	24 4	73	e.			2		7		e.	0	0			cloudy.
S. S. Oceanic N. 38° 00′, W. 147° 45′ *	30.08	764.0	60	15.6	91	nnw.			6		8		nw.			mod.	nw.	cloudy.
S. S. City of Augusta, N. 33° 21′, W. 78° 52′†	30.36	771.1				ene.			4		6?		ne.	0	0	sm'h		clear.?
S. S. Columbia, Astoria, Oregon†	30.37	771.4	42	5.6	83	nne.			3		0							clear.
S. S. Oregon, Portland, Oregon †	30.35	770.9	33	0.6	70	calm			0									fog.?
S. S. Ancon, N. 35° 29′ W. 121° 09′†	29.98	761.5	55	12.8	74	ese.			4		0					sm'h		clear.
S. S. Dakota, New Tacoma, Wash. Ter†	29.83	757.7	41	5.0	91	calm			0		2		nw.	0	0	sm'h		clear.
S. S. Orizabu, N. 36° 20′ W. 121° 53′†	29.86	758.4	56	13.3	75	ne.			6		0					long	wnw.	clear.
S. S. Australia, Sydney, N. S. W	30.28	769.1	70	21.1	85	ne.			3		5?			0	0			clear.?
S. S. City of New York, S. 33° 55′, E. 160° 03′ †	30.23	767.8	65	18.3	73	nnw.			4		8		w.	0	0	sm'h		threatening.
S. S. City of Pekin, N. 28° 16′, E. 125° 35′†	30.43	772.9	69	20.6	90	nne.			4		5		n.	0	0	mod.	n.	fair.
S. S. City of Sydney, N. 3° 39′, W. 164° 35′†	29.91	759.7	78	25.6	86	se.			2		8		ne.	0	0	mod.	ne.	cloudy.
S. S. Colima, N. 33° 02′, W. 119° 33′†	29.99	761.7	57	13.9	75	n.			2		10		w.	0	0	h'vy	w.	misty.
S. S. Grenada, San José, Guatemala †	29.92	760.0	79	26.1	86	ne.			2		0			0	0	sm'h	sse.	clear.
S. S. San José, N. 13° 35′. W. 90° 48′ *†	30.07	763 8				n.			3		0			0	0	light	ne.	
S. S. Bermuda, Castries, W. I†	29.98	761.5	81	27.2		ne.			1		7		ne.	3 h'r	3 h'r	gentle	ne.	squally.
S. S. Muriel, New York Bay, N. Y.	30.31	769.9	56	13.3		nw.			2		10			0	0	sm'h		fair.
S. S. Caracas, N. 17° 27′, W. 67° 46′†	30.02	762.5	81.3	27.4	78	n			3		8		nne.	½h'r	½h'r		nne.	fair.
S. S. Valencia, N. 33° 04′, W. 71° 46′ †	30.20	767.1	67	19.4	69	nne.			6		6		n.	2 h'r	2 h'r	h'vy	nne.	fine.
S. S. Belgenland, N. 45° 31′, W. 45° 46′ †	30.09	764.3	57	13.9	94	calm			0		10		w.	sqll's	sqll's	mod	s.	cloudy.
S. S. Nederland, N. 49° 38′, W. 26° 06′ †	30.33	770.4	55	12.8		w.			4		10			0	0	mod.	wnw.	covered.
S. S. Pennland, Antwerp, Belgium	29.23	742.4	43	6.1	92	ssw.			4		10		sw.	6 h'r	6 h'r			overcast.
S. S. Rhynland, N. 40° 35′, W. 70° 30′	30.27	768.8	51	10.6	65	nnw.			3		0			0	0	sm'h		clear.
S. S. Switzerland, N. 50° 53′, E. 0° 57′†	29.09	738.9				nw.			8		10		n.	9 h'r	9 h'r	r'gh	wsw.	rainy.
S. S. Waesland, Jersey City N. J.	30.32	770.1	41	5.0	82	sw.			3		6		wsw.	0	0			fair.
S. S. Maas, N. 41° 42′, W. 63° 48′	30.19	766.9	57.0	13.9	86	ne.			2		7?		ene.	0	0	2	ene.	overcast ?
S. S. P. Oaland, Rotterdam, Holland	29.15	740.4	30.5	2.5	96	e.			4		10							snowing.
S. S. Schiedam, N. 45° 32′, W. 49° 40′	29.98	761.5	53.2	11.8	90	nnw.			5		7		wnw.	6 h'r	6 h'r	mod.	wsw.	cloudy.
S. S. W. A. Scholten, New York, N. Y.	30.38	771.6	39.2	4.0	95	sw.			1		5		nw.	0	0			
S. S. State of Florida, Glasgow, Scotland	29.60	751.8	47	8.3		e.			4		8			2 h'r	2 h'r			foggy.
S. S. State of Georgia, N. 50° 17′, W 37° 00′†	29.98	761.5	47	8.3		ssw.			6		20			15 h'r	15 h'r	mod.	ssw.	raining.
S. S. State of Nevada, N. 40° 46′, W. 69° 15′†	30.23	767.8	49	9.4		nnw.			0		0			0	0	sm'h		clear.
S. S. Hekla, N. 46° 20′ W. 47° 30′*†	30.04	763.0	45.5	7.5		var.			0–2		10		se.	0	0	mod.	se.	foggy.
S. S. Thingvalla, Christiania, Norway†	30.12	765.0	28.4 —	2.0		ne.			4		3		ne.	0	0			clear.
S. S. Phantyn. N. 39° 39′, W. 59° 23′									5		5		nne.	0	0	mod.	n.	
S. S. Baltic, N. 41° 18′, W. 66° 30′	30.18	766.6	45	7.2	76	n.			4		5		n.	0	0	sm'h		d. clouds.
S. S. Celtic, New York, N. Y †	30.25	768.3	45	7.2	84	n.			2		0			0	0			fine.
S. S. Germanic, N. 44° 52′, W. 42° 05′†	30.23	767.8	66	18.9		s.			4		9		sw.	0	0	mod.	ssw.	d. clouds.
S. S. Lepanto, N. 40° 20′. W. 56° 00′*	30.14	765.5	68	20.0		ne.			6		8		nne.	0	0	light	n.	gloomy.
S. S. Romano, N. 47° 05′, W. 34° 47′	30.19	766.8	58	14.4		sw.			6		10		sw.	0	0	mod.	sw.	fine.
S. S. Salerno, Odessa, Russia			40	4.4		s.			8		10		s.	6 h'r	6 h'r			heavy rain.
S. S. Catherine Whiting, Barnegat, N. J†	30.36	771.1				nw.			1		0			0	0	sm'h		
S. S. Norman, N. 42° 04′, W. 70° 15′	30.25	768.3				nw.			5		0			0	0	sm'h		clear.
S. S. Saxon, N. 40° 58′, W. 71° 10′ *†	30.34	770.6	48	8.9		nw.			5		0							
MISCELLANEOUS.																		
Bk. Adelaid, N. 16° 42′, W. 61° 04′ *†	29.96	761.0	80	26.7		ne.			3		2		ne.	3 h'r	3 h'r	mod.	ne.	clearing.
Bg. Aleira, Maracaybo, Venezuela	29.96	761.0	82	27.8		ene.			2		2		ne.	0	0	sm'h		clear.
S. Annie M., Law, Kobe, Japan*†	30.20	767.1	54	12.2		ne.			1		0			0	0			fine.
Bk. Anna Thormann, S. 13° 08′, E. 104° 04′*	29.98	761.6	77.2	25.1	74	se.			5		7 ks		se.	0	0	r'gh	sse.	fair.
S. S. Antonio Lopez, N. 25° 39′, W. 31° 39′			71	21.7	90	ese.			5		7			5 h'r	5 h'r	cross		squally.
Bk. Aquidneck, N. 0° 59′, W. 33° 43′ *†	30.00	762.0				se.			3				se.			light	se.	clear.
Bk. Aureola, N. 49° 00′, W. 14° 34′ *†	30.30	769 6	59	15.0		nw.			0		8		nw.	0	0	h'vy	nnw.	cloudy.
Bk. Alba, N. 57° 05′, E. 6° 07′ *†	29.86	758.5	37.4	3.0		wsw.			9									snowing.
Bk. Bayonnaise, N. 19° 48′, W. 51° 50′ *†	30.08	764.0				se.			2		6		se.			large	se.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Sch. Bonny Doon, N. 39° 59′ W. 59° 00′*†	30.00	762.0	.....	.....	.....	ne.	.....	.....	6	.....	10	.....	ne.	rain	rain	high	ne.	drizzling.
S. S. Burswell, N. 43° 48′ W. 16° 02′ *†	30.20	767.1	59	15.0	.....	nw.	.....	.....	5	.....	8	.....	nw.	3 h'r	3 h'r	high	nw.	squally.
Bk. Champion, N. 49° 20′, W. 4° 35′†	29.39	746.5	49.0	9.4	.....	nnw.	.....	.....	3	.....	10	.....	nw.	12 h'r	12 h'r	h'vy	nne.	heavy rain.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.25	768.6	57	13.9	75	ne.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear.
Schr.C. R. Flint, Cedar Keys, Fla†	30.24	768.1	54	12.2	.....	ne.	.....	.....	2	.....	1	.....	ne.	0	0	.....	.....	clear.
S. Cornelius, N. 38° 38′, W. 59° 39′ *†	30.08	764.0	65.8	18.8	.....	ne.	.....	.....	5	.....	10	.....	.....	13 h'r	13 h'r	r'gh	ne.	light rain.
Bkt. David Preston, N. 27° 44′ W. 86° 35′	.....	.....	.....	.....	.....	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	
Bk. Don Quixote, Pasoeroen Roads, Java*	29.87	758.7	88	31.1	.....	e.	.....	.....	3	.....	3	.....	e.	0	0	sm'h	.....	fair
Bk. E. D. Bigelow, N. 43° 09′, W. 40° 25′*†	30.10	764.5	.....	.....	.....	s.	.....	.....	0	.....	2	.....	ssw.	0	0	long	ssw.	hazy .
Schr. Edith R. Seward, N. 34° 30′, W. 75° 30′*†	30.30	769.6	60	15.6	.....	nne.	.....	.....	2	.....	6	.....	ne.	0	0	sm'h	nne.	clear.
S. E. J. Spicer, New York, N. Y	30.35	770.9	53	11.7	100	sw.	.....	.....	2	.....	2	.....	wnw	0	0	.....	.....	hazy.
Bk. Eliza Barss, Bermuda, W. I†	29.76	755.9	.....	.....	.....	nne.	.....	.....	6	.....	10	.....	nne.	6 h'r	6 h'r	.....	.....	raining.
S. Enoch Train, N. 18° 41′, W. 58° 21′*†	30.08	764.0	.....	.....	.....	calm	.....	.....	0	.....	8	.....	.....	h'vy	h'vy	light	s.	cloudy.
Bk. Essex, Muscat, Arabia*†	30.12	765.0	85	29.4	.....	nw.	.....	.....	6	.....	.....	.....	nw.	.....	.....	.....	.....	
Schr. F. E. McDonald, N. 37° 15′, W. 75° 36′†	30.39	771.9	.....	.....	.....	n.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	fine.
S. S. Foscolia, S. 11° 07′, W. 35° 33′*†	29.56	750.8	.....	.....	.....	nne.	.....	.....	4	.....	1	.....	ne.	0	0	rg'h	ne.	clear.
Bk. Freya, N. 30° 10′, W. 22° 38′	.....	.....	76	24.4	.....	e.	.....	.....	5	.....	5	.....	ese.	1 h'r	1 h'r	mod.	ese	fair.
Bg. George. N. 41° 30′, W. 66° 15 *†	30.24	768.1	.....	.....	.....	n.	.....	.....	5	.....	2	.....	n.	0	0	sm'h	.....	fair
S. Glendon, S 27° 15′, W. 94° 10′†	29.91	759.7	68	20.0	.....	ssw.	.....	.....	6	.....	4	.....	ssw.	0	0	mod.	s.	fair.
S. Grecian, N. 17° 46′, W. 58° 06′†	29.99	761.7	83	28.3	83	se.	.....	.....	2	.....	5	.....	se.	0	0	mod.	n.	fair.
Bk. Grey Eagle, N. 35° 29′, W. 67° —′*†	30.00	762.0	62	16.7	.....	nne.	.....	.....	6	.....	5	.....	n.	6 h'r	6 h'r	h'vy	n.	fair.
Bk. Gronsvaer, S. 43° 46′, E. 150° 20′†	30.18	766.6	62.5	16.9	96	var.	.....	.....	2	.....	0	.....	.....	0	0	3	sw.	fine.
Bk. Hattie G. McFarland, New York, N. Y †	30.39	771.9	47	8.3	.....	w.	.....	.....	1	.....	3	.....	w.	0	0	.....	.....	
Schr Hattie Weston, Mayaro Bay, Trinidad W. I*†	29.94	760.5	80	26.7	.....	ne.	.....	.....	3	.....	10	.....	ne.	6 h'r	6 h'r	mod.	ene.	raining.
S. Hedwig, N. 30° 34′, W. 72° 03′	30.13	765.4	68.0	20	80	n.	.....	.....	6	.....	7	.....	n.	0	0	5	n.	stormy.
Bk. Heinrich & Tonio, N. 39° 44′, W. 65° 00′*†	30.11	764.8	54	12.2	.....	n.	.....	.....	5	.....	0	.....	.....	0	0	mod.	n.	clear.
Schr. Isabel Alberto. Cedar Keys, Florida†	30.23	767.8	...	.....	.....	nne.	.....	.....	1	.....	0	.....	.....	0	0	. .....	. .....	clear.
S. Ivy, Cork, Ireland†	29.90	759.4	44	6.7	.....	nw.	.....	.....	5	.....	6	.....	nw.	0	0	.....	.....	cloudy.
Schr. James Slater, S. 0° 50′, W. 48° 55′*†	30.10	764.5	82	27.8	.....	ene.	.....	.....	2	.....	2	.....	ene.	c	0	.....	.....	
Schr. Jennie N. Huddell, N. 37° 00′, W. 75° 20′†	30.29	769.4	59	15.0	88	ne.	.....	.....	3	.....	2	.....	se.	0	0	h'vy	ene.	fair.
S. S. John Hopkins, Baltimore, Md	.....	.....	46	7.8	.....	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	.....	overcast.
Schr. John L. Thomas, Vivorilla Cays, C. A *†	30.08	764.0	.....	.....	.....	ne.	.....	.....	2	.....	1	.....	ene.	0	0	.....	.....	clear.
Bg. John Wesley, Cardenas, Cuba, W. I†	30.09	764.3	.....	.....	.....	ene.	.....	.....	2	.....	4	.....	.....	0	0	.....	.....	fair.
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.17	766.3	82	27.8	71	n.	.....	.....	2	.....	3	.....	.....	.....	.....	.....	.....	fair.
Light House Tender, Laurel, N. 26° 30′, W. 80° 00′†	30.16	766.1	73	22.8	.....	nne.	.....	.....	3–4	.....	3	.....	ne.	0	0	mod.	nne.	fair.
Bk. Liberia, N. 10° 12′, W. 24° 13′.*..	29.89	759.2	82	27.8	79	ene.	.....	.....	2	.....	2	.....	ene.	0	0	.....	.....	fine.
Bg. Lilian, Demerara, Brit. Guiana†	29.90	759.4	82	27.8	.....	e.	.....	.....	3	.....	2	.....	.....	0	0	.....	.....	clear.
Bg. L. & W. Armstrong, N. 38° 01′, W. 72° 44′*†	30.30	769.6	.....	.....	.....	nnw.	.....	.....	4	.....	1	.....	nnw.	0	0	sm'h	n.	clear.
S. S. Madrid, N. 33° 26′, W. 43° 42′*†	30.20	767.1	74	23.3	90	se.	.....	.....	5	.....	5	.....	se.	shr's	shr's	sm'h	ene.	showery.
S. S. Malabar, N. 13° 04′, E. 53° 48′*†	30.00	762.0	.....	.....	.....	ne.	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bg. Mary Gibbs, N. 23° 20′, W. 79° 30′*†	30.04	763.0	70	21.1	.....	ne.	.....	.....	5	.....	0	.....	.....	0	0	.....	.....	clear.
Bk. Matilda C. Smith, N. 48° 00′, W. 8° 00′*†	29.70	754.4	.....	.....	.....	nw.	.....	.....	7	.....	7	.....	nw.	.....	.....	r'gh	nw.	squally.
Bg. Mattie B. Russell, N. 30° 00′ W. 78° 30′*†	30.28	769.1	.....	.....	.....	ne.	.....	.....	5	.....	3	.....	ne.	0	0	hv'y	n.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	29.93	760.2	.....	.....	.....	ne.	.....	.....	.....	.....	.....	.....	ne.	4 h'r	4 h'r	long	ne.	fair.
S. M. P. Grace, N. 22° 12′, W. 119° 35′*	29.98	761.5	70	21.1	.....	var.	.....	.....	1	.....	8	.....	e.	0	0	sm'h	n.	fair.
Bg. Myrtle, N. 34° 50′, W. 73° 09′†	30.15	765.8	.....	.....	.....	n	.....	.....	4	.....	10	.....	n.	6 h'r	6 h'r	r'gh	nw.	cloudy.
Bg. O. C. Clary, N. 33° 48′, W. 67° 22′*†	29.94	760.5	66	18.9	89	nne.	.....	.....	6	.....	4	.....	nne.	.....	.....	hv'y	nne.	fair.
S. Orealla, Off Point de Galle, Ceylon, India*	29.89	759.2	.....	.....	.....	nne.	.....	.....	2	.....	9	.....	var.	2 h'r	2 h'r	long	sw.	showery.
Bk. Orpheus, N. 36° 40′, W. 53° 17′	30.00	762.0	72	22.2	.....	ne.	.....	.....	4	.....	7 k	.....	ese.	0	0	mod	ese.	squally.
S Paramita, San Francisco, Cal†	30.10	764.5	52	11.1	.....	n.	.....	.....	1	.....	.....	.....	n.	0	0	.....	.....	foggy.
S. S. Peconic, N. 36° 56′, W. 41° 41′*†	30.10	764.5	70	21.1	.....	se.	.....	.....	4	.....	5?	.....	se.	0	0	mod.	se.	cloudy.*
S. S. Radnorshire, N. 29° 16′, E. 32° 35′*†	30.03	762.7	.....	.....	.....	n.	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	clear.
S. St. Francis, S. 20° 30′, W. 94° 30′†	30.11	764.8	67	19.4	.....	s.	.....	.....	3	.....	8	.....	se.	½ h'r	½ h'r	sm'h	se.	cloudy.
Schr. S. B. Hubbard, N. 35° 42′, W. 74° 05′†	30.41	772.4	55	12.8	.....	n.	.....	.....	7	.....	5	.....	n.	0	0	long	n.	fine.
Bk. Southern Belle, N. 48° 15′, W. 15° 30′*†	30.06	763.5	52	11.1	.....	nw.	.....	.....	6	.....	8	.....	nw.	1 h'r	1 h'r	long	nw.	cloudy.
S. S. Strathleven, N. 37° 19′, E. 10° 06′	30.01	762.3	63.0	17.2	94	sw.	.....	.....	3	.....	3	.....	sw.	.....	.....	2	nw.	d. clouds.
Bg. Teneriffe, N. 38° 25′ W. 73° 00′	30.23	767.8	.....	.....	.....	n.	.....	.....	4	.....	.....	.....	.....	0	0	sm'h	... .	
Bk. Truro, N. 47° 15′, W. 32° 00′ *†	30.27	768.8	.....	.....	.....	ssw.	.....	.....	2–3	.....	10	.....	w.	8 h'r	8 h'r	mod.	n.	hazy.
U. S. F. C. S. S. FishHawk, Washington, D. C†	30.45	773.4	41	5.0	82	sw.	.....	.....	1	.....	3	.....	calm	0	0	.....	.....	clear.
Bk. Usko, N. 37° 09′. W. 73° 15′*†	30.36	771.1	54	12.2	.....	n.	.....	.....	3	.....	2	.....	ne.	0	0	sm'h	nnw.	clear.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.29	769.3	64.4	18	.....	var.	.....	.....	.....	.....	.....	.....	.....	0	0	.....	.....	clear.
Schr. Viola Reppard, N. 36° 53′, W. 74° 30′†	30.22	767.6	60	15.6	.....	nne.	.....	.....	2	.....	1	.....	nne.	0	0	small	nne.	fair.
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762.0	.....	.....	.....	sse.	.....	.....	1	.....	2	.....	sse.	0	0	.....	.....	fine.
Bk. Wandering Jew, S. 16° 37′, W. 35° 07′†	29.85	758.2	81	27.2	.....	nne.	.....	.....	6	.....	5	.....	n.	0	0	long	e.	fair.
Bk. Warden Law S. 39° 38′, W. 77° 58′†	29.96	761.0	.....	.....	.....	calm	.....	.....	0	.....	4	.....	nne.	2 h'r	2 h'r	sm'h	s.	fair.
Bgt. Willie, S. 39° 14′, E. 7° 50′*†	30.35	770.9	56	13.3	.....	wsw.	.....	.....	5	.....	8	.....	sw.	0	0	long	sw.	cloudy.

International Chart I. November 16, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.

W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 17, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.10	764.4	65.8	18.8	68	n.	.....	.....	5	.....	3	.....	.....	0	0	pretty fair...	Malaterre.
Algiers	.....	.....	29.95	760.6	63.0	17.2	54	nnw.	.....	.....	0	.....	0	.....	.....	inap.	inap.	clear.....	Thève.
La Calle	.....	.....	29.82	757.3	55.8	13.2	98	n.	.....	.....	4	.....	5	.....	.....	0.461	11.7	cloudy.....	Fonfréde.
Tunis	.....	.....	29.85	758.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.11	764.7	64.4	18.0	63	nw.	.....	.....	2	.....	3	.....	.....	inap.	inap.	pretty fair...	Pérès.
Tebessa	.....	.....	30.08?	764.0?	62.6	17.0	36	nw.	.....	.....	6	.....	1	.....	.....	0	0	very fair.....	Dognon.
Geriville	.....	.....	.....	.....	59.0	15.0	23	nw.	.....	.....	6	.....	2	.....	.....	0	0	fair.....	Louchamp.
Laghouat	.....	.....	30.19	766.9	69.8	21.0	14	nw.	.....	.....	3	.....	0	.....	.....	0	0	clear.....	Abraham.
Biskra	.....	.....	29.98	761.6	69.8	21.0	37	n.	.....	.....	7	.....	2	.....	.....	0	0	fair.....	Malau.
Australian.																			
Melbourne, Victoria	29.99	761.7	30.08	764.0	59.7	15.4	89	ssw.	2	0.9	.....	.....	1	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	28.83	732.3	29.38	746.3	44.6	7.0	94	ne.	.....	.....	2	.....	10	.....	.....	0.740	18.8	raining.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.75	730.3	29.54	750 3	31.6	— 0.2	92	e	9.0	4.2	.....	.....	10	.....	.....	0.071	1.8	.....	Dr. Wierzbiski.
Eperies	28.71	729.3	29.62	752 4	32.0	0.0	96	calm	.....	.....	0	.....	10	.....	.....	inap.	inap.	.....	Julius Mikolik.
Gratz	28.17	715.4	29.43	747.4	41.4	5.2	94	e.	.....	.....	2	.....	10	.....	.....	0.185	4.7	.....	Andreas Rospini.
Hermannstadt	28.21	716.4	29.63	752.7	52.2	11.2	62	sse.	.....	.....	4	.....	8	.....	.....	0.010	0.4	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.15	714.9	29.52	749.8	34.0	1.1	96	wsw.	.....	.....	1	.....	10	.....	.....	1.059	26.9	snowing.....	The Staff.
Lemberg	28.72	729.5	29.76	755.8	27.7	— 2.4	77	se.	.....	.....	2	.....	10	.....	.....	0.213	5.4	.....	Dr. T. Stanecki.
Pola	29.27	743.5	29.38	746.3	52.0	11.1	72	w.	.....	.....	3	.....	8	.....	.....	0.252	6.4	.....	I. R. Hydrographic Office.
Szathmar	29.06	738.1	29.52	749.8	48.6	9 2	53	se.	.....	.....	3	.....	10	.....	.....	0.189	4.8	.....	Joseph Midlinszay, S. J.
Szegedin	29.14	740 2	29.42	747.3	49.1	9.5	78	s.	.....	.....	3	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.31	744.5	29.41	747.1	47.3	8.6	92	calm	.....	.....	0	.....	10	.....	.....	0.661	16.8	raining.....	Royal Academy.
Vienna	28.76	730.5	29.49	749.1	36.3	2.4	93	calm	.....	.....	0	.....	10	.....	.....	0.594	15.1	rain & snow	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.87	758.7	29.97	761.2	35.1	1.7	72	sw.	6	2.7	.....	.....	3	.....	.....	0.010	0.3	misty.....	W. Boswell
Armagh, Observatory	29.71	754.6	29.96	761.0	35.5	1.9	91	se.	2	0.9	.....	.....	0	.....	.....	.....	.....	misty.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.98	761.5	38.2	3.4	80	ne.	3	1.3	.....	.....	3	.....	.....	.....	.....	misty.....	John Hartnup.
Bolton, Sharples	29.43	747.5	29.98	761.5	38.8	3.8	72	nne.	3	1.3	.....	.....	8	.....	.....	.....	.....	misty.....	Thomas Mackereth.
Bradford, Yorkshire	29.56	750.8	29.95	760.7	38.7	3.7	76	ne.	.....	.....	2	.....	8	.....	.....	0.60	15.2	d. clouds	McLandsborough&Preston
Bridgetown, Barbadoes	29.96	761 0	29.99	761.7	81.0	27.2	82	ne.	.....	.....	2	.....	8	.....	.....	.....	.....	overcast.....	Corpl. J. Surgenor, A. H. C.
Cardington	29.77	756.1	29.89	759.2	40.0	4.4	81	n.	.....	.....	1.0	.....	0	.....	.....	blank	blank	d. clouds....	John McLaren.
Chatham, School M. E	29.77	756.1	29.90	759.4	39.9	4.4	71	nw.	.....	.....	1	.....	5	.....	.....	.....	.....	gloomy.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.79	756.7	30.02	762.5	44.1	6.7	74	n.	.....	.....	1	.....	8	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.70	703.6	29.92	760.0	68.2	20.1	62	se.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.60	751.8	29.84	757.9	86.0	30.0	65	ne.	.....	.....	1	.....	5	.....	.....	.....	.....	d. clouds....	Sergt. John Robinson.
Gibraltar, Mediterranean	30.17	766.3	30.22	767.6	63.0	17.2	88	nw.	.....	.....	4	.....	0	.....	.....	.....	.....	blue sky.....	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.76	755.9	29.97	761.2	30.3	2.4	85	e.	.....	.....	3	.....	fg.	.....	.....	blank	blank	foggy.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.74	755.4	29.91	759.7	40.4	4.7	73	nnw.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Guernsey	29.68	753.9	29.98	761.5	44.0	6.7	66	nnw.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky.....	A. Collenette, F. M. S.
Kew, Observatory	29.90	759.4	29.94	760.5	40.1	4.5	66	nnw.	12	5.4	.....	.....	9	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.69	754.1	29.95	760.7	39.5	4.2	77	ne.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	29.69	754.1	29.76	755.9	70.2	21.2	95	se.	.....	.....	3	.....	7	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.14	765.5	30.19	766.8	74.5	23.6	57	ne.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast.....	C. S. Duncombe.
Oscott, St. Mary's College	29.43	747.5	29.97	761.2	38.5	3.6	67	nne.	.....	.....	3	.....	0	.....	.....	.....	.....	d. clouds....	Warren Middleton.
Oxford, Radcliffe Obs'y	29.72	754.9	29.95	760.7	38.5	3.6	83	nnw.	.....	.....	3	.....	9	.....	.....	.....	.....	misty.....	The Staff.
Plymouth	29.93	760.2	30.01	762.2	39.3	4.1	90	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	misty.....	John Merrifield.
Sandwick Manse, Orkneys	29.78	756.4	29.89	759.2	34.8	1.6	92	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	d. clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.80	756.9	29.80	758.4	65.2	18.4	68	sw.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	29.68	753.9	29.96	761.0	39.3	4.1	87	ne.	.....	.....	1	.....	8	.....	.....	0	0	overcast.....	W. F. Cooper.
Silloth Rectory	29.94	760.5	29.97	761.2	35.0	1.7	75	e.	.....	.....	1	.....	3	.....	.....	0	0	d. clouds....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.98	761.5	38.0	3.3	76	nnw.	1	0.4	.....	.....	10	.....	.....	.....	.....	overcast.....	I. New.
Stratfield Turgiss	29.72	754.9	29.95	760.7	39.7	4.3	77	nw.	.....	.....	1	.....	8	.....	.....	.....	.....	d. clouds....	Rev. O. H. Griffiths, F. M. S.
Truro, Royal Institution	.....	.....	.....	.....	47	8.3	69	nw.	.....	.....	4	.....	6	.....	.....	.....	.....	d. clouds....	W. Newcombe.
Valencia, Observatory	29.88	758.9	29.90	759.4	45.9	7.7	96	se.	30	13.4	.....	.....	10	.....	.....	.....	.....	raining.....	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.28	769.1	30.32	770.1	20	— 3.3	72	nw.	8	3.6	.....	3 cjes	0	w.	.....	0	0	fair.....	H. J. Cundall, C. E.
Chatham, N. B*	30.36	771.1	30.43	772.9	17	— 8.3	87	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	G. A. Blair.
Father Point, Quebec*	30.39	771.9	30.41	772.4	19	— 7.2	76	w.	23.0	10.3	.....	5 cs	0	w.	e.	0	0	fair.....	J. McWilliams.
Fort Garry, Manitoba*	29.47	748.5	30.35	770.9	24	— 4.4	92	s.	13	5.8	.....	10 s	.....	.....	.....	0	0	cloudy.....	James Stewart.
Halifax, N. S*	30.20	767.1	30.34	770 6	30.0	— 1.1	88	n.	6	2.7	.....	8 ck	0	w.	.....	0	0	fair.....	A. Allison.
Kingston, Ontario*	30.04	763 0	30.40	772.1	26	— 3.3	96	ne.	10	4.5	.....	.....	10 n	.....	.....	0.02	0.5	snowing.....	A. P. Knight, M. A.
Montreal, Quebec*	30.24	768.1	30.46	773.7	22	— 5.6	67	ne.	6	2.7	.....	.....	10 ks	.....	w.	0	0	cloudy.....	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.75	755.6	30.49	774.4	23	— 5.0	88	n.	8	3.6	.....	2 k	5 ks	w.	n.	0	0	fair.....	Rev. R. Mosley.
Port Dover, Ontario	29.57	751.1	30.30	769.6	30	— 1.1	100	ne.	12	5.4	.....	.....	10 n	.....	ne.	0.46	11.7	light snow..	H. Morgan.
Port Stanley, Ontario	29.61	752.1	30.28	769.1	32	0.0	92	ne.	11	4.9	.....	.....	10 n	.....	ne.	0.34	8.6	sleeting.....	M. Payne.
Quebec, Quebec*	30.10	764.5	30.45	773.4	19	— 7.2	87	ne.	.....	.....	1	8 k	8 k	ne.	sw.	0	0	.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.99	761.7	30.49	774.4	15	— 9.4	87	n.	4	1.8	.....	0	2 s	.....	.....	0	0	fair.....	W. H. McIntyre.
Saugeen, Ontario*	29.64	752.8	30.40	772.1	28.	— 2.2	96	ne.	11	4.9	.....	.....	10 s	.....	.....	0.40	10.2	cloudy.....	
St. Andrews, N. B	30.31	769.9	30.37	771.4	27.	— 2.8	74	ne.	5	2.2	.....	.....	1c n	.....	.....	0	0	cloudy.....	
Sydney, C. B*	30.21	767.3	30.27	768 8	32	0.0	74	w.	6	2.7	.....	2 c	2 ks	.....	.....	0	0	clear.....	T. C. Hill, C. E
Toronto, Ontario*	29.98	761.5	30.39	771.9	28	— 2.2	92	ne.	12	5.4	.....	.....	10 n	.....	.....	0.15	3.8	light snow...	Magnetic Observatory.
Yarmouth, N. S*	30.24	768.1	30.31	769.9	34	1.1	82	n.	1	0.4	.....	.....	10 k	.....	n.	0	0	cloudy.....	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.88	733.5	30.35	770.9	25.5	— 3.6	94	ne.	.....	.....	2	.....	10 s	.....	.....	0.424	10.8	overcast.....	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	32	0.0	90	w.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.14	765.5	30.17	766.3	65.0	18.3	73	w.	13	5.8	.....	0	6 k	.....	.....	0.374	9.5	hazy.....	John Duthie.
Cape Town, C. G. H. Obs'y	30.24	768.1	30.28	769.1	74.5	23.6	40	s.	11	4.9	.....	1	1	.....	.....	0.110	2.8	.....	The Staff, for D.G.H.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.32	770.1	42.4	5.8	88	w.	1.8	0.8	.....	2 c	0	e.	.....	0.079	2.0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.32	770.2	30.35	770.8	52.5	11.4	95	nnw.	2.7	1 2	.....	.....	10	.....	.....	0.012	0.3	covered.....	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.80	756.9	29.85	758.1	28.9	— 1.7	92	ene.	.....	.....	8	.....	10	.....	.....	.....	.....	snowing.....	Oversergent Fischer.
Fanöe	29.84	758.0	29.87	758.6	30.0	— 1.1	94	ne.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.29	743.9	29.33	745.0	27.7	— 2.4	89	sse.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.39	746.5	29.41	747.0	29.1	— 1.6	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	snowing.....	
Stykkisholm, Iceland	29.32	744.8	29.37	745.9	39.9	4.4	89	se.	.....	.....	6	.....	8	.....	.....	.....	.....	raining.....	A. O. Thorlacius.
Thorshavn	29.83	757.6	29.86	758.5	41.5	5.3	80	se.	18	8	.....	.....	5	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.87	758.7	29.97	761.1	29.7	1.3	76	ene.	.....	.....	6	.....	8	.....	.....	.....	.....	.....	Loerrer Oesterböl.
Jacobshavn	29.32	744.8	29.37	746.0	23 7	— 4.6	.....	e.	.....	.....	2	.....	6	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.40	746.8	29.86	758.5	46.4	8	70	nw.	.....	.....	1	0	8 n	.....	nw.	0.189	4.8	very cloudy.	M. Labroue, Director.
Alençon, Normal School	29.32	744.7	29.87	758.7	42.4	5.8	94	nw.	.....	.....	2	.....	n	.....	ne.	0.197	5.0	.....	M. Nicot, Director.
Arras, Engineer School	29.52	749.8	29.78	756.5	39.0	3.9	83	.....	.....	.....	2	.....	kn;n	.....	.....	inap	inap.	.....	M. Fénéon, Command't.
Avignon, Normal School	29.70	754.4	29.78	756.4	50.4	10.2	64	nw.	.....	.....	2	.....	5	.....	nw.	0.059	1.5	cloudy.....	M. Giraud, Director.
Bar-sur-Seine	29.21	741.9	29.78	756.3	40.5	4.7	86	nnw.	.....	.....	1	.....	10	.....	nnw.	0.480	12.2	covered.....	M. Saillard, Director.
Beauvais, Normal School	29.57	751.0	29.84	758.0	42.3	5.7	73	nnw.	.....	.....	1	.....	10	.....	n.	0.047	1.2	covered.....	M. Frère Eugène Marie.
Besançon, Normal School	28.80	731.6	29.71	754.5	39.0	3.9	87	sw.	.....	.....	1	.....	n	.....	w.	0.728	18.5	.....	M. Gobin, Director.
Bordeaux, Observatory	29.74	755.4	30.01	762.2	47.3	8.5	65	nw.	.....	.....	1	.....	8	.....	.....	0.417	10.6	almost cov'd	M. Rayet, Director.
Bourges, Normal School	29.32	744.7	29.88	758.9	41.0	5	87	nw.	.....	.....	4	.....	n	.....	nw.	0.189	4.8	.....	M. Malet, Director.
Brest, Naval Observatory	29.80	756.9	30.04	763.1	47.1	8.4	86	calm	.....	.....	0	.....	3	.....	.....	0.031	0.8	.....	M. de Kermaree, Dir.
Caen, Normal School	29.82	757.5	29.90	759.4	44.2	6.8	65	w.	.....	.....	1	.....	10	.....	.....	0.24	6.	covered.....	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.37	746.1	29.70	754.4	37.8	3.2	97	w.	.....	.....	4	.....	10	.....	.....	0.079	2.0	covered	M. Jadot, Director.
Charleville, Normal School	29.24	742.6	29.76	755.8	35.1	1.7	82	ne.	.....	.....	1	.....	10	.....	.....	0.205	5.2	light snow...	M. Grimard, Director
Clermont-Ferrand Obs'y	28.48	723.4	29.87	758.6	41.5	5.3	74	nw.	.....	.....	2	.....	10	.....	.....	0.205	5.2	covered.....	M. Allnard, Director.
Cluny, Normal School	28.93	734.9	29.80	756.9	41.7	5.4	78	nw.	.....	.....	2	.....	9	.....	nw.	0.177	4.5	.....	M. de Villemontée, Dir.
Commercy, Normal School	28 86	733.1	29.75	755.6	40.3	4.6	77	wnw.	.....	.....	3	.....	8	wnw.	wnw.	0.429	10.9	very cloudy	Dr. Coulet, Director.
Gap, Normal School	.....	.....	.....	.....	41.7	5.4	37	n.	.....	.....	2	.....	2	.....	nw.	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.60	726.4	29.74	755.4	45.9	7.7	59	nw.	.....	.....	4	.....	5	.....	nw.	0.04	1.	.....	M. Kina, Director.
Grenoble, Normal School	28.98	736.1	29.77	756.1	41.0	5	81	nne.	.....	.....	1	.....	10 kn	.....	n.	0.520	13.2	.....	M. Ablard, Director.
Guéret	28.30	718.9	29.94	760.5	37.0	2.8	89	nw.	.....	.....	4	.....	5	.....	w.	0.236	6.0	cloudy.....	M. Delorme, Dir.
Lamballe, Normal School	29.67	753.5	29.94	760.5	45.3	7.4	80	nw.	.....	.....	2	0	5 k	.....	nw.	0.020	0.5	cloudy.....	M. Ollitrault, Director.
Lescar, Normal School	29.47	748.4	30.04	763.0	47.5	8.6	96	w.	.....	.....	1	0	5 kn	.....	w.	1.575	40.0	cloudy.....	M. Chanvin, Director.
Lorient, Naval Observatory	29.96	760.9	30.06	763.5	51.8	11.0	50	nw.	.....	.....	1	.....	10	nw.	calm	0.079	2 0	covered.....	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.75	730.2	29.83	757.7	42.1	5.6	73	n.	.....	.....	4	.....	5	.....	nnw.	0.063	1.6	cloudy	M. André, Director.
Mans, Normal School	29.62	752 4	29.93	760.2	43.7	6.5	78	w.	.....	.....	1	.....	.....	.....	w.	0.181	4.6	.....	M. Piboen, Director.
Marseille, Observatory	29.46	748.2	29.73	755.1	50.4	10.2	55	wnw.	.....	.....	4.5	.....	8	.....	wnw.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.58	624.4	29 43	747.4	35.2	1.8	67	n.	28.0	12.5	.....	.....	7	nw.	.....	0.169	4.3	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29.68	753.9	29.81	757.2	48.6	9.2	86	w.	.....	.....	3	.....	5	nw.	.....	0	0	cloudy.....	M. Galzin, Director.
Nancy, Normal School	28.82	732.1	29.61	752.2	39.6	4.2	80	nw.	.....	.....	1	.....	kn	.....	nw.	0.386	9.8	.....	M. Hasse, Director
Nantes, Observatory	29.87	758.8	30.04	762.9	46.4	8.0	72	nw.	.....	.....	2	.....	10 n; kn	.....	nw.	0.020	0.5	.....	M. Larocque, Director.
Perpignan, Observatory	29.79	756.7	29.91	759.7	53.6	12.0	46	nw.	28.0	12.5	.....	.....	7	.....	nw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.00	533.5	.....	.....	15.8	— 9.0	.....	nw.	.....	.....	3–4	.....	10	.....	nw.	2.795	71.0	snowy.....	Gen'l de Nansouty, Dir.
Privas, Normal School	28.71	729.1	29.78	756.5	44.6	7	42	s.	.....	.....	1	.....	5	s.	s.	0	0	cloudy.....	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.84	630.8	.....	.....	25.5	— 3.6	100	nw.	.....	.....	6	.....	10	.....	.....	1.642	41.7	snow & fog..	M. Allnard, Director.
Rochefort, Naval Obs'y	29.97	761.2	30.00	762.0	50.0	10.0	76	wnw.	.....	.....	2	.....	2	.....	nnw.	0	0	¼ covered...	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.78	756.5	30.00	762.1	46.8	8.2	67	nw.	.....	.....	1	.....	5	.....	nw.	0.08	2.	cloudy.....	M. Brotier, Director.
Rodez, Normal School	28.09	713.6	29.94	760.4	36.5	2.5	96	n.	.....	.....	3	.....	10	.....	w.	0.240	6.1	covered.....	M. Séger, Director.
Rouen, Normal School	29.83	757.6	29.87	758.8	41.7	5.4	90	nw.	.....	.....	1	.....	.....	nw.	.....	0.484	12.3	.....	M. Mouillot.
Saint Lô	.....	.....	.....	.....	42.8	6	75	nw.	.....	.....	1	.....	.....	.....	n.	0.335	8 5	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.66	753.4	29.83	757.6	42.4	5.8	72	n.	.....	.....	3	.....	8	.....	nnw.	0.067	1.7	.....	M. Renou, Director.
Toulouse, Observatory	29.31	744.4	30.03	762.8	46.6	8.1	69	w.	.....	.....	4	.....	10	nw.	.....	0.291	7.4	covered	M. Baillaud, Director.
Tours	29.54	750.4	29.92	759.9	45.3	7.4	69	wnw.	.....	.....	2	.....	10	.....	nw.	0.122	3.1	covered	M. de Tastes.
Versailles, Observatory	29.34	745.3	29.84	757.8	41.0	5.0	74	n.	.....	.....	2	.....	.....	.....	.....	0.016	0.4	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.08	713.3	29.56	750.8	36.3	2.4	81	calm	.....	.....	0	.....	10	.....	.....	0.228	5.8	.....	Prof. Jnedt.
Bamberg	28.69	728.8	29.52	749.9	37.6	3.1	84	nw.	.....	.....	1	.....	10	.....	.....	0.079	2.0	rain & snow	Prof. Dr. Roh.
Berlin	29 44	747.7	29.62	752.4	27.0	— 2.8	81	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.04	737.5	29.56	750.8	28.2	— 2.1	90	e.	.....	.....	1	.....	10	.....	.....	0.213	5.4	.....	Royal University Obs'y.
Carlsruhe	29.16	740.7	29.60	751.9	38.5	3.6	92	nw.	.....	.....	1	.....	10	nw.	.....	0.331	8.4	raining	Albert Senz.
Cassel	28.84	732.5	29.55	750.6	34.5	1.4	92	n.	.....	.....	2	.....	10	nw.	.....	0.165	4.2	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.26	743.2	29.62	752.4	38.3	3.5	85	nnw.	.....	.....	1	.....	8	.....	.....	0.079	2.0	.....	Physical Society.
Friedrichshafen	28.13?	714.5?	29.59	751.6	39.2	4.0	80	w.	.....	.....	6	.....	10	w.	.....	0.091	2.3	.....	Wilhelm, Chief Tel.
Hamburg	29.64	752.9	29.73	755.2	26.6	— 3.0	91	ne.	.....	.....	3	.....	10	.....	.....	0.110	2.8	snowing	E. Preller.
Kiel	29.73	755.2	29.75	755.6	32.5	0.3	81	e.	.....	.....	3	.....	9	.....	.....	0.008	0.2	snowing.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.18	741.1	29.61	752.2	27.7	— 2.4	89	nne.	.....	.....	2	.....	10	.....	.....	0.051	1.3	.....	H. Leppig, Asst.
Magdeburg	29.43	747.4	29.63	752.5	27.0	— 2.8	87	ne.	.....	.....	1	.....	10	.....	ne.	0.071	1.8	snow & fog..	Weather Observatory.
Memel	29.99	761.7	30.04	762 9	18.7	— 7.4	81	e.	.....	.....	3	0	9 s	.....	.....	.....	.....	.....	Issermann.
Munich	27.70	703.5	29.53	750.0	39.7	4.3	77	calm	.....	.....	0	.....	9	n.	.....	0.217	5.5	.....	Central Station.
Neufahrwasser	29.83	757.7	29.85	758.1	23.7	— 4.6	84	se.	.....	.....	3	.....	10	.....	.....	0.331	8.4	light snow...	A. Lothes.
Neustadt, Palatinate	29.04	737.5	29.56	750.7	39.6	4.2	89	nnw.	.....	.....	3	.....	8	n.	.....	0	0	foggy	Dicknether.
Stuttgart	28.63	727.1	29.54	750.2	37.8	3.2	89	n.	.....	.....	1	.....	10	.....	.....	0.150	3.8	.....	Prof. Dr. Schoder.
Wustrow	29.75	755.6	29.77	756.2	26.8	— 2.9	94	sse.	.....	.....	3	.....	10	.....	.....	0.118	3.0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.52	749.8	29.90	759.4	70.9	21.6	.....	s.	.....	.....	4.0	0	2 k	.....	.....	0.008	0.2	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.02	762.6	30.08	763.9	79.9	26.6	74	wsw.	10.0	4.5	.....	.....	5	ssw.	.....	0	0	d. clouds.....	
Deesa	29.52	749.9	30.00	762.0	82.5	28.0	25	nne.	3.0	1.3	.....	.....	4	sw.	.....	0	0	d. clouds.....	
Bombay	29.93	760.1	29.96	761.1	79.7	26.5	72	nw.	14.0	6.3	.....	.....	0	.....	.....	0	0	blue sky.....	
Poona, Yarrowda	28.09	713.5	29.93	760.3	84.0	28.9	30	ne.	4.0	1.8	.....	.....	2	e.	.....	0	0	d. clouds.....	
Trichinopoly	29.69	754.1	29.97	761.3	78.7	25.9	84	ne.	1.0	0.4	.....	.....	10	.....	.....	0.07	1.8	overcast.....	
Bellary	28.48	723.3	29.97	761.2	73.0	22.8	90	nw.	6.0	2.7	.....	.....	10	.....	.....	0.03	0.8	overcast.....	
Belgaum	27.41	696.3	29.96	761.0	75.8	24.3	63	e.	6.0	2.7	.....	.....	8	e.	n.	0	0	d. clouds.....	
Lahore	29.29	744.0	30.06	763.5	66.4	19.1	57	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Roorkee	29.13	739.8	30.06	763 4	68.8	20.4	56	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	.....	
Agra	29.49	748.9	30.06	763.5	76.0	24.4	31	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Nagpur	28.96	735.6	30.01	762.3	77.2	25.1	41	ne.	4.0	1.8	.....	.....	2	e.	.....	0	0	d. clouds.....	
Jubbulpore	28.69	728.7	30.08	763.9	72.8	22.7	38	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Lucknow	29.67	753.6	30.06	763.4	74.2	23.4	45	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Allahabad	29.73	755.1	30.06	763.4	65.7	18.7	64	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Patna	29.88	758.9	30.07	763.7	70.1	21.2	52	nw.	1.7	0.8	.....	.....	0	.....	.....	0	0	blue sky.....	
Hazaribagh	28.00	711.3	30.08	763.9	65.5	18.6	55	n.	4.7	2.1	.....	.....	0	.....	.....	0	0	blue sky.....	
Cuttack	29.95	760.8	30.04	762.9	72.2	22.3	74	ne.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky.....	
Calcutta, Allpore	30.01	762.2	30.03	762.8	70.2	21.2	68	nnw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Dhubri	29.92	759.8	30.04	762.9	71.9	22.2	73	calm	0.9	0.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Chittagong	29.94	760.3	30.03	762.7	73.1	22.8	75	w.	1.6	0.7	.....	.....	2	.....	.....	0	0	blue sky ...	
Sibsagar	29.72	754.8	30.06	763.6	70.0	21.1	82	ne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Zanzibar, Africa	29.88	759.1	29.91	759.6	82.7	28.2	77	s.	3.5	1.6	.....	.....	7	.....	e.	0.09	2.3	raining.....	
Jeypore	28.59	726.2	30.06	763.5	74.8	23.8	42	e.	2.2	1.0	.....	.....	0	.....	.....	0	0	blue sky.....	
Italian.																			
Udine	28.99	736.4	29.41	747.0	46.4	8.0	75	calm	0	0	.....	.....	10	.....	.....	0.898	22.8	.....	Prof. Giovanni Clodig.
Milan	28.96	735.6	29.49	749.0	45.3	7.4	74	nw.	7.4	3.3	.....	.....	3	nw.	.....	0.094	0.1	.....	Prof. Schiapparelli.
Padua	29.31	744.4	29.42	747.2	47.8	8.8	82	wsw.	7.4	3.3	.....	.....	10	w.	.....	0.406	10.3	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.55	725.1	29.47	748.4	49.5	9.7	33	w.	8.7	3.9	.....	.....	1	nw.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	BAROMETER. Corrected for instrumental error and for temperature		Reduced to sea-level.		Temperature of the air.		Relative humidity.	WIND. Direction.	Velocity.		Force.	CLOUDS. Amount and kind.		Direction.		Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Genoa	29.26	743.2	29.45	748.1	51.8	11.0	33	ne.	3.8	1.7	.....	.....	4	sw.	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.55	699.8	29.50	749.3	42.8	6.0	51	wnw.	...	.....	2	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.15	740.5	29.20	741.7	53.6	12.0	60	ssw.	6.9	3.1	.....	.....	8	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.20	741.6	29.45	748.1	51.4	10.8	61	nw.	.....	.....	6	.....	10	sw.	.....	0.394	10.0	.....	Prof. Costantino Pittier
Leghorn	29.33	744.9	29.41	747.0	56.3	13.5	58	sw.	19.9	8.9	.....	.....	3	.....	.....	0.276	7.0	.....	Prof. P. Monte.
Rome	29.34	745.3	29.52	749.8	53.6	12.0	84	ne.	0.7	0.3	.....	.....	10	.....	.....	0.409	10.4	.....	Prof. P. Tachini.
Lecce	29.35	745.4	29.60	751.8	64.0	17.8	78	sw.	37.4	16.7	.....	.....	10	sw.	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	28.86	733.1	29.75	755.7	60.8	16.0	71	wsw.	5.6	2.5	.....	.....	9	sw.	.....	0.299	7.6	.....	Prof. D. Conti.
Cagliari	29.53	750.1	29.72	755.0	55.8	13.2	54	nw.	.....	.....	4	.....	5	nw.	.....	0.433	11.0	.....	Prof. A. Pacinotti.
Palermo	29.42	747.3	29.67	753.6	68.0	20.0	39	w.	20.6	9.2	.....	.....	10	w.	.....	0.059	1.5	.....	Prof. G. Cacciatore.
Syracuse	29.71	754.6	29.75	755.7	67.6	19.8	63	wsw.	24.2	10.8	.....	.....	10	wsw.	.....	0.118	3.0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.04	737.7	29.57	751.0	53.1	11.7	59	sw.	10.5	4.7	.....	.....	10	sw.	.....	0.244	6.2	.....	Prof. F. Brioschi.
Stelvio	21.57	547.9	.....	.....	17.4	— 8.1	97	e.	.....	.....	2	.....	10	.....	.....	0	0	misty	Prof. P. F. Denza.
Valdobbia	21.60	548.6	.....	.....	19.4	— 7.0	70	e.	.....	.....	6	.....	10	.....	.....	0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.03	762.8	30.06	763.6	43.1	6.2	98	calm	.....	.....	0	.....	10ck;s	.....	W.	0.382	9.7	.....	Hattori.
Awomori	30.01	762.2	30.05	763.3	38.7	3.7	94	sw.	2.9	1.3	.....	.....	10s;ks	.....	.....	0.204	5.2	overcast	K. Ogawa.
Hakodate	30.01	762.3	30.02	762.6	36.0	2.2	80	n.	3.0	1.3	.....	.....	10	.....	.....	0	0	overcast	
Hiroshima	.....	.....	.....	.....	54.8	12.7	88	wsw.	1.8	0.8	.....	.....	10 cks	.....	.....	0	0	cloudy	Y. Miwa.
Kanazawa	29.98	761.4	30.06	764.0	49.0	9.4	77	sw.	2.3	1.0	.....	.....	10	.....	.....	0	0	overcast	S. Endo.
Kioto	29.96	761.0	30.14	765.5	45.7	7.6	92	wnw.	1.7	0.7	.....	2 ck	4 ck	.....	.....	0	0	fair	M. Tojima.
Nagasaki, I. M. Obs'y	30.00	762.1	30.21	767 3	55.0	12.8	80	ne.	0.6	0.3	.....	7 ck	3 s	sw.	.....	0	0	overcast	S. Takehayashi.
Nemuro	29.95	760.7	30.02	762.5	37.0	2.8	92	nw.	6.0	2.7	.....	10	0	.....	.....	0	0	cloudy	
Niigata	30.01	762.2	30.05	763.3	48.2	9.0	74	sw.	2.9	1.2	.....	0	8 ck	.....	W.	0.455	11.6	cloudy	M. Moritta.
Nobiru	30.01	762.3	30.03	762.7	49.5	9.7	70	wsw.	9.6	4.3	.....	.....	10s;ks	.....	wsw.	0	0	covered	H. Midzushima.
Osaka	30.12	765.1	30.14	765.5	50.0	10.0	86	sse.	1.7	0.7	.....	10k;cs	2 ck	w.	w.	0	0	clear	
Supporo	.....	.....	.....	.....	32.0	0.0	89	se.	1.8	0.8	.....	10	.....	.....	.....	inap.	inap	covered	
Tokei Obs'y, Yeddo	30.04	763.1	30.12	765.1	48.1	8.9	94	ese.	3.3	1.4	.....	3ck;cs	0	w.	.....	0	0	fair	The Staff.
Wakayama	30.09	764.2	30.15	765.7	51.6	10.9	80	ene.	3.0	1.3	.....	1	.....	w.	.....	0	0	clear	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.88	758.9	30.07	763.8	78.2	25.7	65	e.	16.0	7.2	.....	2 ck	4 k;ks	ne.	ese.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.74	603.1	29.96	761.1	57.2	14.0	64	e.	inap.	inap.	.....	2 c	0	.....	.....	0	0	foggy	Prof. Vicente Fernandez.
Leon	24.37	619 2	30.16	766.1	50.0	10.0	88	nw.	.....	.....	1	6 c	0	sw.	.....	0	0	cloudy	Prof. M. Leal.
Mazatlan	29.76	755.8	30.02	762.4	70.5	21.4	82	nnw.	0.9	0.4	.....	1 cs	0	w.	.....	0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.19	588.9	30.34	770.6	46.9	8.3	88	calm	0	0	.....	0	0	.....	.....	0	0	fine	The Staff.
Morelia	24.34	618.2	30.30	769.6	50.7	10.4	79	ne.	0.9	0.4	.....	1 c	0	s.	.....	c	0	clear	M. Tena, M. D.
Orizaba	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Pabellon, Aguascallentes	23.97	608.8	30.01	762.2	55.9	13.3	71	e.	.....	.....	2	.....	.....	.....	.....	0	0	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.1	30.35	770.9	43.7	6.5	45	calm	0	0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.78	578.7	30.49	774.5	52.9	11.8	76	se.	4.4	1.9	.....	3	1	se.	.....	0	0	½ cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.77	756.1	29.77	756.1	37.9	3.3	.....	nne.	.....	.....	4	.....	.....	.....	.....	0.374	9.5	.....	
Groningen	29.70	754.3	29.75	755.7	30.9	— 0.6	.....	ne.	.....	.....	2	.....	.....	.....	.....	0.299	7.6	.....	
Helder	29.77	756.1	29.77	756.1	32.9	0.5	.....	ne.	.....	.....	2	.....	.....	.....	.....	0.031	0.8	.....	
Hellevoetsluis	29.74	755.5	29.74	755.5	33.8	1.0	78	ne.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	29.70	754 4	29.75	755.6	30.4	— 0.9	86	nne.	.....	.....	2	.....	10	.....	.....	0.051	1.3	dull	H. van der Brink
NORWEGIAN.																			
Bergen	29.92	760.0	29.98	761.6	32.0	0.0	45	e.	11	5	.....	.....	10	.....	.....	0	0	.....	
Brono	30.15	765.8	30.19	766.8	27.0	— 2.8	66	calm	0	0	.....	.....	8	.....	.....	0	0	.....	
Christiania	29.97	761.3	30.13	765.3	26.2	— 3.2	74	nne.	4	2	.....	.....	7	.....	.....	0	0	.....	
Gjæsvær	30.19	766.7	30.21	767 3	39.7	4.3	.....	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	
Lodingen	30.20	767.0	30.24	768.2	30.9	— 0.6	81	n.	.....	.....	2	.....	3	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.32	770.0	30.47	774.0	62.2	16.8	90	se.	1.8	0.8	.....	.....	5	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.23	742.5	30.24	768.0	61.2	16.2	58	ne.	13.6	6.1	.....	.....	8	.....	.....	0	0	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	30.25	768.4	30.34	770.6	66.7	19.3	56	e.	8.7	3.9	.....	.....	0	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.97	761.3	30.34	770.5	59.9	15.5	71	n.	17.4	7.8	.....	.....	8	.....	.....	0.004	0.1	.....	The Staff.
Ponta Delgada, Azores	30.42	772.6	30.49	774.4	64.8	18.2	69	ne.	3.8	1.7	.....	.....	4	.....	.....	0	0	.....	
Saint Paul de Loando	29.74	755.4	29.94	760.5	71.2	21.8	86	nw.	0.7	0.3	.....	.....	10	.....	.....	c	0	.....	
Serra da Estrella	25.39	644.8	30.26	768.5	37.4	3.0	92	nw.	31.8	14.2	.....	.....	8	.....	.....	2.835	72.0	foggy	
RUSSIAN.																			
Akmolinski	29.34	745.3	30.49	774.5	26.1	— 3.3	94	wsw.	4	2	.....	.....	10 n	.....	.....	0.004	0.1	.....	Major K. Lasarew.
Archangel	29.96	760.9	29.98	761.4	20.5	— 6.4	95	s.	2	1	.....	.....	10	.....	.....	0.079	2.0	.....	Capt. Sselliwerstow.
Astrakhan	30.13	765.2	30.04	763.1	52.0	11.1	79	sse.	9	4	.....	.....	10 s;n	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	30.19	766.8	30.77	781.5	— 6.2	—21.2	83	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	29.83	757.6	30.09	764.2	21.9	— 5.6	100	wsw.	4	2	.....	.....	10 km	.....	.....	0	0	.....	Observatory.
Ekaterinburg	29.20	741.6	30.23	767.9	19.4	— 7.0	86	calm	0	0	.....	.....	10	.....	.....	0.087	2.2	.....	Meteorological Obs'y.
Kasan	29.49	749.1	29.78	756.4	20.3	— 6.5	84	ne.	13	6	.....	.....	10	.....	.....	0.185	4 7	snowing	Observatory.
Kertch	29.88	759.0	29.90	759.5	40.6	8.1	86	calm	0	0	.....	.....	10 n	.....	.....	0.102	2.6	.....	Lagorio & Sastyleff.
Kieff	29.34	745.1	30.02	762.4	19.6	— 6.9	81	n.	4	2	.....	cs	10 ks	.....	.....	.....	.....	.....	Observatory.
Lugan	29.72	754.8	29.93	760.2	34.3	1.3	82	w.	13	6	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	29.93	760.2	30.00	762.0	32.4	0.2	89	ne.	4	2	.....	0	2 ks	.....	.....	0	0	.....	Capt. Kurdakow.
Pekin, China	30.21	767.4	30.35	771 0	45.9	7.7	80	calm	0	0	.....	0	8 n	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	30.01	762.2	30.02	762.6	18.7	— 7.4	97	wsw.	4	2	.....	ck	5 n	.....	.....	0.024	0.6	.....	Central Physical Obs'y.
Semipalatinsk	30.02	762.5	30.76	781.4	4.6	—15.2	81	e.	9	4	.....	.....	0	.....	.....	0	0	.....	Major Lasarew.
Tashkend, Laboratory	28.84	732.4	30.44	773.2	50.9	10.5	69	n.	2	1	.....	.....	1	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.73	729.7	30.15	765.7	57.4	14.1	51	nnw.	2	1	.....	0	7 s	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.40	772.1	30.72	780.4	—11.9	—24.4	88	calm	0	0	.....	0	0	.....	.....	.....	.....	.....	
Vladivostock	30.16	766.0	30.22	767.7	23.2	— 4.9	.....	n.	4	2	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.31	744.5	29.76	755.9	22.6	— 5.2	80	se.	22	10	.....	.....	10	.....	.....	.....	.....	heavy clouds	Astronomical Obs'y.
Wilna	29.60	751.9	30.06	763.5	15.4	— 9.2	88	e.	7	3	.....	.....	8	.....	.....	0	0	.....	Berg, Assistant.
Yeniseisk	30.51	774.9	30.80	782.3	— 4.2	—20.1	89	e.	2	1	.....	.....	0	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.81	757.2	45	7.2	92	s.	.....	.....	7	.....	10	.....	.....	0.2	5.	raining	J. Youngclause
North Unst	.....	.....	29.84	757.9	.....	.....	.....	ne.	.....	.....	6	2	6	se.	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.74	755 4	29.84	758.0	58.6	14.8	47	w.	5.6	2.5	.....	0	0	.....	.....	0	0	.....	Antonio Rzve, Director.
Bilbao, Met. Obs'y	30.10	764.6	30.16	766.1	53.1	11.7	77	nw.	6.3	2.8	.....	2	5	n.	.....	1.362	34.6	cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.17	690.2	30.23	767.8	45.0	7.2	66	w.	3.1	1.4	.....	0	1	.....	.....	0.051	1.3	almost clear	Domingo Martin.
Madrid, Royal Obs'y	27.91	708.9	30.17	766.3	52.9	11.6	49	w.	7.2	3.2	.....	.....	9	.....	.....	0	0	almost cov.	The Staff.
Marcia, Met. Obs'y	29.93	760.3	30.09	764.3	62.2	16.8	59	nw.	5.1	2.3	.....	5	4	se.	.....	0	0	almost cov.	Olayo Diaz, Director.
Oviedo	29.28	743.8	30.16	766.1	48.2	9.0	88	e.	14.3	6.4	.....	.....	10 n	.....	w.	0.059	1.5	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.33	745.0	30.24	768.2	53.8	12.1	69	calm	0	0	.....	.....	10	.....	.....	0.106	2.7	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.92	759.9	29.98	761.4	80.2	26.8	71	ne	2.2	1.0	.....	0	1 ks	.....	.....	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.15	765.9	30.25	768.4	62.2	16.8	62	wnw.	11.7	5.3	.....	2	3	ne.	nw.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.86	758.5	29.95	760.8	77.4	25.2	76	n.	13.4	6.0	.....	5 c	4 k	n.	n.	0	0	d. clouds	Manuel Maese.
Tuguegarao, Philippine Id's	29.90	759.4	30.03	762.7	76.0	24.4	92	nnw.	4.8	2.1	.....	0	0	.....	.....	0	0	clear	José L. Yrastorza.
SWEDISH																			
Haparanda	30.10	764.4	30.13	765.4	22.6	— 5.2	100	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.10	764.5	30.15	765.8	23.7	— 4.6	100	calm	.....	.....	0	.....	10	.....	.....	0.055	1.4	.....	

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	30.06	763.4	30.11	764.7	22.6	— 5.2	80	calm			0		8			0.291	7.4		
Stockholm	29.87	758.7	30.05	763.2	28.0	— 2.2	83	nne.			2		6			0.012	0.3		
Wisby	29.97	761.1	30.02	762.6	29.5	— 1.4	76	ese.			2		7			0.028	0.7		
Sub-series.																			
Upsala	29.97	761.2	30.06	763.4	27.0	— 2.8	100	nnw.	5.8	2.6			9		ene.	0.024	0.6		S. G. Fineman.
Swiss.																			
Geneva	28.33?	719.6?	29.81?	757.1?	37.9	3.3	73	sw.			1		9			0.417	10.6	covered	The Observatory.
Turkish.																			
Constantinople			29.91	759.6	67.6	19.8	57	sw.	15	8.0			3		sw.	0	0		The Observatory.
Valona			29.80	750.8	65.1	18.4		s.			2		10			0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.06	763.4	73.0	22.8	74	calm			0	7 c				0	0		Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.26	768.6	30.34	770.6	38	3.3	71	n.	6	2.7			10 n			0.11	2.8	light snow.	J. O. Barnes.
Alpena, Michigan	29.77	756.1	30.47	773.9	28	— 2.2	77	e.	10	4.5			10 s		e.	0.25	6.3	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.04	636.0	30.14	765.5	33	0.6	100	se.	3	1.3			10 n			0.52	13.2	heavy snow.	W. C. Barnes.
Assinnaboine, Ft., Montana	27.23	691.6	30.21	767.3	37	2.8	64	sw.	28	12.5		0	0			0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.10	739.1	30.32	770.1	50	10.0	58	w.	2	0.9			10 s		w.	0	0	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.26	768.6	30.27	768.8	42	5.6	92	sw.	1	0.4			10 n			0.01	0.3	light rain	Jas. M. Watson.
Augusta, Georgia	30.16	766.1	30.36	771.1	46	7.8	83	calm	0	0			10 s		w.	trap.	trap.	cloudy	John Healy.
Baltimore, Maryland	30.22	767.6	30.27	768.8	47	8.3	77	w.	1	0.4			10s;fg		w.	0.66	1.5	cloudy	Geo W Felger.
Barnegat, New Jersey	30.20	768.6	30.28	769.1	41.0	5.0	92	ne.	9	4.0			10 s			0.04	1.0	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.80	733.0	30.54	775.7	25	— 3.9	86	se.	1	0.4		0	4 s		se.	trap.	trap.	fair	A. Pritchard.
Benton, Fort, Montana	27.32	693.9	30.28	769.1	38	3.3	64	sw.	16	7.2		0	7 ks		sw.	0	0	fair	S. Wheaton.
Bismarck, Dakota	28.52	724.4	30.44	773.2	23	— 5.0	88	s.	8	3.6		0	0			trap.	trap.	clear	Cyrus Cramer
Block Island, Rhode Island	30.25	768.3	30.28	769.1	43	6.1	83	ne.	20	8.9			10 n		ne.	trap.	trap.	light rain	J. T. Elker.
Boise City, Idaho	27.04	702.0	30.58	776.7	20	— 6.7	87	w.	2	0.9		0	0			0	0	clear	B. E. Light.
Boston, Massachusetts	30.10	766.1	30.32	770.1	34.0	1.1	90	nw.	8	3.6			10 n			0.02	0.5	light snow.	O. B. Cole.
Brownsville, Texas	30.13	765.3	30.18	766.6	68.0	20.0	93	se.	4	1.8		0	6 s		s.	0	0	fair	M. McCarty.
Buffalo, New York	29.51	749.5	30.29	769.4	33	0.6	94	ne	10	4.5			10 n		ne.	0.39	9.9	light snow.	W. Finn.
Buford, Fort, Dakota	28.37	720.6	30.35	770.9	23	— 5.0	88	s.	6	2.7		0	0			0	0	clear	F. A. Mellen.
Burlington, Vermont	30.11	764.8	30.42	772.7	27.0	— 2.8	88	n.	11	4.9			10 n		n.	0.02	0.5	light snow.	W. B. Gates.
Cairo, Illinois	29.89	759 2	30.31	769.9	47.7	8.7	95	w.	2	0.9			10 s		w.	0.17	4.3	threatening	W. H. Ray.
Cape Henry, Virginia	30.28	769.1	30.30	769.6	48	8.9	71	s.	7	3.1			10 s			0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.24	768.1	30.27	768.8	58.0	14.4	57	sw.	13	5.8			10 s			0	0	cloudy	W. E. Smith.
Cape Mendocino, California	29.70	754.4	30.22	767.6	50	10.0	52	se.	4	1.8		0	0			0	0	clear	J. J. McLean.
Cedar Keys, Florida	30.25	768.3	30.27	768.8	59	15.0	93	ne.	6	2.7		0	0			0	0	clear	F. W. Mixer.
Champaign, Illinois	29.41	747.0	30.27	768.8	43.0	6.1	93	nw.	11	4.9			10 s		nw.	0.16	4.1	cloudy	L. A. Welsh
Charleston, S. Carolina	30.26	768.6	30.32	770.1	53	11.7	72	ne.	3	1.3		6 c	0	n.		0	0	fair	J. H. Smith.
Charlotte, N. Carolina	29.40	746.7	30.28	769 1	45.0	7.2	65	sw.	1	0.4			10 s		sw:	0	0	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.46	748.3	30.30	769.6	52.0	11.1	69	s.	1	0.4			10s;sk		w.	trap.	trap.	cloudy	B. L. Goulding.
Cheyenne, Wyoming	24.24	615.7	30.45	773.4	12.2	—11.0	70	sw.	2	0.9		0	0			0.01	0.3	clear	E. McGovern.
Chicago, Illinois	29.53	750.0	30.27	768.8	43.2	6.2	83	ne.	12	5.4			10 s		ne.	0 31	7.9	cloudy	J. Mitchell.
Chincoteague, Virginia	30.20	768.6	30.28	769.1	46	7.8	83	s.	4	1.8			10 ks			0	0	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.58	751.3	30.27	768.8	48.5	9.2	89	w.	5	2.2			10 n		w.	0.06	1.5	light rain	R. B. Watkins.
Cleveland, Ohio	29.49	749.0	30.26	768.6	37.3	2.9	94	s.	4	1.8			10 n			0.21	5.3	light rain	J. B. Newlin.
Coleman City, Texas	28.50	723.9	30.38	771.6	39	3.9	82	n.	20	8.9			10 s		n.	0	0	cloudy	L. Dorman.
Columbus, Ohio	29.34	745.2	30.23	767.8	45	7.2	83	se.	3	1.3			10 n			0.09	2.3	light rain	D. Cuthbertson.
Concho, Fort, Texas	28.44	722.4	30.45	773.4	38.0	3.3	82	n.	16	7.2			10 s			0	0	cloudy	J. McGlone.
Custer, Fort, Montana	27.01	686.0	30.33	770.4	16	— 8.9	83	e.	9	4.0		0	4 s		calm	0	0	fair	W. B. Lamar.
Davenport, Iowa	29.63	752.6	30.32	770.1	39	3.9	82	n.	10	4.5			10 s		n.	0.51	13.0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.40	645.1	30.30	769.6	32	0.0	81	n.	4	1.8			10 s		n.	0	0	cloudy	J. Williams.
Dayton, Washington T'y	26.66	728.0	30.44	773.2	26	— 3.3	92	ne.	3	1.3		0	0			0	0	clear	H. Clifford.
Deadwood, Dakota	25.55	649.0	30.38	771.6	14.5	— 9.7	100	n.	6	2.7		0	0			0.27	6.9	clear	G. W. Scott.
Delaware Breakwater, Del.	30.20	768.6	30.28	769.1	45	7.2	83	s.	8	3.6			10 s			0	0	cloudy	T. S. Townsend.
Denison, Texas	29.58	751.3	30.42	772.7	42.0	5.6	82	n.	7	3.1			10 s			1.20	30.5	cloudy	J. W. Byram.
Denver, Colorado	24.99	634.7	30.49	774.4	21.3	— 5.9	72	se.	3	1.3			10 s			0.04	1.0	cloudy	F. M. Neal.
Des Moines, Iowa	29.48	748.8	30.42	772.7	37	2.8	72	ne	7	3.1			10 s		ne.	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.50	750.8	30.30	769.6	39.0	3.9	82	calm	0	0			10 s			0.37	9.4	threatening	C. F. R. Wappenhans.
Dodge City, Kansas	27.85	707.4	30.59	777.0	30	— 1.1	70	n.	4	1.8		0	0			0.03	0.8	clear	V. P. Temple.
Dubuque, Iowa	29.01	752.1	30.36	771.1	36	2.2	89	n.	9	4.0			10 n			0.40	10.2	light rain	J. Harvey Smith.
Duluth, Minnesota	29.76	755.9	30.55	776.0	33	0.6	78	sw.	4	1.8		0	4 s			0.03	0.8	fair	N. B. Conger.
Eagle Pass, Texas	29.58	751.3	30.41	772.4	48.3	9.1	56	n.	14	6.3			10 s			0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25 58	649.7	30.44	773.2	— 6	—21.1	82	n.	0	2.7		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	30.30	769.6	30.37	771.4	28.0	— 2.2	77	n.	17	7.6			10 s		w.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.03	701.8	30.56	776.2	28	— 2.2	59	n.	8	3.6			10 s		n.	trap.	trap.	cloudy	W. J. Cundall.
El Paso, Texas	26.49	672.8	30.34	770.6	39.0	3.9	73	ne.	8	3.6			10 s		ne.	0	0	cloudy	J. O'Dowd.
Erie, Pennsylvania	29.50	749.3	30.26	768.6	39	3.9	89	s.	2	0.9			10 n			0.26	6.6	light rain	Peter Wood.
Escanaba, Michigan	29.80	756.9	30.50	774.7	25.0	— 3.9	88	ne.	12	5.4		0	0			0.08	2.0	clear	George Heathcote.
Fredericksburg, Texas	28.60	726.4	30.42	772.7	42	5.6	82	n.	12	5.4			10 s		n.	0.10	2.5	cloudy	Frank Hallwegler.
Galveston, Texas	30.18	766.6	30.23	767.8	61	16.1	87	n.	31	13.9			10ks		n.	0.32	8.1	cloudy	E. O'C. Macluerney.
Grand Haven, Michigan	29.64	752.8	30.34	770.6	36.0	2.2	84	ne.	14	6.3			10 n		e.	0.40	10.2	light rain	J. Mueller.
Grant, Fort, Arizona	25.24	641.1	30.08	764.0	42	5.6	70	calm	0	0			10 s		nw.	0	0	cloudy	Robert U. Lord.
Hatteras, North Carolina	30.29	769 4	30.31	769.9	50	10.0	77	n.	0	2.7		6 k	3 s	ne.		0	0	cloudy	R. M. Crawford.
Helena, Montana	26.00	660.4	30.38	771.6	21	— 6.1	84	calm	0	0		0	0			0	0	clear	N. C. Smith.
Henrietta, Texas	29.41	747.0	30.45	773.4	36	2.2	79	n.	16	7.2			10 s		n.	0.07	1.8	cloudy	J. P. Sherry.
Huron, Dakota	29.08	738.6	30.56	776.2	30	— 1.1	88	nw.	5	2.2			10 s			0.03	0.8	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.39	746.5	30.23	767.8	46	7.8	89	w.	1	0.4			10s;fg			0.03	0.8	cloudy	O. Schultze
Indianola, Texas	30.23	767.8	30.29	768.6	54.0	12.2	80	n.	34	15.2		3 c	2 k	w.	n.	0.03	0.8	fair	I. A. Reed.
Jacksboro, Texas	29.24	742.7	30.46	773 7	38	3.3	73	n.	7	3.1			10 s		n.	0.04	1.0	cloudy	D. J. Carr.
Jacksonville, Florida	30.20	768.6	30.31	769.9	57	13.9	89	calm	0	0		4 k	fg.	ne.		0	0	fair	J. W. Smith.
Keogh, Fort, Montana	27.68	703.1	30.34	770.6	21	— 6.1	73	se.	8	3.6		0	4 s			0	0	fair	A. Schneider.
Keokuk, Iowa	29.67	753.6	30.36	771.1	38.5	3.6	84	nw.	3	1.3			10 s		nw.	0.49	12.4	cloudy	F. Z. Gosewisch.
Key West, Florida	30.16	766.1	30.18	766.6	73.0	22.8	71	ne.	13	5.8			9 ks		e.	0	0	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	30.31	769.9	30.33	770.4	47.5	8.6	82	nw.	3	1.3		0	8ks;fg		w.	0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.27	743.4	30.34	770.6	48	8.9	71	s.	3	1.3		0	fg.			0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.61	752.1	30.43	772.9	32	0.0	78	n.	12	5.4			10 s			0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.53	750.0	30.47	773 9	35	1.7	79	n.	10	4.5			10 s		n.	0.55	14.0	cloudy	A. W. Browne.
Lewiston, Idaho	29.05	753.1	30.52	775.2	27.0	— 2.8	88	sw.	1	0.4		0	0			0	0	clear	W. Bell.
Little Rock, Arkansas	29.96	761.0	30.29	769.4	50	10.0	93	nw.	3	1.3			10 s		nw.	0.98	24.9	cloudy	W. U. Simons.
Los Angeles, California	29.82	757.4	30.22	767.6	44	6.7	51	ne.	4	1.8		0	0			0	0	clear	T. S. Collins.
Louisville, Kentucky	29.64	752.8	30.23	767.8	52	11.1	80	sw.	5	2.2			10 s			0.01	0.3	threatening	L. M. Dey.
Lynchburg, Virginia	29.54	750.3	30.26	768.6	45	7.2	80	calm	0	0		0	5 s			0	0	fair	Lewis Dunne.
Mackinaw City, Michigan	29.80	756.9	30.49	774.4	29.0	— 1.7	77	e.	19	8.5		0	3 k		e.	0.32	8.1	clear	F. R. Day.
Macon, Fort, North Carolina	30.32	770.1	30.33	770.4	49	9.4	77	n.	6	2.7		10 c	0			0	0	cloudy	F. P. Chaffee.
Madison, Wisconsin	29.29	744.0	30.36	771.1	35	1.7	89	ne.	18	8.0			10 s		ne.	0.43	10.9	cloudy	C. A. Shaw.
Maginnis, Fort, Montana	25.94	551.2	30.15	765.8	22	— 5.6	73	se.	8	3.6		0	0			0	0	clear	F. Burke.
McKavett, Fort, Texas	28.03	711.9	30.41	772.4	39	3.9	82	n.	16	7.2			10 s			0.18	4.6	cloudy	J. E. Thatcher.
Marquette, Michigan	29.75	755.6	30.52	775 2	24	— 4.4	88	s.	2	0.9			10 s			0.06	1.5	cloudy	J. Gilligan.
Memphis, Tennessee	29.95	760.7	30.30	769.6	49	9.4	100	calm	0	0			10 n			0.56	14.2	light rain	D. T. Flannery.
Milwaukee, Wisconsin	29.56	750.8	30.34	770.6	39	3.9	89	ne.	17	7.6			10 n		ne.	0.52	13.2	light rain	W. Line.
Missoula, Fort, Montana	27.68	687.8	30.49	774.4	16	— 8.9	61	n.	4	1.8		0	0			0	0	clear	J. H. Young.
Mobile, Alabama	30.21	767.3	30.25	768.3	56	13.3	86	ne.	2	0.9		1 cs	1 ks	nw.		0	0	clear	C. A. Read.
Montgomery, Alabama	30.05	763.3	30.29	769.4	48	8.9	86	calm	0	0		8 k;hz	0	w.		0	0	cloudy	J. B. McLaughlin.

STATIONS	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.46	748.3	30.52	775.2	14	—10.0	80	s.	3	1.3		0	0			inap.	inap.	clear	H. Bessant.
Morgantown, W. Virginia	29.24	742.7	30.30	769.6	43.3	6.3	92	calm	0	0			10 s			0.14	3.6	cloudy	J. C. Sprigg, jr
Mt. Washington, N. H.	23.81	604.8	30.37	771.4	16.0	— 8.9	70	se.	7	3.1			10n;fg		se.	0.08	2.0	light snow	J. G. Linsley.
Nashville, Tennessee	29.68	753.9	30.28	769.1	49.0	9.4	86	calm	0	0			10 n		sw.	0.06	1.5	light rain	L. N. Jesunofsky.
New Haven, Connecticut	30.18	766.6	30.30	769.6	36	2.2	89	ne.	8	3.6			10 n		ne.	0.03	0.8	light rain	J. H. Sherman.
New London, Connecticut	30.27	768.8	30.32	770.1	38	3.3	89	ne.	6	2.7			10 n			0.03	0.8	light rain	J. G. Lynch.
New Orleans, Louisiana	30.17	766.3	30.23	767.8	60.5	15.8	82	se.	4	1.8		6 c	0	w.		0	0	fair	L. Dunne.
Newport, Rhode Island	30.25	768.3	30.30	769.6	38.8	3.8	77	n.	7	3.1			10 n		n.	0.01	0.3	light rain	W. McGillivray.
New York, New York	30.12	765.0	30.30	769.6	42	5.6	92	w.	1	0.4			10n;fg		w.	0.09	2.3	light rain	J. B. Merrill.
Norfolk, Virginia	30.26	768.6	30.29	769.4	47	8.3	86	sw.	3	1.3			10 s			inap.	inap.	cloudy	Wm. Davis.
North Platte, Nebraska	27.50	698.5	30.58	776.7	14.6	— 9.7	68	w.	6	2.7		0	5 s			0	0	fair	E. F. Brady.
Olympia, Washington T'y.	30.27	768.8	30.31	769.9	36.5	2.5	89	s.	1	0.4			10 s			0	0	cloudy	J. Discomb.
Omaha, Nebraska	29.27	743 4	30.51	774.9	35.0	1.7	79	n.	18	8.0			10 s			0	0	cloudy	A. Pollak.
Oswego, New York	29.96	761.0	30.30	769.6	30.5	— 0.8	100	ne.	16	7.2			10 n			0.32	8.1	heavy snow	S. W. Beall.
Palestine, Texas	29.81	757.2	30.38	771.6	45.5	7.5	83	nw.	10	4.5			10 ks		nw.	0.65	16.5	cloudy	L. M. Pindell.
Pensacola, Florida	30.25	768.3	30.28	769.1	54.3	12.4	82	ne.	6	2.7		1 c	6 s	w.	sw.	0	0	fair	M. McGauran.
Philadelphia, Pa.	30.19	766.8	30.29	769.4	45	7.2	76	nw.	1	0.4			10n;fg		w.	0.08	2.0	light rain	T. T. Townsend.
Pike's Peak, Colorado	17.77	451.3	30.43	772.9	6	—14.4	83	w.	32	14.3		0	0			0.01	0.3	clear	H. Hall.
Ploche, Nevada	24.16	613.7	30.30	769.6	22.5	— 5.3	60	n.	9	4.0		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.42	747.3	30.27	768.8	41.0	5.0	92	s.	1	0.4			10 n			0.43	10.9	light rain	W. Daly.
Poplar River, Montana	28.00	711.2	30.29	769.4				w.			1	0	0			0	0	clear	W. D. Maxwell.
Port Ende, Louisiana	30.24	768.1	30.24	768.1	66.5	19.2	83	se.	6	2.7		3 c	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.61	752.1	30.33	770.4	32.8	0.4	92	ne.	17	7.6			10 n			0.27	6.9	light snow	W. O. Bailey.
Portland, Maine	30.30	769.6	30.35	770.9	35	1.7	74	ne.	16	7.2			10 n		ne.	0.05	1.3	light snow	W. W. Eichelberger.
Portland, Oregon	30.29	769.4	30.36	771.1	37.8	3.2	73	se.	1	0.4		0	0			0	0	clear	M. L. Hearne.
Portsmouth, N. C.					52	11.1	80	w.	6	2.7		7ck;c	3 ks	sw.		0	0	cloudy	F. S. Coburn.
Prescott, Arizona	24.79	629.7	30.13	765.3	18.5	— 7.5	87	s.	1	0.4		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	30.25	768.3	30.28	769.1	43.5	6.4	76	n.	13	5.8			10 s			0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.22	767.6	30.23	767.8	63	17.2	84	ne.	6	2.7		7 ck	0	e.		0	0	fair	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.61	752 1	30.31	769.9	32	0.0	100	ne.	12	5.4			10 n			0.25	6.3	light snow	E. W. McGann
Roseburg, Oregon	29.77	756 1	30.34	770.6	29	— 1.7	88	e.	2	0.9		0	fg.			0	0	light fog	J. J. Nanry.
Sacramento, California	30.22	767.6	30.30	769.6	39.8	4.3	82	nw.	4	1.8		0	0			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.70	754.4	30.33	770.4	39.0	3.9	100	nw.	13	5.8			10 s		nw.	0.27	6.9	cloudy	J. H. Weber
St. Paul, Minnesota	29.58	751.3	30.50	774.7	33.0	0.6	68	n.	7	3.1		10 k	0	se.		0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.47	748.5	30.40	772.1	25	— 3.9	88	sw.	16	7.2			10 s			0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.90	657.8	30.47	773.9	23	— 5.0	51	calm	0	0		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.62	752 3	30.34	770.6	47.5	8.6	63	n.	11	4.9			10 s			0	0	cloudy	T. J. Kenan.
San Diego, California	30.12	765.0	30.19	766.8	45.0	7.2	49	ne.	2	0.9		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.54	750.3	30.26	768.6	45.4	7.4	68	e.	7	3.1			10 n		e.	0.18	4.6	light rain	M. H. Perry.
Sandy Hook, New Jersey	30.27	768.8	30.30	769.6	43.0	6.1	83	nw.	6	2.7			10 n			0.04	1.0	light rain	B. A. Blundon.
San Francisco, California	30.22	767.6	30.29	769.4	47	8.3	77	se.	2	0.9		0	0			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.40	594.3	30.44	773.2	26	— 3.3	49	ne.	4	1.8			10 s		ne.	0.08	2.0	cloudy	H. U. Jones.
Savannah, Georgia	30.23	767.8	30.32	770.1	53	11.7	69	n	4	1.8		5 ck	0	w.		0	0	fair	H. W. Ford.
Shaw, Fort, Montana	26.47	672.3	30.29	769.4	39	3.9	57	sw.	21	9.4		5 k	0	w.		0	0	fair	A. L. Mathews.
Shreveport, Louisiana	30.05	763.3	30.30	769.6	54	12.2	93	n.	5	2.2			10 s		n.	1.19	30.2	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	29.19	741.4	30.50	774.7	35	1.7	69	n.	12	5.4			10 s		n.	0.03	0.8	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.36	618.7	30.20	767.1	34.5	1.4	77	se.	9	4.0			10 s			0	0	cloudy	N. D. Lane.
Sitka, Alaska	29.89	759.2	29.96	761.0	44.2	6.8	60	se.	24	10.7			10 ks		se.	0.37	9.4	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.89	759.2	30.38	771.6	42.5	5.8	83	w.	8	3.6			10 s			0.50	12.7	cloudy	J. B. Campbell.
Smithville, North Carolina	30.27	768.8	30.31	769.9	46	7.8	76	n.	6	2.7		9 ck	hz.	w.		0	0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.41	721.6	30.49	774.4	21.5	— 5.8	78	nw.	3	1.3			10 s			0	0	cloudy	D. Moore.
Springfield, Illinois	29.58	751.3	30.30	769.6	41	5.0	92	nw.	6	2.7			10s;fg		nw.	0.24	6.1	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.22	767.6	30.36	771.1	34	1.1	89	n.			1		10 n			0.04	1.0	cloudy?	Charles Mayr.
Springfield, Mo.	28.90	734.0	30.41	772.4	35.4	1.9	79	n.	9	4.0			10 s		n.	0.22	5.6	cloudy	J. B. Marbury.
Starkville, Miss.	29.76	755.9	30.26	768.6	53	11.7	83	e.	5	2.2			10 s			0	0	cloudy	C. Dill.
Stevenson, Fort, Dakota	28.41	721.6	30.38	771.6	23	— 5.0	88	se.	5	2.2		0	0			inap.	inap.	clear	W. Burrows
Stockton, Fort, Texas	27.32	693.9	30.44	773.2	39.0	3.9	73	ne.	6	2.7			10 s		ne.	0	0	cloudy	J. F. Marshall.
Thatcher's Island, Mass.	30.25	768.3	30.30	769.6	39.0	3.9	82	n	15	6.7			10s		ne.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.32	693.9	30.16	766.1	42	5.6	82	calm			0		10 ks			0	0	cloudy	J. T. Fitzgerald.
Toledo, Ohio	29.53	750.0	30.26	768.6	39	3.9	82	n.	8	3.6			10 n		n.	0.45	11.4	light rain	A. Buell.
Tucson, Arizona	27.67	702.8	30.13	765.3	40	4.4	67	calm	0	0			9 s			0	0	cloudy	J. L. Whiteside.
Umatilla, Oregon	30.13	765.3	30.51	774.9	23	— 5.0	94	sw.	2	0.9		0	3 s			0	0	clear	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					27.5	— 2.5	67	n.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.99	761.7	30.26	768.6	58.0	14.4	93	n.	2	0.9			10 n			0.05	1.3	light rain	James Keneally.
Visalia, California	29.92	760.0	30.30	769.6	34.7	1.5	92	se.	3	1.3		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.71	627.6	30.45	773.4	—10.8	—23.8	74	sw.	5	2.2		0	0			inap.	inap.	clear	T. M. Ambler.
Washington, D. C.	30.14	765.5	30.26	768.6	44.5	6.9	87	s.	2	0.9		3 k	2 s	w.		0.03	0.8	fair	B. M. Pursell.
West Las Animas, Colorado	26.37	669.8	30.49	774.4	11	—11.7	85	e.	6	2.7		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.64	752 8	30.28	769.1	42	5.6	65	e.	2	0.9			10 n			0.21	5.3	light rain	B. F. Hough.
Wilmington, N. Carolina	30.26	768.6	30.32	770.1	47	8.3	77	ne.	1	0.4			10s;sk			inap.	inap.	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.96	659.4	30.49	774.4	13	—10.6	66	calm	0	0		0	0			0	0	clear	J. Grover.
Yankton, Dakota	29.12	739.6	30.50	774.7	32	0.0	68	n.	3	1.3		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	30.06	763.5	30.21	767.3	38.3	3.5	54	calm	0	0		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3			55.0	12.8	74	e.	1	0.4		2 k	5ks;s		se.	0.91	23.1	foggy	Joaquin Gomez.
Havana, Cuba, W. I.	30.09	764.3	30.15	765.8	63.7	17.6	85	calm	0	0		0	5ks;s		e.	0.03	0.8	fair	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	71	21.7	83	n.	2	0.9		0	0			0	0	fine	Robert Johnston.
Navassa, W. I.	29.90	759.4	29.98	761.5	77	25.0	75	ne.	28	12.5		0	3 ks		ne.	0	0	clear	F. M. Everett.
Paramaribo, S. A.	29.97	761.2	29.97	761.2	78	25.6	91	se.			2	3 c	5 k	e.		0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.94	760.5	77	25.0	89	n.			1		9 ks		s	inap.	inap.	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					76	24.4	94	ne.			4	cs	ks.		ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.06	763.5	30.09	764.3	74	23.3	72	n.	1.2	0.5		1 c	0			0	0	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	28.56	725.4	28.62	726.9	38	3.3	89	se.			6	6 cs	0			2.16	54.9	fair	W. J. Fisher.
St. Thomas, W. I.	29.88	758 9	30.00	762.0	77	25.0	62	n.				0	6 k		n.	0.15	3.8		Aug. Walloe.
York Factory, B. A.	30.47	773.9	30.53	775.4	31.0	— 0.6	100	sw.	26	11.6			10 n		sw.	0.30	7.6	snowing	Fortescue & Wood.

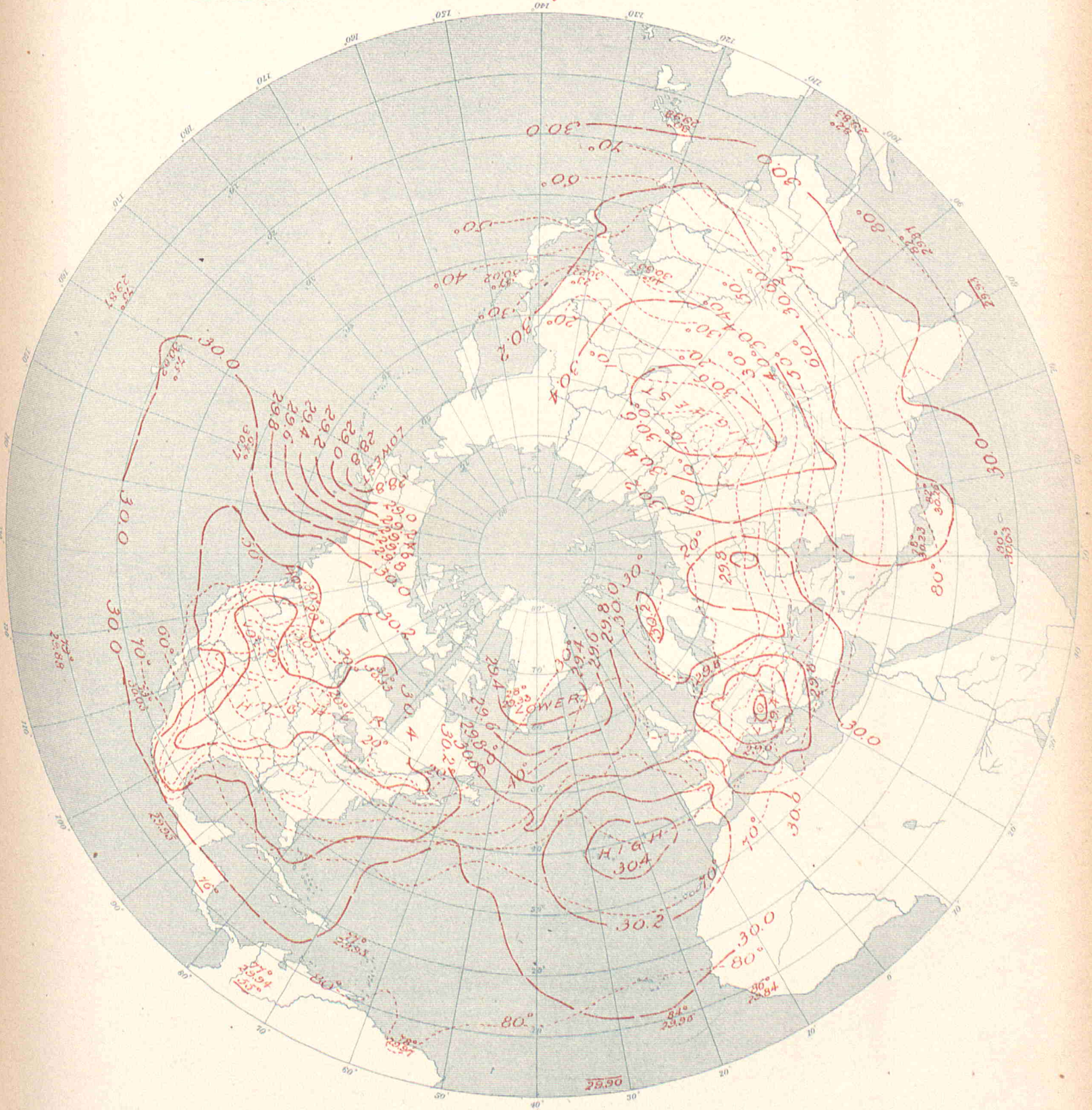
VESSELS. WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Shang-Hai, China	30.31	769.9	54	12.2		ne.			2		5	ne.						d. clouds.
H. M. S. Amethyst, Colonia, Uruguay †	30.17	766.3	66.5	19.2	68	n.			4		0							blue sky.
H. M. S. Audacious, N. 12° 14′, E. 50° 51′	29.93	760.2	80	26.7	82	e.			1		2	ene.				1	e.	d. clouds.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	30.00	762.0	76	24.4	60	ne.			1		3	ssw.				1	nne.	d. clouds.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	30.05	763.3	76.5	24.7	69	nnw.			2		1	nw.						blue sky.
H. M. S. Cleopatra, N. 31° 14′, E. 121° 28′	30.32	770.1				n.			1		8							d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C.	30.31	769.9	39	3.9	86	n.			1		6							d. clouds.
H. M. S. Curacoa, Kobe, Japan	30.06	763.5	58.5	14.7	69	calm			0		5							d. clouds.
H. M. S. Diamond, S. 29° 21′, E. 165° 09′ *†	29.94	760.5	65	18.3	73	ese.			3-4		3					1	se.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	29.89	759.2	67	19.4	90	nnw.			7-8		9	nnw.						squally.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.87	758.7	78	25.6	88	ssw.			2		7							d. clouds.
H. M. S. Flamingo, Port of Spain, Trinidad, W. I.	29.86	758.4	80	26.7	95	calm			0		1	e.						blue sky.
H. M. S. Flying Fish, N. 32° 44′, E. 129° 52′	30.19	766.8	58	14.4	81	calm			0		7							misty.
H. M. S. Gannet, S. 24° 05′, W. 70° 45′	30.01	762.2	64	17.8	83	n.			2		10					2	ssw.	d. clouds.
H. M. S. Griffon, N. 20° 25′ W. 66° 40′	29.87	758.7	74	23.3	76	n.			3-4		1	n.				3	n.	squally.
H. M. S. Iron Duke, N. 22° 33′, E. 116° 00′	30.11	764.8	70	21.1	95	ne.			3		8	ne.				4	ne.	d. clouds.
H. M. S. Kingfisher, N. 20° 44′ W. 111° 16′	30.03	762.7	73	22.8		n.			2		2	n.				1	n.	d. clouds.
H. M. S. Lark, S. 10° 56′, E. 161° 48′	29.90	759.4	81.3	27.4	89	se.			2		3					2	e.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.85	758.2	62	16.7		ne.			1		10							d. clouds.
H. M. S. Magpie, N. 34° 44′ E. 128° 36′	30.19	766.8	55.4	13.0	63	wnw.			1		9	w.						d. clouds.
H. M. S. Northampton, Halifax, N. S.	30.27	768.8	31.5	— 0.3	84	ne.			3		7	nw.						d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.81	757.2	70	21.1	84	sw.			1									blue sky.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.83	757.7	82	27.8	76	s.			1		1							blue sky.
H. M. S. Rocket, S. 5° 05′ W. 81° 10′	30.00	762.0	63	17.2	?	sw.			1		3							d. clouds.
H. M. S. Sappho, S. 44° 00′, W. 131° 26′	29.28	743.7	50.2	10.1	86	nw.			6		1	nw.				4	nw.	blue sky.
H. M. S. Superb, N. 39° 37′, E. 19° 56′ *	29.87	758.7	68	20.0	64	sse			3		2	s.				3	ese.	d. clouds.
H. M. S. Sylvia, Port Tamar, Patagonia	29.00	736.6	44.5	6.9	90	wnw.			4-6		10							raining.
H. M. S. Tourmaline, Aden, Arabia	30.01	762.2				e.			2		1	e.						blue sky.
H. M. S. Woodlark, Bahrein, Arabia	30.13	765.3	77.5	25.3	82	nw.			3		5	nnw.						d. clouds.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.36	771.1	40	4.4	82	calm			0		1	w.						blue sky.
Portuguese Naval																		
Rio Lima, Fogo, Cape Verd Islands	30.13	765.2	82.4	28.0	71						3		ne.			1	sw.	d. clouds.
Tamega, Macao, China	30.16	766.0	73.4	23.0	78	calm			0		9			¼ h'r	¼ h'r			overcast.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.13	765.3	81	27.2	54	ne.	4	1.8			8		e.	0	0			fair.
Navy Yard, Portsmouth, N. H.	30.33	770.4	31	— 0.6	?	ne.	12	5.4			10		ne.					snowing.
Naval Hospital, Yokohama, Japan*	30.04	763.0	49	9.4	93	calm			0		5		w.	0	0			fair.
Adams, Sitka, Alaska*†	30.00	762.0	44	6.7	67	e.			5		10							cloudy.
Alaska, Honolulu, Sandwich Island	30.02	762.5	75	23.9	76	ne.			2		5			0.15	3.8	sm'h		fair.
Alliance, Hampton Roads, Va*†	30.28	769.1	50	10.0	93	ssw.			2		10			sll't	sll't			cloudy.
Ashuelot, Kobe, Japan	30.18	766.6	59	15.0	76	calm			0		2		calm					clear.
Brooklyn, Keel Point, Patagonia	29.19	741.4	57	13.9	62	w.	14	6.3			8		calm	0	0	sm'h		fair.
Colorado, New York, N. Y.	30.40	772.1	43	6.1	83	ne.	1	0.4			10		calm	0.08	2.0			raining.
Enterprise, Norfolk, Va	30.33	770.4	48	8.9	100	sse.			1		10		calm					cloudy.
Essex, Callao, Peru	29.99	761.7	64	17.8	83	calm			0		5					sm'h	se.	fair.
Franklin, Norfolk, Va	30.41	772.4	46	7.8	85	nw.	2	0.9			10		nw.	0	0			overcast.
Galena, Montevideo, Uruguay	30.04	763.0	61	16.1	88	n.			3		0					sm'h		clear.
Hartford, S. 43° 38′, W. 61° 56′*	29.47	748.5	58	14.4	93	wsw.			2		2			0	0	sm'h	n.	clear.
Independence, Mare Island, Cal.	30 29	769.4	39	3.9	91	calm			0		0							clear.
Iroquois, Callao, Peru	30.02	762.5	65	18.3	78	se.			1		5		se.					fair.
Jamestown, Newport, R. I.	30.26	768.6	43	6.1	91	nne.			3		10					sm'h		drizzling.
Kearsarge, Norfolk, Va	30.29	769.4	50	10.0	93	calm			0		10							cloudy.
Lackawanna, Valparaiso, Chili*	29.86	758.4	61	16.1	77	ne.			1		0							clear.
Lancaster, N. 38° 18′, E. 14° 55′*	29.56	750.8	69	20.6	75	w.			6		10		w.			mod.	w.	cloudy.
Michigan, Erie, Pa	30.36	771.1	37	2.8	90	ene.			6		10		e.					snowing.
Minnesota, New York, N. Y.	30.32	770.1	45	7.2	67	nnw.	2	0.9			10							cloudy.
Monocacy, Yokohama, Japan *	29.94	760.5	53	11.7	93	w.			1		5		calm					fair.
New Hampshire, Newport, R. I.	30.32	770.1	43	6.1	83	nne.			3		10		calm			sm'h		overcast.
Nipsic, Palermo, Sicily*	29.64	752.8	70	21.1	40	wsw.			4		10					sm'h		cloudy.
Onward, Callao, Peru†	30.11	764.8	62	16.7	88	calm			0		2					long	w.	clear.
Palos, Taku, China*	30.30	769.6	47	8 3	77	e.			2		2		wsw.					fair.
Pensacola, Callao, Peru*	29.93	760.2	62	16.7	83	calm	0	0			8			0	0	sm'h		fair.
Powhatan, Boston, Mass.	30.30	769.6	36	2.2	100	n.			1		10							snowing.
Quinnebaug, Valetta, Malta*	29.81	757.2	72	22.2	63	sw.			4-5		0					sm'h		clear.
Ranger, Acapulco, Mexico	29.99	761.7	78	25.6	86	calm			0		0			0	0	sm'h		clear.
Richmond, Yokohama, Japan*	30.04	763.0	54	12.2	86	calm			0		5		nw.	0	0			fair.
Saratoga, Key West, Florida	30.15	765.8	74	23.3	90	ne.			2-3		5		ne.	0	0	sm'h		fair.
St. Louis, League Island, Pa.	30.53	775.4	41	5.0	91	ne.			1		10			0.06	1.5			cloudy.
Swatara, N. 15° 37′, W. 45° 48′*	29.79	756.7	78	25.6	82	ene.			2		5					sm'h		fair.
Tennessee, Hampton Roads, Va	30.30	769.6	50	10.0	78	sw.	9	4.0			10			inap.	inap.			drizzling.
Vandalia, Hampton Roads, Va*	30.28	769 1	50	10.0	86	ssw.			4		10							drizzling.
Wabash, Boston, Mass.	30.30	769.6	33	0.6	89	nnw.	3	1.3			10		n.	0.10	2.5			snowing.
Wachusetts, Mare Island, Cal†	30.26	768.6	39	3.9	91	var.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.22	767.6	54	12.2	100	nw.			1		10		calm					cloudy.
Yantic, Norfolk, Va	30.34	770.6	50	10.0	86	se.			1		8							rainy.
Merchant Marine.																		
S. S. Circassian, N. 56° 15′, W. 27° 45′*.	29.82	757.4	44	6.7	84	wsw.			3		10		w.	0	0	3	w.	overcast.
S. S. Grecian, Buenos Ayres, Argentine, Rep*	30.00	762 0	67	19.4	89	n.			5		0			0	0	sm'h		clear.
S. S. Polynesian, Moville, Ireland*	29.97	761.2	46	7.8		wsw.			2		5		sw.	0	0			fair.
S. S. British Crown, N. 44° 51′, W. 41° 50′ †	29.98	761.5	65	18.3		sw.			5		10			18 h'r	18 h'r	mod.	sw.	heavy rain.
S. S. Indiana, N. 41° 07′ W. 64° 57′			52	11.1	86	nne.			3		2		n.			mod.	ne.	fine.
S. S. Lord Clive, Liverpool, Eng*†	29.87	758.7				calm			0		hz			0	0			hazy.
S. S. Lord Gough, Philadelphia, Pa	30.30	769 6	45	7.2		nw.			3									raining.
S. S. Ohio, Liverpool, Eng	29.96	761.0	44	6.7	92	ene.			2		9		ene.					cloudy.
S. S. Pennsylvania, N. 51° 30′, W. 15° 25′†	29.94	760.5	54	12.2		w.			4		10		nw.			mod.	w.	misty.
S. S. Jason, N. 44° 01′, W. 45° 57′*	30.19	766.7				wnw.			6		6 k					6	nw.	foggy.
S. S. Stella, N. 45° 20′ W. 51° 42′	30.11	764.8	42.8	6		n.			3		3		n.			2	n.	d. clouds.
S. S. Bolivia, New York, N. Y.			44	6.7	100	sw.			3		10		sw.	8 h'r	8 h'r			threatening.
S. S. Devonia, N. 47° 28′, W. 45° 30′†	30.03	762.7	41	5.0		nnw.			3		3		nnw.	0	0	mod.	nw.	clear.
S. S. Dorian, N. 42° 42′, W. 65° 05′*	30.11	764.8	48	8.9		e.			2		10		w.	2 h'r	2 h'r	sm'h		overcast.
S. S. Galatia, Calcutta, India†	30.11	764.8	78.3	25.7		n.			1		2			0	0			fair.
S. S. Utopia, N. 34° 47′, E. 23° 56′			72	22.2	76	wsw.			3		2		sw.	0	0	mod	sw.	clear.
S. S. Ailsa, N. 24° 31′, W. 74° 10′†	30.12	765.0	78	25.6	65	nne.			5		10		ne.	0	0	r'gh	ne.	cloudy.
S. S. Alpin, San Carlos, Venezuela	29.92	760.0				ne.			3				ne.	0	0			fine.
S. S. Alvo, N. 32° 44′, W. 74° 14′	30.30	769 6	68	20.0		var.			2-3		6 k			0	0	long	nne.	fine.
S. S. Antillas, Mayaguez, Porto Rico, W. I			78	25.6														
S. S. Ambrose, N. 17° 26′, W. 60° 23′†.	30.00	762.0				var.			0-4		4		n.	5 h'r	5 h'r	3	n.	fine.
British Merchant, N. 9° 52′, W. 119° 37′	29.88	758.9	79	26.1	89	nne.			2		8							showery.
Bk. Coppename, N. 40° 52′, W. 16° 20′	30.46	773.7	58.5	14.7	85	n.			4		5							blue sky.
Dynomene, N. 9° 00′, E. 89° 12′	29.87	758.7	81.5	27.5	87	nne.			4		7							misty.
S. S. Gordon Castle, N. 26° 11′, E. 120° 21′	30.34	770.6	67.5	19.7	95	nne.			4-5		10					high		misty.
May Hulse, S. 11° 00′, W. 30° 55′	29.91	759 7	81.0	27.2	70	ene.			4		3							d. clouds.
Markland, N. 46° 46′, W. 23° 52′	30.36	771.1	58.3	14.6	96	wsw.			4		10					3	nw.	d. clouds.
S. S. Olympus, N. 30° 37′, E. 32° 18′					35	ne.			3		0							blue sky.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.	Character.	Direction from.	
MERCHANT MARINE.—Continued.																		
S. S. Mexico, Guaymas, Mexico†	30.08	764.0	66.6	19.2	62	n.			5		8		nw.			sm'h		fair.
S. S. Marathon, Smyrna, Turkey	30.05	763.3	63	17.2		ssw.			4		5?		ssw.	2 h'r	2 h'r	mod.	sw	cloudy?
S. S. Parthia, N. 42° 37′ W. 58° 02′*†	30.00	762.0	49	9.4		nnw.			5		4?		nw.	o	o	sli't	nnw.	cloudy?
S. S. Scyth a, N. 41° 21′, W. 69° 41′	30.21	767.3	52	11.1	93	ne.			2		3		ne.	o	o	sm'h		clear.
S. S. Colina, N. 44° 43′, W. 43° 27′ †	29.92	760.0				ssw.			3		10		s.	3 h'r	3 h'r	long	sse.	heavy rain.
S. S. France, N. 49° 41′, W. 19° 40′†	30.03	762.7	53.6	12		w.			5		k		w.	rain	rain	sm'h	nw.	rainy.
S. S. Labradore, New York, N. Y*†	30.28	769.0	51.8	11										o	o			
S. S. Abyssinia, N. 51° 11′, W. 17° 47′*	29.91	759.7	58	14.4	88	ssw.			5		10		w.			mod.	w.	raining.
S. S. Wisconsin, N. 44° 20′, W. 54° 20′	30.09	764.3	44	6.7		nnw.			2		2		ne.	o	o	sm'h		fair.
S. S. Wyoming, N. 47° 43′ W. 44° 58′*	29.96	761.0	36	2.2		w.			4		2		wsw.	o	o	mod.	s.	fair.
S. S. Bohemia, Hamburg, Germany†	29.69	754.1				se.			3		2		se.	12 h'r	12 h'r			foggy.
S. S. Cimbria, N. 40° 32′, W. 69° 30′	30.24	768.1	48.2	9.0		se.			2		5?		s.	o	c	sm'h	se.	cloudy?
S. S. Frisia, N. 48° 25′, W. 24° 12′	30.23	767.8	59	15.0		wsw.			4		4		w.	o	o	mod.	sw.	fair.
S. S. Gellert Plymouth, Eng	30.03	762.7	46	7.8		sse.			3		9		nw.	o	o			covered.
S. S. Silesia, N. 40° 37′, W. 69° 17′†	30.26	768.6	48	8.9		wnw.			1		7		w.	o	o	3		d. clouds.
S. S. Vandalia, N. 49° 03′, W. 15° 40′	30.20	767.1	56.8	13.8		wsw.			6		10		wsw.	o	o	mod.	wsw.	cloudy.
S. S. Mentmore, N. 47° —′, W. 44° —′*	30.11	764.8				nw.			4		5		nw.	2 h'r	2 h'r	sm'h	nw.	clearing.
S. S. Archimedes, N. 47° 46′, W 31° 06′	30.05	763.3				sw.			5		8		sw.	o	o	mod.	sw.	fine.
S. S. Hevelius, S. 24° —′ W. 44° —′*†	30.14	765.5	72	22.2		sse.			4		2		ene.	o	o	sm'h		clear.
S. S. Ptolmey, N 10° 15′, W. 47° 30′	29.95	760.7	81	27.2	83	ese.			4		5					2	ese.	d clouds.
S. S. Bulgarian, N. 51° 36′, W. 14° 04′*	29.99	761.7				w.			4		10		w.	12 h'r	12 h'r	mod.	w.	raining.
S. S. City of San Antonio, N. 25° 49′, W. 79° 22′†	30.24	768.1	75	23.9		ne.			3		10		ne.	o	o	sm'h		cloudy.
S. S. Colorado, New York, N. Y†	30.30	769.6	42	5.6		e.			2		10		e.	6 h'r	6 h'r			cloudy.
S. S. Rio Grande, N. 40° 00′, W. 74° 00′†	30.35	770.9	52	11.1		nw.			2		10			o	o			cloudy.
S. S. San Marcos, N. 28° 30′, W. 92° 20′	30.38	771.6	72	22.2		s.			4		5		ssw.			sm'h		fine.
S. S. Archimede, Palermo, Sicily*†	29.75	755.6	70	21.1	70	ssw.			5		6		ssw.	o	o			cloudy.
S. S. Hermod, N. 40° 44′ W. 69° 40′†	30.18	766.6	53.6	12		nw.			1		10		w.	4 h'r	4 h'r	sm'h		misty.
S. S. Glenapp, S. 19° 00′, W. 39° 00′†	29.87	758.7	78	25.6		var.			7		10 k		ssw.	6 h'r	6 h'r	r'gh	ssw.	heavy rain.
S. S. Chalmette, New York, N. Y†	30.23	767.8	46	7.8		nne.			1		10		sse.	4 h'r	4 h'r			cloudy.
S. S. New York, N. 34° 22′ W. 76° 22′			56.0	13.3		nw.			3		10			o	o	sm'h		overcast.
S. S. Denmark, N. 48° 02′, W. 27° 05′	30.26	768.6	59	15.0		sw.			5		10		sw.	o	o	sli't	wsw.	cloudy.
S. S. Egypt, N. 51° 18′ W. 15° 53′*†	29.93	760.2				w.			5		10		wnw.	5 h'r	5 h'r	long	w.	hazy.
S. S. England, off Tuskar, Ireland	29.98	761.5				sw.			4		1		sw.	o	o	sm'h		clear.
S. S. Erin, N. 45° 40′, W. 42° 06′	30.07	763.8	57	13.9		nne.			4		10		ne.	24 h'r	24 h'r	h'vy	sw.	raining.
S. S. Greece, N. 41° 22′, W. 65° 57′	30.14	765.5				nne.			3		8		n.	o	o	sm'h		fine.
S. S. Helvetia, N. 43° 00′ W. 59° 45′	30.23	767.8	45	7.2		n.			1		2		n.	o	o	sm'h		clear.
S. S. The Queen, N. 40° 52′, W. 63° 07′*†	30.20	767.1	50	10.0		ne.			4		10		calm	o	o	sm'h		overcast.
S. S. Santiago, Cienfuegos, Cuba, W. I.	30.31	769.9	75	23.9	77	n.			3					o	o			fine.
S. S. City of Alexandria, N. 38° 22′, W. 74° 43′†	30.36	771.1	53	11.7		ssw.			3		10?		w.	o	o	small	n.	clear?
S. S. City of Merida, N. 23° 09′, W. 82° 22′			69.8	21		calm			0		2			o	o			fine.
S. S. Knickerbocker, N. 24° 24′, W. 82° 44′ *†	30.19	766.8	74	23.3		ene.			6								w.	rainy.
S. S. Leerdam, N. 50° 00′ W. 22° 08′*	30.01	762.2	61.4	16.3		n.			6							long		cloudy.
S. S. Donau, N. 49° 52′. W. 20° 31′	30.08	764.0				w.			4		10		w.	13 h'r	13 h'r	r'gh	w.	raining.
S. S. Elbe, off Needles, Eng	29.98	761.6	43.7	6.5	100	ne.			3		10			o	o	sm'h		hazy.
S. S. Oder, N. 41° 36′, W. 64° 56′	30.28	769.1	51.8	11.0		n.			1–2		5?		n.	o	o	sm'h	n.	cloudy?
S. S. Ohio, Galveston Roads, Texas	30.18	766.6				n.			6		10		n.	3 h'r	3 h'r	mod.	nne.	misty.
S. S. Salier, N. 51° 18′ E. 1° 44′	29.85	758.2	44.6	7.0		nnw.			6		8		nnw.	o	o	cross	nnw.	fair.
S. S. Werra, N. 42° 24′, W. 61° 51′ *	30.32	770.1	44.6	7.0		nne.			3–1		10		nne.	o	o	sm'h	n.	overcast.
S. S. Belgic, Hong Kong, China†	30.19	766.8	73	22.8	81	se.			2		5?		se.	o	o			clear ?
S. S. Oceanic, N. 37° 46′ W. 152° 38′ *	30.17	766.3	64	17.8	58	wsw.			5		6?		wsw.			mod	wnw.	clear ?
S. S. City of Augusta, Savannah, Ga †	30.27	768.8				ssw.			4		2		nw.	o	o			clear.
S. S. Mississippi, N. 39° 20′, W. 123° 58′†	30.38	771.6	48	8.9	78	n.			1		0							clear.
S. S. Columbia, N. 43° 00′ W. 124° 51′†	30.24	768.1	51	10.6	75	ene.			1		0					sm'h	ene.	clear.
S. S. Oregon, Portland, Oregon†	30.27	768 8	40	4.4	82	calm			0		0							clear.
S. S. Ancon, N. 33° 49′, W. 118° 38′†	30.16	766.1	59	15.0	44	nne.			4		0					sm'h		clear.
S. S. Dakota, Seattle, Wash. Ter.†	29.78	756.4	44	6.7	84	se.			4		8		se.	6 h'r	6 h'r	sm'h		cloudy.
S. S. Australia, Sydney, N. S. W.	30.28	769.1	70	21.1	95	se.			3		1		sse.	o	o			clear.
S. S. City of New York, S. 33° 57′, E. 154° 02′†	30.12	765.0	72	22.2	71	nw.			1		10		nw.	o	o	sm'h		cloudy.
S. S. City of Pekin, N. 25° 53′, E. 121° 20′ †	30.39	771.9	69	20.6	80	ne.			5		10		ne.	o	o	mod.	n.	cloudy.
S. S. City of Sydney, N. 8° 01′, W. 163° 02′ †	29.87	758.7	75	23 9	86	ne.			5		10		nne.	¼ h'r	¼ h'r	r'gh	ne.	raining.
S. S. Colima, N. 36° 21′, W. 122° 01′†	30.23	767.8	53	11.7	73	nw.			5		0			o	o	h'vy	nw.	clear.
S. S. Grenada, La Libertad, San Salvador†	29.93	760.2	78	25.6	86	ne.			1		0			o	o	sm'h	sse.	clear.
S. S. San José, N. 15° 32′, W. 94° 15′*†	30.10	764.5				wnw.			2		0			o	o		wnw.	
S. S. Bermuda, St. Pierre, W. I †	29.91	759.7	76	24.4		e.			1		9		ene.	7 h'r	7 h'r	gentle	n.	showery.
S. S. Caracas, N. 21° 28′, W. 68° 29′ †	30.03	762.7	78	25.6	65	n.			6		9		n.	20 h'r	20 h'r	h'vy	n.	fair.
S. S. Valencia, N. 28° 49′, W. 70° 30′†	30.19	766.8	73	22.8	67	nne.			6		6		ne.	o	o	h'vy	ene.	fine.
S. S. Belgenland, N. 46° 40′, W. 39° 35′†	30.05	763.3	64	17.8	89	ssw.			8		10		w.	20 h'r	20 h'r	h'vy	sw.	cloudy.
S. S. Nederland, N. 49° 31′, W. 32° 01′ †	30.15	765.8	58	14.4		s.			6		10			6 h'r	6 h'r	mod	s.	covered.
S. S. Pennland, Antwerp, Belgium	29.77	756 1	32.5	0.3	85	n.			3		10		nne.	12 h'r	12 h'r			overcast.
S. S. Rhyniand, Jersey City, N. J	30.24	768.1	50	10.0	72	ene.			5		10		e.					rainy.
S. S. Waesland, Jersey City, N. J	30.33	770.4	47	8.3	85	nne.			4		10		ne.	0.07	1.8			rain & fog.
S. S. Maas, N. 43° 12′, W. 59° 40′	30.19	766.7	51.8	11.0	65	e.			5		8		ese.	4 h'r	4 h'r	6	e.	drizzling.
S. S. P. Caland, Rotterdam, Holland	29.74	755.4	36.1	2.3	89	nne.			4		3		nne.					fair.
S. S. Schiedam, N 44° 06′ W. 55° 21′	30.24	768.1	51.4	10.8	86	nw.			4		3		wnw.	1 h'r	1 h'r	sm. h	w.	fair.
S. S. W. A. Scholten, New York, N. Y	30.44	773 2	43.3	6.3	93	calm			0		10		wsw.	4 h'r	4 h'r			rainy.
S. S. State of Florida, Glasgow, Scotland	29.96	761.0	49	9.4		ese.			2		10			o	o			cloudy.
S. S. State of Georgia, N. 52° 11′, W. 30° 54′†	29.85	758.2	51	10.6		s.			4		10			6 h'r	6 h'r	mod.	wsw.	raining.
S. S. State of Indiana, N. 40° 47′. W. 68° 05′†	30.34	770.6	48	8.9		calm			0		8		sw.	o	o	sm'h		overcast.
S. S. State of Nevada, New York, N. Y†	30.25	768.3	39	3.9		nne.			1		10		nne.	driz	driz			hazy.
S. S. Hekla, N. 48° 50′, W. 42° 00′ *†	30.04	763.0	47.3	8.5		var.			0–1		8		ne.	2 h'r	2 h'r	mod.	sw.	misty.
S. S. Thingvalla, N. 50° 01′, E. 10° 30′†	30.10	764.5	28.4	—2.0		nne.			4		4		nne.	o	o			clear.
S. S. Iowa, off Seven Heads, Ireland *†	30.05	763.3	46	7.8		s.			2		10		s.	8 h'r	8 h'r	sm'h		misty.
S. S. Plantyn, N. 39° 51′, W. 55° 28′	30.07	763.8							4		5		ne.	rain	hail	mod.	ene.	squally.
S. S. Celtic, N. 40° 38′, W. 67° 36′†	30.28	769.1	48	8.9		calm			0		10		ne.	o	o	sm'h		cloudy.
S. S. Germanic, N. 47° 35′, W. 33° 50′†	30.21	767.3	60	15.0		ssw.			5		9		sw.	o	o	mod.	sw.	d. clouds.
S. S. Lepanto, N. 42° 00′, W. 51° 56′*	30.11	764.8	52	11.1		ne.			7		2		ne.	o	o			clear.
S. S. Marengo, Hull, England *†	29.86	758.4				ne.			5		4		ne.	2 h'r	2 h'r	mod.	ne.	squally.
S. S. Romano, N. 46° 12′, W. 39° 15′	29.87	758.7	63	17.2		sw.			6		10		sw.	6 h'r	6 h'r	h'vy	sw.	fine.
S. S. Salerno, Odessa, Russia			38	3.3		e.			8		10		e.	o	o			overcast.
S. S. Catherine Whiting, Providence, R. I †	30.30	769.6				nne.			1					snow	snow			
S. S. Norman, N. 42° 23′, W. 71° 05′	30.21	767.3				ne.			5				ne.	5 h'r	5 h'r			heavy snow.
S. S. Saxon, N. 39° 00′, W. 72° 07′ *†	30.30	769.6	52	11.1		wsw			5		8		sw.					
MISCELLANEOUS.																		
Bk. Adelaid, N. 17° 16′ W. 04° 11′ *†	29.95	760.7	81	27.2		nnw.			5				n.	o	o	sm'h	n.	clear.
Bg. Aleira, Maracaybo, Venezuela	29.92	760 0	86	30.0		ene.			4		6?		ne.	1 h'r	1 h'r			clear ?
S. Annie M. Law, Kobe, Japan *†	30.15	765.8	54	12.2		n.			1		5		nw.	o	o			fine.
S. S. Anna Thormann, S. 13° 58′, E. 101° 22′*	29.99	761.7	75.9	24.4	77	ese.			4		4 k		se.	o	o	mod.	sse.	fair.
Bk. Antonio Lopez, N. 24° 39′, W. 37° 22′			77	25 0	70	ne.			4		4			2 h'r	2 h'r	long	nne.	fair.
Bk. Aquidneck, N. 1° 29′, W. 33° 01′ *†	30.00	762.0				se.			2				se.			light	se.	clear.
Bk. Aureola, N. 50° 05′, W. 12° 14′			60	15.6		nw.			0		10		nw.	3 h'r	3 h'r	h'vy	nw.	dense fog.
Bk. Alba, N. 56° 33′, E. 5° 35′ *†	30.02	762.6	37.4	3.0		wsw.			6									snowing.
Bk. Bayonnaise, N. 19° 04′, W. 52° 56′*†	30.00	762.0				sse.			4		6?		w.	o	o	large	se.	clear ?
Bkt. Bonny Doon, N. 40° 06′, W. 56° 15′ *†	29.76	755.9				e.			8		8		ne.	rain	rain	h'vy	ne.	drizzling.
S. S. Burswell, N. 41° 27′, W. 19° 51′*†	30.42	772.7	67	19.4		nnw.			2		7		nnw.	2 h'r	2 h'r	high	nw.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Champion, N. 49° 05′, W. 4° 50′ †	29.71	754.6	60.0	15.6		n.			4		10		nw.	0	0	mod.	nnw.	dull.
Schr. Chas. F Heyer, Apalachicola, Fla	30.26	768.6	60	15.6	71	ese.			1		0			0	0			clear.
Schr. C. R. Flint, Cedar Keys, Fla†	30.28	769.1	53	11.7		ne.			2		1		ne.	0	0			clear.
S. Cornelius, N. 38° 09′, W. 59° 06′			64.6	18.1		ne.			6		10		ne.	3 h'r	3 h'r	r'gh	ne.	cloudy.
Bkt. David Preston, N. 28° 30′, W. 87° 40′			78	25.6		ne.					10		nne.	10 h'r	10 h'r	rg'h	nnw.	
Bk. Don Quixote, Pasoeroean Roads, Java*	29.74	755.4	88	31.1		wsw.			6		5?		wnw.	3 h'r	3 h'r	sm'h		clear?
Bk. E. D. Bigelow, N. 44° 00′ W. 35° 45′*†	30.20	767.1				ssw.			6		2		sw.	0	0	long	wsw.	hazy.
Schr. Edith R. Seward, N. 35° 15′, W. 74° 40′*†	30.32	770.1	61	16.1		nnw.			1		6?		n.	0	0	mod.	nne.	clear?
S. E. J. Spicer, New York. N. Y.	29.97	761.2	46	7.8	?	nne.			5		10		s.	8 h'r	8 h'r			light rain.
Bk. Eliza Barss, Bermuda, W. I †	29.88	758.9				nne.			7		10		nne.	0	0			cloudy.
S. Enoch Train, N. 18° 10′. W. 59° 33′*†	30.00	762.0				nnw.			2		0			0	0	light	sse	fine.
Bk. Essex, Muscat, Arabia*†	30.16	766.1	82	27.8		nw.			3		hz.						n.	fine.
Schr. F E. McDonald, N. 37° 45′, W. 75° 36′†	30.39	771.9				ssw.			1									fine.
S S. Foscolia, S. 8° 54′ W. 37° 27′*†	29.55	750.6				nne.			5		5		ne.	0	0	r'gh	ne.	fair.
Bk. Freya, N. 27° 41′ W. 24° 30′			70	21.1		ese.			5		10		sw.	4 h'r	4 h'r	mod.	se.	squally.
Bg. George, N. 42° 20′, W. 64° 40′*†	30.32	770.1				nne.			5		2		n.	0	0	sm'h		fair.
S. Glendon, S. 24° 40′ W. 96° 00′†	29.91	759.7	72	22.2		s.			5		4		s.	0	0	mod.	s.	fair.
S. Grecian, N. 18° 08′, W. 58° 45′†	29.95	760.7	82	27.8	83	calm			0		3		calm	3 h'r	3 h'r	sm'h		clear.
Bk. Grey Eagle, N. 33° 00′, W. 65° 26′			68	20.0		ne.			4		5		nne.	2 h'r	2 h'r	h'vy	nne.	fair.
Bk. Gronsvaer, S. 43° 38′ E. 151° 50′†	30.13	765.2	66.6	18.9	97	n.			4		1		n.	0	0	5	sw.	fine
Bk. Hattie G. McFarland, New York, N. Y†	30.35	770.9	47	8.3		nne.			1		10							stormy.
Schr. Hattie Weston, Mayaro Bay, Trinidad, W. I.*†	29.90	761.0	82	27.8		calm			0		5		ne.	0	0	mod.	ene.	fair.
S. Hedwig, N. 31° 14′, W. 74° 03′	30.27	768.8	67.1	19.5	83	n.			4		10		n.	0	0	3	ne.	
Bk. Heinrich & Tonio, N. 39° 00′, W. 62° 45′*†	30.22	767.6	56.5	13.6		ne.			4		10		ne.	0	0	mod.	ne.	cloudy
Schr. Isabel Alberto, Cedar Keys, Fla†	30.26	768.6				ne.			1		0			0	0			clear.
S. Ivy, Cork, Ireland†	30.18	766.6	40	4.4		nne.			2		10							misty.
Schr. James Slater, S. 0° 08′, W. 48° 00′*†	30.15	765.8	83	28.3		ene.			4		2		ne.	0	0	mod	ene.	
Schr. Jennie N. Huddell, N. 35° 50′, W. 75° 10′†	30.27	768.8	66	18.9	74	n.			1		5		n.	0	0	long	e.	fair.
S. S. John Hopkins, Norfolk, Va			46	7.8		sw.			2		10			0	0			overcast.
Schr. John L. Thomas, Vivorilla Cays, C. A*†	30.10	764.3				ene.			3		1		ene.	0	0			clear
Bg. John Wesley, Cardenas, Cuba, W. I†	30.03	762.7				ese.			1		9		e.	0	0			cloudy.
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.12	765.0	86	30.0	68	nw.			2		0							clear.
Light House Tender, Laurel, N. 25° 35′, W. 80° 07′ †	30.20	767.1	73	22.8		ene.			1–2		9		ene.	0	0	mod.	ne.	cloudy.
Bk. Liberia, N. 9° 30′, W. 23° 30′*	29.86	758.4	84	28.9	79	var.			2		4		ene.	2 h'r	2 h'r	sm'h	s.	fine.
Bg. Lilian, Demerara, Brit. Guiana†	29.90	759.4	82	27.8		ene.			3		3			0	0			clear.
Bg. L. & W. Armstrong, N. 38° 16′, W. 72° 56′*†	30.28	769.1				calm			0		8		wnw.	0	0	sm'h	nnw.	hazy.
S. S. Madrid, N. 33° 25′, W. 47° 46′*†	30.10	764.5	73	22.8	90	se.			5		2		se.	sh'rs	sh'rs	mod.	e.	fine.
S. S. Malabar, N. 13° 18′, E. 49° 43′*†	30.05	763.3				n.			1		0			0	0	sm'h		clear.
Bg. Mary Gibbs, N 23° 50′, W. 79° 30′*†	30.07	763.8	71	21.7		ene.			4		4		ene.	0	0	1	n.	clear.
Bk. Matilda C. Smith, N. 46° 15′ W. 10° 00′						nnw.			7		6		nnw.			r'gh	nnw.	drizzling.
Bg. Mattie B. Russell, N. 31° 00′, W. 78° 15′*†	30.43	772.9				calm			0		3		s.	0	0	h'vy	ne.	
Schr. Moravian, N. 12° 33′, W. 81° 43†	29.93	760.2				ne							ne.	0	0	long	ne.	fair.
S. M. P. Grace. N. 19° 46′, W. 119° 45′*	29.98	761.5	71	21.7		ene.			5		10		e.	0	0	r'gh	con	squally.
Bg. Myrtle, N 35° 24′. W. 73° 19′†	30.27	768.8				nw.			1		10		n.	0	0	sm'h		cloudy.
Bg O. C. Clary, N. 31° 14′, W. 66° 10′*†	29.94	760.5	70	21.1	90	nne.			6		10		ne.			h'vy	ne.	cloudy.
S. Orealla, Off Point de Galle, Ceylon, India*	29.83	757.7				var.			2		5		var.			sl't	sw.	showery
Bk Orpheus, N. 37° 30′, W. 52° 42′	29.93	760.2	70	21.1		se.			3–6		10 n		ese.	2 h'r	2 h'r	mod.	ne.	squally.
S.Paramita, San Francisco, Cal†	30.14	765.5	53	11.7		e.			1				se.	0	0			foggy.
S. S. Peconic, N. 36° 57′, W. 46° 47′*†	29.98	761.5	72	22.2		sse.			4		2		sse.	2 h'r	2 h'r	mod.	cross	threatening.
S. S. Radnorshire, N. 25° 52′, E. 35° 02′*†	30.05	763.3				nw.			1		0			0	0			clear.
S. St. Francis, S. 18° 45′, W. 76° 30′†	30.06	763.5	69	20.6		se.			4		6		se.	½h'r	½h'r	sm'h	se.	cloudy.
Schr. S. B. Hubbard, N. 36° 13′, W. 74° 50′†	30.36	771.1	55	12.8		calm			0		5		se.	0	0	long	n.	threatening
Bk. Southern Belle, N. 49° 15′ W. 12° —′*†	30.00	762.0	56	13.3		w.			4		10		w.	2 h'r	2 h'r	mod.	nw.	raining.
S. S. Strathleven, Malta, Mediterranean	29.87	758.7	66.5	19.2	92	sw.			6		5		w.					d. clouds.
S. S. Sunbeam, N. 51° 20′, E. 1° 11′	29.87	758.7	42	5.6	83	wnw.			5		6		wnw.	0	0	3	nne.	d. clouds.
Bg. Teneriffe, N. 38° 50′, W. 73° 15′	30.24	768.1				w.			3					0	0	sm'h		cloudy.
Bk. Truro, N. 48° 10′, W. 35° 15′†*	29.93	760.2				ssw.			4–5		10			14 h'r	14 h'r	mod.	ssw.	rainy.
U.S.F.C.S.S.Fish Hawk, Washington, D. C†	30.36	771.1	47	8.3	85	s.			1		4		sw.	0	0			fair.
Bk. Usko, N. 37° 10′ W. 69° 35′*†	30.35	770.9	59	15.0		n.			2		3		nne.	0	0	cross		fair.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.37	771.3	64.4	18		ne.			3		0		ne.	0	0			
Schr Viola Reppard, N. 36° 10′, W. 74° 22′†	30.23	767.8	64	17.8		calm			0		10		calm	0	0	small	e.	cloudy.
Schr. Walter L. Plummer, Mirngone, Hayti, W. I*†	30.10	764.5				se.			1		2		se.	0	0			fine.
Bk. Wandering Jew, S. 19° 32′, W. 35° 32′†	29.83	757.7	79	26.1		nnw.			5		9		nnw.	2 h'r	2 h'r	h'vy	ne.	squally.
Bk. Warden Law, S. 38° 30′, W. 76° 20′	29.84	757.9				nnw.			1		6		nnw.	1 h'r	1 h'r	sm'h	sw.	cloudy.
Bgt. Willie, S. 38° 54′, E. 11° 50′*†	30.40	772.1	58	14.4		sw.			6		8		sw.	0	0	r'gh	sw.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Champion, N. 49° 05′, W. 4° 50′ †	29.71	754.6	60.0	15.6		n.			4		10		nw.	0	0	mod.	nnw.	dull.
Schr. Chas. F Heyer, Apalachicola, Fla	30.26	768.6	60	15.6	71	ese.			1		0			0	0			clear.
Schr. C. R. Flint, Cedar Keys, Fla†	30.28	769.1	53	11.7		ne.			2		1		ne.	0	0			clear.
S. Cornelius, N. 38° 09′, W. 59° 06′			64.6	18.1		ne.			6		10		ne.	3 h'r	3 h'r	r'gh	ne.	cloudy.
Bkt. David Preston, N. 28° 30′, W. 87° 40′			78	25.6		ne.					10		nne.	10 h'r	10 h'r	rg'h	nnw.	
Bk. Don Quixote, Pasoeroean Roads, Java*	29.74	755.4	88	31.1		wsw.			6		5?		wnw.	3 h'r	3 h'r	sm'h		clear?
Bk. E. D. Bigelow, N. 44° 00′ W. 35° 45′*†	30.20	767.1				ssw.			6		2		sw.	0	0	long	wsw.	hazy.
Schr. Edith R. Seward, N. 35° 15′, W. 74° 40′*†	30.32	770.1	61	16.1		nnw.			1		0?		n.	0	0	mod.	nne.	clear?
S. E. J. Spicer, New York. N. Y.	29.97	761.2	46	7.8	?	nne.			5		10		s.	8 h'r	8 h'r			light rain.
Bk. Eliza Barss, Bermuda, W. I †	29.88	758.9				nne.			7		10		nne.	0	0			cloudy.
S. Enoch Train, N. 18° 10′. W. 59° 33′*†	30.00	762.0				nnw.			2		0			0	0	light	sse	fine.
Bk. Essex, Muscat, Arabia*†	30.16	766.1	82	27.8		nw.			3		hz.						n.	fine.
Schr. F E. McDonald, N. 37° 45′, W. 75° 36′†	30.39	771.9				ssw.			1									fine.
S S. Foscolia, S. 8° 54′ W. 37° 27′*†	29.55	750.6				nne.			5		5		ne.	0	0	r'gh	ne.	fair.
Bk. Freya, N. 27° 41′ W. 24° 30′			70	21.1		ese.			5		10		sw.	4 h'r	4 h'r	mod.	se.	squally.
Bg. George, N. 42° 20′, W. 64° 40′*†	30.32	770.1				nne.			5		2		n.	0	0	sm'h		fair.
S. Glendon, S. 24° 40′ W. 96° 00′†	29.91	759.7	72	22.2		s.			5		4		s.	0	0	mod.	s.	fair.
S. Grecian, N. 18° 08′, W. 58° 45′†	29.95	760.7	82	27.8	83	calm			0		3		calm	3 h'r	3 h'r	sm'h		clear.
Bk. Grey Eagle, N. 33° 00′, W. 65° 26′			68	20.0		ne.			4		5		nne.	2 h'r	2 h'r	h'vy	nne.	fair.
Bk. Gronsvaer, S. 43° 38′ E. 151° 50′†	30.13	765.2	66.6	18.9	97	n.			4		1		n.	0	0	5	sw.	fine
Bk. Hattie G. McFarland, New York, N. Y†	30.35	770.9	47	8.3		nne.			1		10							stormy.
Schr. Hattie Weston, Mayaro Bay, Trinidad, W. I.*†.	29.90	761.0	82	27.8		calm			0		5		ne.	0	0	mod.	ene.	fair.
S. Hedwig, N. 31° 14′, W. 74° 03′	30.27	768.8	67.1	19.5	83	n.			4		10		n.	0	0	3	ne.	
Bk. Heinrich & Tonio, N. 39° 00′, W. 62° 45′*†	30.22	767.6	56.5	13.6		ne.			4		10		ne.	0	0	mod.	ne.	cloudy
Schr. Isabel Alberto, Cedar Keys, Fla†	30.26	768.6				ne.			1		0			0	0			clear.
S. Ivy, Cork, Ireland†	30.18	766.6	40	4.4		nne.			2		10							misty.
Schr. James Slater, S. 0° 08′, W. 48° 00′*†	30.15	765.8	83	28.3		ene.			4		2		ne.	0	0	mod.	ene.	
Schr. Jennie N. Huddell, N. 35° 50′, W. 75° 10′†.	30.27	768.8	66	18.9	74	n.			1		5		n.	0	0	long	e.	fair.
S. S. John Hopkins, Norfolk, Va			46	7.8		sw.			2		10			0	0			overcast.
Schr. John L. Thomas, Vivorilla Cays, C. A*†	30.10	764.3				ene.			3		1		ene.	0	0			clear
Bg. John Wesley, Cardenas, Cuba, W. I†	30.03	762.7				ese.			1		9		e.	0	0			cloudy.
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.12	765.0	86	30.0	68	nw.			2		0							clear.
Light House Tender, Laurel, N. 25° 35′, W. 80° 07′ †	30.20	767.1	73	22.8		ene.			1–2		9		ene.	0	0	mod.	ne.	cloudy.
Bk. Liberia, N. 9° 30′, W. 23° 30′*	29.86	758.4	84	28.9	79	var.			2		4		ene.	2 h'r	2 h'r	sm'h	s.	fine.
Bg. Lilian, Demerara, Brit. Guianat	29.90	759.4	82	27.8		ene.			3		3			0	0			clear.
Bg. L. & W. Armstrong, N. 38° 16′, W. 72° 56′*†	30.28	769.1				calm			0		8		wnw.	0	0	sm'h	nnw.	hazy.
S. S. Madrid, N. 33° 25′, W. 47° 46′*†	30.10	764.5	73	22.8	90	se.			5		2		se.	sh'rs	sh'rs	mod.	e.	fine.
S. S. Malabar, N. 13° 18′, E. 49° 43′*†	30.05	763.3				n.			1		0			0	0	sm'h		clear.
Bg. Mary Gibbs, N 23° 50′, W. 79° 30′*†	30.07	763.8	71	21.7		ene.			4		4		ene.	0	0	1	n.	clear.
Bk. Matilda C. Smith, N. 46° 15′ W. 10° 00′						nnw.			7		6		nnw.			r'gh	nnw.	drizzling.
Bg. Mattie B. Russell, N. 31° 00′, W. 78° 15′*†	30.43	772.9				calm			0		3		s.	0	0	h'vy	ne.	
Schr. Moravian, N. 12° 33′, W. 81° 43†	29.93	760.2				ne.							ne.	0	0	long	ne.	fair.
S. M. P. Grace. N. 19° 46′, W. 119° 45′*	29.98	761.5	71	21.7		ene.			5		10		e.	0	0	r'gh	con	squally.
Bg. Myrtle, N 35° 24′. W. 73° 19′†	30.27	768.8				nw.			1		10		n.	0	0	sm'h		cloudy.
Bg O. C. Clary, N. 31° 14′, W. 66° 10′*†	29.94	760.5	70	21.1	90	nne.			6		10		ne.			h'vy	ne.	cloudy.
S. Orealla, Off Point de Galle, Ceylon, India*	29.83	757.7				var.			2		5		var.			sl't	sw.	showery
Bk Orpheus, N. 37° 30′, W. 52° 42′	29.93	760.2	70	21.1		se.			3–6		10 n		ese.	2 h'r	2 h'r	mod.	ne.	squally.
S. Paramita, San Francisco, Cal†	30.14	765.5	53	11.7		e.			1				se.	0	0			foggy.
S. S. Peconic, N. 36° 57′, W. 46° 47′*†	29.98	761.5	72	22.2		sse.			4		2		sse.	2 h'r	2 h'r	mod.	cross	threatening.
S. S. Radnorshire, N. 25° 52′, E. 35° 02′*†	30.05	763.3				nw.			1		0			0	0			clear.
S. St. Francis, S. 18° 45′, W. 76° 30′†	30.06	763.5	69	20.6		se.			4		6		se.	½h'r	½h'r	sm'h	se.	cloudy.
Schr. S. B. Hubbard, N. 36° 13′, W. 74° 50′†	30.36	771.1	55	12.8		calm			0		5		se.	0	0	long	n.	threatening
Bk. Southern Belle, N. 49° 15′ W. 12° —′*†	30.00	762.0	56	13.3		w.			4		10		w.	2 h'r	2 h'r	mod.	nw.	raining.
S. S. Strathleven, Malta, Mediteranean	29.87	758.7	66.5	19.2	92	sw.			6		5		w.					d. clouds.
S. S. Sunbeam, N. 51° 20′, E. 1° 11′	29.87	758.7	42	5.6	83	wnw.			5		6		wnw.	0	0	.3	nne.	d. clouds.
Bg. Teneriffe, N. 38° 50′, W. 73° 15′	30.24	768.1				w.			3					0	0	sm'h		cloudy.
Bk. Truro, N. 48° 10′, W. 35° 15′†*	29.93	760.2				ssw.			4–5		10			14 h'r	14 h'r	mod.	ssw.	rainy.
U.S.F.C.S.S. Fish Hawk, Washington, D. C†	30.36	771.1	47	8.3	85	s.			1		4		sw.	0	0			fair.
Bk. Usko, N. 37° 10′ W. 69° 35′*†	30.35	770.9	59	15.0		n.			2		3		nne.	0	0	cross		fair.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.37	771.3	64.4	18		ne.			3		0		ne.	0	0			
Schr Viola Reppard, N. 36° 10′, W. 74° 22′†	30.23	767.8	64	17.8		calm			0		10		calm	0	0	small	e.	cloudy.
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†.	30.10	764.5				se.			1		2		se.	0	0			fine.
Bk. Wandering Jew, S. 19° 32′, W. 35° 32′†.	29.83	757.7	79	26.3		nnw.			5		9		nnw.	2 h'r	2 h'r	h'vy	ne.	squally.
Bk. Warden Law, S. 38° 30′, W. 76° 20′	29.84	757.9				nnw.			1		6		nnw.	1 h'r	1 h'r	sm'h	sw.	cloudy.
Bgt. Willie, S. 38° 54′, E. 11° 50′*†	30.40	772.1	58	14.4		sw.			6		8		sw.	0	0	r'gh	sw.	cloudy.

International Chart I. November 17, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 18, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.22	767.6	65.5	18.6	83	se.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.12	765.0	63.7	17.6	65	w.	.....	.....	6	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	29.99	761.8	59.4	15.2	87	w.	.....	.....	5	.....	6	.....	.....	1.173	29.8	cloudy	Fonfrède.
Tunis	.....	.....	29.95	760.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.22	767.5	62.6	17.0	64	w.	.....	.....	2	.....	5	.....	.....	0	0	cloudy	Pérès.
Tebessa	.....	.....	30.10	764.4	51.8	11.0	70	w.	.....	.....	3	.....	3	.....	.....	inap.	inap.	pretty fair	Dognon.
Geriville	.....	.....	.....	.....	54.7	12.6	52	nw	.....	.....	4	.....	2	.....	.....	0	0	fair	Louchamp.
Laghouat	.....	.....	30.22	767.6	68.0	20.0	11	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.12	765.0	63.7	17.6	49	n.	.....	.....	3	.....	5	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	59.8	15.4	76	sse.	3	1.3	.....	.....	10	.....	.....	0	0	dull	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.19	741.3	29.74	755.5	41.1	5.6	85	ne.	.....	.....	3	.....	10	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.88	733.6	29.69	754.0	24.1	— 4.4	95	wnw.	9.8	4.4	.....	.....	10	.....	.....	0.083	2.1	.....	Dr. Wierzbiski.
Eperies	28.71	729.1	29.61	752.2	31.3	— 0.4	81	n.	.....	.....	3	.....	10 n	.....	.....	0.953	24.2	.....	Julius Mikolik.
Gratz	28.48	723.3	29.74	755.5	41.4	5.2	52	nw.	.....	.....	3	.....	6	.....	.....	0.472	12.0	.....	Andreas Rospini.
Hermannstadt	28.13	714.5	29.56	750.7	48.0	8.9	74	nw.	.....	.....	1	.....	10	.....	.....	0.075	1.9	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.46	722.8	29.86	758.4	30.4	— 0.9	88	w.	.....	.....	3	.....	10	.....	.....	0.047	1.2	gloomy	The Staff.
Lemberg	28.58	726.0	29.60	751.8	32.9	0.5	87	nw.	.....	.....	2	.....	10	.....	.....	inap.	inap.	.....	Dr. T. Stanecki.
Pola	29.63	752 7	29.75	755.6	43.7	6.5	75	nne.	.....	.....	1	.....	10	.....	.....	0.063	1.6	.....	I. R Hydrographic Office.
Szathmar	29.09	738.8	29.55	750.5	37.9	3.3	82	sw.	.....	.....	4	.....	10	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.39	746.6	29.68	753.9	38.1	3.4	70	nw.	.....	.....	2	.....	4	.....	.....	0.248	6.3	.....	Karl Stancel.
Trieste	29.67	753.5	29.77	756.1	45.3	7.4	69	s.	.....	.....	1	.....	10	.....	.....	0.047	1.2	.....	Royal Academy.
Vienna	29.04	737.5	29.78	756.4	33.6	0.9	87	nw.	.....	.....	2	.....	10	.....	.....	0.230	6.0	snowing	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.61	752.1	29.71	754.6	41.0	5.0	68	s.	19	8.5	.....	.....	10	.....	.....	0.520	13.0	squally	W. Boswell
Armagh, Observatory	29.37	746.0	29.60	751.8	47.6	8.7	95	s.	18	8.0	.....	.....	10	.....	.....	.....	.....	overcast	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.82	757.4	36.9	2.7	70	se.	26	11.6	.....	.....	10	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	29.33	745.0	29 87	758.7	35.9	2.2	74	sse.	12	5.4	.....	.....	10	.....	.....	.....	.....	gloomy	Thomas Mackereth.
Bradford, Yorkshire	29.47	748.5	29.87	758.7	36.6	2.6	63	se.	.....	.....	2	.....	10	.....	.....	0.30	7.6	overcast	McLandsborough & Preston
Bridgetown, Barbadoes	29.86	758 4	29.89	759.2	76.0	24.4	97	ne.	.....	.....	1	.....	9	.....	.....	.....	.....	raining	Corpl. J. Surgenor, A. H. C.
Cardington	29.66	753.4	29.78	756.4	37.0	2.8	80	sw.	.....	.....	0.6	.....	4	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E.	29.86	758.4	30.00	762.0	41.9	5.5	76	calm	.....	.....	0	.....	5	.....	.....	blank	blank	d clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.59	751.6	29.82	757.4	50.5	10.3	95	sse.	.....	.....	3	.....	10	.....	.....	.....	.....	rain & fog	The Staff.
Fort Napier, Natal	27.74	704 6	29.96	761.0	72.0	22.2	67	e.	.....	.....	2	.....	6	.....	.....	.....	.....	.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88.0	31.1	62	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.19	766.8	30.24	768.1	64.0	17.8	88	w.	.....	.....	3	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.48	748 8	29.69	754.1	39.2	4.0	72	sse.	.....	.....	2	.....	10 nk	.....	.....	.....	.....	gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.81	757.2	29.99	761.7	33.7	0.9	98	se.	.....	.....	1	.....	1	.....	.....	.....	.....	blue sky	The Staff.
Guernsey	29.61	752.1	29.92	760.0	44.0	6.7	84	s.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	29.95	760.7	29.99	761.7	31.6	— 0.2	.....	nnw.	1	0.4	.....	.....	fg	.....	.....	.....	.....	foggy	The Staff.
Leicester, Museum	29.67	753.6	29.93	760.2	36.2	2.3	62	sw.	.....	.....	2	.....	8	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.81	757.2	29.89	759.2	70.4	21.3	93	nw.	.....	.....	2	.....	6	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.06	763 5	30.10	764.5	75.0	23.9	57	ne.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.39	746.5	29.94	760.5	34.5	1.4	75	sse.	.....	.....	2	.....	8	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.73	755.1	29.96	761.0	36.9	2.7	78	se.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast	The Staff.
Plymouth	29.79	756.7	29.87	758.7	45.9	7.7	99	se.	.....	.....	2	.....	10	.....	.....	.....	.....	drizzling	John Merrifield.
Sandwick Manse, Orkneys	29.39	746.5	29.49	749.0	41.5	5.3	87	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	gloomy	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.67	753.6	29.73	755.1	63.4	17.4	65	ssw.	.....	.....	2	.....	10	.....	.....	.....	.....	gloomy	W. H. Lyne.
Sheffield	29.59	751.6	29.88	758.9	36.8	2.7	80	s.	.....	.....	1	.....	8	.....	.....	0.25	6.4	overcast	W. F. Cooper.
Silloth Rectory	29.72	754 9	29.75	755.6	39.0	3.9	69	se.	.....	.....	3	.....	10	.....	.....	0.330	8.4	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.86	758.4	37.5	3.1	62	sse.	10	4.5	.....	.....	10	.....	.....	.....	.....	d. clouds	I. New.
Strathfield Turgiss	29.75	755.6	29.98	761.5	37.2	2.9	71	se.	.....	.....	1	.....	9	.....	.....	.....	.....	foggy	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.76	755 9	29.80	756.9	54	12.2	93	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.70	754.4	29.72	754.9	53.4	11.9	95	wsw.	20	8.9	.....	.....	10	.....	.....	.....	.....	raining	The Met'g'l Office
Canadian.																			
Bathurst, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.27	768.8	30.31	769.9	29.0	— 1.7	72	nw.	2	0.9	.....	0	5 8	.....	ne.	0	0	fair	H. J. Cundall, C. E.
Chatham, N. B*	30.33	770.4	30.40	772.1	18	— 7.8	87	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	G. A. Blair.
Father Point, Quebec*	30.37	771.4	30.40	772.1	25	— 3.9	80	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.35	745.5	30.24	768.1	19	— 7.2	100	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	James Stewart.
Halifax, N. S*	30.15	765.8	30.29	769.4	29	— 1.7	92	n.	8	3.6	.....	.....	10 n	.....	.....	0.050	1.3	light snow	A. Allison.
Kingston, Ontario*	30.03	762.7	30.40	772.1	19.0	— 7.2	83	ne.	8	3.6	.....	0	2 8	.....	ne.	0.01	0.3	fair	A. P. Knight, M. A.
Montreal, Quebec*	30.18	766.6	30.40	772.1	18	— 7.8	96	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.67	753.6	30.43	772.9	15	— 9.4	83	e.	3	1.3	.....	0	0	.....	.....	0	0	clear	Rev. R. Mosley.
Port Dover, Ontario	29.66	753.4	30.41	772.4	18	— 7.8	100	ne.	8	3.6	.....	0	0	.....	.....	0.09	2.3	clear	H. Morgan.
Port Stanley, Ontario	29.67	753.6	30.37	771.4	20	— 6.7	87	n.	8	3.6	.....	0	2 k	.....	ne.	0.02	0.5	clear	M. Payne.
Quebec, Quebec*	30.08	764 0	30.43	772 9	15	— 9.4	83	nw.	.....	.....	1	5 k	5	.....	nw.	0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.94	760.5	30.45	773.4	9	—12.8	87	calm	0	0	.....	5 c	fg.	nw.	.....	0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.63	752.6	30.41	772.4	15	— 9.4	96	se.	3	1.3	.....	2 k	0	n.	.....	0	0	clear	
St. Andrews, N. B	30.26	768.6	30.32	770.1	21	— 6.1	88	ne.	5	2.2	.....	.....	0	.....	.....	0	0	clear	
Sydney, C. B*	30.25	768.3	30.32	770.1	33	0.6	85	e.	1	0.4	.....	.....	10 n	.....	e.	0.04	1.0	cloudy	T. C. Hill, C. E
Toronto, Ontario*	30.00	762.0	30.42	772.7	17	— 8.3	73	n.	7	3.1	.....	0	2 8	.....	w.	0.07	1.8	clear	Magnetic Observatory.
Yarmouth, N. S*	30.17	766.3	30.24	768.1	27	— 2.8	88	ne.	7	3.1	.....	.....	10 s	.....	ne.	0.07	1.8	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.90	734.0	30.44	773.2	6	—14.4	100	nw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	30	— 1.1	100	nw.	2	0.9	.....	0	0	.....	.....	0	0	fine	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.24	768.1	30.27	768.8	66.0	18.9	88	wsw.	26.4	11.8	.....	.....	8 k	.....	.....	0.040	1.0	cloudy	John Duthie.
Cape Town, C. G. H. Obs'y	30.17	766.3	30.21	767.3	75.0	23.9	55	s.	34	15.2	.....	0	2	.....	.....	0	0	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent	Wind. Direction. From.	Velocity. Miles p. hr.	Mrs. p sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
Chinese (*Sub-arctic*).																			
Tchang-kia-tchouang	.....	.....	30.29	769.4	42.8	6.0	92	calm	3.1	1.4	.....	.....	10	.....	.....	0	0	foggy	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.33	770.4	30.36	771.1	53.2	11.8	82	n.	3.8	1.7	.....	10 ck	0	.....	.....	0	0	covered	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.78	756.3	29.82	757.5	32.2	0.1	87	ne.	.....	.....	7	.....	8	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	29.96	761.0	29.98	761.6	30.6	— 0.8	81	n.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.56	750.9	29.61	752.0	25.0	— 3.9	98	nw.	.....	.....	4	.....	10	.....	.....	.....	.....	snowing	S. Kleinschmidt.
Ivigtut	29.63	752.6	29.65	753.1	17.2	— 8.2	.....	calm	.....	.....	0	.....	7	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.05	737.8	29.09	738.9	35.6	2.0	91	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.24	742.6	29.27	743.5	45.0	7.2	87	ssw.	18	8	.....	.....	10	.....	.....	.....	.....	raining	Overloerer Bergh.
Vestervig	29.91	759.7	30.00	762.1	30.2	— 1.0	90	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	Loerer Oesterbol.
Jacobshavn	29.43	747.6	29.48	748.8	17.2	— 8.2	.....	e.	.....	.....	2	.....	4	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.45	748.1	30.11	764.9	46.0	7.8	86	calm	.....	.....	0	.....	8	.....	.....	0	0	very cloudy	M. Labroue, Director.
Alençon, Normal School	29.49	749.1	30.04	763.1	41.4	5.2	97	sw.	.....	.....	1	.....	8	.....	ne.	0.157	4.0	.....	M. Nicot, Director.
Arras, Engineer School	29.78	756.3	30.04	763.1	37.4	3.0	69	.....	.....	.....	2	.....	8	.....	.....	0	0	.....	M. Fénéon, Command't.
Avignon, Normal School	29.89	759.1	29.97	761.1	44.6	7	71	n.	.....	.....	4	.....	1	.....	n.	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.51	749.6	30.10	764.5	32.4	1.2	85	sse.	.....	.....	1	.....	2	.....	.....	0.079	2.0	slightly cl'dy	M. Saillard, Director.
Beauvais, Normal School	29.78	756.5	30.06	763.5	38.7	3.7	80	e.	.....	.....	1	.....	2	.....	sse.	0	0	slightly cl'dy	M. Frère Eugène Marie.
Besançon, Normal School	29.11	739.5	30.05	763.3	34.2	1.2	85	sw.	.....	.....	1	.....	n	.....	nw.	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.76	755.9	30.03	762.7	46.8	8.2	79	se.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	M. Rayet, Director.
Bourges, Normal School	29.52	749.9	30.08	764.1	44.6	7	93	ene.	.....	.....	1	.....	k	.....	ene.	0.091	2.3	.....	M. Malet, Director.
Brest, Naval Observatory	29.71	754.5	29.95	760.7	46.4	8.0	97	se.	.....	.....	1	.....	10	.....	se.	0.453	11.5	.....	M. de Kermaree, Dir.
Caen, Normal School	29.95	760.8	30.02	762.6	41.7	5.4	85	se.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.66	753.4	29.99	761.8	35.1	1.7	87	calm	.....	.....	0	.....	5	.....	w.	0	0	cloudy	M. Jadot, Director.
Charleville, Normal School	29.54	750.3	30.06	763.5	32.7	0.4	70	sw.	.....	.....	1	.....	8	.....	.....	0	0	¾ covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.67	728.2	30.07	763.7	39.6	4.2	70	nw.	.....	.....	1	.....	10	.....	.....	0.063	1.6	covered	M. Alluard, Director.
Cluny, Normal School	29.24	742.6	30.07	763.8	40.6	4.8	71	w.	.....	.....	1	.....	2	.....	.....	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.20	741.6	30.10	764.4	31.3	— 0.4	81	ne.	.....	.....	1	.....	1	ne.	ne.	0	0	clear	Dr. Coulet, Director.
Gap, Normal School	27.33	694.2	29.93	760.1	37.4	3	66	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.75	730.3	29.90	759.5	43.7	6.5	51	nw.	.....	.....	4	.....	1	.....	nw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.22	742.1	30.01	762 3	40.6	4.8	56	nnw.	.....	.....	2	ck	0	n.	.....	0.177	4.5	.....	M. Ablard, Director.
Guéret	28.41	721.6	30.06	763.4	39.6	4.2	87	nw.	.....	.....	2	.....	2	.....	.....	0	0	slightly cl'dy	M. Delorme, Dir.
Lamballe, Normal School	29.64	752.8	29.91	759.8	41.0	5	93	se.	.....	.....	2	10 n	10	.....	se.	0.059	1.5	raining	M. Ollitrault, Director.
Lescar, Normal School	29.45	748.0	30.02	762.5	50.0	10.0	95	sw.	.....	.....	1	.....	10	.....	.....	1.024	26.0	raining	M. Chauvin, Director.
Lorient, Naval Observatory	29.85	758.3	29.96	760.9	46.0	7.8	86	ene.	.....	.....	1	.....	10	.....	.....	0.236	6.0	raining	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.97	735.9	30.07	763.7	39.9	4.4	56	n.	.....	.....	1	0	5 kn	.....	nnw.	0.035	0.9	fair	M. André, Director.
Mans, Normal School	29.69	754.2	30.00	762.1	41.5	5.3	89	s.	.....	.....	1	.....	.....	.....	nw.	0	0	.....	M. Piboen, Director.
Marseille, Observatory	29.63	752 6	29.90	759.5	46.9	8.3	54	nw.	.....	.....	4	.....	2	.....	nw.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.70	627.4	29.54	750.4	40.1	4.5	65	nw.	18.6	8.3	.....	.....	8	.....	.....	0.071	1.8	.....	M. Curé for Dr. Fines.
Montpellier, Normal School	29.84	758.0	29.97	761.3	50.4	10.2	54	nnw.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.20	741.7	30.02	762.4	35.2	1.8	75	nw.	.....	.....	1	.....	kn	.....	.....	0.024	0.6	.....	M. Hasse, Director
Nantes, Observatory	29.86	758.4	30.02	762.6	45.7	7.6	71	sse.	.....	.....	1-2	.....	10	.....	.....	0	0	.....	M. Larocque, Director.
Perpignan, Observatory	29.89	759.2	30.00	762.1	52.7	11.5	62	n.	15.0	6.7	.....	.....	9	.....	nw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.10	535.9	.....	.....	24.8	— 4.0	.....	ne.	.....	.....	3-4	.....	10	.....	ne.	3.937	100.0	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.83	732.2	29.91	759.8	40.1	4.5	77	n.	.....	.....	1	.....	1	n.	n.	0	0	clear	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.03	635.8	.....	.....	25.5	— 3.6	100	nw.	.....	.....	1	.....	10	.....	.....	0.925	23.5	covered	M. Alluard, Director.
Rochefort, Naval Obs'y	29.98	761.5	30.01	762.3	46.4	8.0	79	s.	.....	.....	1	.....	10	.....	sw.	0.472	12.	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.81	757.1	30.03	762.7	43.5	6.4	85	se.	.....	.....	1	.....	10	.....	se.	0.091	2.3	covered	M. Brotier, Director.
Rodez, Normal School	27.82	706.6	30.04	762.9	34.2	1.2	85	nw.	.....	.....	1	0	1 k	.....	.....	0	0	clear	M. Seger, Director.
Rouen, Normal School	30.00	761.9	30.00	762.1	40.6	4.8	83	nw.	.....	.....	1	.....	2	se.	.....	0	0	slightly cl'dy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	41.0	5	71	nw.	.....	.....	1	.....	.....	.....	n.	0	0	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.89	759.3	30.06	763.5	41.2	5.1	58	s.	.....	.....	1	.....	0	.....	.....	0.012	0.3	.....	M. Renou, Director.
Toulouse, Observatory	29.37	746.1	30.10	764.5	44.8	7.1	75	n.	.....	.....	1	.....	hz	hw.	.....	0.012	0.3	hazy	M. Baillaud, Director.
Tours	29.85	758.1	30.02	762.6	45.7	7.6	66	ssw.	.....	.....	1	.....	2	n.	nw.	0	c	slightly cl'dy	M. de Tastes.
Versailles, Observatory	29.56	750.7	30.05	763.2	40.3	4.6	71	sw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.45	722.7	29 98	761.5	27.7	— 2.4	75	nw.	.....	.....	4	.....	7	nw.	.....	0.067	1.7	.....	Prof. Jnedt.
Bamberg	29.05	737.8	29.89	759.1	30.2	— 1.0	73	.....	.....	.....	.....	.....	10	.....	.....	0.039	1.0	snowing	Prof. Dr. Hoh.
Berlin	29.51	749.6	29.70	754.3	33.8	1.0	81	ne.	.....	.....	3	.....	10	.....	.....	0.055	1.4	.....	Prof. Dr. Arndt.
Breslau	29.13	740.0	29.66	753.3	23.7	— 4.6	86	w.	.....	.....	3	.....	10	.....	.....	0.051	1.3	.....	Royal University Obs'y.
Carlsruhe	29.58	751.2	30.03	762.8	32.9	0.5	69	nw.	.....	.....	1	.....	5	nw.	.....	0.020	0.5	snowing	Albert Senz.
Cassel	29.16	740.7	29.88	758.9	28.0	— 2.2	83	nw.	.....	.....	2	.....	10	nw.	.....	0.063	1.6	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.63	752.7	30.00	762.0	33.8	1.0	73	w.	.....	.....	1	.....	8	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.50?	723.9?	30.00	762.0	34.0	1.1	83	w.	.....	.....	8	.....	10	w.	.....	0.472	12.0	.....	Wilhelm, Chief Tel.
Hamburg	29.82	757.5	29.91	759.8	29.1	— 1.6	94	nw.	.....	.....	3	.....	10	.....	.....	0.020	0.5	snowing	E. Preller.
Kiel	29.88	759.0	29.90	759.4	33.6	0.9	69	nnw.	.....	.....	2	.....	7	.....	.....	0.071	1.8	snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.40	746.7	29.84	757.9	30.0	— 1.1	94	nw.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	H. Leppig, Asst.
Magdeburg	29.61	752.1	29.81	757.1	31.6	— 0.2	85	nw.	.....	.....	2	.....	10 ks	.....	nnw.	0.020	0.5	.....	Weather Observatory.
Memel	29.62	752.3	29.67	753.5	18.7	— 7.4	100	e.	.....	.....	5	.....	10	.....	.....	.....	.....	snowing	Issermann.
Munich	28.06	712.7	29.91	759.8	27.5	— 2.5	83	nw.	.....	.....	4	.....	10	.....	.....	0.220	5.6	snowing	Central Station.
Neufahrwasser	29.52	749.9	29.54	750.3	25.2	— 3.8	91	e.	.....	.....	2	.....	10	.....	.....	0.705	17.9	snowing	A. Lothes.
Neustadt, Palatinate	29.47	748.6	30.00	761.9	32.4	0.2	89	w.	.....	.....	1	.....	3	w.	.....	0.028	0.7	.....	Dicknether.
Stuttgart	29.02	737.1	29.96	761.0	28.4	— 2.0	90	nw.	.....	.....	1	.....	5	n.	.....	0.091	2.3	.....	Prof. Dr. Schoder.
Wustrow	29.81	757.1	29 83	757.7	32.4	0.2	89	n.	.....	.....	5	.....	10 k	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.39	746.4	29.76	756.0	69.6	20.9	.....	s.	.....	.....	5.0	.....	8	.....	.....	0.102	2.6	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.98	761.4	30.03	762.7	77.7	25.4	86	wsw.	20.0	8.9	.....	.....	2	.....	.....	0	0	d. clouds	
Deesa	29.50	749.3	29.98	761.4	81.5	27.5	38	wsw.	4.0	1.8	.....	.....	5	sw.	.....	0	0	d. clouds	
Bombay	29.90	759 0	29.94	760.5	78.5	25.8	86	nw.	10.0	4.5	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.66	712.8	29.90	759.3	86.5	30.3	30	nw.	10.0	4.5	.....	.....	3	e.	.....	0	0	d. clouds	
Trichinopoly	29.66	753.4	29.95	760.6	78.2	25.7	94	ene.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast	
Bellary	28.44	722.4	29.92	759.9	77.5	25.3	78	se.	2.0	0.9	.....	.....	7	.....	.....	0.07	1.8	d. clouds	
Belgaum	27.37	695.2	29.90	759.3	80.0	26.7	50	ene.	4.0	1.8	.....	.....	4	.....	ne.	0	0	d. clouds	
Lahore	29.27	743.5	30.04	762.9	67.1	19.5	64	calm	0	0	.....	.....	7	.....	.....	0	0	d. clouds	
Roorkee	29.11	739.4	30.04	762.9	69.8	21.0	57	calm	0	0	.....	.....	5	w.	.....	0	0	.....	
Agra	29.46	748.2	30.03	762.8	75.7	24.3	33	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.94	735.0	29.99	761.8	77.3	25.2	37	calm	3.0	1.3	.....	.....	1	.....	.....	0	0	blue sky	
Jubbulpore	28.66	728.0	30.04	763.1	73.4	23.0	32	e.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.65	753.1	30.03	762.8	76.2	24.6	44	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.71	754.7	30.04	762.9	66.6	19.2	58	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.86	758.5	30.05	763.3	68.9	20.5	54	n.	1.8	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.98	710.6	30.05	763.3	64.9	18.3	43	n.	3.7	1.6	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.94	760.3	30.02	762.5	71.9	22.2	70	ne.	1.0	0 4	.....	.....	2	.....	.....	0	0	d. clouds	
Calcutta, Alipore	30.00	761.9	30.02	762.4	70.3	21.3	74	n.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.89	759.1	30.01	762.2	72.3	22.4	71	calm	1.2	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.91	759.6	30.00	762.0	72.6	22.6	75	w.	1.8	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.71	754.6	30.06	763.5	69.5	20.8	83	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.87	758.8	29.90	759.3	83.5	28.6	64	n.	3.4	1.5	.....	.....	6	.....	ene.	1.22	31.0	d. clouds	
Jeypore	28.56	725.5	30.03	762.7	74.7	23.7	38	s.	2.6	1.2	.....	.....	1	s.	.....	0	0	d. clouds	
Italian.																			
Udine	29.35	745.4	29.76	756.0	44.4	6.9	70	calm	0	0	.....	.....	6	.....	.....	0.532	13.5	.....	Prof. Giovanni Clodig.
Milan	29.26	743.2	29.79	756.6	48.9	9.4	17	n.	10.5	4.7	.....	.....	0	.....	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.63	752.5	29.74	755.3	49.5	9.7	68	sse.	8.1	3.6	.....	.....	6	ne.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.88	733.5	29.80	756.8	48.0	8.9	29	e.	6.3	2.8	.....	.....	0	.....	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.58	751.2	29.77	756.1	52.9	11.6	8	n.	5.6	2.5			0			0	0		Prof. G. M. Garibaldi.
Mondovi	27.85	707.5	29.80	757.0	41.5	5.3	23	nne.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.56	750.9	29.61	752.1	50.4	10.2	39	nne.	9.4	4.2			3			0	0		Prof. Luigi Guidi.
Florence	29.47	748.6	29.73	755.1	47.1	8.4	62	wsw.			2					0.063	1.6		Prof. Costantino Pitter
Leghorn	29.61	752.1	29.69	754.2	53.4	11.9	25	nnw.	4.9	2.2			3			0	0		Prof. P. Monte.
Rome	29.53	750.0	29.71	754.5	53.4	11.9	57	n.	0.7	0.3			3			0.110	2.8		Prof. P. Tachini.
Lecce	29.46	748.1	29.71	754.5	59.9	15.5	66	ssw.	7.4	3.3			8	sw.		0.441	11.2		Prof. C. de Giorgi.
Cosenza	28.87	733.3	29.76	755.9	51.8	11.0	75	wnw.	1.8	0.8			9	w.		0.890	22.6		Prof. D. Conti.
Cagliari	29.62	752.3	29.81	757.2	55.9	13.3	42	nw.			6		5	nw.		0.035	0.9		Prof. A. Pacinotti.
Palermo	29.56	750.9	29.81	757.2	57.2	14.0	52	wnw.	15.0	6.7			10	wnw.		0.248	6.3		Prof. G. Cacciatore.
Syracuse	29.76	756.0	29.81	757.1	61.9	16.6	51	wsw.	22.4	10.0			9	wsw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.18	741.2	29.71	754.5	54.1	12.3	73	sw.	0	0			10	sw.		0.020	0.5		Prof. F. Brioschi.
Stelvio	21.79	553.4			7.9	—13.4	76	e.			2		0			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.79	553 3			12.4	—10.9	69	e.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.17	766.4	30 20	767.2	35.2	1.8	73	calm			0		9 ck;s		sw.	0.047	1.2	cloudy	Hattori.
Awomori	30.14	765.5	30.17	766.3	33.5	0.8	73	sw.	6.4	2.9			10 s			0	0	covered	K. Ogawa.
Hakodate	30.16	765.9	30.17	766.2	22.5	— 5.3	70	n.	3.0	1.3		2	4	nw.	nw.	0	0	fair	
Hiroshima					50.5	10.3	80	nne.	3.6	1.6		0	0			0	0	clear	Y. Miwa.
Kanazawa	30.13	765.3	30.24	768.0	44.0	6.7	83	ese.	4.0	1.8		0	1			0.622	15.8	fair	S. Endo.
Kioto	30.00	762.0	30.18	766.6	47.0	8.3	93	nw.	0.7	0.3		2 ck	0	nw.		0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.06	763.6	30.27	768.8	51.7	10.9	74	n.	0.9	0.4		0	0			0	0	clear	S. Takehayashi.
Nemuro	30.12	765.0	30.19	766.8	31.0	— 0.6	96	wnw.	6.0	2.7		0	8			0	0	cloudy	
Niigata	30.18	766.6	30.22	767.6	43.6	6.4	81	se.	2.3	1.0			10 ck		w.	0.160	4.1	overcast	M. Morita.
Nobiru	30.16	766.1	30.18	766.5	34.6	1.4	72	n.	4.0	1.8		0	0			0	0	clear	H. Midzushima.
Osaka	30.16	766 c	30.17	766.4	48.2	9.0	82	n.	2.6	1.2		5ck;cs	0	w.		0	0	fair	
Sapporo					24.0	— 4.4	69	calm	0	0			10			0.010	0.2	covered	
Tokei Obs'y, Yeddo	30.06	763.6	30.14	765.6	46.8	8.2	71	nne.	4.0	1.8		0	5 ck;s		sw.	0	0	cloudy	The Staff.
Wakayama	30.12	765.1	30.18	766.6	52.3	11.3	84	ne.	2.0	0.9			3		nw.	0.014	0.4	fair	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.84	757.9	30.03	762.7	79.0	26.1	55	e.	18.0	8.0		7 cs;c	3 k;ks		sse.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.71	602.1	29.93	760.1	51.3	10.7	92	wnw.	inap.	inap.		0	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.36	618.7	30.19	766.8	47.5	8.6	87	ene.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.78	756.4	30.04	763.0	69.0	20.6	75	nnw.	5.3	2.3		0	1 s			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.18	588.7	30.36	771.0	43.9	6.6	85	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.25	616.0	30.21	767.3	52.2	11.2	92	n.	1.8	0.8		0	1 k		se.	0	0	clear	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascalientes	23.99	609.3	30.10	764.4	48.7	9.3	88	calm			0					0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.1	30.31	769.8	44.6	7.0	55	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.74	577.6	30.58	776.7	51.0?	10.2?	80	e.	5.1	2.3		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.04	763.0	30.04	763.0	37.0	2.8		ssw.			3					0	0		
Groningen	29.97	761.1	30.02	762.5	31.6	— 0.2		wnw.			1					0.020	0.5		
Helder	30.02	762.4	30.02	762.4	33.3	0.7		w.			1					0.228	5.8		
Hellevoetsluis	30.04	762.9	30.04	762.9	35.6	2.0	77	sw.			2					0	0		
Utrecht	29.96	760.9	30.00	762.1	36.7	2.6	77	nne.			1		5			0	0	cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.88	759.0	29.95	760.6	36.7	2.6	55	s.	25	11			10			0.016	0.4		
Brono	30.00	761.9	30.04	762.9	34.3	1.3	72	se.	18	8			2			0	0		
Christiania	29.92	760.0	30.08	763.9	27.9	— 2.3	69	nnw.	7	3			7			0	0		
Gjesvær	30.19	766.9	30.22	767.5	34.3	1.3		calm			0		10						
Lodingen	30.12	765.0	30.17	766.2	34.0	1.1	62	n.			1		5			0	0		
PORTUGUESE.																			
Angra, Azores	30.31	769 9	30.47	773.9	63.0	17.2	90	se.	10.5	4.7			6			0.177	4.5		Dr. J. A. Sampaio.
Campo Major	29.26	743.3	30.27	768.8	61.7	16.5	64	wnw.	2.5	1.1			5	n.		0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.26	768.5	30.34	770.7	68.5	20.3	52	e.	7.4	3.3			1	nne.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.01	762.3	30.37	771.5	60.1	15.6	80	n.	15.0	6.7			8			0	0		The Staff.
Ponta Delgada, Azores	30.42	772.6	30.49	774.4	65.1	18.4	73	ese.	6.9	3.1			3			0.039	1.0		
Saint Paul de Loando	29.78	756.4	29.98	761.6	72.3	22.4	88	nnw.	0.7	0.3			10			0	0		
Serra da Estrella	25 45	646.3	30.28	769.0	41.7	5.4	85	wnw.	41.6	18.6			6			0.091	2.3		
RUSSIAN.																			
Akmolinski	29.23	742.4	30.37	771.3	28.9	— 1.7	76	ssw.	9	4			10 n			0	0		Major K. Lasarew.
Archangel	30.18	766.5	30.20	767.0	0.3	—17.6	86	calm	0	0			0			0	0		Capt. Sselliwerstow.
Astrakhan	30.27	768.9	30.19	766.8	52.3	11.3	84	wsw.	2	1		0	1 s			0	0		Capt. Wisganow.
Barnaul	30.13	765.3	30.69	779.6	5.5	—14.7	76	calm	0	0			0			0	0		Meteorological Obs'y.
Dorpat	29.82	757.3	30.08	764.1	12.6	—10.8	93	e.	0	4			10 n			0.094	2.4		Observatory.
Ekaterinburg	29.00	736.5	30.02	762.4	21.0	— 6.1	79	w.	18	8			10			0.012	0.3	snowing	Meteorological Obs'y.
Kasan	29.98	761.6	30.28	769.0	18.0	— 7.8	78	w.	7	3		9 c	0			blank	blank		Observatory.
Kertch	29.74	755.3	29.76	755.8	58.5	14.7	96	se.	9	4		0	4 ks			0	0		Lagorio & Sastyrea.
Kieff	28.86	733.0	29.51	749.6	32.0	0.0	100	e.	13	6			10 n					rain & fog	Observatory.
Lugan	29.76	756.0	29.97	761.3	38.7	3.7	95	e.	13	6			10			0.008	0.2		Meteorological Obs'y.
Nikolaiev	29.60	751.8	29.67	753.6	58.5	14.7	71	s.	31	14		0	8 sn			0.169	4.3		Capt. Kurdakow.
Pekin, China	30.21	767.4	30.35	771.0	41.4	5.2	83	calm	0	0		0	5 k			0.091	2.3	lunar corona	Physical Observatory.
St. Petersburg	30.17	766.2	30.18	766.6	12.2	—11.0	91	s.	9	4			10			0	0		Central Physical Obs'y.
Semipalatinsk	29.98	761.6	30.72	780.2	10.4	—12.0	81	e.	20	9			0			0	0		Major Lasarew.
Tashkend, Laboratory	28.75	730.2	30.36	771.1	48.7	9.3	66	calm	0	0			0						Teich, A. M.
Tiflis	28.70	728.9	30.10	764.4	66.0	18.9	39	calm	0	0		0	0			0	0		Physical Observatory.
Tomsk	30.24	768.2	30.56	776 1	6.3	—14.3	81	s.	11	5		3 c	0						
Vladivostock	30.08	764 1	30.15	765.8	23.4	— 4.8		e.	4	2		0	3 k			0	0		
Warsaw	29.09	738.9	29.54	750.2	21.4	— 5.9	93	w.	16	7		4 ck	0						Astronomical Obs'y.
Wilna	29.24	742.6	29.68	753.8	21.9	— 5.6	96	e.	22	10			10			0.083	2.1	snowing	Berg, Assistant.
Yeniseisk	30.41	772 4	30.72	780.8	— 5.4	—20.8	91	e.	2	1			0 •			0	0	lunar corona	M. O. Marks.
SCOTTISH.																			
Monach Lt			29.42	747.3	49	9.4	92	s.			7		10			0.3	8.	sleeting	J. Youngclause.
North Unst			29.47	748.5				s.			7		10						Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.87	758.7	29.98	761.4	54.7	12.6	73	e.	3.1	1.4		0	2			0	0	almost clear	Antonio Rzve, Director.
Bilbao, Met. Obs'y	30.04	763.0	30.10	764.5	58.3	14.6	87	nw.	4.7	2.1			10			0.768	19.5	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.19	690.7	30.22	767.7	47.3	8.5	93	sw.	4.9	2.2			10			0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.93	709.5	30.19	766.8	56.7	13.7	53	nw.	21.5	9.6		4	0	nnw.		0	0	light clouds	The Staff.
Murcia, Met. Obs'y	29.98	761.5	30.11	764.8	70.2	21.2	51	w.	5.1	2.3		2	3	se.		0	0	clouds	Olayo Diaz, Director.
Oviedo	29.28	743.8	30.16	766.1	55.4	13.0	78	e.	10.1	7.2			10 n		w.	0.110	2.8	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.35	745.4	30.26	768.5	54.9	12.7	93	w.	6.9	3.1			10			0.209	5.3	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.88	758.9	29.93	760.3	78.5	25.8	80	ne.	5.5	2.5		0	2 ks		ne.	0.087	2.2	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.19	766.8	30.29	769.4	60.8	16.0	49	nw.	6.6	3.0		3	5	nnw.	nnw.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.82	757.4	29.91	759.7	76.3	24.6	71	n.	13.4	6.0		3 cs	2 k	n.	n.	0.217	5.5		Manuel Maese.
Tuguegarao, Philippine Id's	29.89	759.2	30.02	762.6	76.7	24.8	92	n.	2.6	1.2		0	6 k		ese.	0	0	cloudy	José L. Yrastorza.
SWEDISH																			
Haparanda	30.20	767.1	30.24	768.1	28.0	— 2.2	100	n.			2		10			0	0		
Umea	30.16	766.1	30.21	767.4	29.5	— 1.4	96	calm			0		10			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	30.11	764.8	30.16	766.1	31.3	— 0.4	85	calm			0		10			0.150	3.8		
Stockholm	29.82	757.3	29.99	761.8	32.0	0.0	63	ene.			4		10			0.012	0.3		
Wisby	29.78	756.4	29.84	757.9	30.9	— 0.6	77	ene.			6		10			0	0		
Sub-series.																			
Upsala	29.93	760.3	30.02	762.5	31.3	— 0.4	83	nne.	7.2	3.2			10		ene.	0.051	1.3	snowing	S. G. Fineman.
Swiss.																			
Geneva	28.58	726.0	30.06	763.5	38.1	3.4	46	nnw.			1		3			0.012	c.3		The Observatory.
Turkish.																			
Constantinople			29.77	756.1	65.1	18.4	62	s.	22	10.0			10		sw.	0.472	12.0		The Observatory.
Valona			29.77	756.2	57.7	14.3		s.			1		5			0.94	24.	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			29.98	761.6	75.0	23.9	58	w.			1	7 cs		sw.		0	0		Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.29	769.4	30.37	771.4	28	— 2.2	77	n.	14	6.3			10 s			0.13	3.3	cloudy	J. O. Barnes.
Alpena, Michigan	29.67	753.6	30.37	771.4	20	— 6.7	84	nw.	4	1.8		0	0			0	0	clear	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.06	636.5	30.16	766.1	34	1.1	92	e.	2	0.9		0	6 s			0.48	12.2	fair	W. U. Barnes.
Assinnaboine, Ft., Montana	27.39	695.7	30.37	771.4	21	— 6.1	61	e.	2	0.9		0	0			0	0	clear	B. O. Lenoir.
Atlanta, Georgia	28.92	734.6	30.14	765.5	52	11.1	93	w.	6	2.7			10 s			0.05	1.3	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.20	767.1	30.21	767.3	36	2.2	79	n.	16	7.2		0	6 ks		n.	0.07	1.8	fair	Jas. M. Watson.
Augusta, Georgia	29.96	761.0	30.16	766.1	57	13.9	86	sw.	1	0.4			10 s		w.	inap.	inap.	cloudy	John Healy.
Baltimore, Maryland	30.26	768.6	30.31	769.9	40	4.4	73	ne.	6	2.7			10 s		ne.	0.01	0.3	cloudy	Geo W Felger.
Barnegat, New Jersey	30.20	767.1	30.22	767.6	37.0	2.8	92	ne.	25	11.2			10 s		ne.	0.33	8.4	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.79	731.3	30.48	774.2	29	— 1.7	88	se.	1	0.4		0	4 s			0	0	fair	A. Pritchard.
Benton, Fort, Montana	27.42	696.5	30.38	771.6	16	— 8.9	67	calm	0	0		0	0			0	0	clear	S. Wheaton.
Bismarck, Dakota	28.49	723.6	30.41	772.4	27	— 2.8	88	nw.	6	2.7		0	0			0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	30.16	766.1	30.19	766.8	33	0.6	100	ne.	44	19.7			10 n		ne.	0.36	9.1	light snow	J. T. Elker.
Boise City, Idaho	27.60	701.0	30.54	775.7	23	— 5.0	88	w.	2	0.9		0	0			0	0	clear	B. E. Light.
Boston, Massachusetts	30.13	765.3	30.29	769.4	25.0	— 3.9	88	n.	18	8.0			10n;fog			0.29	7.4	light snow	O. B. Cole.
Brownsville, Texas	30.09	764.3	30.14	765.5	53.4	11.9	93	n.	12	5.4			10 s		n.	0.07	1.8	cloudy	M. McCarty.
Buffalo, New York	29.60	751.8	30.38	771.6	24	— 4.4	85	ne.	4	1.8		0	sk.			0.03	0.8	clear	W. Finn.
Buford, Fort, Dakota	28.41	721.6	30.39	771.9	22	— 5.6	73	sw.	4	1.8		0	0			0	0	clear	F. A. Mellen.
Burlington, Vermont	30.09	764.3	30.40	772.1	21.3	— 5.9	72	ne.	5	2.2		5 cs	3 s	ne.	n.	inap.	inap.	cloudy	W. B Gates.
Cairo, Illinois	29.93	760.2	30.35	770.9	40.8	4.9	87	n.	10	4.5			10 s		n.	0.01	0.3	threatening	W. H. Ray.
Cape Henry, Virginia	30.17	766.3	30.19	766.8	47	8.3	68	n.	14	6.3		2 c	5 s			0	0	fair	A. K. Alderson.
Cape May, New Jersey	30.21	767.3	30.24	768.1	39.0	3.9	73	n.	16	7.2			10 s		n.	0	0	cloudy	W. E. Smith.
Cape Mendocino, California	29.69	754.1	30.22	767.6	43	6.1	74	se.	6	2.7		4 k	fg.	se.	se.	0	0	fair	J. J. McLean.
Cedar Keys, Florida	30.14	765.5	30.16	766.1	60	15.6	81	ne.	3	1.3		0	0			0	0	clear	F. W. Mixer.
Champaign, Illinois	29.44	747.8	30.30	769.6	41.0	5.0	73	ne.	0	2.7			10 s		ne.	0.05	1.3	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.06	763.5	30.12	765.0	59	15.0	87	calm	0	0		3 c	6 s;fg		w.	0	0	cloudy	J. H. Smith.
Charlotte, N. Carolina	29.23	742.4	30.11	764.8	49.8	9.9	77	e.	5	2.2			10 s		e.	0	0	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.32	744.7	30.17	766.3	51.5	10.8	88	w.	4	1.8			10 s		w.	0.08	2.0	cloudy	B. L. Goulding.
Cheyenne, Wyoming	24.26	616.2	30.48	774.2	11.8	—11.2	66	nw.	6	2.7		0	0			0	0	clear	E. McGovern.
Chicago, Illinois	29.58	751.3	30.32	770.1	40.2	4.6	82	se.	4	1.8			10 s			0	0	cloudy	J. Mitchell.
Chincoteague, Virginia	30.19	766.8	30.21	767.3	40	4.4	73	n.	26	11.6			10 ks		n.	0	0	cloudy	O. F. Dickens.
Cincinnati, Ohio	29.59	751.6	30.28	769.1	42	5.6	82	ne.	5	2.2			10 s		n.	inap.	inap.	cloudy	R. B. Watkins.
Cleveland, Ohio	29.57	751.1	30.34	770.6	28.9	— 1.7	89	se.	6	2.7		2 k	2 s	ne.		0.08	2.0	fair	J. B. Newlin.
Coleman City, Texas	28.47	723.1	30.36	771.1	39	3.9	92	n.	12	5.4			10 n		n.	0.06	1.5	light rain	L. Dorman.
Columbus, Ohio	29.40	746.7	30.29	769.4	32	0.0	78	ne.	7	3.1			10 s		ne.	0.09	2.3	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.34	719.8	30.35	770.9	37.0	2.8	100	ne.	8	3.6			10 n			0.12	3.0	light rain	J. McGlone.
Custer, Fort, Montana	27.12	688.8	30.44	773.2	25	— 3.9	76	se.	1	0.4		0	0			0	0	clear	W. B. Lamar.
Davenport, Iowa	29.68	753.9	30.37	771.4	42	5.6	82	e.	4	1.8			10s;fg			0.08	2.0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.22	640.6	30.12	765.0	27	— 2.8	88	n.	8	3.6			10 n		n.	0.06	1.5	sleeting	J. Williams.
Dayton, Washington T'y	28.65	727.7	30.43	772.9	23	— 5.0	92	sw.	2	0.9		0	0			0	0	clear	H. Clifford.
Deadwood, Dakota	25.63	651.0	30.46	773.7	26	— 3.3	88	se.	2	0.9		0	0			0	0.	clear	G. W. Scott.
Delaware Breakwater, Del	30.22	767.6	30.24	768.1	40	4.4	82	ne.	26	11.6			10 s		ne.	0.01	0.3	cloudy	T. S. Townsend.
Denison, Texas	29.58	751.3	30.42	772.7	42.0	5.6	65	ne.	6	2.7			10 s			0	0	cloudy	J. W. Byram.
Denver, Colorado	25.00	635.0	30.50	774.7	19.0	— 7.2	73	s.	8	3.6		0	0			0	0	clear	F. M. Neal.
Des Moines, Iowa	29.44	747.8	30.39	771.9	31	— 0.6	78	n.	1	0.4		0	sk.			0.02	0.5	clear	F. W. Conrad.
Detroit, Michigan	29.64	752.8	30.38	771.6	26.0	— 3.3	88	ne.	8	3.6		0	0			inap.	inap.	clear	C. F. R. Wappenhans.
Dodge City, Kansas	27.71	703.8	30.45	773.4	28	— 2.2	67	s.	2	0.9		0	fg.			0	0	clear	V. P. Temple.
Dubuque, Iowa	29.60	751.8	30.35	770.9	39.5	4.2	81	ne.	1	0.4			10 s		ne.	0.01	0.3	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.44	747.8	30.34	768.1	33	0.6	78	s.	12	5.4		0	9 s		s.	inap.	inap.	cloudy	N. B. Conger.
Eagle Pass, Texas	29.47	748.8	30.30	769.6	48.0	8.9	93	nw.	4	1.8			10 n			inap.	inap.	light rain	F. Belford.
Eagle Rock, Idaho	25.53	648.5	30.39	771.9	0	—17.8	76	n.	6	2.7		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	30.25	768.3	30.32	770.1	24.0	— 4.4	80	n.	16	7.2		4 c	2 s	sw.		0	0	fair	D. C. Murphy.
Elliott, Fort, Texas	27.50	698.5	30.43	772.9	35	1.7	82	se.	4	1.8			10 n		se.	inap.	inap.	light rain	W. J. Cundall.
El Paso, Texas	26.26	667.0	30.11	764.8	35	1.7	89	e.	9	4.0			10 s		e.	0	0	cloudy	J. O'Lowd.
Erie, Pennsylvania	29.61	752.1	30.37	771.4	28	— 2.2	77	e.	1	0.4		0	2 s			0.09	2.3	clear	Peter Wood.
Escanaba, Michigan	29.58	751.3	30.28	769.1	32.0	0.0	92	sw.	7	3.1		0	8 s		sw.	0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.50	723.9	30.32	770.1	42	5.6	92	ne.	14	6.3			10 s			0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.20	767.1	30.25	768.3	53	11.7	86	ne.	21	9.4			10 ks		ne.	0	0	threatening	E. O'C. Macinerney.
Grand Haven, Michigan	29.65	753.1	30.35	770.9	28.5	— 1.9	88	ne.	4	1.8			10 k		w.	0.01	0.3	cloudy	J. Mueller.
Grant, Fort, Arizona	25.25	641.3	30.09	764.3	40	4.4	79	nw.	8	3.6			10 s		se.	0.04	1.0	cloudy	Robert G. Lord.
Hatteras, North Carolina	30.14	765.5	30.16	766.1	53	11.7	80	ne.	26	11.6		9 k	8	n.		0	0	cloudy	R. M. Crawford.
Helena, Montana	26.17	664.7	30.55	776.0	24	— 4.4	76	calm	0	0		0	0			0	0	clear	N. O. Smith.
Henrietta, Texas	29.37	746.0	30.41	772.4	41	5.0	92	n.	4	1.8			10 s		n.	0	0	cloudy	J. P. Sherry.
Huron, Dakota	28.91	734.3	30.39	771.9	25.3	— 3.7	70	nw.	6	2.7		0	0			0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.41	747.0	30.25	768 3	40	4.4	82	ne.	4	1.8			10s;fg		ne.	0.01	0.3	cloudy	O. Schutze
Indianola, Texas	30.19	766.8	30.22	767.6	53.7	12.1	86	ne.	25	11.2		10 k	0	sw.		0	0	cloudy	I. A. Reed.
Jacksboro, Texas	29.18	741.2	30.40	772.1	43	6.1	74	ne.	3	1.3			10 s		ne.	0	0	cloudy	D. J. Carr.
Jacksonville, Florida	30.10	764.5	30.16	766.1	59	15.0	87	calm	0	0		2 cs	fg.			0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.82	706.6	30.50	774.7	23	— 5.0	73	sw.	2	0.9		0	2 s			0	0	clear	A. Schneider.
Keokuk, Iowa	29.64	752.8	30.33	770.4	38.5	3.6	90	nw.	1	0.4			10 s			0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.10	764.5	30.12	765.0	72.0	22.2	78	ne.	7	3.1			10ks		e.	0	0	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	30.17	766.3	30.19	766.8	50	10 0	86	ne.	30	13.4		0	9 ks		ne.	0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.10	739.1	30.17	766.3	46	7.8	93	calm	0	0		0	hz.			0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.51	749.5	30.33	770.4	38	3.3	82	s.	5	2.2			10 s			0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.49	749.0	30.43	772.9	31	— 0.6	88	calm	0	0		0	0			inap.	inap.	clear	A. W. Browne.
Lewiston, Idaho	29.63	752.6	30.50	774.7	26.0	— 3.3	88	sw.	1	0.4		0	0			0	0	clear	W. Bell.
Little Rock, Arkansas	30.04	763.0	30.37	771.4	39	3.9	82	calm	0	0		0	0			0	0	clear	W. U. Simons.
Los Angeles, California	29.82	757.4	30.22	767.6	45	7.2	53	ne.	5	2.2		0	0			0	0	clear	T. S. Collins.
Louisville, Kentucky	29.61	752.1	30.20	767.1	44	6.7	83	n.	5	2.2			10 s			0.05	1.3	cloudy	L. M. Dey.
Lynchburg, Virginia	29.51	749.5	30.23	767.8	45.5	7.5	67	ne.	0	2.7			10 s		ne.	0	0	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.63	752.6	30.32	770.1	27.5	— 2.5	92	sw.	12	5.4		0	1 k		sw.	0	0	clear	F. R. Day.
Macon, Fort, North Carolina	30.14	765.5	30.15	765.8	52	11.1	86	n.	14	6.3		10 cs	0	w.		0	0	cloudy	F. P. Chaffee.
Madison, Wisconsin	29.29	744.0	30.36	771.1	38	3.3	89	sw.	5	2.2			10 s		w.	inap.	inap.	cloudy	C. A. Shaw.
Maginnis, Fort, Montana	25.73	653.5	30.24	768.1	26	— 3.3	50	n.	2	0.9		0	0			0	0	clear	F. Burke.
McKavett, Fort, Texas	27.99	710 9	30.37	771.4	40	4.4	82	n.	10	4.5			10 n			0.12	3.0	light rain	J. E. Thatcher.
Marquette, Michigan	29.46	748.3	30.24	768.1	32	0.0	78	sw.	16	7.2		3 k	0	sw.		0	0	clear	J. Gilligan.
Memphis, Tennessee	29.98	761.5	30.33	770.4	38	3.3	89	w.	2	0.9		0	0			0.02	0.5	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.55	750.6	30.34	770.6	42	5.6	83	s.	4	1.8			10 s			0.02	0.5	cloudy	W. Line.
Missoula, Fort, Montana	27.06	687.3	30.46	773.7	17	— 8.3	38	ne.	1	0.4		0	0			0	0	clear	J. H. Young.
Mobile, Alabama	30.17	766 3	30.21	767.3	56.5	13.6	90	n.	8	3.6			10 n		n.	0.03	0.8	light rain	C. A. Read.
Montgomery, Alabama	29.95	760.7	30.19	766.8	55	12.8	90	nw.	7	3.1			10 n		nw.	inap.	inap.	light rain	J. B. McLaughlin.

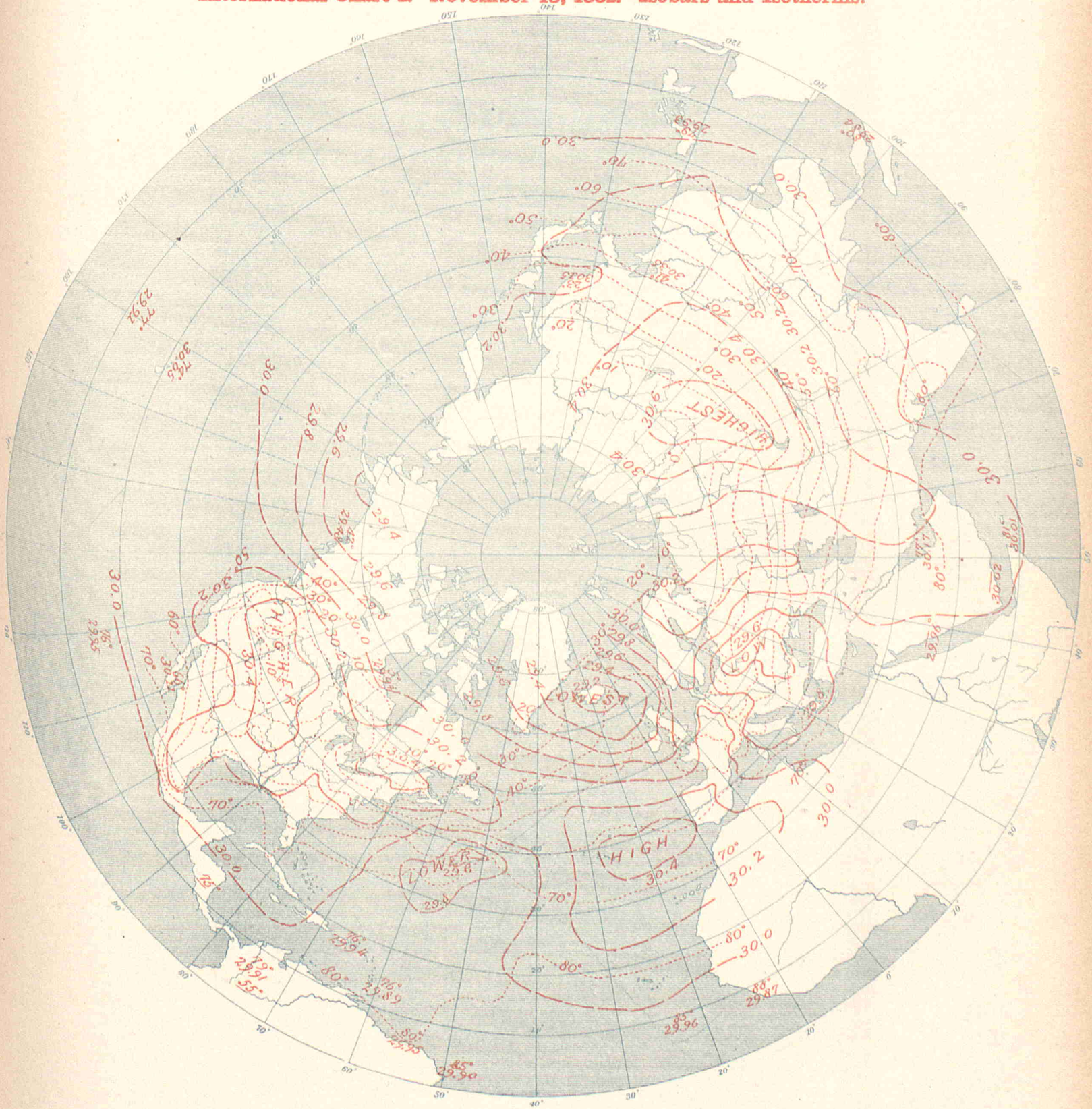
STATIONS	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.26	743.2	30.32	770.1	24	— 4.4	88	w.	6	2.7		o	o			0.03	0.8	clear	H. Bessant.
Morgantown, W. Virginia	29.24	742.7	30.30	769.6	37.5	3.1	82	ne.	3	1.3			10 s		n.	0.29	7.4	cloudy	J. C. Sprigg, jr
Mt. Washington, N. H.	23.76	603.5	30.32	770 11	7.5	—13.6	63	n.	11	4.9		o	2 ks		n.	0.08	2.0	clear	J. G. Linsley.
Nashville, Tennessee	29.62	752.3	30.22	767.6	46.0	7.8	93	nw.	8	3.6			10 n		nw.	0.09	2.3	light rain	L. N. Jesunofsky.
New Haven, Connecticut	30.17	766.3	30.29	769.4	26.5	— 3.1	82	n.	14	6.3		o	o			0.25	6.3	clear	J. H. Sherman.
New London, Connecticut	30.23	767.8	30.28	769.1	29	— 1.7	67	nw.	11	4.9			8 ks		nw.	0.30	7.6	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.13	765.3	30.19	766.8	58.7	14.8	91	n.	9	4.0			10 s		n.	0.04	1.0	cloudy	L. Dunne.
Newport, Rhode Island	30.18	766.6	30.23	767.8	29.3	— 1.5	95	n.	17	7.6			10 n		n.	0.46	11.7	light snow	W. McGillivray.
New York, New York	30.11	764.8	30.29	769.4	33	0.6	85	ne.	13	5.8		4 cs	fg.	ne.		0.34	8.6	fair	J. B. Merrill.
Norfolk, Virginia	30.18	766.6	30.32	767.6	48	8.9	77	n.	8	3.6			10 s		n.	0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.36	694.9	30.44	773.2	30.6	— 0.8	78	n.	6	2.7		o	o			0	0	clear	E. F. Brady.
Olympia, Washington Ty.	30.17	766.3	30.21	767.3	36.0	2.2	89	calm	o	o		o	1 s			0	0	clear	J. Dascomb.
Omaha, Nebraska	29.17	740.9	30.41	772.4	29.1	— 1.6	80	sw.	2	0.9		o	o			0.06	1.5	clear	A. Pollak.
Oswego, New York	30.00	762.0	30.34	770.6	25.0	— 3.9	73	e.	1	0.4			fg.			0.37	9.4	dense fog	S. W. Beall.
Palestine, Texas	29.77	756.1	30.34	770.6	44.0	6.7	76	ne.	8	3.6		10 ck	o					cloudy	L. M. Pindell.
Pensacola, Florida	30.13	765.3	30.16	766.1	63.0	17.2	90	nw.	5	2.2			10 s		nw.	0	0	cloudy	M. McGauran.
Philadelphia, Pa.	30.18	766.6	30.28	769.1	37	2.8	82	ne.	10	4.5		o	9 s		ne.	inap	inap	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.82	452.6	30.48	774.2	8	—13.3	58	ne.	21	9.4		o	1 s			0	0	clear	H. Hall.
Ploche, Nevada	24.16	613.7	30.30	769.6	28.2	— 2.1	70	nw.	1	0.4		o	o			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.49	749.0	30.34	770.6	33.8	1.0	71	e.	6	2.7			10s;fg			0.06	1.5	cloudy	W. Daly.
Poplar River, Montana								nw.			1	o	o			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.14	765.5	30.15	765.8	67.5	19.7	89	n.	8	3.6			10 s		n.	0	0	cloudy	M. Herman.
Port Huron, Michigan	29.66	753.4	30.38	771.6	24.3	— 4.3	91	calm	o	o		o	o			0.02	0.5	clear	W. O. Bailey.
Portland, Maine	30.27	768.8	30.32	770.1	25.0	— 3.9	73	n.	19	8.5		3 c	o	nw.		0.08	2.0	clear	W. W. Eichelberger.
Portland, Oregon	30.23	767.8	30.30	769.6	39.2	4.0	65	e.	5	2.2		o	o			0	0	clear	M. L. Hearne.
Portsmouth, N. C.					54	12.2	86	n.	29	13.0			10s		ne.	0	0	cloudy	F. S. Coburn.
Prescott, Arizona	24.82	630.4	30.16	766.1	32	0.0	92	e.	2	0.9		o	8 s			0	0	cloudy	W. H. Clendenon.
Provincetown, Mass.	30.17	766.3	30.20	767.1	36.5	2.5	89	n.	24	10.7			10 n			1.07	27.2	light rain	P. T. Jenkins.
Punta Rassa, Florida	30.12	765 0	30.13	765 3	63	17.2	90	n.	5	2.2		9 ck	o	se.		0	0	cloudy	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.66	753.4	30.36	771.1	26	— 3.3	77	n.	3	1.3		9 k	sk	n.		0.18	4.6	cloudy	E. W. McGann
Roseburg, Oregon	29.72	754.9	30.29	769.4	28	— 2.2	88	calm	o	o		o	fg.			0	0	light fog	J. J. Nanry.
Sacramento, California	30.23	767.8	30.31	769 9	41.9	5.5	82	se.	1	0.4		o	o			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.73	755 1	30.36	771.1	38.0	3.3	100	w.	10	4.5			10 s			0.01	0.3	cloudy	J. H. Weber.
St. Paul, Minnesota	29.38	746.2	30.30	769.6	31.0	— 0.6	78	s.	6	2.7		o	2 s			0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.32	744 7	30.25	768.3	23	— 5.0	94	nw.	9	4.0		o	o			inap.	inap.	clear	C. B Dilley.
Salt Lake City, Utah	25.90	657.8	30.47	773.9	22	— 5.6	48	e.	3	1.3		o	o			0	0	clear	J. Craig.
San Antonio, Texas	29.56	750.8	30.28	769.1	48.0	8.9	77	n.	7	3.1			10 s		n.	0	0	cloudy	T. J. Kenan.
San Diego, California	30.14	765.5	30.21	767.3	46.5	8.1	39	nw.	4	1.8		o	o			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.61	752.1	30.33	770.4	34.0	1.1	78	s.	6	2.7		o	5 s			0.39	9.9	fair	M. H. Perry.
Sandy Hook, New Jersey	30.25	768.3	30.28	769.1	35.0	1.7	79	ne.	30	13.4		9 k	o	ne.		0.61	15.5	cloudy	B. A. Blandon.
San Francisco, California	30.23	767.8	30.30	769.6	46.5	8.1	89	ne.	1	0.4		o	fg.			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.20	589.3	30.24	768.1	28	— 2.2	70	ne.	10	4.5			10 n		ne.	inap.	inap.	light snow	H. U. Jones.
Savannah, Georgia	30.05	763.3	30.14	765.5	61	16.1	78	sw.	3	1.3		10 cs	fg.	w.		inap.	inap.	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.53	673.8	30.35	770.9	32	0.0	81	w.	6	2.7		3 cs	o			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	30.10	764.5	30.35	770.9	45	7.2	76	ne.	9	4.0			10 s		e.	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	29.13	739.9	30.44	773 2	42	5.6	55	ne.	5	2.2		o	7 s		ne.	0	0	fair	W. M. Mattingly.
Silver City, New Mexico	24.25	615.9	30.09	764.3	33.5	0.8	87	calm	o	o			10 n			0.05	1.3	light snow	N. D. Lane.
Sitka, Alaska	29.41	747.0	29.48	748.8	42	5.6	82	se.	20	8.9			10 n		se.	2.19	55.6	light rain	F. W. Fickett.
Smith, Fort, Arkansas	29.92	760 0	30.41	772.4	32.5	0.3	88	calm	o	o		o	o			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.10	764.5	30.14	765.5	49	9.4	86	n.	6	2.7		9 cs	o	w.		0	0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.34	719.8	30.42	772 7	21	— 6.1	87	w.	2	0.9			10 s			0	0	cloudy	D. Moore.
Springfield, Illinois	29.63	752.6	30.35	770.9	41	5.0	92	nw.	8	3.6			10s;fg		nw.	0.07	1.8	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.19	766.8	30.33	770.4	27	— 2.8	77	n.			2	o	o			0 11	2.8	clear	Charles Mayr.
Springfield, Mo.	28.88	733.5	30.39	771.9	29.5	— 1.4	77	nw.	5	2.2		o	o			0	0	clear	J. B. Marbury.
Starkville, Miss.	29.79	756.7	30.29	769.4	46	7.8	83	nw.	10	4.5			10 s		nw.	0.31	7.9	cloudy	C. Dill.
Stevenson, Fort, Dakota	28.45	722.6	30.42	772.7	25	— 3.9	64	nw.	7	3.1		o	o			0	0	clear	W. Burrows
Stockton, Fort, Texas	27.15	689.6	30.27	768.8	35.0	1.7	89	e.	6	2.7			10 s		e.	0.07	1.8	cloudy	J. F. Marshall.
Thatcher's Island, Mass.	30.25	768.3	30.30	769.6	33.0	0.6	82	ne.	29	13.0		o	8 k		ne.	0.96	24.4	cloudy	G. Liebmann
Thomas, Camp, Arizona	27.26	692.4	30.10	764.5	44	6.7	96	w.			1		10 s			0.13	3.3	cloudy	J. T. Fitzgerald.
Toledo, Ohio	29.59	751.6	30.32	770.1	29	— 1.7	77	n.	8	3.6		o	2 k		n.	inap.	inap.	clear	A. Buell.
Tucson, Arizona	27.61	701.3	30.07	763.8	43	6.1	68	calm	o	o		o	8 ks			o	o	cloudy	J. L. Whiteside.
Umatilla, Oregon	30.13	765.3	30.51	774.9	29	— 1.7	94	e.	2	0.9			10 s			inap.	inap.	cloudy	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					39	3.9	73	ne.			1	o	6 s		e.	o	o	fair	D. Brooks.
Vicksburg, Mississippi	30.06	763.5	30.33	770.4	46.3	7.9	82	nw.	8	3.6			10 s		nw.	0.04	1.0	cloudy	James Kenealy.
Visalia, California	29.90	759.4	30.28	769.1	34.3	1.3	92	e.	2	0.9		o	o			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.73	628.1	30.47	773.9	3.3	—15.9	86	calm	o	o		o	1 k			0	0	clear	T. M. Ambler.
Washington, D. C.	30.18	766.6	30.30	769.6	39.0	3.9	78	n.	7	3.1			10 s		n.	inap.	inap.	cloudy	B. M. Purssell.
West Las Animas, Colorado	26.31	668.3	30.43	772.9	11	—11.7	100	nw.	8	3.6		o	2 s			0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.72	754.9	30.35	770.9	33	0.6	68	n.	3	1.3		hz.	o			0.02	0.5	dense haze	B. F. Hough.
Wilmington, N. Carolina	30.09	764.3	30.15	765.8	51	10.6	86	n.	1	0.4			10 s		nw.	0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.90	657.8	30.43	772.9	16	— 8.9	76	ne.	6	2.7		o	o			0	0	clear	J. Grover.
Yankton, Dakota	29.00	736.6	30.38	771.6	26	— 3.3	77	sw.	1	0.4		o	o			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.95	760.7	30.10	764.5	55.0	12.8	30	n	8	3.6		o	o			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.99	558.5			55.0	12.8	74	calm	o	o		4 ck	4ks;s	ne.	ne.	0.22	5.6	cloudy	Joaquin Gomez.
Havana, Cuba, W. I.	30.02	762.5	30.09	764.3	68.0	20.0	78	se.	3	1.3		o	9k;ks		ne.	o	o	cloudy	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762.2	73	22.8	73	n.	3	1.3		o	1 s		e.	o	o	fine	Robert Johnston.
Navassa, W. I.	29.87	758.7	29.95	760.7	77	25.0	69	ne.	29	13.0		2 cs	2 ks	e.	ne.	o	o		F. M. Everett.
Paramaribo, S. A.	29.95	760.7	29.95	760.7	80	26.7	82	e.			2	3 c	5 k	e.		o	o		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	79	26.1	85	calm			o		10 ks		calm	inap.	inap.	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					74.8	23.8	92	ne.			2	6 ck	o	ne.		o	o	fair	Earl Flint.
Santiago de Cuba, W. I.	30.00	762.0	30.03	762.7	72	22.2	75	calm	o	o		o	1 s			o	o	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.32	744.7	29.38	746.2	33	0.6	78	sw.			3	o	4 k			o	o	fair	W. J. Fisher.
St. Thomas, W. I.	29.84	757.9	29.96	761.0	75	23.9	71	n.				o	6 k		n.	o	o	cloudy	Aug. Walloe.
York Factory, B. A.	29.88	758.9	29.94	760.5	5.0	—15.0	87	nw.	16	7.2		4 k	2 s	nw.	nw.	0.15	3.8	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Shang-Hai, China	30.36	771.1	56	13.3	.....	nne.	.....	.....	1	.....	6	ne.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Amethyst, Colonia, Uruguay†	30.07	763.8	70	21.1	71	n.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Audacious, N. 11° 34′, E. 53° 20′	29.91	759.7	81	27.2	91	ene.	.....	.....	3-4	.....	2	ene.	.....	.....	.....	3	e.	d. clouds.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	29.93	760.2	81	27.2	67	ne.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	30.10	764.5	73.5	23.1	72	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Cleopatra, N. 31° 14′, E. 121° 28′	30.30	769.6	.....	.....	.....	n.	.....	.....	1	.....	9	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	30.18	766.6	41	5.0	83	n.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	showery.
H. M. S. Curacoa, Kobe, Japan	30.07	763.8	56.5	13.6	74	n.	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Diamond, S. 30° 00′, E. 162° 59′ *†	29.97	761.2	67	19.4	73	se.	.....	.....	2	.....	6	sw.	.....	.....	.....	1	se.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	29.82	757.4	68.5	20.3	77	nw.	.....	.....	3-4	.....	6	nw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.92	760.0	79	26.1	84	sw.	.....	.....	2-3	.....	3	nne.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flamingo, Port of Spain, Trinidad, W. I.	29.88	758.9	80	26.7	100	ssw.	.....	.....	1	.....	2	e.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flying Fish, N. 32° 44′ E. 129° 52′	30.22	767.6	57	13.9	87	calm	.....	.....	0	.....	5	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Gannet, S. 26° 40′, W. 70° 35′	30.07	763.8	64	17.8	75	calm	.....	.....	0	.....	0	.....	.....	.....	.....	2	ssw.	blue sky.
H. M. S. Griffon, N. 18° 01′ W. 68° 17′	29.85	758.2	76	24.4	90	nnw.	.....	.....	3-4	.....	0	.....	.....	.....	.....	1	ene.	blue sky.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.16	766.1	72	22.2	95	se.	.....	.....	1	.....	5	e.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Kingfisher, N. 19° 04′ W. 110° 36′	30.00	762.0	76	24.4	.....	nne.	.....	.....	3	.....	2	ne.	.....	.....	.....	2	ne.	d. clouds.
H. M. S. Lark, S. 10° 08′, E. 162° 15′	29.88	758.9	82.3	27.9	89	e.	.....	.....	1	.....	4	.....	.....	.....	.....	2	se.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.98	761.5	64	17.8	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Magpie, N. 34° 45′, E. 128° 25′	30.28	769.1	54.4	12.4	63	ne.	.....	.....	1-2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Northampton, Halifax, Nova Scotia	30.26	768.6	31	— 0.6	.....	nnw.	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	snowing.
H. M. S. Nelson, Melbourne, Australia	29.84	757.9	59	15.0	82	s.	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.84	757.9	80	26.7	84	nnw.	.....	.....	1-2	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Rocket, S. 5° 05′, W. 81° 10′	29.94	760.5	63	17.2	.....	sse.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sappho, S. 44° 00′, W. 127° 01′	29.72	754.9	50.2	10.1	86	wnw.	.....	.....	6	.....	4	w.	.....	.....	.....	7	w.	squally.
H. M. S. Sylvia, Jerome Channell, Patagonia	29.42	747.3	44.2	6.8	88	w.	.....	.....	3-5	.....	10	.....	.....	.....	.....	.....	.....	showery.
H. M. S. Tourmaline, Aden, Arabia	30.02	762.5	.....	.....	.....	e.	.....	.....	3	.....	2	e.	.....	.....	.....	.....	.....	squally.
H. M. S. Woodlark, Barein, Arabia	30.07	763.8	76.5	24.7	77	n.	.....	.....	3	.....	1	nw.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.29	769.4	43	6.1	91	calm	.....	.....	0	.....	1	w.	.....	.....	.....	.....	.....	blue sky.
Portuguese Naval.																		
Rio Lima, Fogo, Cape Verd Islands	30.03	762.7	82.8	28.2	83	sw.	.....	.....	1	.....	2	.....	ne.	.....	.....	1	sw.	d. clouds.
Tamega, Macao, China	30.18	766.6	73.4	23.0	81	ese.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.06	763.5	63	17.2	51	nw.	3	1.3	.....	.....	10	.....	n.	0	0	.....	.....	cloudy.
Navy Yard, Portsmouth, N. H.	30.30	769.6	25	— 3.9	?	ne.	15	6.7	.....	.....	10	.....	ne.	Bl'k	Bl'k	.....	.....	cloudy.
Naval Hospital, Yokohama, Japan*	29.96	761.0	51	10.6	62	n.	.....	.....	2	.....	8	.....	w.	sli't	sli't	.....	.....	cloudy.
Adams, Sitka, Alaska *†	29.55	750.6	42	5.6	83	e.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	light rain.
Alaska, Honolulu, Sandwich Islands	30.05	763.3	74	23.3	76	ne.	.....	.....	2	.....	5	.....	n.	0.15	3.8	sm'h	.....	fair.
Alliance, Hampton Roads, Va*†	30.18	766.6	51	10.6	93	nne.	.....	.....	3-4	.....	8	.....	.....	0	0	.....	.....	cloudy.
Ashuelot, Kobe, Japan	30.20	767.1	55	12.8	87	calm	.....	.....	.....	.....	8	.....	w.	.....	.....	.....	.....	cloudy.
Brooklyn, Keel Point, Patagonia	29.58	751.3	52	11.1	59	sw.	10	4.5	.....	.....	2	.....	s.	0	0	sm'h	.....	fair.
Colorado, New York, N. Y.	30.35	770.9	33	0.6	79	ne.	15	6.7	.....	.....	6	.....	calm	0.01	0.3	.....	.....	cloudy
Enterprise, Norfolk, Va	30.22	767.6	50	10.0	78	n.	2	0.9	.....	.....	10	.....	ne.	.....	.....	.....	.....	cloudy.
Lasex, Callao, Peru	30.00	762.0	66	18.9	78	ese.	.....	.....	1	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy.
Franklin, Norfolk, Va	30.21	767.3	53	11.7	60	nne.	12	5.4	.....	.....	8	.....	calm	0	0	.....	.....	fair.
Galena, Montevideo, Uruguay	30.02	762.5	66	18.9	78	n.	.....	.....	4	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Hartford, S. 45° 08′, W. 62° 25′*	29.52	749.8	53	11.7	93	wsw.	.....	.....	6	.....	2	.....	.....	0	0	sm'h	w.	clear.
Independence, Mare Island, Cal.	30.30	769.6	38	3.3	100	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear.
Iroquois, Callao, Peru	30.04	763.0	65	18.3	83	ese.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, Newport, R. I.	30.18	766.6	31	— 0.6	89	n.	.....	.....	6	.....	10	.....	n.	.....	.....	.....	.....	overcast
Kearsarge, Norfolk, Va	30.19	766.8	49	9.4	93	ne.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	cloudy
Lackawanna, Valpariso, Chili*	30.03	762.7	62	16.7	77	ne.	.....	.....	2	.....	8	.....	s.	.....	.....	.....	.....	cloudy.
Lancaster, N. 38° 22′, E. 13° 44′*	29.67	753.6	62	16.7	71	wnw.	.....	.....	6	.....	10	.....	wnw.	.....	.....	r'gh	nw.	cloudy.
Michigan, Erie, Pa	30.14	765.5	37	2.8	62	ne.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear.
Minnesota, New York, N. Y	30.29	769.4	36	2.2	100	ne.	3	1.3	.....	.....	5	.....	ne.	.....	.....	.....	.....	clearing.
Monocacy, Yokohama, Japan*	29.90	759.4	53	11.7	86	n.	.....	.....	3	.....	2	.....	calm	.....	.....	.....	.....	fair.
New Hampshire, Newport, R. I.	30.25	768.3	34	1.1	90	nne.	.....	.....	6	.....	10	.....	nne.	.....	.....	sm'h	.....	snowing.
Nipsic, Palermo, Sicily*	29.74	755.4	59	15.0	64	wnw.	.....	.....	3	.....	10	.....	.....	.....	.....	sm'h	.....	rainy.
Onward, Callao, Peru†	30.11	764.8	64	17.8	83	se.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos, Tientsin, China*	30.26	768.6	45	7.2	92	calm	.....	.....	0	.....	2	.....	w.	.....	.....	.....	.....	fair.
Pensacola, Callao, Peru*	29.93	760.2	66	18.9	78	s.	3	1.3	.....	.....	10	.....	.....	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass	30.28	769.1	28	— 2.2	100	n.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	overcast
Quinnebaug, N. 39° 15′, E. 15° 42′*	29.76	755.9	63	17.2	67	wnw.	.....	.....	2	.....	8	.....	wnw.	.....	.....	mod.	sw.	cloudy.
Ranger, Acapulco, Mexico	29.95	760.7	75	23.9	81	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
Richmond, Yokohama, Japan*	30.01	762.2	56	13.3	57	n.	.....	.....	3	.....	5	.....	sw.	0	0	.....	.....	fair.
Saratoga, Key West, Florida	30.15	765.8	72	22.2	71	ne.	.....	.....	2	.....	0?	.....	.....	0	0	sm'h	.....	cloudy.
St. Louis, League Island, Pa	30.49	774.4	35	1.7	80	nne.	.....	.....	2	.....	8	.....	ne.	.....	.....	.....	.....	cloudy.
Swatara, N. 16° 33′ W. 47° 08′*	29.78	756.4	79	26.1	78	se.	.....	.....	3	.....	5	.....	se.	.....	.....	sm'h	.....	fair.
Tennessee, Hampton Roads, Va	30.16	766.1	47	8.3	85	n.	10	4.5	.....	.....	10	.....	.....	blank	blank	.....	.....	cloudy.
Vandalia, Hampton Roads, Va*	30.19	766.8	47	8.3	92	nne.	.....	.....	3	.....	10	.....	calm	.....	.....	.....	.....	cloudy.
Wabash, Boston, Mass	30.28	769.1	25	— 3.9	88	nne.	12	5.4	.....	.....	10	.....	ne.	0.24	6.1	.....	.....	cloudy.
Wachusetts, Mare Island, Cal†	30.27	768.8	39	3.9	91	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
Wyandotte, Washington, D. C.	30.41	772.4	44	6.7	84	n.	.....	.....	1	.....	10	.....	calm	.....	.....	.....	.....	cloudy.
Yantic, Norfolk, Va	30.18	766.6	49	9.4	85	n.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Merchant Marine.																		
S. S. Circassian, N. 56° 08′, W. 18° 00′*	29.53	750.0	47	8.3	77	w.	.....	.....	6	.....	5	.....	w.	2 h'r	2 h'r	4	w.	raining.
S. S. Grecian, Buenos Ayres, Argentine Rep.*	29.98	761.5	78	25.6	61	n.	.....	.....	5	.....	6?	.....	nnw.	0	0	sm'h	.....	clear.?
S. S. Polynesian, N. 55° 24′, W. 13° 15′*	29.54	750.3	50	10.0	.....	w.	.....	.....	5	.....	10	.....	.....	0	0	mod.	nw.	overcast.
S. S. British Crown, N. 46° 56′, W. 36° 02′†	30.18	766.6	51	10.6	.....	nne.	.....	.....	5	.....	10	.....	ne.	24 h'r	24h'r	mod.	sw.	raining.
S. S. Indiana, N. 42° 31′, W. 60° 27′	.....	.....	48	8.9	92	e.	.....	.....	6	.....	10?	.....	e.	.....	.....	r'gh	ne.	clear.?
S. S. Lord Clive, Liverpool, Eng	.....	.....	.....	.....	.....	s.	.....	.....	4	.....	10	.....	.....	rain	sleet	.....	.....	rainy.
S. S. Lord Gough, Philadelphia, Pa	30.24	768.1	42	5.6	.....	ne.	.....	.....	3	.....	.....	.....	.....	0	0	.....	.....	cloudy.
S. S. Ohio, Liverpool, Eng	29.97	761.2	43	6.1	92	sw.	.....	.....	3	.....	9	.....	sw.	.....	.....	.....	.....	cloudy.
S. S. Pennsylvania, N. 51° 09′, W. 21° 08′ †	29.95	760.7	51	10.6	.....	w.	.....	.....	5	.....	10	.....	nw.	.....	.....	mod.	w.	overcast
S. S. Jason, N. 44° 42′, W. 42° 38′*	29.98	761.5	.....	.....	.....	var.	.....	.....	5	.....	6 k	.....	.....	.....	.....	6	w.	foggy.
S. S. Stella, N. 43° 41′ W. 58° 13′	30.12	765.1	48.2	9	.....	e.	.....	.....	5	.....	9	.....	ne.	.....	.....	4	ne.	overcast.
S. S. Bolivia, New York, N. Y	.....	.....	32	0.0	100	nne.	.....	.....	3	.....	8	.....	.....	18 h'r	18 h'r	.....	.....	hazy.
S. S. Devonia, N. 45° 02′, W. 52° 06′†	30.33	770.4	42	5.6	.....	ne.	.....	.....	4	.....	6	.....	ne.	.....	.....	mod.	n	fair.
S. S. Dorian, Boston, Mass*	30.05	763.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
S. S. Galatia, Calcutta, India†	30.12	765.0	78.3	25.7	.....	n.	.....	.....	2	.....	2	.....	.....	0	0	.....	.....	fair.
S. S. Utopia, N. 36° 17′ E. 19° 37′	.....	.....	68	20.0	79	wnw.	.....	.....	5	.....	8	.....	nw.	0	0	high	wnw.	cloudy.
S. S. Ailsa, N. 27° 38′, W. 74° 08′†	30.20	767.1	72	22.2	67	nne.	.....	.....	5	.....	10	.....	ne.	0	0	h'vy	ne.	cloudy.
S. S. Alpin, San Carlos, Venezuela	29.94	760.5	.....	.....	.....	ne.	.....	.....	4	.....	.....	.....	ne.	2 h'r	2 h'r	.....	.....	stormy.
S. S. Alvo, N. 29° 10′, W. 74° 20′	30.14	765.5	70	21.1	.....	ne.	.....	.....	2	cs	7 ks	e.	.....	0	0	long	nne.	fair.
S. S. Ambrose, N. 20° 14′, W. 62° 30′†	29.96	761.0	.....	.....	.....	nw.	.....	.....	4	.....	2	.....	nw.	0	0	9	nw.	fine.
British Merchant, N. 11° 05′, W. 120° 11′	29.87	758.7	79	26.1	95	ne.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	.....	raining.
Bk. Coppename, N 39° 42′, W. 17° 04′	30.52	766 1	60	15.6	88	n.	.....	.....	3	.....	8	.....	.....	.....	.....	.....	.....	showery.
Dynomene, N. 11° 40′ E. 88° 00′	29.87	758.7	79.5	26.4	100	ne.	.....	.....	5	.....	6	.....	.....	.....	.....	.....	.....	misty.
S. S. Gordon Castle, N. 28° 53′, E. 122° 12′	30.31	769.9	61.5	16.4	88	n.	.....	.....	4	.....	6	.....	.....	.....	.....	.....	.....	showery.
May Hulse, S. 13° 30, W. 31° 38′	29.94	760.5	79	26.1	82	ne.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	.....	d. clouds
Markland, N. 48° 00′ W. 20° 25′	30.16	766.1	57.3	14.1	97	wsw.	.....	.....	6	.....	10	.....	.....	.....	.....	4	w.	misty.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.90	759 4	.....	.....	46	n.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Mexico, Carmen Island, Gulf of California	30.11	764.8	65.6	18.7	56	nw.	.....	.....	5	.....	8	.....	nw.	.....	.....	sm'h	.....	fair.
S. S. Marathion, Marmara Island, Tukrey in Asia	29.75	755.6	61	16.1	.....	sw.	.....	.....	6	.....	7	.....	ssw.	1 h'r	1 h'r	r'gh	ssw.	stormy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Parthia, N. 42° 24′, W. 65° 35′*†	30.03	762.7	44	6.7		nne.			6		6?		nne.	6 h'r	6 h'r	sli't	n.	overcast?
S. S. Scythia, N. 41° 50′, W. 53° 36′			54	12.2	87	nne.			4		10		ne.	0	0	mod.	ne.	dull.
S. S. Colina, N. 45° 34′, W. 38° 46′†	30.12	765.0				nne.			3		10		nne.	5 h'r	5 h'r	long	se.	raining.
S. S. France, N. 49° 48′, W. 11° 13′†	29.83	757.7	53.6	12		sw.			3		k		sw.	0	0	sm'h	nw.	cloudy.
S. S. Labradore, New York, N. Y*†	30.20	767.0	48.2	9										0	0			
S. S. Abyssinia, N. 51° 30′, W. 8° 59′*	29.70	754.4	57	13.9	87	wsw.			4		fg.		w.	0	0	mod.	n.	dense fog.
S. S. Wisconsin, N. 46° 06′ W. 47° 48′	30.15	765.8	38	3.3		ne			3		8		e.	0	0	sli't		fair.
S. S. Wyoming, N. 45° 26′, W. 52° 04′*	30.23	767.8	34	1.1		ne.			4		2		ene.	0	0	mod.	se.	fair.
S. S. Bohemia, Hamburg, Germany †	29.80	756.9				wnw.			2		10		nw.	8 h'r	8 h'r			overcast.
S. S. Cimbria, N. 41° 28′ W. 64° 34′	29.92	760.0	50.0	10.0		nne.			8		10		nne.	9 h'r	9 h'r	h'vy	ne.	covered.
S. S. Frisia, N. 49° 04′, W. 16° 18′	30.02	762.5	58	14.4		wsw.			6		10		wsw.	3 h'r	3 h'r	mod.	wnw.	misty.
S. S. Gellert, Plymouth, Eng	29.93	760.2	50	10.0		wnw.			5		10			6 h'r	6 h'r			covered.
S. S. Silesia, New York, N. Y†	30.13	765.3	36.2	2.3		nw.			7		8		nw.	3 h'r	3 h'r	6–7	nw.	d. clouds.
S. S. Vandalia, N. 49° 28′, W. 9° 40′	29.97	761.2	56.1	13.4		wsw.			6		10		wsw.	0	0	mod.	wsw.	cloudy.
S. S. Wieland, Elbe River, Germany	30.03	762.7				ene.			4		8		ene.	0	0	mo't.	ne.	fine.
S. S. Mentmore, N. 45° —′, W. 51° —′*	30.27	768.8				ene.			5		8		e.	0	0	high	e.	threatening.
S. S. Nessmore, N. 51° 12′, W. 14° 07′	29.83	757.7	56.3	13.5	95	w.			6		10			0	0	short	w.	hazy.
S. S. Archimedes, N. 48° 50′, W. 25° 06′	30.01	762.2				wnw.			3		10		w.	6 h'r	6 h'r	long	wsw.	overcast.
S. S. Hevelius, Rio de Janeiro, Brazil*†	30.20	767.1	72	22.2		sse.			3		4		sse.	0	0			clear.
S. S. Ptolmey, N. 12° 45′, W. 50° 30′†	29.93	760.2	82	27.8	75	ese.			2		5		nnw.	0	0	2	ese.	d. clouds.
S. S. Bulgarian, N. 51° 32′ W. 19° 36′ *	29.91	759.7				w.			7		10		w.	5 h'r	5 h'r	high	w.	
S. S. City of San Antonio, Nassau, Bahamas†	30.12	765.0	76	24.4		ne.			3		2		ne.	0	0			fair.
S. S. Colorado, New York, N. Y †	30.30	769.6	32	0.0		nne.			2		2		nne.	18 h'r	18 h'r			clear.
S. S. San Marcos, N. 26° 53′, W. 88° 10′	30.17	766 3	76	24.4		ese.			4		1		ese.			sm'h		fine.
S. S. Archimede, Palermo, Sicily *†	29.78	756.4	64	17.8	73	wsw.			6		6		wsw.	6 h'r	6 h'r			cloudy.
S. S. Glenapp, S. 21° 00′, W. 40° 00′†	29.89	759.2	78	25.6		s.			7		9 k		s.	6 h'r	6 h'r	r'gh	s.	raining.
S. S. Glenfyne, N. 34° 59′, W. 73° 01′						nnw.			5		10		nw.	1 h'r	1 h'r	sm'h	se.	rainy.
S. S. Chalmette, New York, N. Y†	30.19	766.8	38	3.3		nne.			5		3		nne.	0	0	h'vy	ne.	clear.
S. S. New York, N. 31° 40′ W. 80° 10′ †	30.05	763.3	68.0	20.0		wsw.			3		8		w.	0	0			cloudy.
S. S. Denmark, N. 48° 47°, W. 20° 14′	30.05	763 3	60	15.6		wsw.			6		10		w.	0	0	mod.	w.	cloudy.
S. S. Egypt, N. 51° 08′, W. 21° 45′†	29.97	761.2				wnw.			5		8?		w.	6 h'r	6 h'r	long	wnw.	clear?
S. S. England, Liverpool, Eng	29.92	760.0				se.			4		2		se.	0	0			cloudy.
S. S. Erin, N. 47° 35′, W. 36° 56′	30.32	770.1	54	12.2		nne.			6		10		ne.	18 h'r	18 h'r	sm'h	wsw.	gloomy.
S. S. Greece, N. 40° 37′, W. 71° 58′						n.			7		10		nne.	3 h'r	3 h'r	r'gh	n	
S. S. Helvetia, N. 41° 15′, W. 61° 45′	29.96	761.0	46	7.8		ne.			6		10		ne.	12 h'r	12 h'r	short	ne.	raining.
S. S. Holland, N. 49° 32′, W. 11° 27′	29.93	760.2	56	13.3		wnw.			6		10			14 h'r	14 h'r	h'vy	wnw.	misty.
S. S. The Queen, N. 41° 32′, W. 57° 37′*†	29.98	761.5	52	11.1		ne.			5		8		ese.	shr's	sh'rs	high	ese.	squally.
S. S. Santiago, Cienfuegos, Cuba W. I			74	23.3	86	calm			0					0	0			fine.
S. S. City of Alexandria, N. 34° 18′ W. 76° 10′†	30.20	767.1	60	15.6		nw.			6		8?		nw.	0	0	sm'h	n.	clear?
S. S. City of Merida, N. 23° 09′, W. 82° 22′			71.6	22		ne.			1		10		ne.	0	0	light	ne.	cloudy.
S. S. Knickerbocker, N. 27° 08′ W. 79° 43′*†	30.11	764.8	74	23.3		nne.			7							long		cloudy.
S. S. Leerdam, N. 49° 53′, W. 25° 17′*	29.96	761.0	56.8	13.8		w.			6							long		cloudy.
S. S. Ameuka, N. 52° 00′, E. 2° 35′ *	29.97	761.2	43.5	6.4	72	e.			3		0			1 h'r	1 h'r	sm'h	e.	fine.
S. S. Donau, N. 49° 37′, W. 27° 04′	30.09	764.3				w.			4		10		w.	15 h'r	15 h'r	h'vy	w.	cloudy.
S. S. Elbe, Off Ameland's Id, Netherlands	30.02	762 4	37.4	3.0	100	e.			2–3		10			0	0	sm'h		covered.
S. S. Oder, N. 40° 34′, W. 71° 59′	30.15	765 8	40.1	4.5		nne.			6		10		nne.	6 h'r	6 h'r	r'gh	nne.	covered.
S. S. Ohio, Galveston, Texas	30.30	769.6				nne.			6		10		nne.	0	0	mod.	ne.	cloudy
S. S. Saller, N. 53° 52′, E. 7° 33′	29.99	761.7	44.6	7.0		nne.			4		8		nne.	5 h'r	5 h'r	r'gh	nne.	fair.
S. S. Werra, N. 40° 40′, W. 69° 56′*	30.26	768.6	41.9	5.5		n.			5		10		nnw.	2 h'r	2 h'r	r'gh	n.	cloudy.
S. S. Belgic, Hong Kong, China †..	30.23	767.8	73	22.8	85	se.			2		5?		se.	0	0	sm'h		clear?
S. S. Oceanic, N. 37° 32′, W. 157° 20′*	30.00	762.0	63	17.2	89	sw.			6		10		sw.			mod.	nw.	cloudy.
S. S. City of Augusta, Savannah, Ga†	30.17	766.3				sw.			3		0			0	0			foggy.
S. S. Mississippi, N. 43° 34′, W. 124° 33′ †	30.32	770.1	47	8.3	85	sse.			1		fg.					long	wnw.	foggy.
S. S. Columbia, N. 38° 00′, W. 123° 05′†	30.27	768.8	51	10.6	89	ne.			2		7		ese			sm'h	nw.	hazy.
S. S. Oregon, Port and, Oregon†	30.23	767.8	40	4.4	58	calm			0		0							clear.
S. S. Ancon, N. 32° 39′, W. 117° 15′†	30.16	766.1	56	13.3	75	se.			1		0					sm'h		clear.
S. S. Dakota, Seattle, Wash. Terr	29.73	755.1	46	7.8	77	se.			4		8		se.	12 h'r	12 h'r	sm'h		cloudy.
S. S. Australia, Sydney, N. S W	30.07	763.8	69	20.6	90	sse.			3		5?		ese.	0	0			clear.
S. S. City of New York, Sydney, N. S. W†	30.08	764.0	78	25.9	86	calm			0		0			1 h'r	1 h'r			clear.
S. S. City of Pekin, N. 22° 58′, E. 117° 14′†	30.35	770.9	69	20.6	75	ene.			6		10		n.	0	0	mod.	ene.	cloudy.
S. S. City of Sydney, N. 12° 09′ W. 161° 25′†	29.91	759.7	77	25.0	82	ene.			3		8		nne.	½h'r	½h'r	h'vy	ne.	light rain.
S. S. Grenada, N. 12° 52′, W. 88° 42′†	29.92	760 0	81	27.2	78	e.			1		0			0	0	sm'h	s.	clear.
S. S. San Jose, N. 15° 50′ W. 98° 07′ *†	30.16	766.1				nw.			2		0			0	0	long	nw.	
S. S. Bermuda, Roseau, W. I†	29.94	760.5	81	27.2		n.			1–2		2		n.	sh'rs	sh'rs	long	nnw.	fine.
S. S. Caracas, N. 24° 28′, W. 69° 30′†	30.03	762.7	76	24.4	68	n.			5		8		n.	0	0	h'vy	nne.	cloudy.
S. S. Valencia, N. 24° 25′, W. 69° 30′†	30.05	763.3	76	24.4	73	nne.			5		6		ne.	0	0	h'vy	nne.	fine.
S. S. Belgenland, N. 47° 47′, W. 32° 14′†	30.36	771.1	54	12.2	100	n.			4		10		n.	21 h'r	21 h'r			misty.
S. S. Nederland, N. 49° 21′ W. 37° 03′†	30.37	771.4	44	6.7		w.			4		10		w.			cross	w.	cloudy.
S. S. Pennland, Antwerp, Belgium	30.06	763.5	35	1.7	80	sw.			2		10		wnw.	0	0			cloudy.
S. S. Rhynland, Jersey City, N. J	30.26	768.6	46	7.8	69	nw.			4		4		n.					fair.
S. S. Waesland, Jersey City, N. J	30.30	769 6	37	2.8	81	n.			5		6		nne.	0.09	2.3			fair.
S. S. Maas, N. 44° 09′, W. 56° 55′—			50.4	10.2	76	ne.			8		10		ssw.	21 h'r	21 h'r	9	e.	raining.
S. S. P. Caland, Rotterdam, Holland	30.01	762.2	34.7	1.5	93	sw.			3		7		nw.					cloudy.
S. S. Schiedam, N. 42° 54′, W. 66° 39′	30.02	762.5	62.4	16.9	85	ne.			6		10		wnw.	4 h'r	4 h'r	h'vy	ne.	hazy.
S. S. W. A. Scholten, New York, N. Y	30.42	772.7	36.0	2.2	90	w.			2		8		nw.	0	0			
S. S. State of Florida, Glasgow, Scotland	29.55	750.6	47	8.3		se.			2		10			0	0			cloudy.
S. S. State of Georgia, N. 53° 54′, W. 22° 20′†	29.81	757.2	47	8.3		wnw.			8		5		wnw.	sh'rs	sh'rs	mod.	wnw.	showery.
S. S. State of Indiana, N. 41° 45′, W. 64° 08′†	29.89	759.2	52	11.1		ne.			7		7		ne.	4 h'r	4 h'r	r'gh	ene.	cloudy.
S. S. State of Nevada, New York, N. Y†	30.30	769.6	31	— 0.6		ne.			1		8		ne.	0	0			clear.?
S. S. Hekla, N. 51° 25′, W. 35° 20′*†	30.23	767.8	48.2	9.0		nw.			1–5		8		nw.	0	0	ong	sw.	fair
S. S. Thingvalla, N. 57° 58′, E. 7° 20′†	30.08	764.0	40.1	4.5		ene.			3		3		ene.	0	0	mod	ene	clear.
S. S. Iowa, N. 51° 17′, W. 15° 19′ *†	29.90	759.4	55	12.8		w.			7		5		w.	14 h'r	14 h'r	r'gh	w.	fair.
S. S. Plantyn, N. 40° 31′, W. 52° 03′	29.92	760.0							6		6		ene.	6 h'r	6 h'r	r'gh	ne.	squally.
S. S. Britanic, N. 51° 22′, W. 14° 55′†	29.88	758.9	54	12.2	93	wsw.			5		9		w.	2 h'r	2 h'r	r'gh	w.	cloudy.
S. S. Celtic, N 41° 12′, W. 61° 28′†	29.92	760.0	52	11.1	86	e.			7		10		e.	6 h'r	6 h'r	h'vy	e.	overcast.
S. S. Germanic, N. 49° 38′, W. 25° 14′ †	30.24	768.1	55	12.8		wnw.			4		9		w.	3 h'r	3 h'r	mod.	w.	overcast.
S. S. Lepanto, N. 42° 00′, W. 47° 44′*	30.01	762.2	57	13.9		ene.			9		8		ne.	24 h'r	24 h'r	h'vy	n.	cloudy.
S. S. Marengo, N. 50° 37′, W. 0° 01′*†	29.90	759.4				nne.			3		4		ene.	12 h'r	12 h'r	sm'h	ne.	cloudy.
S. S. Romano, N. 45° 05′, W. 45° 45′	30.17	766.3	51	10.6		ne.			7		8		se.	0	0	r'gh	ne.	fine
S. S. Salerno, N. 44° 44′, E. 30° 06′			46	7.8		sw.			9		10		sw.	0	0	h'vy	sw.	
S. S. Aries, N. 39° 48′, W. 74° 15′*†	30.19	766.8				nne.			7		9		nne.	1 h'r	1 h'r	long	nne.	squally.
S. S. Catherine Whiting, Providence, R. I †	30.22	767.6				ne.			1					snow	snow			
S. S. Norman, N. 42° 23′, W. 71° 05′	30.16	766.1				nne.			5				ne.	snow	snow			heavy snow
S. S. Saxon, Philadelphia, Pa*†	30.42	772.7	39	3.9		nne.			6		10							
MISCELLANEOUS.																		
Bk. Adelaid, N. 18° 00′, W. 64° 20′ *†	29.91	759.7	80	26.7		nnw.			5		1		n.	0	0	long	nnw.	fair.
Bg. Aloira, Maracaibo, Brazil	29.90	759.4	86	30.0		ene.			1		2		ne.	0	0			clear.
Bk. Annie M. Law, Kobe, Japan *†	30.21	767.3	54	12.2		ne.			1		5		nw.	0	0			fine.
S. S. Anna Thormann, S. 14° 50′ E. 98° 41′*	29.98	761.6	76.8	24.9	85	se.			6		9 k		se.	inap.	inap.	r'gh	sse.	cloudy.
Bk. Antonio Lopez, N. 23° 44′, W. 42° 46′ *	29.94	760.5	80	26.7	74	ne.			1		3			0	0	long	ne.	clear.
Bk. Aquidneck, S. 1° 26′ W. 33° 23′*†	30.10	764.5				ese.			3				se.			light	se.	clear.
Bk. Aureola, N. 51° 09′, W. 80° 50′*†	30.00	762.0	60	15.6		wsw.			5		10		nw.	2 h'r	2 h'r	mod.	w.	dense fog.
Bk. Alba, N. 57° 21′, E. 6° 01′*†	30.10	764.5	37.8	3.2		wsw.			7									snowing.
Bk. Bayonnaise, N. 18° 48′, W. 53° 00′ *†	29.92	760.0				w.			2		10		w.	12 h'r	12 h'r	large	se.	rainy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Sch. Bonny Doon, N. 39° 22′, W. 53° 30′						s.			9		10		sw.	h'vy	h'vy	hv'y	e.	drizzling
S. S. Buiswell, N. 39° 39′, W. 24° 04′*†	30.49	774.4	76	24.4		e.			2		7		wsw.	o	o	light	nne.	light fog.
Bk. Champion, N. 44° 43′, W. 5° 11′†..	29.81	757.2	58.0	14.4		wnw.			9		10		nne.	8 h'r	8 h'r	mod.	nnw.	drizzling.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.15	765.8	63	17.2	100	calm			0	0	0			o	o			clear.
Schr. C. R. Flint, Cedar Keys, Fla†	30.29	769.4	62	16.7		n.			1		2		nw.	o	o			clear.
S. Cornelius, N. 37° 39′, W. 59° 12′ *†..	29.97	761.2	68.0	20.0		e.			6		10		sse.	4 h'r	4 h'r	long	ne.	heavy rain.
Bkt. David Preston, N. 29° 12′ W. 88° 20′*†	29.70	754.4	67	19.4		wsw.					2		wsw.	rain	rain	h'vy	wsw.	
Bk. Don Quixote, Pasoeroen Roads, Java*	29.83	757.7	92	33.3		e.			2		2		e.	o	o	sm'h		clear.
Bk. E. D. Bigelow, N. 44° 32′, W. 31° 00′*†	30.30	769.5				sw.			5		10		wnw.	o	o	mod.	w.	cloudy.
Schr. Edith R. Seward, N. 36° 08′, W. 75° 15′*†	30.20	767.1	57	13.9		n.			3		8		nne.	o	o	mod.	n.	cloudy.
S. E. J. Spicer, New York, N. Y.	30.28	769.1	45	7.2	100	nw.			6		4		nne.	12 h'r	12 h'r			fair.
Bk. Eliza Barss, Bermuda, W. I†	29.84	757.9				n.			5		8?			o	o			clear.?
S. Enoch Train, N. 16° 52′ W. 61° 00′*†	29.95	760.7				nnw.			2		2		nnw.	o	o	h'vy	nnw.	clear.
Bk. Essex, Muscat, Arabia*†	30.10	764.5	84	28.9		nw.			4									fine.
Schr. F. E. McDonald, Off Cape May, N. J†	30.23	767.8				n.			5		5						nne.	fine.
S. S. Foscolia, S. 6° 03′, W. 34° 41′*†	29.56	750.8				ene.			2		2		ne.	o	o	sm'h	ne.	clear.
Bk. Freya, N. 25° 10′, W. 27° 00′			76	24.4		e.			4		5		sw.	o	o	mod.	se.	fair.
Bg. George, N. 43° 24′ W. 64° 52′*†	30.12	765.0				ne.			7		10		n.	rain	rain	r'gh	ne.	stormy.
S. Glendon, S. 22° 20′ W. 97° 20′†	30.01	762.2	72	22.2		ese.			4		3		ese.	o	o	sm'h		clear.
S. Grecian, N. 19° 09′, W. 58° 45′†	29.88	758.9	81	27.2	74	w.			4		3		w.	o	o	long	nw.	clear.
Bk. Grey Eagle, N. 33° 39′ W. 62° 45′*†..	29.75	755.6	70	21.1		nne.			4		5		nne.	6 h'r	6 h'r	mod	ene.	clearing
Bk. Gronsvaer, S. 43° 17′ E. 154° 39′†	30.02	762.5	66.4	19.1	97				4		3		n.	o	o	4	sw.	fine.
Bk. Hattie G. McFarland, New York City, N. Y†...	30.33	770.4	34	1.1		ne.			5		2		nne.	o	o			fair.
Schr. Hattie Weston, N. 10° 05′, W. 61° 25′ *†	29.98	761.5	83	28.3		calm			0		2		e.	o	o	sm'h	e.	fair.
S. Hedwig, N. 32° 00′, W. 74° 38′	30.13	765.3	68.0	20	75	nnw.			4		9		n.	o	o	3	ene.	
Bk. Heinrich & Tonio, N. 38° 21′, W. 61° 30′*†	29.90	759.4	64	17.8		ne.			2–5		10		n.	1 h'r	1 h'r		se.	cloudy.
Schr. Isabel Alberto, Cedar Keys, Fla†	30.16	766.1				nw.			1		0			o	o			clear.
S. Ivy, Cork, Ireland†	29.96	761.0	44	6.7		w.			1		10			o	o			cloudy.
Schr. James Slater, N. 2° 52′, W. 48° 48′†	29.90	759.4	85	29.4		ne.			2		2		ene.	o	o	mod.	ne.	
Schr. Jennie N. Huddell, N. 34° 20′ W. 76° 30′†	30.09	764.3	66	18.9	84	nne.			5		10		nw.	o	o	long	e.	threatening.
S. S. John Hopkins, N. 37° 40′, W. 75° —′			42	5.6		nne.			5		8		ne.	4 h'r	4 h'r		ne.	cloudy.
Schr. John L. Thomas, Vivorilla Cays, C. A*†	30.08	764.0				ne.			4		2		ene.	o	o	light	n.	clear.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.96	761.0				s.			1		4		nw.	o	o			fair.
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.10	764.5	86	30.0	72	nw.			2		0							clear.
Light House Tender, Laurel, N. 24° 44′, W. 81° 11′†	30.11	764.8	73	22.8		nw.			1–2		10		ene.	o	o	mod.	ene.	cloudy.
Bk. Liberia, N. 8° 39′, W. 23° 10′*	29.86	758.4	85	29.4	79	e.			1–2		5		e.	4 h'r	4 h'r	small	s.	fine.
Bg. Lilian, Demerara, British Guiana†	29.90	759.4	82	27.8		ene.			3		2			o	o			clear.
Bg. L. & W. Armstrong, N. 38° 34′, W. 72° 29′*†	30.28	769.1				n.			8		6		nne.	2 h'r	2 h'r	r'gh	nne	squally.
S. S. Madrid, N. 33° 23′. W. 51° 56′*†	29.94	760.5	74	23.3	86	se.			5		8	sw.	se.	sh'rs	sh'rs	mod	e.	cloudy.
S. S. Malabar, N. 13° 03′ E. 45° 40′*†	30.00	762.0				var.			1		0			o	o	sm'h		clear.
Bg. Mary Gibbs, N. 25° 15′, W. 79° 50′*†	30.04	763.0	70	21.1		ne.			3		0			o	o	1	n.	clear.
Bk. Matilda C. Smith, N. 42° 35′, W. 11° 20′						nnw.			6		5		n.	shr's	shr's	mod	nnw.	fine.
Bg. Mattie B. Russell, N. 32° 30′, W. 78° 00′*†	30.33	770.4				n.			2		3		ne.	light	light	long	ene.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	29.93	760.2				ne.							ne.	o	o	long	ne.	fair.
S. M. P. Grace, N. 15° 49′, W. 119° 10′*	29.95	760.7	76	24.4		ene.			7		10		ene.	hv'y	h'vy	con.		squally.
Bg. O. C. Clary, N. 28° 39′ W. 64° 41′*†	29.85	758.2	72	22.2	90	n.			6		4		ne.			h'vy	cross	fair.
Bk. Orpheus, N. 38° 50′ W. 50° 12′	29.58	751.3	73	22.8		sse.			6		8 k		sse.	4 h'r	4 h'r	mod.	sse.	clearing
S. Paramita, San Francisco, Cal†	30.09	764.3	53	11.7		e.			2				se.	o	o			hazy.
S. S. Peconic, N. 37° —′, W. 51° 39′*†	29.78	756.4	71	21.7		sse.			4		2		s.	o	o	long	cross	threatening
S. S. Radnorshire, N. 22° 23′, E. 37° 15′*†	29.96	761.0				nne.			1		0			o	o			clear.
S. St. Francis, S. 17° 30′ W. 97° 45′†	30.09	764.3	70	21.1		se.			2		7		se.	o	o	sm'h	se.	cloudy.
Schr. S. B. Hubbard, N. 36° 25′, W. 74° 11′†	30.13	765.3	54	12.2		n.			5		5		nne.	o	o	hv'y	n.	clearing
Bk. Southern Belle, N. 49° 20′, W. 7° —′*†	29.85	758.2	60	15.6		w			4		10		w.	o	o	mod.	wnw.	raining.
S. S. Strathleven, N. 35° 23′, E. 17° 46′	29.87	758.7	65.8	18.8	72	w.			4		3		wnw.			3	wnw.	d. clouds.
S. S. Sunbeam, N. 50° 12′, W. 3° 38′	29.88	758.9	43	6.1	92	sse.			4		10		wnw.	2 h'r	2 h'r	3	s.	drizzling.
Bg. Teneriffe, N. 39° 10′, W. 73° 00′	30.11	764.8				nne.			7					o	o	r'gh	ne.	
Bk. Truro, N. 47° 45′ W. 37° 00′*†	30.20	767.1				nne.			2–3		8		nnw.	21 h'r	21 h'r	mod.	ssw.	clearing.
U.S. F. C. S. S. Fish Hawk, Washington, D. C†	30.37	771.4	45	7.2	84	nne.			3		9		nne.	o	o			cloudy.
Bk. Usko, N. 37° 14′. W. 68° 51′			59	15.0		nnw.			3		10		nw.	3 h'r	3 h'r	long	se.	light rain.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.41	772.3	64.4	18.		ne.			4		8		sw.	o	o			
Schr. Viola Reppard, N. 37° 26′ W 74° 09′†	30.13	765.2	50	10.0		nnw.			6		10		nnw.	o	o		nnw.	cloudy.
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762.0				s.			1		2		s.	o	o			fine.
Bk. Wandering Jew, S. 20° 00′, W. 35° 33′†..	29.97	761.2	74	23.3		sse.			6		10		sse.	24 h'r	24 h'r	large	sw.	squally.
Bk. Warden Law, S. 37° 16′, W. 75° 42′	30.02	762.5				se.			4		8		se.	12 h'r	12 h'r	sm'h	s.	raining.
Bgt. Willie, S. 38° 34′, E. 15° 30′*†	30.44	773.2	59	15.0		ssw.			3–5		8		ssw.	o	o	rg'h	sw.	cloudy.
S. Wm. Woodbury, N. 36° 48′ W. 73° 49′*†	30.20	767.1	52	11.1		n.			6		6?		nw.			cross	nnw.	clear.?

International Chart I. November 18, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 19, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.21	767.3	65.8	18.8	77	n.	.....	.....	3	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.15	765.8	65.1	18.4	97	wnw.	.....	.....	5	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	29.99	761.8	65.5	18.6	77	wnw.	.....	.....	3	.....	5	.....	.....	0.138	3.5	cloudy	Fonfrède.
Tunis	.....	.....	29.98	761.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.24	768.1	70.5	21.4	46	sw.	.....	.....	1	...e....	3	.....	.....	0	0	pretty fair	Pérès.
Tebessa	.....	.....	30.18	766.5	59.0	15.0	62	n.	.....	.....	3	.....	2	.....	.....	0	0	fair	Dognon.
Geriville	.....	.....	.....	.....	59.4	15.2	34	nw.	.....	.....	2	.....	2	.....	.....	0	0	fair	Lonchamp.
Laghouat	.....	.....	30.27	768.8	68.0	20.0	11	sw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.20	767.0	69.1	20.6	45	n.	.....	.....	2	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	29.95	760.7	30.04	763.0	57.5	14.2	75	ese.	12	5.4	.....	9	.....	.....	.....	0	0	dull	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.39	746.4	29.96	760.9	36.1	2.3	80	ne.	.....	.....	2	.....	8	.....	.....	0.016	0.4	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.99	736.4	29.80	756.8	27.0	— 2.8	87	w.	3.8	1.7	.....	.....	0	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.90	734.1	29.83	757.6	28.0	— 2.2	80	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.56	725.3	29.85	758.2	34.5	1.4	89	sw.	.....	.....	2	.....	8	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.32	719.4	29.78	756.3	40.5	4.7	76	nw.	.....	.....	2	.....	10	.....	.....	0.008	0.2	rain & snow	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.34	719.8	29.74	755.5	27.1	— 2.7	87	sw.	.....	.....	1	.....	10	.....	.....	0.118	3.0	gloomy	The Staff.
Lemberg	28.82	731.9	29.84	757.9	32.7	0.4	73	sw.	.....	.....	1	.....	3	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.77	756.1	29.88	759.0	43.5	6.4	65	one.	.....	.....	1	.....	10	.....	.....	0.197	5.0	.....	I. R. Hydrographic Office.
Szathmar	29.34	745.2	29.80	757.0	34.9	1.6	73	sw.	.....	.....	3	.....	4	.....	.....	0	0	.....	Joseph Midlinszay, S. J.
Szegedin	29.58	751.4	29.87	758.8	34.2	1.2	89	n.	.....	.....	1	.....	4	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.82	757.3	29.92	759.9	42.1	5.6	43	e.	.....	.....	2	.....	5	.....	.....	0	0	.....	Royal Academy.
Vienna	29.08	738.6	29.83	757.6	31.8	— 0.1	49	se.	.....	.....	2	.....	8	.....	.....	0.055	1.4	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.04	737.6	29.14	740 1	40.3	4.6	63	wsw.	11	4.9	.....	.....	6	.....	.....	0	0	d. clouds	W. Roswell
Armagh, Observatory	29.18	741.2	29.42	747.3	38.0	3.3	89	sw.	17	7.6	.....	.....	.....	.....	.....	.....	.....	.....	S. Dall.
Bidston, Liverpool Obs'y	.....	.....	29.40	746.7	42.6	5.9	80	wsw.	36	16.1	.....	.....	4	.....	.....	.....	.....	d. clouds	John Hartnup.
Bolton, Sharples	28.86	733.0	29.40	746.7	40.9	4.9	87	wsw.	27	12.1	.....	.....	10	.....	.....	.....	.....	squally	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.28	7.1	.....	McLandsborough & Preston
Bridgetown, Barbadoes	29.88	758.9	29.91	759.7	82.0	27.8	69	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	29.58	751.3	29.70	754.4	46.6	8.1	69	nw.	.....	.....	3.0	.....	5	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E.	29.36	745.7	29.50	749.3	46.7	8.2	66	sw.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.49	749.0	29.72	754 9	46.9	8.3	81	wnw.	.....	.....	5	.....	5	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.76	705.1	29.98	761.5	68.0	20.0	69	e.	.....	.....	1	.....	9	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88.0	31.1	59	nw.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.15	765.8	30.20	767.1	67.2	19.6	76	w.	.....	.....	4	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.02	737.1	29.23	742.4	36.6	2.6	89	wnw.	.....	.....	2	.....	7	.....	.....	.....	.....	gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.34	745.2	29.52	749.8	45.2	7.3	67	w.	.....	.....	5	.....	4	.....	.....	.....	.....	d. clouds	The Staff.
Guernsey	29.41	747.0	29.71	754.6	50.0	10.0	71	w.	.....	.....	4	.....	2	.....	.....	blank	blank	blue sky	A. Collenette, F. M. S.
Kew, Observatory	29.49	749.0	29.53	750.0	46.2	7.9	62	w.	20	8.9	.....	.....	7	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.19	741.4	29.45	748.0	45.0	7.2	67	w.	.....	.....	2	.....	6	.....	.....	.....	.....	d. clouds	J. C. Smith.
Malta, Mediterranean	29.86	758.4	29.93	760.2	62.2	16.8	97	w.	.....	.....	2	.....	9	.....	.....	blank	blank	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.97	761.2	30.02	762.5	74.0	23.3	71	sw.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast	C. S. Duncombe.
Oscott, St. Mary's College	28.92	734 6	29.45	748.0	47.4	8.6	65	w.	.....	.....	4	.....	5	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.29	744.0	29.52	749.8	45.2	7.3	66	w.	.....	.....	3	.....	2	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.59	751.6	29.67	753.6	46.5	8.1	92	nw.	.....	.....	2	.....	8	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	28.90	734.0	29.00	736.6	42	5.6	65	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.57	751.1	29.63	752.6	58.0	14.4	76	ene.	.....	.....	1	.....	10	.....	.....	blank	blank	gloomy	W. H. Lyne.
Sheffield	29.12	739.6	29.40	746.7	41.0	5.0	90	wsw.	.....	.....	5	.....	7	.....	.....	0.22	5.6	showery	W. F. Cooper.
Silloth Rectory	29.29	744.0	29.32	744.7	38.9	3.8	90	w.	.....	.....	4	.....	10	.....	.....	0.120	3.0	raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.39	746.5	42.6	5.9	58	w.	29	13.0	.....	.....	10	.....	.....	.....	.....	raining	I. New.
Stratfield Turgiss	29.33	745 0	29.54	750.3	46.2	7.9	69	w.	.....	.....	3	.....	0	.....	.....	.....	.....	squally	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.66	753 4	29.70	754.4	50	10.0	86	nw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29 68	753.9	29.70	754.4	45.4	7.4	75	w.	29	13.0	.....	.....	10	.....	.....	.....	.....	raining	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.89	759.2	29.93	760.2	33	— 0.6	85	n.	24	10.7	.....	.....	10 n	.....	.....	ne.	Inap.	Inap.	threatening. H. J. Cundall, C. E.
Chatham, N. B*	30.04	763.0	30.11	764.8	24	— 4.4	92	n.	9	4.0	.....	.....	10 ks	.....	.....	n.	o	o	cloudy. G. A. Blair.
Father Point, Quebec*	30.16	766.1	30.18	766.6	19.0	— 7.2	70	calm	0	0	.....	.....	10 k	.....	.....	calm	o	o	cloudy. J. McWilliams.
Fort Garry, Manitoba*	29.20	741.7	30.07	763.8	24	— 4.4	88	s.	10	4.5	.....	o	o	.....	.....	.....	o	o	clear. James Stewart.
Halifax, N. S*	29.71	754.6	29.84	757.9	34	1.1	81	n.	16	7.2	.....	.....	10	.....	.....	.....	0.100	2.5	cloudy. A. Allison.
Kingston, Ontario*	29.88	758.9	30.24	768.1	21	— 6.1	87	ne.	3	1.3	.....	2 ck	o	nw.	.....	.....	o	o	fair. A. P. Knight, M. A.
Montreal, Quebec*	30.00	762.0	30.22	767.6	22	— 5.6	86	nw.	5	2.2	.....	o	2 s	.....	.....	.....	o	o	clear. C. H. McLeod, C. E.
Parry Sound, Ontario*	29.47	748.5	30.20	767.1	29	— 1.7	88	n.	2	0.9	.....	.....	10 n	.....	.....	ne.	0.03	0.8	cloudy. Rev. R. Mosley.
Port Dover, Ontario	29.50	749.3	30.23	767.8	28.	— 2.2	100	w.	15	6.7	.....	10 k	o	w.	.....	.....	o	o	clear. H. Morgan.
Port Stanley, Ontario	29.58	751.3	30.27	768.8	22	— 5.6	91	w.	3	1.3	.....	.....	8 k	.....	.....	nw.	Inap.	Inap.	cloudy. M. Payne.
Quebec, Quebec*	29.87	758.7	30.22	767.6	22	— 5.6	80	e.	.....	.....	1	2 c	2 c	e.	e.	o	o	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.73	755.1	30.22	767.6	23	— 5.0	88	s.	1	0.4	.....	.....	10 s	.....	.....	se.	0.05	1.3	light snow. W. H. McIntyre.
Saugeen, Ontario*	29.47	748.5	30.21	767.3	36	2.2	75	n.	12	5.4	.....	.....	10 ks	.....	.....	.....	0.02	0.5	cloudy
St. Andrews, N. B	29.96	761.0	30.01	762.2	30	— 1.1	67	ne.	7	3.1	.....	.....	10 n	.....	.....	.....	o	o	cloudy
Sydney, C. B*	29.74	755.4	29.80	756.9	35	1.7	75	ne.	23	10.3	.....	.....	10 n	.....	.....	ne.	0.06	1.5	cloudy. T. C. Hill, C. E
Toronto, Ontario*	29.84	757 9	30.25	768.3	27	— 2.8	84	n.	2	0.9	.....	.....	10 n	.....	.....	w.	o	o	cloudy. Magnetic Observatory.
Yarmouth, N. S*	29.82	757.4	29.89	759.2	34	1.1	78	ne.	9	4.0	.....	.....	10 k	.....	.....	ne.	o	o	cloudy. Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.76	730.5	30.22	767.6	28.0	— 2.2	88	w.	.....	.....	2	.....	10 s	.....	.....	nw.	0.60	15.2	dull. Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	38	3.3	100	n.	3	1.3	.....	.....	10 n	.....	.....	.....	.....	.....	raining. John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.07	763.8	30.10	764.5	70.0	21.1	73	e.	6.1	2.7	.....	0	2 k	.....	.....	o	o	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.93	760.2	29.97	761.2	82.2	27.9	51	s.	41	18.3	.....	o	o	.....	.....	o	o	.....	The Staff, for D.G.H.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.69	779.6	33.4	0.8	61	ne.	7.4	3.3	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.48	774.3	30.51	775.0	51.8	11.0	95	ne.	5.1	2.3	.....	.....	10 n	.....	.....	0.315	8.0	raining	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.33	744.9	29.37	746.1	31.5	— 0.3	81	nw.	.....	.....	1	.....	9	.....	.....	.....	.....	.....	Oversergeant Fischer.
Fanöe	29.26	743.3	29.29	743.9	27.5	— 2.5	100	sse.	.....	.....	4	.....	10	.....	.....	.....	.....	snowing	Overloerer Lauridsen.
Godthaab, Greenland	29.68	753.9	29.72	755.0	26.8	— 2.9	.....	s.	.....	.....	6	.....	10	.....	.....	.....	.....	snowing	S. Kleinschmidt.
Ivigtut	29.94	760.5	29.96	761.0	25.3	— 3.7	.....	se.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	.....
Stykkisholm, Iceland	29.25	743.0	29.30	744.1	36.3	2.4	77	ne.	.....	.....	7	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	28.71	729.3	28.75	730.2	40.8	4.9	81	sw.	30.2	13.5	.....	.....	10	.....	.....	.....	.....	raining	Overloerer Bergh.
Vestervig	29.24	742.7	29.34	745.1	29.1	— 1.6	94	ese.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	Loerer Oesterbol.
Jacobshavn	29.69	754.1	29.74	755.3	15.4	— 9.2	.....	e.	.....	.....	2	.....	3	.....	.....	.....	.....	.....	.....
French.																			
Agen, Normal School	29.29	743.9	29.94	760.5	48.6	9.2	92	w.	.....	.....	1	c; ck	o	w.	.....	0.768	19.5	.....	M. Labroue, Director.
Alençon, Normal School	29.17	740.9	29.72	754.9	48.2	9	89	calm	.....	.....	0	cs	fg	e.	e.	0.236	6.0	foggy	M. Nicot, Director.
Arras, Engineer School	29.39	746.6	29.65	753.0	46.2	7.9	80	nw.	.....	.....	4	.....	o	.....	.....	0.079	2.0	clear	M. Fénéon, Command't.
Avignon, Normal School	29.84	757.8	29.91	759.8	41.4	5.2	81	n.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	M. Giraud, Director.
Bar-sur-Seine	29.10	739.2	29.67	753.5	45.1	7.3	91	wnw.	.....	.....	1	.....	10	.....	nw.	0.024	0.6	covered	M. Saillard, Director.
Beauvais, Normal School	29.36	745.8	29.63	752.6	48.9	9.4	71	nw.	.....	.....	2	.....	8	.....	wnw.	0.079	2.0	very cloudy	M. Frère Eugène Marie.
Besançon, Normal School	28.94	735.0	29.78	756.4	40.5	4.7	74	sw.	.....	.....	1	.....	10 n	.....	sw.	0.079	2.0	raining	M. Gobin, Director.
Bordeaux, Observatory	29.70	754.3	29.96	761.0	55.2	12.9	99	w.	.....	.....	1	.....	10	.....	wnw.	0.220	5.6	covered	M. Rayet, Director.
Bourges, Normal School	29.25	743.0	29.81	757.1	50.9	10.5	93	sw.	.....	.....	1	.....	k	.....	sw.	0.020	0.5	..	M. Malet, Director.
Brest, Naval Observatory	29.63	752.7	29.87	758.8	53.2	11.8	85	w.	.....	.....	2	.....	4	.....	.....	2.382	60.5	.....	M. de Kermaree, Dir.
Caen, Normal School	29.60	751.9	29.68	753.8	49.3	9.6	69	w.	.....	.....	1	.....	10	.....	.....	0.177	4.5	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.21	741.9	29.53	750.1	44.8	7.1	88	ssw.	.....	.....	1	.....	8	sw.	w.	0.098	2.5	very cloudy	M. Jadot, Director.
Charleville, Normal School	29.06	738.1	29.58	751.3	38.5	3.6	80	w.	.....	.....	1	.....	2	.....	.....	0	0	¼ covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.46	722.8	29.80	757.0	54.3	12.4	72	wsw.	.....	.....	3	.....	8	.....	w.	0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	28.91	734.4	29.78	756.4	48.4	9.1	86	sw.	.....	.....	2	.....	10	.....	w.	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.74	729.9	29.62	752.3	30.2	— 1	88	w.	.....	.....	3	.....	10	w.	w.	0	0	covered	Dr. Goulet, Director.
Gap, Normal School	27.34	694.3	29.93	760.2	37.4	3	53	.....	.....	.....	.....	.....	10	.....	.....	c.12	3.	.....	M. Jeangirard, Director.
Grésque, du Rhone	28.76	730.6	29.90	759.5	46.2	7.9	75	n.	.....	.....	1	.....	10	.....	w.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.10	739.1	29.90	759.4	35.2	1.8	89	se.	.....	.....	1	.....	10 kn	.....	s.	.....	.....	raining	M. Ablard, Director.
Guéret	28.25	717.6	29.84	758.0	48.6	9.2	86	w.	.....	.....	3	.....	n	.....	w.	0.295	7.5	.....	M. Delorme, Dir.
Lamballe, Normal School	29.50	749.2	29.77	756.2	51.8	11	70	w.	.....	.....	4	o	5 k	.....	.....	0.04	1.	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.49	749.0	30.06	763.4	55.2	12.9	96	w.	.....	.....	3	.....	10	.....	.....	1.937	49.2	raining	M. Chauvin, Director.
Lorient, Naval Observatory	29.78	756.4	29.88	759.0	54.7	12.6	70	w.	.....	.....	1	.....	8	sw.	w.	0.031	0.8	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.77	730.8	29.86	758.5	37.6	3.1	91	s.	.....	.....	1	.....	10	.....	w.	0.075	1.9	raining	M. André, Director.
Mans, Normal School	29.46	748.2	29.76	755.9	48 7	9.3	70	nw.	.....	.....	4	.....	.....	.....	nnw.	0.071	1.8	.....	M. Piboeu, Director.
Marseille, Observatory	29.61	752.2	29.89	759.2	48.6	9.2	73	nw.	.....	.....	1	.....	10	.....	nw.	0.031	0.8	light rain	M. Stephan, Director.
Mt. Louis	24.78	629.4	29.62	752.4	40.6	4.8	93	ne.	16.8	7.5	.....	.....	10	.....	.....	0.126	3.2	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29.75	755.6	29.88	758.9	47.5	8.6	80	ene.	.....	.....	2	.....	10	.....	nw.	0	0	covered	M. Galzin, Director.
Nancy, Normal School	28.79	731.2	29.61	752.1	37.8	3.2	97	ssw.	.....	.....	1	.....	10 n	.....	.....	.....	.....	light rain	M. Hasse, Director
Nantes, Observatory	29.72	754.9	29.89	759.0	52.3	11.3	75	wnw.	.....	.....	2–3	.....	10 n	.....	wnw.	0.047	1.2	.....	M. Lareeque, Director.
Perpignan, Observatory	29.84	757.8	29.95	760 6	62.8	17.1	67	nw.	24.2	10.8	.....	.....	10	.....	nw.	0.051	1.3	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.19	538.3	.....	.....	28.8	— 1.8	.....	sw.	.....	.....	2–3	.....	10	.....	sw.	2.480	63.0	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.87	733.2	29.95	760.8	41.7	5.4	88	n.	.....	.....	1	.....	10	n.	s.	0	0	covered	M. Taillen.
Puy de Dôme Obs'y, Summit	24.85	631.3	.....	.....	34.3	1.3	100	w.	.....	.....	9	.....	10	.....	.....	0.181	4.6	rain & fog	M. Alluard, Director.
Rochefort, Naval Obs'y	29.89	759 2	29.92	760.0	54.7	12.6	95	w.	.....	.....	2	.....	10	.....	wnw.	0.63	16.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.80	756.9	29.93	760.3	54.0	12.2	86	w.	.....	.....	1	.....	5	.....	w.	0.20	5.	cloudy	M. Brotier, Director.
Rodez, Normal School	27.75	704.8	29.93	760.2	38.1	3.4	93	nw.	.....	.....	2	.....	10	.....	w	0.43	11.	raining	M. Seger, Director.
Rouen, Normal School	29.58	751 3	29.63	752.5	50.0	10	62	w.	.....	.....	1	.....	2	nnw.	.....	0.252	6.4	slightly cl'dy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	49.6	9.8	69	w.	.....	.....	1	.....	.....	w.	sw.	0	0	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.49	749.0	29.65	753.2	49.3	9.6	67	wnw.	.....	.....	1	.....	10	.....	var.	0 028	0.7	.....	M. Renou, Director.
Toulouse, Observatory	29.30	744.2	30.02	762.6	55.0	12.8	98	w.	.....	.....	6	.....	10	w.	.....	0.791	20.1	covered	M. Baillaud, Director.
Tours	29.60	751.7	29.77	756.2	52.2	11.2	75	wsw.	.....	.....	1	.....	8	.....	wsw.	0.020	0.5	very cloudy	M. de Tastes.
Versailles, Observatory	29.16	740.6	29.65	753 1	48.2	9.0	69	nw.	.....	.....	3	.....	.....	.....	.....	0.063	1.6	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.10	713.8	29.61	752.1	26.6	— 3.0	84	sw	.....	.....	4	.....	10	sw.	.....	0.008	0.2	.....	Prof. Jnedt.
Bamberg	28.69	728.8	29.52	749.9	25.9	— 3.4	90	sw.	.....	.....	3	.....	10	.....	.....	0.157	4.0	snowing	Prof. Dr. Hoh.
Berlin	29.32	744.6	29.50	749.3	30.6	— 0.8	96	sw.	.....	.....	3	.....	10	.....	.....	0.193	4.9	.....	Prof. Dr. Arndt.
Breslau	29.19	741.3	29.71	754.6	29.1	— 1.6	62	ssw.	.....	.....	2	.....	9	.....	.....	0.028	0.7	.....	Royal University Obs'y.
Carlsruhe	29.12	739.7	29.57	751.1	30.9	— 0.6	84	sw.	.....	.....	2	.....	10	.....	.....	0.240	6.1	raining	Albert Senz.
Cassel	28.63	727.1	29.34	745 2	27.9	— 2.3	96	s.	.....	.....	6	.....	10	sw.	.....	0.055	1.4	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.18	741.2	29.55	750.5	28.9	— 1.7	90	sw.	.....	.....	2	.....	10	.....	.....	0.177	4.5	snowing	Physical Society.
Friedrichshafen	28.19?	715.9?	29.08	753.9	31.8	— 0.1	92	se.	.....	.....	1	.....	10	e.	.....	0.303	7.7	.....	Wilhelm, Chief Tel.
Hamburg	29.31	744.5	29.40	746.8	25.7	— 3.5	98	ese.	.....	.....	3	.....	10	.....	.....	0.024	0.6	snowing	E. Preller.
Kiel	29.38	746.2	29.39	746.6	27.3	— 2.6	88	sse.	.....	.....	1	.....	10	.....	.....	0.209	5.3	snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.14	740 2	29.58	751.3	29.8	— 1.2	86	s.	.....	.....	4	.....	10	.....	.....	0.087	2.2	.....	H. Leppig, Asst.
Magdeburg	29.31	744.5	29.50	749.4	28.2	— 2.1	79	s.	.....	.....	3	.....	10	.....	.....	0.004	0.1	foggy	Weather Observatory.
Memel	29.34	745.3	29.39	746.4	25.2	— 3.8	100	se.	.....	.....	3	.....	10	.....	.....	.....	.....	snowing	Issermann.
Munich	27.81	706.3	29.05	753.0	28.2	— 2.1	74	se.	.....	.....	3	.....	10	.....	.....	0.031	0.8	snowing	Central Station.
Neufahrwasser	29.42	747.3	29.44	747.7	31.6	— 0.2	85	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	snowing	A. Lothes.
Neustadt, Palatinate	28.99	736.4	29.51	749.6	33.1	0.6	96	s.	.....	.....	2	.....	10	.....	.....	0.248	6.3	.....	Dicknether
Stuttgart	28.60	726.4	29.52	749.7	33.3	0.7	90	w.	.....	.....	2	.....	10	.....	.....	0.213	5.4	.....	Prof. Dr. Schoder.
Wustrow	29.45	747.9	29.47	748.5	28.4	— 2.0	88	sse.	.....	.....	3	.....	10 s	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.31	744.4	29.69	754.2	59.0	15.0	.....	sw.	.....	.....	5.0	.....	8	.....	.....	0.016	0.4	covered	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.04	763.1	30.10	764.4	86.0	30.0	48	e.	12.0	5.4	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.52	749.9	30.00	762.0	81.2	27.3	17	nnw.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.92	759.8	29.95	760.8	79.7	26.5	76	nw.	13.0	5.8	.....	.....	1	wnw.	.....	0	0	d. clouds	
Poona, Yarrowda	28.08	713.2	29.92	759.9	85.8	29.9	26	nne.	10.0	4.5	.....	.....	5	e.	.....	0	0	d. clouds	
Trichinopoly	29.68	753.7	29.96	760.9	79.9	26.6	75	ne.	1.0	0.4	.....	.....	6	.....	.....	0.04	1.0	d. clouds	
Bellary	28.46	722 9	29.94	760.4	80.6	27.0	49	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	d. clouds	
Belgaum	27.40	696.0	29.92	760.1	80.8	27.1	41	nne.	5.0	2.2	.....	.....	4	.....	ne.	0	0	d. clouds	
Lahore	29.30	744.2	30.06	763.6	69.7	20.9	46	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.13	739.9	30.06	763.4	68.8	20.4	52	sw.	.....	.....	.....	.....	1	.....	.....	0	0	.....	
Agra	29.48	748.7	30.05	763.3	75.2	24.0	34	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.94	735.0	29.99	761.7	77.5	25.3	42	calm	3.0	1.3	.....	.....	2	e.	.....	0	0	d. clouds	
Jubbulpore	28.68	728.5	30.06	763.6	72.3	22.4	37	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.64	752.8	30.02	762.6	74.2	23.4	45	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.72	754.8	30.04	763.1	66.1	18.9	66	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.88	758.9	30.07	763.8	68.4	20.2	59	ene.	1.8	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.99	711.0	30.06	763.5	66.6	19.2	49	nne.	2.4	1.1	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.95	760.6	30.03	762.8	72.5	22.5	69	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	30.01	762.3	30.03	762.8	70.5	21.4	73	nne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.91	759.6	30.03	762.7	71.9	22.2	75	calm	1.6	0.7	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.92	759.9	30.01	762.2	72.6	22.6	86	calm	1.1	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.72	754.8	30.06	763.6	68.0	20.0	85	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.90	759.5	29.93	760.1	81.6	27.6	73	s.	2.7	1.2	.....	.....	7	.....	se.	0.06	1.5	d. clouds	
Jeypore	28.58	725.8	30.04	763.1	73.7	23.2	45	nw.	1.4	0.6	.....	.....	1	.....	nw.	0	0	blue sky	
Italian.																			
Udine	29.49	749.1	29.91	759.7	40.1	4.5	47	ne.	0.7	0.3	.....	.....	10	.....	.....	0.055	1.4	.....	Prof. Giovanni Clodig.
Milan	29.39	746.6	29.92	760.0	43.2	6.2	39	ssw.	4.3	1.9	.....	.....	1	nw.	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.80	757.0	29.91	759.8	41.5	5.3	48	nne.	3.8	1.7	.....	.....	9	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.97	735.7	29.88	759.0	42.8	6.0	46	nw.	3.8	1.7	.....	.....	1	.....	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer: Corrected for instrumental error and for temperature. Inch.	Barometer: Corrected for instrumental error and for temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	WEATHER.	OBSERVERS.
ITALIAN.—Continued.																			
Genoa	29.68	753.8	29.87	758.7	50.0	10.0	40	se.	0.7	0.3			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	27.91	709.0	29.86	758.5	37.2	2.9	47	w.			2		0			0	0		Prof. D. C. Bruno
Pesaro	29.93	760.3	29.98	761.5	45.0	7.2	74	nnw.	1.8	0.8			8			0	0		Prof. Luigi Guidi.
Florence	29.64	752.9	29.90	759.4	46.4	8.0	41	s.			2					0	0		Prof. Costantino Pittier.
Leghorn	29.76	755.8	29.84	757.9	48.4	9.1	67	ese.	3.8	1.7			5			0	0		Prof. P. Monte.
Rome	29.73	755.1	29.91	759.6	50.4	10.2	40	n.	7.4	3.3			0			0	0		Prof. P. Tachini.
Lecce	29.54	750.3	29.79	756.7	49.3	9.6	68	nnw.	18.6	8.3			6	nw.		0	0		Prof. C. de Giorgi.
Cosenza	28.95	735.4	29.84	758.0	50.4	10.2	72	wnw.	6.9	3.1			2	nw.		0.150	3.8		Prof. D. Conti.
Cagliari	29.75	755.6	29.94	760.5	59.5	15.3	78	nw.			6		10			0.012	0.3		Prof. A. Pacinotti.
Palermo	29.70	754.4	29.95	760.7	58.5	14.7	45	nw.	12.5	5.6			5	nw.		0.402	10.2		Prof. G. Cacciatore.
Syracuse	29.83	757.7	29.87	758.8	61.7	16.5	77	wnw.	14.3	6.4			4	wnw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.37	746.0	29.90	759.5	50.9	10.5	42	w.	0.7	0.3			0			0.264	6.7		Prof. F. Brioschi.
Stelvio	21.79	553.5			8.2	—13.2	100	se.			4		10			0.193	4.9	misty	Prof. P. F. Denza.
Valdobbia	21.84	554.8			26.4	— 3.1	68	n.			2		8			2.362	60.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.00	762.1	30.04	762.9	38.0	3.3	84	nw.			4		10 n		nw.	0.279	7.1	raining	Hattori.
Awomori	29.92	759.9	29.95	760.7	37.3	2.9	66	w.	17.5	7.8			10 sk	s.	w.	0.434	11.0	overcast	K. Ogawa.
Hakodate	29.90	759.4	29.91	759.6	33.8	1.0	72	wnw.	25.6	11.4		0	8		w.	0.204	5.2	overcast	
Hiroshima					44.9	7.2	84	nne.	4.2	1.9		0	0			0	0	clear	Y. Miwa.
Kanazawa	30.07	763.9	30.18	766.5	45.6	7.6	90	s.	10.2	4.6			10			0.710	18.0	raining	S. Endo.
Kioto	30.04	763.0	30.22	767.6	42.4	5.8	89	nw.	0.4	0.2		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.17	766.3	30.38	771.7	50.4	10.2	72	calm	0	0		4 c	0	n.		0	0	clear	S. Takehayashi.
Nemuro	29.75	755.6	29.81	757.2	33.5	0.8	92	nnw.	12.0	5.4		10	0					snowing	
Niigata	30.00	762.0	30.04	763 0	49.8	9.9	67	w.	20.5	9.1			10 ck		nw.	0.275	7.0	overcast	M. Morita.
Nobiru	29.97	761.2	29.99	761.6	42.3	5.7	87	nnw.	13.8	6.2		3 ck	4 n	w.		0.055	1.4	light rain	H. Midzushima.
Osaka	30.20	767.0	30.21	767.4	47.0	8.3	75	w.	10.3	4.6		0	0			0	0	clear	
Sapporo					28.0	— 2.2	61	w.	10.2	4.6		2	3			0.030	0.8	fair	
Tokei Obs'y, Yeddo	29.96	760.9	30.04	762.9	45.2	7.3	89	wnw.	3.0	1.3		0	0			0	0	clear	The Staff.
Wakayama	30.19	766.8	30.25	768.3	51.6	10.9	71	nnw.	1.8	0.8		0	0			0	0	clear	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.82	757.4	30.01	762.2	79.5	26.4	65	e.	13.5	6.0		7 c ck	5 k	wsw.	ene.	0.01	0.3	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.70	601.9	29.92	759.9	54.0	12.2	88	w.	inap.	inap.		3 ck	1 k	w.	w.	0	0	light haze	Prof. Vicente Fernandez.
Leon	24.35	618.5	30.14	765.5	54.5	12.5	76	nnw.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.76	756.0	30.03	762.7	65.0	18.3	49	nnw.	1.6	0.8		1 cs	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.2	30.25	768.3	47.5	8.6	84	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.26	616.2	30.23	767.8	52.7	11.5	67	w.	5.1	2.3		1 k	1 k	w.	w.	0	0	clear	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascalientes	23.91	607.4	30.00	762.0	48.9	9.4	84	calm			0					0	0		M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.3	30.53?	765.4?	54.7	12.6	78	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.76	578.1	30.43	773.0	49.0	9.0	85	sw.	12.0	5.4		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.41	747.1	29.41	747.1	45.3	7.4		w.			5					0.138	3.5		
Groningen	29.18	741.1	29.23	742.5	31.8	— 0.1		s.			2					0.173	4.4		
Helder	29.25	742.9	29.25	742.9	40.8	4.9		wnw.			5					0.079	2.0		
Hellevoetsluis	29.36	745.7	29.36	745.7	44.6	7.0	71	wnw.			4					0.075	1.9		
Utrecht	29.29	743.9	29.34	745.1	41.2	5.1	89	w.			3		5			0.138	3 5	cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.23	742.4	29.29	744.0	34.2	1.2	52	ese.	16	7			10			0	0		
Brono	29.65	753.0	29.69	754.0	32.4	0.2	50	e.	18	8			8			0	0		
Christiania	29.32	744.8	29.48	748 7	29.1	— 1.6	78	ne.	4	2			10			0.004	0.1	snowing	
Gjesvær	30.26	768.6	30.28	769.2	27.5	— 2.5		se.			6		3						
Lodingen	29.88	759.0	29.93	760.2	34.0	1.1	52	se.			6		9			0	0		
PORTUGUESE.																			
Angra, Azores	30.32	770.0	30.47	773.9	64.4	18.0	82	e.	10.5	4.7			3			0	0		
Campo Major	29.24	742.7	30.24	768.1	62.2	16.8	61	sw.	6.3	2.8			0			0	0		Dr. J. A. Sampaio.
Funchal, Madeira	30.22	767.6	30.31	769.9	69.1	20.6	50	e.	13.0	5.8			3	nne.		0	0		Dr. A. M. R. dos Santos
Lisbon, Observatory	29.99	761.8	30.35	771.0	60.8	16.0	57	n.	23.0	10 3			4			0	0		Capt. D. A. de Cunha.
Ponta Delgada, Azores	30.42	772.6	30.49	774.4	65.8	18.8	64	ese.	5.6	2.5			3			0	0		The Staff.
Saint Paul de Loando	29.72	755.0	29.93	760.1	74.3	23.5	83	w.	1.3	0.6			1	sse.		0	0		
Serra da Estrella	25.48	647.3	30.29	769.3	45.1	7.3	74	nnw.	19.2	8.6			1			0.339	8.6		
RUSSIAN.																			
Akmolinski	29.02	737.0	30.15	765.7	29.3	— 1.5	90	sw.	9	4			9 n			0.008	0.2		Major K. Lasarew.
Archangel	30.40	772 2	30.42	772.7	6.4	—14.2	92	ese.	4	2			9 k			0	0		Capt. Sselliwerstow.
Astrakhan	30.25	768.4	30.17	766.3	52.3	11.3	56	se.	2	1		0	0			0	0		Capt. Wisganow.
Barnaul	29.65	753.2	30.18	766.6	26.8	— 2.9	61	sw.	22	10			10			0.217	5.5		Meteorological Obs'y.
Dorpat	29.37	740.1	29.63	752.6	22.3	— 5.4	96	ese.	7	3			10 n			0.094	2.4		Observatory.
Ekaterinburg	29.35	745.5	30.41	772.3	13.1	—10.5	78	w.	7	3			0			0	0		Meteorological Obs'y.
Kasan	30.02	762.1	30.30	769.5	18.5	— 7.5	83	ese.	16	7			10			0.181	4.6	snowing	Observatory.
Kertch	29.65	753.2	29.67	753.7	58.8	14.9	93	calm	0	0		0	6 n			0	0		Lagorio & Sustyrea.
Kieff	29.22	742.3	29.89	759.3	27.7	— 2.4	77	n.	2	1		cs	10 ks						Observatory.
Lugan	29.68	753.8	29.88	759.0	47.1	8.4	87	se.	4	2			10						Meteorological Obs'y.
Nikolaiev	29.69	754.1	29.76	755.9	47.7	8.7	96	calm	0	0			10 n			0	0		Capt. Kurdakow.
Pekin, China	30.61	777.6	30.70	781.2	30.4	— 0.9	56	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	29.77	756.1	29.78	756.5	21.6	— 5.8	90	ese.	18	8			10 n			0.016	0.4		Central Physical Obs'y.
Semipalatinsk	29.69	754.2	30.41	772.3	19.8	— 6.8	75	s.	20	9			0			0	0		Major Lasarew.
Tashkend, Laboratory	28.67	728.2	30.26	768.7	52.7	11.5	42	calm	0	0			0						Telch, A. M.
Tiflis	28.65	727.8	30.06	763.4	64.4	18.0	45	s.	2	1		1 c	0			0	0		Physical Observatory.
Tomsk	29.63	752.6	29.92	760.0	26.8	— 2.9	89	s.	13	6			10					heavy snow	
Vladivostock	30.28	769.1	30.35	770.8	23.4	— 4.8		nw.	9	4		0	0			0	0		
Warsaw	29.26	743.1	29.70	754.3	27.9	— 2.3	79	wsw.	20	9		0	8 k						Astronomical Obs'y.
Wilna	29.18	741.2	29.62	752.3	29.8	— 1.2	94	s.	27	12			10			blank	blank	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.63	752.6	29.93	760.2	27.1	— 2.7	80	w.	16	7			10			0.004	0.1	snowing	M. O. Marks.
SCOTTISH.																			
Monach Lt			29.09	738.9	45	7.2	92	wnw.			8		10			0.3	8.	sleet sh'wrs	J. Youngclause
North Unst			28.98	736.1				s.			7	1	1	s.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.83	757.6	29.93	760.2	62.2	16.8	70	se.	2.2	1.0			9			0	0	covered	Antonio Reve, Director.
Bilbao, Met. Obs'y	30.10	764 6	30.16	766.1	60.1	15.6	80	nw.	6.5	2.9		2	7	nw.		0.248	6.3	almost cov.	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.20	690.8	30.19	766.7	53.6	12.0	76	sw.	5.6	2.5		0	7			0.087	2.2	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.96	710.2	30.19	766.8	59.4	15.2	63	s.	3.1	1.4		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	29.98	761.5	30.11	764.9	69.8	21.0	54	nw.	4.3	1.9		1	3	se.		0	0	clouds	Olayo Diaz, Director.
Oviedo	29.29	744.0	30.17	766.3	58.6	14.8	58	e.	24.8	11.1			10 kn		w.	0.059	1.5	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.36	745.7	30.26	768.7	56.3	13.5	96	calm	0	0			10			0.134	3.4	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.91	759.6	29.97	761.1	78.8	26.0	79	nne.	12.3	5.5			9 ks		ne.	0.126	3.2	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.15	765.8	30.25	768.3	62.6	17.0	66	n.	7.7	3.4		0	4		nw.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.80	757.0	29.89	759.3	76.3	24.6	92	w.	2.2	1.0		4 s	2 k	w.	w.	0	0		Manuel Maese.
Tuguegarao, Philippine Id's	29.91	759.6	30.04	762.9	75.2	24.0	90	nw.	7.6	3.4		0	4 ks		ne.	inap.	inap.	cloudy	José L. Yrastorza.
SWEDISH																			
Haparanda																			
Umea	30.13	765 2	30.17	766.2	16.2	— 8.8	94	se.			2		0			0.106	2.7		
	29.92	759.9	29.97	761.2	24.4	— 4.2	84	se.			2		10			0.079	2.0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	Upper. From	Lower. From.	Inch.	Mill		
SWEDISH—Continued.																			
Hernosand	29.74	755.3	29.79	756.6	28.8	— 1.8	96	ene.	.....	.....	6	.....	10	.....	.....	0	0	....	
Stockholm	29.26	743.1	29.43	747.6	36.6	— 3.0	83	e.	.....	.....	7	.....	10	.....	.....	0.118	3.0	snowing	
Wisby	29.30	744.2	29.36	745.7	27.7	— 2.4	96	ene.	.....	.....	4	.....	10	.....	.....	0.480	12.2	snowing.....	
Sub-series.																			
Upsala	29.40	746.7	29.48	748.9	26.2	— 3.2	98	ne.	17.0	7.6	.....	.....	10	.....	.....	0.071	1.8	snowing.....	S. G. Fineman.
SWISS.																			
Geneva	28.36	720.3	29.84	758.0	34.9	1.6	93	n.	.....	.....	1	.....	10	.....	.....	.....	.....	raining.....	The Observatory.
TURKISH.																			
Constantinople	.....	.....	29.67	753.7	58.5	14.7	74	ese.	8	3.5	.....	.....	10	.....	sw.	0.299	7.6	raining.....	The Observatory.
Valona	.....	.....	29.77	756.2	48.7	9.3	.....	se.	.....	.....	1	.....	10	.....	.....	1.77	45.	covered.....	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.97	761 1	71.1	21.7	74	w.	.....	.....	1	10 cs	.....	w.	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.14	765.5	30.22	767.6	28	— 2.2	77	n.	4	1.8	.....	.....	10 s	.....	n.	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.61	752.1	30.31	769.9	32	0.0	88	w.	7	3.1	.....	.....	10 s	.....	.....	0.01	0.3	cloudy.....	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.18	639.6	30.28	769.1	29	— 1.7	61	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	W. C. Barnes.
Assiniaboine, Ft., Montana	27.02	686.3	30.00	762.0	44	6.7	34	sw.	18	8.0	.....	.....	10 s	.....	sw.	0	0	cloudy.....	B. O. Lenoir.
Atlanta, Georgia	28.99	736.3	30.21	767.3	40.5	4.7	88	ne.	6	2.7	.....	0	8 ks	.....	ne.	inap.	inap.	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.15	765.8	30.16	766.1	29	— 1.7	67	n.	10	4.5	.....	0	0	.....	.....	0	0	clear.....	Jas. M. Watson.
Augusta, Georgia	30.04	763.0	30.24	768.1	44	6.7	83	ne.	9	4.0	.....	2 c	8 k	w.	ne.	0.03	0.8	cloudy	John Healy.
Baltimore, Maryland	30.20	767.1	30.24	768.1	30	— 1.1	78	n.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	Geo W Felger.
Barnegat, New Jersey	30.13	765.3	30.15	765.8	30.0	— 1.1	88	n.	16	7.2	.....	0	1 k	.....	e.	0	0	clear.....	G. A. Hill.
Bennett, Fort, Dakota	28.54	724 9	30.23	767.8	27	— 2.8	88	se.	10	4.5	.....	0	0	.....	.....	0	0	clear.....	A. Pritchard.
Benton, Fort, Montana	27.09	688.1	30.05	763.3	46	7.8	49	sw.	14	6.3	.....	.....	10 s	.....	sw.	0	0	cloudy	S. Wheaton.
Bismarck, Dakota	28.21	716.5	30.13	765.3	28	— 2.2	88	se.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	Cyrus Cramer.
Block Island, Rhode Island	30.06	763.5	30.09	764.3	30	— 1.1	78	n.	24	10.7	.....	0	0	.....	.....	0.09	2.3	clear.....	J. T. Elker.
Boise City, Idaho	27.37	695.2	30.31	769.9	24	— 4.4	92	w.	4	1.8	.....	.....	10 s	.....	calm	0	0	cloudy.....	B. E. Light.
Boston, Massachusetts	29.94	760.5	30.10	764.5	21.0	— 6.1	70	nw.	10	4.5	.....	2 c	0	nw.	.....	inap.	inap.	clear.....	O. B. Cole.
Brownsville, Texas	30.06	763.5	30.11	764.8	49.8	9.9	93	n.	13	5.8	.....	.....	10 s	.....	n.	0.07	1.8	cloudy	M. McCarty.
Buffalo, New York	29.46	748.3	30.24	768.1	28	— 2.2	84	se.	4	1.8	.....	0	9 n	.....	sw.	inap.	inap.	light snow...	W. Finn.
Buford, Fort, Dakota	28.11	714.0	30.09	764.3	29	— 1.7	80	s.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	F. A. Mellen.
Burlington, Vermont	29.91	759.7	30.22	767.6	22.3	— 5.4	72	ne.	7	3.1	.....	0	1 s	.....	nw.	0	0	clear.....	W. B Gates.
Cairo, Illinois	29.90	759.4	30.32	770.1	39.8	4.3	84	ne.	7	3.1	.....	7 cs	0	.....	.....	0	0	fair.....	W. H. Ray.
Cape Henry, Virginia	30.16	766.1	30.18	766.6	40	4.4	73	n.	16	7.2	.....	.....	10 s	.....	.....	0.06	1.5	cloudy.....	A. K. Alderson.
Cape May, New Jersey	30.15	765.8	30.18	766.6	36.0	2.2	65	n.	13	5.8	.....	0	3 s	.....	n.	0	0	clear.....	W. E. Smith.
Cape Mendocino, California	29.52	749.8	30.20	767.1	49	9.4	77	n.	4	1.8	.....	.....	10ks	.....	n.	0	0	cloudy.....	J. J. McLean.
Cedar Keys, Florida	30.05	763.3	30.07	763.8	57	13.9	69	n.	12	5.4	.....	0	2 ks	.....	.....	0	0	clear.....	F. W. Mixer.
Champaign, Illinois	29.47	748.5	30.33	770.4	36.8	2.7	72	n.	9	4.0	.....	.....	10 s	.....	n.	0	0	cloudy.....	L. A. Welsh.
Charleston, S. Carolina	30.10	764.5	30.16	766.1	44	6.7	83	n.	12	5.4	.....	.....	10 s	.....	ne.	0	0	threatening.	J. H. Smith.
Charlotte, N. Carolina	29.28	743.7	30.16	766.1	37.0	2.8	89	ne.	1	0.4	.....	.....	10 s	.....	ne.	0.46	11.7	cloudy.....	D. O'Donoghue.
Chattanooga, Tennessee	29.39	746.5	30.24	768.1	39.5	4.2	84	calm	0	0	.....	7 cs	0	.....	.....	0	0	fair.....	B. L. Goulding.
Cheyenne, Wyoming	24.08	611.6	30.29	769.4	14.2	— 9.9	53	w.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	E. McGovern.
Chicago, Illinois	29.59	751.6	30.33	770.4	37.1	2.8	82	nw.	4	1.8	.....	1 k	0	.....	.....	0.01	0.3	clear.....	J. Mitchell.
Chincoteague, Virginia	30.15	765.8	30.17	766.3	33	0.6	68	nw.	19	8.5	.....	0	2 ks	.....	.....	0	0	clear.....	C. F. Dickens.
Cincinnati, Ohio	29.66	753.4	30.34	770.6	34	1.1	88	ne.	1	0.4	.....	0	1 s	.....	n.	0	0	clear	R. B. Watkins.
Cleveland, Ohio	29.52	749.8	30.29	769.4	31.7	— 0.2	86	s.	4	1.8	.....	.....	10 s	.....	n.	inap.	inap.	cloudy	J. B. Newlin.
Coleman City, Texas	28.32	719.3	30.21	767.3	33	0.6	100	nw.	8	3.6	.....	.....	10 s	.....	nw.	1.09	27.7	cloudy	L. Dorman.
Columbus, Ohio	29.40	746.7	30.30	769.6	29	— 1.7	100	n.	1	0.4	.....	0	hz.	.....	.....	0	0	clear.....	D. Cuthbertson.
Concho, Fort, Texas	28.22	716.8	30.22	767.6	35.0	1.7	100	nw.	12	5.4	.....	.....	10 n	.....	.....	0.91	23.1	light rain.....	J. McGlone.
Custer, Fort, Montana	26.84	681.7	30.16	766.1	23	— 5.0	64	e.	6	2.7	.....	0	0	.....	.....	0	0	clear..	W. B. Lamar.
Davenport, Iowa	29.67	753.6	30.36	771.1	33	0.6	88	nw.	2	0.9	.....	.....	fg.	.....	.....	0	0	dense fog....	R. R. Martin.
Davis, Fort, Texas	25.26	641.6	30.16	766 1	24	— 4.4	56	calm	0	0	.....	0	0	.....	.....	0.18	4.6	clear.....	J. Williams.
Dayton, Washington T'y	28.39	721.1	30.17	766.3	29.7	— 1.3	86	ne.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy.....	H. Clifford.
Deadwood, Dakota	25 34	643.6	30.18	766.6	24	— 4.4	70	e.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	G. W. Scott.
Delaware Breakwater, Del	30.14	765 5	30.16	766.1	35	1.7	69	nw.	16	7.2	.....	.....	8 k	.....	nw.	0	0	cloudy	T. S. Townsend.
Denison, Texas	29.33	745.0	30.17	766.3	33.8	1.0	88	n.	6	2.7	.....	.....	10 n	.....	.....	0.17	4.3	light rain....	J. W. Byram.
Denver, Colorado	24.81	630.2	30.31	769.9	19.4	— 7.0	71	s.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	F. M. Neal.
Des Moines, Iowa	29.42	747.3	30.37	771.4	26	— 3.3	77	nw.	1	0.4	.....	0	3 s	.....	.....	0	0	clear.....	F. W. Conrad.
Detroit, Michigan	29.55	750 6	30.29	769.4	36.3	2.4	79	w.	8	3.6	.....	10 ck	0	nw.	.....	0	0	cloudy..	C. F. R. Wappenhans.
Dodge City, Kansas	27.59	700.8	30.33	770.4	29	— 1.7	80	n.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	V. P. Temple.
Dubuque, Iowa	29.02	752.3	30.37	771.4	27.3	— 2.6	96	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog....	J. Harvey Smith.
Duluth, Minnesota	29.59	751.6	30.38	771.6	33	0.6	78	sw.	6	2.7	.....	.....	10 s	.....	sw.	0	0	cloudy	N. B. Conger.
Eagle Pass, Texas	29.42	747.3	30.25	768 3	42.0	5.6	82	nw.	6	2.7	.....	.....	10 s	.....	.....	0.26	6.6	cloudy	F. Belford.
Eagle Rock, Idaho	25.41	645.4	30.27	768.8	— 2	--18.9	72	n.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	J. M. Clifford.
Eastport, Maine	29.95	760.7	30.02	762.5	30.0	— 1.1	78	n.	20	8.9	.....	.....	10 s	.....	ne.	0	0	cloudy.....	D. C. Murphy.
Elliott, Fort, Texas	27.38	695.4	30.30	769.6	30	— 1.1	71	n.	4	1.8	.....	.....	10 n	.....	n.	0.62	15.7	heavy snow	W. J. Cundall.
El Paso, Texas	26.34	669.0	30.19	766.8	26	— 3.3	100	w.	1	0.4	.....	0	0	.....	.....	0.25	6.3	clear.....	J. O'Dowd.
Erie, Pennsylvania	29.50	749.3	30.26	768.6	33	0.6	68	s.	3	1.3	.....	.....	10 n	.....	s.	inap.	inap.	light snow...	Peter Wood.
Escanaba, Michigan	29.65	753.1	30.35	770.9	33.5	0.8	79	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.31	719.1	30.13	765.3	40	4.4	100	nw.	9	4.0	.....	.....	10 s	.....	.....	1.11	28.2	cloudy	Frank Halwegler.
Galveston, Texas	29.93	760.2	29.98	761.5	50	10.0	100	ne.	32	14.3	.....	.....	10 n	.....	n.	0.04	1.0	light rain....	E. O'C. Machenney.
Grand Haven, Michigan	29.61	752.1	30.31	769.9	37.0	2.8	82	n.	4	1.8	.....	.....	10 s	.....	w.	0.02	0.5	cloudy.....	J. Mueller.
Grant, Fort, Arizona	25.38	644.6	30.22	767.6	33	0.6	74	n.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	Robert C. Lord.
Hatteras, North Carolina	30.04	763.0	30.06	763.5	47	8.3	86	ne.	30	13.4	.....	9 k	0	ne.	.....	0.76	19.3	cloudy.....	R. M. Crawford.
Helena, Montana	25.86	655.3	30.18	766.6	27	— 2.8	77	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	N. C. Smith.
Henrietta, Texas	29.15	740.4	30.19	766.8	32	0.0	100	nw.	3	1.3	.....	.....	10 n	.....	.....	0.83	21.1	light snow..	J. P. Sherry.
Huron, Dakota	28.83	732.3	30.31	769.9	21.2	— 6.0	76	se.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	S. W. Glenn.
Indianapolis, Indiana	29 48	748.8	30.32	770.1	37	2.8	89	ne.	2	0.9	.....	.....	10 s	.....	ne.	inap.	inap.	cloudy	O. Schutze
Indianola, Texas	29.97	761.2	30.00	762.0	47.0	8.3	93	n.	35	15.6	.....	.....	10 s	.....	n.	0.76	19.3	cloudy.....	I. A. Reed.
Jacksboro, Texas	29.02	737.1	30.24	768.1	37	2.8	89	n.	4	1.8	.....	.....	10 n	.....	ne.	0.82	20.8	light snow..	D. J. Carr.
Jacksonville, Florida	30.05	763.3	30.10	764.5	50	10.0	86	nw.	6	2.7	.....	0	fg.	.....	.....	0.03	0.8	clear.....	J. W. Smith.
Keogh, Fort, Montana	27.45	697.2	30.12	765.0	27	— 2.8	77	se.	2	0.9	.....	0	3 s	.....	.....	0	0	clear.....	A. Schneider.
Keokuk, Iowa	29.65	753.1	30.34	770.6	35.0	1.7	100	n.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.01	762.2	30.03	762.7	72.0	22.2	66	n.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	R. H. Paxton.
Kittyhawk, North Carolina	30.11	764.8	30.13	765.3	44	6.7	72	ne.	34	15.2	.....	0	9 ks	.....	ne.	0.33	8.4	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.11	739.4	30.18	766.6	36	2.2	69	ne.	8	3.6	.....	0	0	.....	.....	0.12	3.0	clear.....	J. A. Cody.
La Crosse, Wisconsin	29.52	749.8	30.34	770.6	28	— 2.2	77	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	S. C. Emery.
Leavenworth, Kansas	29.40	746.7	30.34	770.6	32	0.0	88	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy.....	A. W. Browne.
Lewiston, Idaho	29.29	744.0	30.16	766.1	33.5	0.8	80	ne.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	W. Bell.
Little Rock, Arkansas	29.87	758.7	30.20	767.1	43	6.1	83	e.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy.....	W. U. Simons.
Los Angeles, California	29.80	756.9	30.20	767.1	43	6.1	73	ne.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	T. S. Collins.
Louisville, Kentucky	29.71	754.6	30.30	769.6	37	2.8	82	n.	4	1.8	.....	0	0	.....	.....	0.05	1.3	clear.....	L. M. Dey.
Lynchburg, Virginia	29.48	748 8	30.20	767.1	37.5	3.1	60	ne.	2	0.9	.....	0	5 s	.....	n.	0	0	fair	Lewis Duane.
Mackinaw City, Michigan	29.65	753.1	30.34	770.6	34.0	1.1	78	nw.	8	3.6	.....	.....	10 s	.....	nw.	0.16	4.1	cloudy.	F. R. Day.
Macon, Fort, North Carolina	30.08	764.0	30.09	764.3	40	4.4	100	nw.	24	10.7	.....	0	2 k	.....	nw.	1.42	36.1	clear.....	F. P. Chaffee.
Madison, Wisconsin	29.30	744.2	30.37	771.4	31	— 0.6	78	n.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	C. A. Shaw.
Maginnis, Fort, Montana	25.47	646.9	29.98	761.5	44	6.7	22	w.	20	8.9	.....	0	5 s	.....	w.	0	0	fair	F. Burke.
McKavett, Fort, Texas	27.86	707.6	30.24	768.1	34	1.1	89	nw.	9	4.0	.....	.....	10ks	.....	n.	1.17	29.7	cloudy	J. E. Thatcher.
Marquette, Michigan	29.58	751.3	30.36	771.1	35	1.7	79	w.	7	3.1	.....	.....	10 s	.....	w.	0.01	0.3	cloudy	J. Gilligan.
Memphis, Tennessee	29.88	758.9	30.24	768.1	43	6.1	83	ne.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.56	750.8	30.35	770.9	34	1.1	88	n.	10	4.5	.....	0	1 s	.....	.....	0	0	clear.....	W. Line.
Missoula, Fort, Montana	26.80	680.7	30.21	767.3	19	— 7.2	58	calm	0	0	.....	0	6 s	.....	.....	0	0	fair.....	J. H. Young.
Mobile, Alabama	30.09	764.3	30.13	765.3	46.5	8.1	79	ne.	8	3.6	.....	.....	10 s	.....	ne.	inap.	inap.	cloudy.....	C. A. Read.
Montgomery, Alabama	29.94	760.5	30.18	766.6	44.3	6.8	85	ne.	3	1.3	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	J. B. McLaughlin.

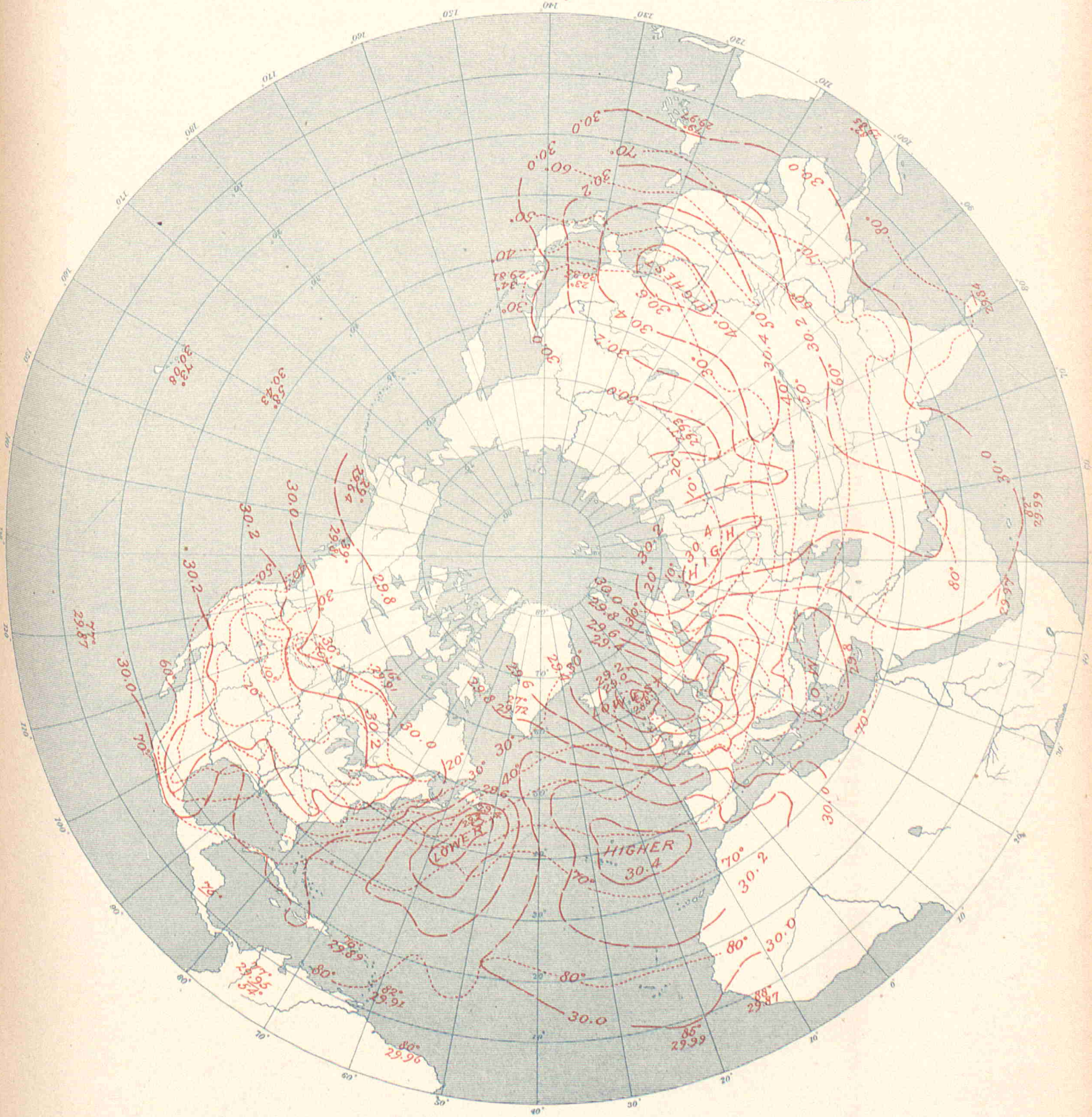
STATIONS	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.22	742.2	30.28	769.1	15	— 9.4	83	s.	8	3.6	.....	0	0	.....	.....	c	0	clear	H. Bessant.
Morgantown, W. Virginia	29.26	743.2	30.32	770.1	26.5	— 3.1	87	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	J. C. Sprigg, jr
Mt. Washington, N. H.	23.60	599.4	30.16	766.1	12.0	—11.1	50	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	J. G. Linsley.
Nashville, Tennessee	29.67	753.6	30.27	768.8	38.5	3.6	82	ne.	6	2.7	.....	6 cs	0	sw.	.....	0.02	0.5	fair	L. N. Jesunofsky.
New Haven, Connecticut	30.03	762.7	30.15	765.8	20	— 6.7	84	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. H. Sherman.
New London, Connecticut	30.09	764.3	30.14	765.5	24	— 4.4	61	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.03	762.7	30.09	764.3	52.0	11.1	69	n.	12	5.4	.....	.....	10 s	.....	n.	0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.04	763.0	30.09	764.3	26.8	— 2.9	81	n.	9	4.0	.....	0	0	.....	.....	0.01	0.3	clear	W. McGillivray.
New York, New York	30.00	762.0	30.18	766.6	27.5	— 2.5	88	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.13	765.3	30.16	766.1	41	5.0	65	n.	9	4.0	.....	.....	10 s	.....	.....	0.03	0.8	cloudy	Wm. Davis.
North Platte, Nebraska	27.26	692.4	30.34	770.6	16.6	— 8.6	78	calm	0	0	.....	0	0	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y.	30.16	766.1	30.20	767.1	42.0	5.6	82	s.	2	0.9	.....	.....	10 n	.....	.....	0.17	4.3	light rain	J. Dascomb.
Omaha, Nebraska	29.13	739.9	30.37	771.4	28.2	— 2.1	77	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	A. Pollak.
Oswego, New York	29.89	759.2	30.23	767.8	27.5	— 2.5	70	s.	4	1.8	.....	7 k	0	n.	.....	0	0	fair	S. W. Beall.
Palestine, Texas	29.54	750.3	30.11	764.8	41.0	5.0	100	n.	8	3.6	.....	.....	10 n	.....	n.	1.66	42.2	light rain	L. M. Pindell.
Pensacola, Florida	30.10	764.5	30.13	765.3	47.4	8.6	81	ne.	8	3.6	.....	.....	10 s	.....	nw.	inap.	inap.	cloudy	M. McGauran.
Philadelphia, Pa.	30.10	764.5	30.20	767.1	30.5	— 0.8	78	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.78	451.6	30.44	773.2	10	—12.2	73	ne.	9	4.0	.....	0	0	.....	.....	0	0	clear	H. Hall.
Pioche, Nevada	24.17	613.9	30.31	769.9	29	— 1.7	43	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.45	748.0	30.30	769.6	24.3	— 4.3	100	w.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	W. Daly.
Poplar River, Montana	27.72	704.1	30.01	762.2	.....	.....	.....	w.	.....	.....	1	0	0	.....	.....	0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.03	762.7	30.04	763.0	61.0	16.1	90	e.	24	10.7	.....	.....	10 s	.....	e.	0	0	cloudy	M. Herman.
Port Huron, Michigan	29.55	750 6	30.27	768.8	33.0	0.6	92	nw.	7	3.1	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	W. O. Bailey.
Portland, Maine	30.05	763.3	30.10	764.5	25	— 3.9	73	n.	16	7.2	.....	0	0	.....	.....	0	0	clear	W. W. Eichelberger.
Portland, Oregon	30.16	766.1	30.23	767.8	38.0	3.3	89	n.	5	2.2	.....	.....	10 n	.....	.....	0.07	1.8	light rain	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	46	7.8	83	ne.	36	16.1	.....	.....	10 ks	.....	ne.	0.60	15.2	cloudy	F. S Coburn.
Prescott, Arizona	24.90	632.4	30.24	768.1	24.5	— 4.2	88	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass.	30.00	762.0	30.03	762.7	34	1.1	78	n.	16	7.2	.....	.....	10 s	.....	n.	0.05	1.3	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.00	762.0	30.01	762.2	63	17.2	92	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. J. Evans.
Red Bluff, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. van Dyk.
Rochester, New York	29.54	750.3	30.24	768.1	18.5	— 7.5	70	sw.	8	3.6	.....	7 k	hz.	n.	.....	0	0	fair	E. W. McGann
Roseburg, Oregon	29.69	754.1	30.26	768.6	37.3	2.9	88	n.	3	1.3	.....	0	9 s	.....	nw.	0	0	cloudy	J. J. Naury.
Sacramento, California	30.19	766.8	30.27	768.8	39.9	4.4	89	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. A. Barwick
St. Louis, Missouri	29.71	754.6	30.34	770.6	38.0	3.3	100	n.	6	2.7	.....	2 c	5s;fg	.....	e.	0	0	clearing	J. H. Weber.
St. Paul, Minnesota	29.41	747.0	30.33	770.4	29.0	— 1.7	88	w.	1	0.4	.....	0	1 s	.....	.....	0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.20	741.7	30.13	765.3	24	— 4.4	88	s.	14	6.3	.....	0	0	.....	.....	0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.88	657.3	30.45	773.4	23	— 5.0	51	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Craig.
San Antonio, Texas	29.40	746.7	30.12	765.0	42.0	5.6	82	nw.	9	4.0	.....	.....	10 s	.....	nw.	0.27	6.9	cloudy	T. J. Kenan.
San Diego, California	30.11	764.8	30.18	766.6	44.2	6.8	86	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.58	751.3	30.30	769.6	35.4	1.9	79	w.	8	3.6	.....	.....	10 s	.....	s.	0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.15	765.8	30.18	766.6	31.0	— 0.6	88	n.	20	8.9	.....	0	hz.	.....	.....	0	0	clear	B. A. Blundon.
San Francisco, California	30.21	767.3	30.28	769.1	47	8.3	89	e.	4	1.8	.....	.....	fg.	.....	n.	0	0	dense fog	N. Gorom.
Santa Fé, New Mexico	23.27	591.0	30.31	769.9	25	— 3.9	76	ne.	2	0.9	.....	.....	10 s	.....	.....	0.34	8.6	cloudy	H. U. Jones.
Savannah, Georgia	30.07	763.8	30.16	766.1	46	7.8	74	n.	6	2.7	.....	0	9 ks	.....	n.	0.13	3.3	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.28	667.5	30.10	764.5	42	5.6	59	sw.	28	12.5	.....	8 cs	0	.....	.....	0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	29.84	757.9	30.09	764.3	42	5.6	100	ne.	5	2.2	.....	.....	10 n	.....	ne.	0.97	24.6	light rain	E. N. Meekins.
Sill, Fort, Indian Territory	28.91	734.3	30.22	767.6	33.5	0.8	87	n.	6	2.7	.....	.....	10 n	.....	.....	0.54	13.7	heavy snow	W. M. Mattingly.
Silver City, New Mexico	24.36	618.7	30.20	767.1	27.0	— 2.8	88	calm	0	0	.....	0	0	.....	.....	0.31	7.9	clear	N. D. Lane.
Sitka, Alaska	29.74	755.4	29.81	757.2	38.9	3.8	79	w.	12	5.4	.....	.....	10 n	.....	w.	1.02	25.9	light rain	F. W. Fickett.
Smith, Fort, Arkansas	29.71	754.6	30.20	767.1	43.5	6.4	68	e.	8	3.6	.....	.....	10 s	.....	e.	0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.09	764.3	30.13	765.3	38	3.3	89	n.	10	4.5	.....	0	1 s	.....	.....	0.81	20.6	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.01	711.4	30.09	764.3	30	— 1.1	81	w.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	D. Moore.
Springfield, Illinois	29.63	752.6	30.35	770.9	38	3.3	72	ne.	4	1.8	.....	3 c	0	nw.	.....	0	0	clear	T. B. Jennings.
Springfield, Massachusetts	30.02	762.5	30.16	766.1	20	— 6.7	76	calm	.....	.....	0	0	0	.....	.....	0	0	clear	Charles Mayr.
Springfield, Mo.	28.75	730.2	30.26	768.6	33	0.6	88	e.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	J. B. Marbury.
Starkville, Miss.	29.70	754.4	30.20	767.1	44	6.7	83	n.	6	2.7	.....	.....	10 s	.....	n.	0	0	cloudy	C. Dill.
Stevenson, Fort, Dakota	28.12	714.2	30.09	764.3	29	— 1.7	88	e.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. Burrows
Stockton, Fort, Texas	27.14	689.3	30.26	768.6	30.0	— 1.1	88	nw.	12	5.4	.....	0	0	.....	.....	0.24	6.1	clear	J. F. Marshall.
Thatcher's Island, Mass.	29.99	761.7	30.04	763.0	34.0	1.1	78	n.	24	10.7	.....	5 k	0	w.	.....	0	0	fair	G. Liebmann.
Thomas, Camp, Arizona	27.44	697.0	30.28	769.1	35	1.7	92	sw.	.....	.....	1	0	0	.....	.....	0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.56	750.8	30.29	769.4	37	2.8	82	w.	4	1.8	.....	.....	10 s	.....	nw.	0	0	cloudy	A. Buell.
Tucson, Arizona	27.76	705.1	30.22	767 6	38	3.3	72	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.83	757.7	30.21	767.3	32	0.0	94	e.	3	1.3	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. Daly.
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. C. Inlay.
Verde, Fort, Arizona	.....	.....	.....	.....	31.5	— 0.3	62	n.	.....	.....	1	0	0	.....	.....	0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.99	759.4	30.17	766 3	44.5	6.9	83	ne.	6	2.7	.....	.....	10 n	.....	.....	0.04	1.0	light rain	James Kenealy.
Visalia, California	29.86	758 4	30.24	768.1	34.4	1.3	95	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.55	623 6	30.29	769.4	— 2.9	—19.4	83	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	T. M. Ambler.
Washington, D. C.	30.13	765.3	30.25	768.3	28.0	— 2.2	82	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	B. M. Purssell.
West Las Animas, Colorado	26.18	665.0	30.30	769.6	22	— 5.6	61	nw.	8	3.6	.....	0	5 s	.....	.....	0	0	fair	F. H. Brandenburg.
Williamsport, Pa.	29.64	752.8	30.27	768.8	22.8	— 5.1	88	w.	6	2.7	..	hz.	0	.....	.....	0	0	clear	B. F. Hough.
Wilmington, N. Carolina	30.11	764.8	30.17	766.3	40	4.4	82	n.	8	3.6	.....	2 k;hz	0	.....	.....	0.64	16.3	clear	Samuel A. Haney.
Winnemucca, Nevada	25.81	655.6	30.34	770.6	16	— 8.9	70	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. Grover.
Yankton, Dakota	29.00	736.6	30.38	771.6	21	— 6.1	70	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. H. Atfield.
Yuma, Arizona	30.02	762.5	30.17	766.3	44.0	6.7	68	e	3	1.3	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.01	559.0	.....	.....	54.0	12.2	77	nw.	2	0.9	.....	5ck;cs	0	s.	.....	0.58	14.7	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.94	760.5	30.00	762.0	69.8	21.0	76	se.	3	1.3	.....	.....	10k; ks	.....	n.	0	0	cloudy	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	29.97	761.2	29.98	761.5	70	21.1	74	n.	1	0.4	.....	0	0	.....	.....	0	0	fine	Robert Johnston.
Navassa, W. I.	29.85	758.2	29.93	760.2	78	25.6	67	ne.	12	5.4	.....	1 cs	3 ks	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	29.96	761.0	29.96	761 0	80	26.7	82	e.	.....	.....	2	3 c	5 k	e.	e.	0	0	.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	77	25.0	89	s.	.....	.....	1	.....	10 ks	.....	s.	0.76	19.3	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	74.8	23.8	96	e.	.....	.....	1	0	6 ks	.....	.....	0.68	17.3	fair	Earl Flint.
Santiago de Cuba, W. I.	29.97	761 2	30.00	762.0	74	23.3	72	n.	2,6	1.2	.....	0	2 s	.....	.....	0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.58	751.3	29.64	752.8	29	— 1.7	74	calm	.....	.....	0	7 cs	0	.....	.....	0	0	fair	W. J. Fisher.
St. Thomas, W. I.	29.84	757.9	29.96	761.0	79	26.1	69	nw.	.....	.....	.....	0	5 ks	.....	nw.	0	0	.....	Aug. Walloe.
York Factory H. B. A.	29.84	757.9	29.91	759.7	16.0	— 8.9	91	sw.	13	5.8	.....	0	0	.....	.....	0	0	clear	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Shang-Hai, China	30.48	774.2	55	12.8	.....	nne.	.....	.....	2	.....	7	ne.	.....	.....	.....	.....	.....	raining
H. M. S. Amethyst, Colonia, Uruguay†	30.10	764.5	74	23.3	81	wnw.	.....	.....	2	.....	4	sw.	.....	.....	.....	.....	.....	misty.
H. M. S. Audacious, N. 10° 21′, E. 55° 48′	29.89	759.2	82	27.8	87	ene.	.....	.....	3–4	.....	3	ene.	.....	.....	.....	3	ene.	squally.
H. M. S. Beacon, N. 30° 34′ E. 32° 16′	29.98	761.5	71	21.7	85	ne.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	blue sky
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	29.97	761.2	73.5	23.1	81	nnw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	overcast.
H. M. S. Cleopatra, N. 31° 14′ E. 121° 28′	30.41	772.4	.....	.....	.....	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	raining.
H. M. S. Comus, Esquimalt, Vancouver Island	30.10	764.5	32	0.0	89	wsw.	.....	.....	3	.....	4	nnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Curacoa, Kobe Japan	30.11	764.8	55.5	13.1	80	nw.	.....	.....	1	.....	4	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Diamond, S. 31° 07′ E. 161° 05′ *†	30.06	763.5	69	20.6	74	ne.	.....	.....	3	.....	4	ne.	.....	.....	.....	1	ne.	d. clouds.
H. M. Dock Yard, Bermuda, W. I.	29.71	754.6	66	18.9	68	wnw.	.....	.....	2–3	.....	5	wnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.93	760.2	75.5	24.2	76	s.	.....	.....	3–4	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flamingo, Port of Spain, Trinidad, W. I.	29.87	758.7	81	27.2	95	se	.....	.....	1	.....	2	se.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flying Fish, N. 32° 44′, E. 129° 52′	30.35	770.9	54	12.2	79	calm	.....	.....	0	.....	5	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Gannet, S. 27° 03′, W. 70° 51′	30.00	762.0	64	17.8	78	sw.	.....	.....	3	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Griffon, N. 16° 54′, W. 69° 50′	29.83	757.7	76	24.4	81	ne.	.....	.....	3	.....	2	ne.	.....	.....	.....	2	ssw.	d clouds.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.16	766.1	71	21.7	100	e.	.....	.....	2	.....	6	e.	.....	.....	.....	2	ne.	d clouds.
H. M. S. Kingfisher, N. 17° 50′, W. 109° 53′	29.96	761.0	77	25.0	.....	ne.	.....	.....	3	.....	2	ne.	.....	.....	.....	2	ne.	d clouds.
H. M. S. Lark, S. 10° 27′, E. 162° 17′	29.89	759.2	82.3	27.9	81	e.	.....	.....	0	.....	4	.....	.....	.....	.....	1	e.	showery.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.94	760.5	66	18.9	.....	calm	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Magpie, N. 34° 45′, E. 128° 25′	30.36	771.1	53.1	11.7	57	nw.	.....	.....	2–3	.....	1	wsw.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Northampton, Halifax, N. S.	29.83	757.7	36	2.2	85	ne.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Nelson, Melbourne, Australia	29.82	757.4	69	20.6	84	s.	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.85	758.2	82	27.8	81	e.	.....	.....	1–2	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S Rocket, S. 5° 05′, W. 81° 10′	30.02	762.5	67	19.4	94	s.	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Sappho, S. 44° 00′, W. 122° 30′	29.84	757.9	49.2	9.6	93	nw.	.....	.....	5–6	.....	4	nw.	.....	.....	.....	5	wnw.	squally.
H. M. S. Sylvia, Sandy Point, Patagonia	29.21	741.9	47.2	8.4	79	wsw.	.....	.....	3–5	.....	7	ene.	.....	.....	.....	.....	.....	squally.
H. M. S. Tourmaline, Aden, Arabia	29.97	761.2	.....	.....	.....	e.	.....	.....	1	.....	3	e.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Woodlark, Bahrien, Arabia	30.11	764.8	74.5	23.6	85	nne.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Zephyr, N. 39° 07′, E. 117° 09′	30.67	779.0	33	0.6	69	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Portuguese Naval.																		
Rio Lima, Fogo, Cape Verd Islands	30.14	765.5	83.3	28.5	88	sw.	.....	.....	1	.....	2	.....	ne.	.....	.....	1	sw.	d. clouds.
Tamega, Macao, China	30.20	767.1	75.2	24.0	83	ese.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.02	762.5	57	13.9	52	nne.	12	5.4	.....	.....	10	.....	nne.	0.22	5.6	.....	.....	cloudy.
Navy Yard, Portsmouth, N. H.	30.09	764.3	22	— 5.6	7	n.	8	3.6	.....	.....	2	.....	ne.	0	0	.....	.....	fair.
Naval Hospital, Yokohama, Japan*	29.98	761.5	47.5	8.6	85	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear.
Adams, Sitka, Alaska *†	29.85	758.2	38	3.3	90	wsw.	.....	.....	2	.....	5	.....	wsw.	.....	.....	.....	.....	fair.
Alaska, Honolulu, Sandwich Island	30.08	764.0	73	22.8	76	ne.	.....	.....	2	.....	8	.....	n.	0.05	1.3	.....	.....	cloudy.
Alliance, Hampton Roads, Va.	30.16	766.1	42	5.6	91	n.	.....	.....	2–3	.....	10	.....	.....	0	0	.....	.....	cloudy.
Ashuelot, Kobe, Japan	30.24	768.1	55	12.8	68	wnw.	.....	.....	3	.....	2	.....	wsw.	.....	.....	.....	.....	clear.
Brooklyn, Keel Point, Patagonia	29.49	749.0	53	11.7	66	w.	10	4.5	.....	.....	10	.....	calm	0	0	sm'h	.....	cloudy.
Colorado, New York, N. Y.	30.32	770.1	30	— 1.1	100	nw.	4	1.8	.....	.....	0	.....	.....	0.03	0.8	.....	.....	clear.
Enterprise, Norfolk, Va.	30.20	767.1	48	8.9	77	nnw.	.....	.....	3	.....	10	.....	n.	.....	.....	.....	.....	cloudy.
Essex, Callao, Peru	29.92	760.0	67	19.4	79	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy.
Franklin, Norfolk, Va.	30.15	765.8	41	5.0	73	n.	18	8.0	.....	.....	10	.....	n.	0	0	.....	.....	cloudy.
Galena, Montevideo, Uruguay	29.96	761.0	72	22.2	85	nnw.	.....	.....	2	.....	8	.....	.....	.....	.....	sm'h	.....	fair.
Hartford, S. 46° 20′, W. 63° 07′*	29.04	752.8	53	11.7	93	w.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	.....	clear.
Independence, Mare Island, Cal.	30.25	768.3	45	7.2	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Iroquois, Callao, Peru	30.01	762.2	63	17.2	94	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, Newport, R. I.	30.11	764.8	29	— 1.7	100	n.	.....	.....	5	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Kearsarge, Norfolk, Va.	30.11	764.8	43	6.1	83	n.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Lackawanna, Valparaiso, Chili*	30.02	762.5	64	17.8	78	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Lancaster, Palermo, Sicily*	29.85	758.2	63	17.2	36	nw.	.....	.....	6	.....	2	.....	nw.	.....	.....	sm'h	.....	fair.
Michigan, Erie, Pennsylvania	30.14	765.5	41	5.0	73	nw.	.....	.....	3	.....	10	.....	e.	.....	.....	.....	.....	cloudy.
Minnesota, New York, N. Y.	30.21	767.3	25	— 3.9	100	nnw.	2	0.9	.....	.....	0	.....	.....	.....	.....	.....	.....	clear.
Monocacy, Yokohama, Japan*	29.84	757.9	52	11.1	86	nnw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	misty.
New Hampshire, Newport, R. I.	30.13	765.3	33	0.6	69	nne.	.....	.....	4	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Nipsic, Palermo, Sicily*	29.89	759.2	61	16.1	45	nw.	.....	.....	4	.....	8	.....	nw.	.....	.....	sm'h	.....	squally.
Onward, Callao, Peru†	30.11	764.8	65	18.3	89	e.	.....	.....	1	.....	10	.....	nw.	.....	.....	sm'h	.....	squally.
Palos, Tientsin, China*	30.65	778.6	33	0.6	89	nnw.	.....	.....	1	.....	2	.....	calm	.....	.....	long	w.	cloudy.
Pensacola, Callao, Peru*	29.94	760.5	65	18.3	84	sse.	4	1.8	.....	.....	10	.....	.....	0	0	sm'h	.....	fair.
Powhatan, Boston, Mass	30.12	765.0	22	— 5.6	100	nw.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	cloudy.
Quinnebaug, N. 39° 50′, E. 13° 52′*	29.91	759.7	58	14.4	53	nnw.	.....	.....	4–6	.....	2	.....	wnw.	.....	.....	mod.	nnw.	clear.
Ranger, Acapulco, Mexico	29.95	760.7	75	23.9	81	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
Richmond, Yokohama, Japan*	29.95	760.7	53	11.7	86	nnw.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	hazy.
Saratoga, N. 24° 49′, W. 80° 12′	29.96	761.0	73	22.8	71	nnw.	.....	.....	4	.....	2	.....	nw.	0	0	sm'h	.....	fair.
St. Louis, League Island, Pa.	30.44	773.2	28	— 2.2	100	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	misty.
Swatara, N. 17° 57′, W. 48° 48′*	29.78	759.4	80	26.7	78	s.	.....	.....	4	.....	8	.....	s.	.....	.....	sm'h	.....	fair.
Tennessee, Hampton Roads, Va.	30.13	765.3	42	5.6	74	nne.	12	5.4	.....	.....	10	.....	.....	sleet	sleet	.....	.....	overcast.
Vandalia, Hampton Roads, Va*	30.16	766.1	41	5.0	83	nne.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Wabash, Boston, Mass	30.10	764 5	22	— 5.6	85	nne.	4	1.8	.....	.....	2	.....	ne.	0	0	.....	.....	fair.
Wachusetts, Mare Island, Cal†	30.26	768.6	44	6.7	100	var.	.....	.....	1	.....	10	.....	calm	0	0	sm'h	.....	overcast.
Wyandotte, Washington, D. C	30.41	772.4	40	4.4	100	nw.	.....	.....	2	.....	1	.....	calm	.....	.....	.....	.....	clear
Yantic, Norfolk, Va.	30.11	764.8	43	6.1	83	nnw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Merchant Marine.																		
S. S. Circassian, N. 55° 20′, W. 9° 00′*	29.44	747.8	43	6.1	92	w.	.....	.....	6	.....	8	.....	w.	8 h'r	8 h'r	7	w.	rain & hail.
S. S. Grecian, Buenos Ayres, Argentine Rep*	29.90	759.4	78	25.6	65	ssw.	.....	.....	5	.....	3	.....	ssw.	o	o	sm'h	.....	clear.
S. S. Polynesian, N. 55° 13, W. 18° 06′*	29.04	752.8	40	4.4	.....	w.	.....	.....	9	.....	8	.....	w.	hail	hail	hv'y	w.	hailing.
S. S. British Crown, N. 48° 41′, W. 29° 19′†	30.42	772.7	51	10.6	.....	ne.	.....	.....	3	.....	7	.....	ese.	11 h'r	11 h'r	mod.	nnw.	cloudy.
S. S. Indiana, N. 43° 38′, W. 57° 10′	.....	.....	45	7.2	84	ene.	.....	.....	0	.....	10	.....	ne.	.....	.....	h'vy	ne.	overcast.
S. S. Lord Clive, Irish Channel*†	29.45	748.0	.....	.....	.....	wnw.	.....	.....	5	.....	4?	.....	wnw.	4 h'r	4 h'r	sli't	nw.	cloudy?
S. S. Lord Gough, Delaware River	30.18	766.6	36	2.2	.....	n.	.....	.....	3	.....	.....	.....	.....	o	o	.....	.....	cloudy.
S. S. Ohio, Liverpool, Eng.	.....	.....	47	8.3	92	.....	.....	.....	.....	.....	.....	.....	nw.	.....	.....	.....	.....	
S. S. Pennsylvania, N. 50° 44′, W 26° 45′	30.33	770.4	45	7.2	.....	w.	.....	.....	5	.....	10	.....	w.	.....	.....	r'gh	w.	cloudy.
S. S. Jason, N. 46° 15′, W. 38° 44′*	30.04	762.9	.....	.....	.....	var.	.....	.....	6	.....	6 k?	.....	.....	.....	.....	7	var.	clear.?
S. S. Stella, N. 42° 00′, W. 63° 48′	29.54	750.4	46.4	8	.....	ne.	.....	.....	7	.....	8	.....	ne.	.....	.....	7	ne.	squally.
S. S. Anchoria, N. 40° 35′ W. 68° 55′†	30.01	762.2	.....	.....	.....	nne.	.....	.....	5	.....	1?	.....	nne.	o	o	h'vy	e.	cloudy.?
S. S. Bolivia, New York, N. Y.	29.95	760.7	28	— 2.2	100	ne.	.....	.....	1	.....	8?	.....	.....	.....	.....	.....	.....	clear ?
S. S. Devonia, N. 42° 56′, W. 57° 10′†	29.22	742.2	52	11.1	.....	nne.	.....	.....	6	.....	10	.....	.....	.....	.....	h'vy	nne.	rainy.
S. S. Ethiopia, N. 55° 16′, W. 11° 35′	29.28	743.7	44	6.7	100	wnw.	.....	.....	8	.....	4	.....	nw.	3 h'r	3 h'r	hv'y	nw.	squally.
S. S. Galatia, Calcutta, India†	30.14	765.5	79	26.1	.....	nne.	.....	.....	2	.....	0	.....	.....	o	o	.....	.....	clear.
S. S. Utopia, N. 37° 33′, E. 16° 40′	.....	.....	56	13.3	81	wnw.	.....	.....	3	.....	8	.....	nw.	sh's	sh's	mod.	.....	cloudy.
S. S. Ailsa, N. 31° 00′, W. 74° 07′†	29.90	759.4	64	17.8	68	ne.	.....	.....	0	.....	10	.....	ne.	6 h'r	6 h'r	h'vy	ne.	cloudy.
S. S. Alpin, N. 13° 20′, W. 71° 52′	29.94	760.5	.....	.....	.....	ne.	.....	.....	3	.....	.....	.....	ne.	.....	.....	sm'h	ene.	fine.
S. S. Alvo, N. 25° 17′, W. 74° 15′	30.04	763.0	73	22.8	.....	wsw.	.....	.....	3–4	8 ck	0	sw.	.....	o	o	mod.	nne.	cloudy.
S. S. Ambrose, N. 22° 05′ W. 64° 05′†	30.00	762.0	.....	.....	.....	nnw.	.....	.....	4	.....	2	.....	nnw.	o	o	9	n.	fine.
British Merchant, N. 13° 43′ W. 121° 38′	29.87	758.7	77.4	25.2	94	ne.	.....	.....	5	.....	7	.....	.....	.....	.....	.....	.....	showery.
Bk. Coppename, N. 38° 06′ W. 18° 05′	30.52	775.2	62.7	17.1	72	ne.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Dynomene, N. 13° 00′ E. 87° 30′	29.88	758.9	79.5	26.4	96	nne.	.....	.....	2	.....	9	.....	.....	.....	.....	.....	.....	threatening.
May Hulse, S. 16° 13′, W. 32° 42′	29.92	760.0	77.7	25.4	95	nne.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	.....	showery.
Markland, N. 49° 10′, W. 16° 29′	30.08	764.0	50.3	10.2	86	wnw.	.....	.....	6	.....	7	.....	.....	.....	.....	5	nw.	squally.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.90	759.4	.....	.....	36	nne.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	blue sky.
S. S. Mexico, La Paz, Lower California†	30.10	764.5	67.6	19.8	92	nw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.			
MERCHANT MARINE —Continued.																		
S. S. Gallia, off Queenstown, Ireland	29.65	753.1	52	11.1		wnw.			7		5		nw.					showery.
S. S. Marathon, Constantinople, Turkey	29.83	757.7	61	16.1		sw.			2		4		sw.	15 h'r	15 h'r	mod.	sw.	cloudy.
S. S. Parthia, Boston, Mass *†	30.07	763.8	29	— 1.7		ene.			5		6		nne.	0	0			cloudy.
S. S. Scythia, N. 42° 30′, W. 49° 30′	29.59	751.6	60.5	15.8	97	ese.			2		10		ese.	12 h'r	12 h'r	mod.	se.	dull.
S. S. Colina, N. 47° 24′, W. 34° 30′ †	30.31	769.9				e.			2		10		ese.	2 h'r	2 h'r	mod.	n.	cloudy.
S. S. France, N. 49° 43′, W. 3° 21′ †	29.71	754.7	48.2	9		nw.			5	ck	0	nw.		hail	hail	sm'h	nw.	hailing.
S. S. Labradore, New York, N. Y *†	30.35	771.0	44.6	7										rain	rain			
S. S. Abyssinia, N. 53° —′, W. 3° 30′ *	29.44	747.8				w.			7		8		w.	1 h'r	1 h'r	h'vy	w.	squally.
S. S. Arizona, off Galley Head, Ireland	29.69	754.1	47	8.3		w.			6		5		wnw.	0	0	mod.	wnw.	fair.
S. S. Wisconsin, N. 48° 00′ W. 41° 30′	29.95	760.7	53	11.7		ese.			6		10		se.	10 h'r	10 h'r	mod.	se.	drizzling.
S. S. Wyoming, N. 43° 11′, W. 59° 14′*	29.35	745.5	38	3.3		nne.			8		9		nne.	0	0	h'vy	e.	threatening.
S. S. Bohemia, Hamburg, Germany †	29.32	744.7				sse.			2		4?		ese.	6 h'r	6 h'r			overcast?
S. S. Cimbria, N. 42° 12′, W. 61° 28′	29.41	747.0	44.6	7.0		nne.			9		10		ne.	14 h'r	14 h'r	h'vy	ne.	covered.
S. S. Frisia, N. 49° 28′, W. 8° 35′	29.78	756.4	55	12.8		n.			6		6		nw.	0	0	r'gh	nw.	fair.
S. S. Gellert, N. 49° 56′, W. 9° 56′	29.82	757.4	50	10.0		nw.			7		4		wnw.	7 h'r	7 h'r	r'gh	nw.	cloudy.
S. S. Silesia, New York, N. Y †	30.12	765.0	25	— 3.9		nnw.			1		0?			0	0			d clouds?
S. S. Vandalia, N. 50° 17′, W. 2° 21′	29.65	753.1	52.3	11.3		nw.			5		5		nw.	0	0	mod.	nw.	fair.
S. S. Wieland, North Hinder, Netherlands	29.52	749.8				ne.			6		8		ne.	0	0	sli't	ne.	cloudy.
S. S. Mentmore, N. 44° —′ W 56° —′						ene.			7		10		ene.	8 h'r	8 h'r	high	ene.	clearing.
S. S. Nessmore, N. 51° 50′ W. 18° 56′	29.94	760.5	52	11.1	93	w.			8		8		w.	12 h'r	12 h'r	h'vy	w.	raining.
S. S. Archimedes, N. 49° 34′, W. 19° 20′	30.04	763.0				w.			6		5		wnw.	rain	rain	long	w.	raining.
S. S. Hevelius, Rio de Janeiro, Brazil *†	30.26	768.6	72	22.2		sse.			3		5?		sse.	0	0			clear.?
S. S. Ptolmy, N. 15° 30′, W. 53° 15′	29.97	761.2	80.2	26.8	87	ese.			1		8		nnw.			4	nnw.	d. clouds.
S. S. Bulgarian, N. 51° 25′, W. 24° 19′ *	30.24	768.1				nnw.			7		8		nnw	1 h'r	1 h'r	high	wnw.	
S. S. City of San Antonio, N. 47° 12′, W. 76° 45′ †	29.98	761.5	74	23.3		w.			2		8		nw.	0	0	h'vy	ne.	cloudy.
S. S. Colorado, N. 37° 33′, W. 74° 40′ †	30.10	764.5	36	2.2		wnw.			6		10		nne.	0	0	long	ne.	cloudy.
S. S. San Marcos, N. 25° 10′, W. 83° 20′	30.15	765.8	77	25.0		e.			1		0					sm'h		very fine.
S. S. Archimede, Palermo, Sicily *†	29.90	759.4	62	16.7	72	wnw.			4		3		wnw.	0	0			fair.
S. S. Glenapp, S. 23° 00′, W. 42° 00′†	29.93	760.2	78	25.6		se.			3		7 k		se.	0	0	mod.	se.	cloudy.
S. S. Glenfyne, N. 32° 22′, W. 69° 55′ *†	29.52	749.8				n.			5		10		n.	0 h'r	6 h'r	mod.	nnw.	rainy.
S. S. Chalmette, N. 37° 42′, W. 74° 30′ †	30.07	763 8	43	6.1		nnw.			5		10		nw.	0	0	mod.	ne.	cloudy.
S. S. New York, N. 27° 40′, W. 80° 04′†	30.07	763.8	70.0	21.1		nw.			3		4		nw.	0	0	mod.	e.	clear.
S. S. Denmark, N. 49° 26′, W. 14° 01′	30.06	763.5	54	12.2		wnw.			6		8		wnw.	0	0	long	wnw.	cloudy.
S. S. Egypt, N. 50° 44′, W. 27° 19′ *†	30.35	770.9				wnw.			5		10		wnw.	0	0	long	wnw	cloudy.
S. S. Erin, N. 48° 46′ W. 32° 04′	30.38	771.6	56	13.3		ene.			4		6		w.	8 h'r	8 h'r	long	w.	fine.
S. S. Helvetia, N. 40° 30′ W. 72° 45′	30.03	762.7	39	3.9		nne.			5		1		n.	0	0	sm'h		clear.
S. S. Holland, N. 49° 02′, W. 15 ° 36′	30.07	763.8	52	11.1		wnw.			7		8		nw	4 h'r	4 h'r	h'vy	wnw.	cloudy.
S. S. The Queen, N. 41° 50′ W. 53° 27′ *†	29.38	746.2	66	18.9		sse.			6		8?		ssw.	sh'rs	sh'rs	h'vy	sse.	clear.?
S. S. Santiago, Cienfuegos W. I	30.18	766.6	75	23.9	77	calm			0					0	0			fine.
S. S. City of Alexandria, N. 30° 50′, W. 80° 31′ †	30.08	764.0	58	14.4		nne.			5		10		ne.	0	0	small	ne.	overcast.
S. S. City of Merida, N. 25° 15′, W. 80° 05′* †	29.92	760.0	75.2	24		nw.			2		2		ne.	½h'r	½h'r	r'gh	n.	fine.
S. S. Knickerbocker, N. 31° 19′, W. 78° 29′ *†	29.88	758.9	60	15.6		n.			9								sw.	
S. S. Leerdam, N. 49° 53′, W. 29° 32′ *	30.32	770.1	55	12.8		nw.			6							long		cloudy.
S. S. America, N. 50° 08′, W. 2° 54′*	29.56	753.4	51.5	10.8	83	wnw.			6		8		wnw.	snow	hail	high	wnw.	squally.
S. S. Donau. N. 48° 27′, W. 34° 26′	30.45	773.4				ese.			3–4		10		se.	0	0	long	nnw.	fine.
S. S. Elbe, Bremerhaven, Germany			36.5	2.5	100	ssw.			3		10			3 h'r	3 h'r			covered.
S. S. sailer, Bremerhaven, Germany	30.01	762.2				n.			6–7		10		n.	2 h'r	2 h'r	cress	nne.	raining.
S. S. Strassburg, N. 50° 18′ W. 1° 07′						e.			4		10		e.	4 h'r	4 h'r			cloudy.
S. S. Belgic, Hong Kong, China†	29.59	751.6				wnw.			5–6		8		nw.	5 h'r	5 h'r	r'gh	nw.	cloudy.
S. S. Oceanic N. 37° 09′, W. 102° 03′ *	30.22	767.6	72	22.2	76	ne.			4		5?		ne.	0	0	sm'h		clear.?
S. S. City of Augusta, Savannah, Ga†	30.43	772.9	58	14.4	64	n.			5		5?		se.			mod.	sw.	clear.?
S. S. Mississippi, N. 46° 16′, W. 124° 11′†	30.11	764.8				ne.			2		6		nne.	0	0			cloudy.
S. S. Oregon, Columbia River, Oregon †	30.28	769.1	48	8.9	85	wnw.			1		10		w.			mod.	wnw.	cloudy.
S. S. Ancon, San Pedro Bay, Calf	30.15	765.8	43	6.1	92	ne.			1		2		sw.					fair.
S. S. Dakota, Seattle, Wash. Ter†	30.11	764.8	48	8.9	92	nne.			4		0					sm'h		clear.
S. S. State of California, N. 41° 06′, W. 124° 30′*†	29.63	752.6	46	7.8	84	se.			4		8		se.	12 h'r	12 h'r	sm'h		cloudy.
S. S. Australia, Sydney, N. S. W	30.20	767.1	51	(0.6	86	e.			3		4		nw.			long	w.	cloudy.
S. S. City of New York, Sydney, N. S. W †	30.18	766.6	70	21.1	85	ne.			4		5?		ne.	0	0			clear.
S. S. City of Pekin, Hong Kong, China †	30.08	764.0	75	23.9	81	ne.			1		0			0	0			clear.
S. S. City of Rio de Janeiro N. 36° 08′ W. 121° 54′ †	30.37	771.4	71	21.7	75	e.			3		2		ene.	0	0			clear.
S. S. City of Sydney, N. 16° 12′, W. 159° 50′†	30.22	767.6	53	11.7	80	nw.			2		0			0	0	light	nw.	clear.
S. S. Grenada, N. 9° 57′, W. 85° 48′†	30.05	763.3	74	23.3	90	ne.			5		8		ne.	¼ h'r	¼ h'r	h'vy	ne.	raining.
S. S. San José, N. 16° 49′, W. 99° 52′ *†	29.89	759.2	77	25.0	86	ese.			2		10		ese.	2 h'r	2 h'r	sm'h	sse.	cloudy.
S. S. Bermuda, St. Johns, W. I	30.20	767.1				wnw.			2		0			0	0			
S. S. Caracas, N. 28° 04′, W. 70° 15′	29.88	758.9	79	26.1		n.			1		3		n.	1½h'r	1½h'r	long	n.	fine.
S. S. Valencia, N. 20° 09′, W. 68° 05′ †	29.93	760.2	72.3	22.4	85	sw.			4		2		wsw.	⅛ h'r	⅛ h'r	mod.	ne.	fair.
S. S. Belgenland, N. 48° 20′, W. 24° 10′†	30.02	762.5	79	26.1	74	nne.			3		3		ne.	0	0	mod.	n.	fine.
S. S. Nederland, N. 48° 36′, W. 43° 30′	30.49	774.4	51	10.6	93	nnw.			4		9		nnw.	0	0	mod.	nw.	cloudy.
S. S. Penniand, Antwerp, Belgium			54	12.2		ene.			6		10					mod	ese.	raining.
S. S. Rhynland, Jersey City N. J	29.51	749.5	44	6.7	88	sw.			2		3		wsw.	3 h'r	3 h'r			fine.
S. S. Waesland, N. 40° 28′, W. 69° 44′	30.16	766.1	32	0.0	70	nnw.			3		0							clear.
S. S. Maas, N. 44° 51′, W. 54° 10′	30.08	764.0	42	5.6	83	n			6		10		n.	0	0	rg'h	une.	cloudy.
S. S. P. Oaland, Rotterdam, Holland	29.13	739.8	47.5	8.6	89	ssw.			7		9		se.	5 h'r	5 h'r	9	ese.	overcast.
S. S. Schiedam, N. 41° 30′, W. 66° 38′	29.34	745.2	37.2	2.9	93	wnw.			6		3		wnw.					fair.
S. S. W. A. Scholten, New York, N. Y	29.83	757.7	50.7	10.4	86	ne.			7		7		n.	7 h'r	7 h'r	h'vy	ne.	fair.
S. S. State of Georgia, N. 55° 00′, W. 14° 03′†	30.36	771.1	30.0	— 1.1	89	calm			0		4		n.	0	0			
S. S. State of Indiana, N. 42° 20′, W. 61° 52′†	29.45	748.0	43	6.1		wnw.			9		9		nw.	hail	hail	r'gh	wnw.	squally.
S. S. State of Nevada, New York, N. Y †	29.38	746.2	43	6.1		n.			9		10		n.	20 h'r	20 h'r	r'gh	ne.	heavy rain.
S. S. Hekla, N. 53° 45′ W. 29° 00′*†	30.18	766.6	27	— 2.8		wnw.			1		0			0	0			clear.
S. S. Thingvalla, N. 58° 37′, E. 00° 31′ †	30.24	768.0	47.3	8.5		nw.			6–7		8		nw.			long	nw.	hailing.
S. S. Iowa, N. 50° 57′ W. 19° 45′*†	29.16	740.7	44.6	7.0		nw.			4		10		nw.	0	0	h'vy	nw.	covered.
S. S. Phantyn N. 41° 50′, W. 48° 49′	30.17	766.3	48	8.9		w.			7		4		w.	2 h'r	2 h'r	h'vy	w.	fair.
S. S. Britannic, N. 51° 09′, W. 21° 28′ †	29.50	750.8							6		6		ssw.	16 h'r	16 h'r	mod.	sw.	
S. S. Celtic, N. 41° 37′, W. 56° 08′ †	30.12	765.0	46	7.8	?	wnw.			6		7		wnw.	0	0	r'gh	w.	fair.
S. S. Germanic, N. 50° 41′, W. 15° 52′†	29.29	744.0	57	13.9	87	ene.			6		10		ene.	hv'y	hv'y	h'vy	ene.	rainy.
S. S. Lepanto, N. 43° 00′ W. 43° 40′*	30.12	765.0	49	9.4		wnw.			6		5		wnw.	shr's	shr's	r'gh	wnw.	d. clouds.
S. S. Marengo, N. 49° 56′, W. 4° 00′ *†	29.96	761.0	68	20.0		sse.			9		10		s.	12 h'r	12 h'r	h'vy	sse.	rainy.
S. S. Romano, N. 44° 00′, W. 52° 00′	29.64	752.8				sw.			6		10		sw.	4 h'r	4 h'r	r'gh	sw.	light rain
S. S. Salerno, N. 42° 06′, E. 29° 40′			53	11.7		se.			4		10					mod.	ne.	foggy.
S. S. Aries, N. 41° 30′, W. 71° 20′*†			56	13.3		s.			8		10		sw.	0 h'r	0 h'r	h'vy	sw.	
S. S. Catherine Whiting, Fire Island, N. Y †	30.05	763.3				nne.			7		0			0	0	sm'h		clear.
S. S. Norman, N. 41° 09′, W. 71° 05′	30.16	766.1				n.			5				n.			light	ene.	
S. S. Saxon, Philadelphia, Pa*†	30.18	766.6				n.			5				ne.	0	0	r'gh	ne.	clear.
MISCELLANEOUS.	30.31	769.9	32	0.0		nw.			4		0							
Bk. Adelaid, N. 18° 30′, W. 65° 00′ *†	29.93	760.2	80	26.7		n.			4				nne.	0	0	sm'h	n.	clear.
Bg. Aldra, Maracaybo, Venezuela	29.93	760.2	82	27.8		ene.			2		2		ne.	0	0			clear.
S. Annie M. Law, Kobe, Japan*†	30.25	768.3	53	11.7		wnw.			2		2			0	0			fine.
Bk. Anna Thormann, S. 15° 59′, E. 95° 47′*	30.03	762.8	74.3	23.5	80	se.			0		3 k		se.	0	0	rg'h	s.	hail.
S. S. Antonio Lopez, N. 22° 39′, W. 47° 52′ *	29.91	759.7	80	26.7	78	sw.			5		3			1 h'r	1 h'r	mod.	sw.	fair.
Bk. Aquidneck, S. 4° 09′, W. 33° 55′ *†	30.10	764.5				ese.			2				se.			light	se.	clear.
Bk. Aureola, Queenstown, Ireland			53	11.7		nnw.			7		5		nnw.	1 h'r	1 h'r			squally.
Bk. Alba, N. 57° 34′, E. 7° 04′ *†	29.41	747.0	37.0	2.8		sw.			7									snowing.
Bk. Bayonnaise, N. 18° 40′, W. 52° 57′ *†	30.00	762.0				wsw.			3		0?		w.	0	0	large	se.	clear.?

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bkt. Bonny Doon, N. 40° 29′, W. 51° 30′	.....	.....	.....	.....	.....	nw.	.....	.....	2	.....	10	.....	w.	sh'rs	sh'rs	cross	se.	drizzling.
S. S. Burswell, N. 37° 54′, W. 28° 51′*†	30.43	772.9	78	25.6	.....	e.	.....	.....	2	.....	3	.....	e.	o	o	sli't	ese	clear.
Bk. Champion, N. 48° 35′, W. 6° 43′ †	29.71	754.6	58.0	14.4	.....	wnw.	.....	.....	11	.....	8	.....	nne.	12 h'r	12 h'r	sm'h	.....	drizzling.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.11	764.8	53	11.7	80	nne.	.....	.....	3	2 cs	2 s	....	n.	o	o	.....	.....	fair.
Schr. C. R. Flint, Cedar Keys, Fla†	30.19	766.8	60	15.6	.....	ne.	.....	.....	3	.....	4	.....	ne.	o	o	.....	.....	clear.
S. Cornelius, N. 37° 20′, W. 57° 54′	.....	.....	65.8	18.8	.....	w.	.....	.....	5	.....	3	.....	w.	6 h'r	6 h'r	long	w.	clear.
Bk. Don Quixote, Pasoeroean Roads, Java*	29.94	760.5	89	31.7	.....	se.	.....	.....	4	.....	3	.....	se.	o	o	sm'h	.....	clear.
Bk. E. D. Bigelow, N. 44° 38′ W. 27° 40′*†	30.35	770.9	.....	.....	.....	w.	.....	.....	3	.....	2	.....	w.	o	o	mod.	w.	fair.
Schr. Edith R. Seward, N. 36° 43′, W. 75° 45′*†	30.16	766.1	42	5.6	.....	n.	.....	.....	3	.....	5?	.....	nne.	o	o	r'gh	ne.	clear?
S. E. J. Spicer, New York. N. Y	30.19	766.8	40	4.4	?	nw.	.....	.....	6	.....	2	....	nw.	o	o	.....	.....	clear
Bk. Eliza Barss, Bermuda, W. I †	29.74	755.4	.....	.....	.....	nw.	.....	.....	5	.....	8?	.....	nw.	o	o	.....	.....	clear?
S. Enoch Train, N. 16° 59′. W. 63° 00′*†	30.00	762.0	.....	.....	.....	var.	.....	.....	1	.....	4	.....	nne.	sh'rs	sh'rs	h'vy	nnw.	fine.
Bk. Essex, Muscat, Arabia*†	30.10	764.5	84	28.9	.....	wnw.	.....	.....	4	.....	hz.	... .	.....	.....	.....	.....	.....	fine.
Schr. F E. McDonald, Off Cape May, N. J†	30.27	768.8	.....	.....	.....	n.	.....	.....	1	.....	o	.....	.....	.....	.....	.....	.....	fine.
S S. Foscolia, S. 3° 42′ W. 36° 42′*†	29.55	750.6	.....	.....	.....	ese.	.....	.....	5	.....	2	.....	e.	o	o	mod.	ene.	fair.
Bk. Freya, N. 23° 00′ W. 29° 18′	.....	.....	77	25.0	.....	ene.	.....	.....	5	.....	10	.....	sw.	o	o	mod.	ese.	cloudy.
Bg. George, N. 41° 45′, W. 64° 20′*†	29.75	755.6	.....	.....	.....	ne.	.....	.....	8	.....	10	.....	ne.	o	o	r'gh	ne.	stormy.
S. Glendon, S. 20° 00′ W. 99° 10′†	30.03	762.7	74	23.3	.....	ese.	.....	.....	4	.....	2	.....	se.	o	o	sm'h	.....	clear.
S. Grecian, N. 20° 45′, W. 58° 30′†	29.92	760.0	80	26.7	74	nnw.	.....	.....	1	.....	3	....	nw.	o	o	long	nw.	clear.
Bk. Grey Eagle, N. 34° 33′, W. 58° 10′	29.51	749.5	71	21.7	.....	wnw.	.....	.....	6	.....	2	.....	sw.	4 h'r	4 h'r	mod.	ne.	hazy.
Bk. Gronsvaer, S. 42° 39′ E. 157° 42′†	30.06	763.5	67.0	19.4	100	n.	.....	.....	4	.....	3	.....	n.	o	o	4	sw.	fine.
Bk. Hattie G. McFarland, New York, N. Y†	30.21	767.3	31	—0.6	.....	wnw.	.....	.....	3	.....	o	.....	.....	o	o	.....	.....	clear.
Schr. Hattie Weston, Icaque, Trinidad, W. I.*†	29.96	761.0	82	27.8	.....	calm	.....	.....	0	.....	1	.....	ene.	1 h'r	1 h'r	sm'h	e.	clear.
S. Hedwig, N. 32° 20′, W. 74° 45′	29.88	758.9	65.3	18.5	84	nne.	.....	.....	8	.....	9	.....	nne.	6 h'r	6 h'r	5	nne.	stormy.
Bk. Heinrich & Tonio, N. 38° 31′, W. 59° 32′*†	29.30	744.2	64	17.8	.....	wsw.	.....	.....	6	.....	4	.....	w.	7 h'r	7 h'r	mod.	wsw.	clearing.
Schr. Isabel Alberto, Cedar Keys, Fla†	30.09	764.3	.....	.....	.....	ne.	.....	.....	3	.....	2	.....	ne.	o	o	.....	.....	fair.
S. Ivy, Cork, Ireland†	29.89	759.2	41	5.0	.....	w.	.....	.....	6	.....	2	.....	w.	o	o	.....	.....	squally.
Schr. James Slater, N. 5° 15′, W. 50° 36′	29.90	759.4	85	29.4	.....	se.	.....	.....	4	.....	2	.....	ene.	o	o	sm'h	ne.	
Schr. Jennie N. Huddell, N. 32° 40′, W. 78° 50′†	29.07	738.4	61	16.1	88	ne.	.....	.....	7	.....	8	.....	ne.	o	o	short	ene.	threatening.
S. S. John Hopkins, N. 40° —′, W. 73° —′ †	.....	.....	34	1.1	.....	nne.	.....	.....	4	.....	2	.....	n.	o	o	long	ne.	fair.
Schr. John L. Thomas, Vivorilla Cays, C. A*†	29.08	738.6	.....	.....	.....	n.	.....	.....	2	.....	1	.....	e.	o	o	light	n.	clear.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.90	759.4	.....	.....	.....	s.	.....	.....	1	.....	1	....	.....	o	o	.....	.....	clear.
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.12	765.0	86	30.0	68	nw.	.....	.....	2	.....	o	.....	.....	.....	.....	.....	.....	clear.
Light House Tender, Laurel, Key West, Florida†	30.02	762.5	73	22.8	.....	nnw.	.....	.....	1	.....	3	.....	n.	o	o	.....	.....	fair.
Bk. Liberia, N. 8° 15′, W. 22° 38′*	29.89	759.2	85	29.4	79	ene.	.....	.....	1	.....	6	s.	ne.	1 h'r	1 h'r	small	s.	
Bg. Lilian, N. 8° 10′, W. 58° 30′ †	29.90	759.4	83	28.3	.....	ene.	.....	.....	3	.....	3	....	.....	o	o	sm'h	nne.	clear.
Bg. L. & W. Armstrong, N. 38° 27′, W. 71° 32′*†	30.08	764.0	.....	.....	.....	n.	.....	.....	8	.....	6	.....	nne.	o	o	h'vy	ne.	clearing.
S. S. Madrid, N. 33° 29′, W. 55° 54′*†	29.64	752.8	70	21.1	90	w.	.....	.....	6	.....	4	.....	wnw.	3 h'r	3 h'r	mod.	e.	fine
S. S. Malabar, N. 12° 56′, E. 43° 17′*†	29.95	760.7	.....	.....	.....	sse.	.....	.....	2	.....	o	.....	.....	o	o	sm'h	.....	clear.
Bg. Mary Gibbs, N. 26° 34′, W. 79° 34′*†	29.96	761.0	69	20.6	.....	nw.	.....	.....	4	.....	o	.....	.....	o	o	2	n.	clear.
Bk. Matilda C. Smith, N. 40° 32′ W. 14° 00′	.....	.....	.....	.....	.....	n.	.....	.....	5	.....	5	.....	n.	o	o	mod.	nnw.	fine.
Schr. Moravian, N. 12° 33′, W. 81° 43†	29.98	761.5	.....	.....	.....	ene.	.....	.....	.....	.....	.....	.....	e.	o	o	long	ne.	fair.
S. M. P. Grace. N. 12° 59′, W. 119° 27′*	29.82	757.4	78	25.6	.....	e.	.....	.....	7	.....	10	.....	ese.	o	o	con.	.....	squally.
Bg. Myrtle, N. 37° 02′. W. 71° 12′†	30.00	762.0	.....	.....	.....	nne.	.....	.....	9	.....	10	.....	n.	4 h'r	4 h'r	r'gh	n.	drizzling.
Bg. O. C. Clary, N. 27° 09′, W. 62° 33′*†	29.86	758.4	74	23.3	90	nw.	.....	.....	4	.....	1	... .	n.	.....	.....	long	ne.	clear.
S. Orealla, Off Point de Galle, Ceylon, India*	29.84	757.9	.....	.....	.....	ssw.	.....	.....	3	.....	4	.....	ssw.	o	o	sl't	sw.	clear.
Bk Orpheus, N. 39° 44′, W. 48° 20′	29.65	753.1	70	21.1	.....	sw.	.....	.....	4	.....	8 k	.....	sw.	5 h'r	5 h'r	mod.	sw.	clearing
S.Paramita, San Francisco, Cal	.....	.....	54	12.2	.....	ne.	.....	.....	1	.....	.....	.....	n.	.....	.....	.....	.....	clear
S. S. Peconic, N. 37° 20′, W. 56° 31′*†	29.30	744.2	70	21.1	.....	wsw.	.....	.....	6	.....	5	.....	wsw.	2 h'r	2 h'r	long	cross	cloudy.
S. S. Radnorshire, N. 19° 00′, E. 39° 22′*†	29.93	760.2	.....	.....	.....	ese.	... ...	.....	2	.....	o	.....	.....	o	o	short	se.	clear.
S. St. Francis, S. 16° 20′, W. 100° 20′†	30.11	764.8	69	20.6	.....	ese.	.....	.....	4	.....	3	.. ..	se.	o	o	sm'h	se.	fine.
Schr. S. B. Hubbard, N. 37° 08′, W. 74° 54′†	30.10	764.5	52	11.1	.....	n.	.....	.....	7	.....	8	.....	n.	sh'rs	sh'rs	h'vy	n.	threatening
Bk. Scud, Off Trinidad, W. I*†	29.92	760.0	.....	.....	.....	nne.	.....	.....	3	.....	7	.....	ene.	5 h'r	5 h'r	.....	.....	rainy.
Bk. Southern Belle, Off Start Point, Eng*†	29.65	753.1	52	11.1	.....	wnw.	.....	.....	6	.....	5?	.....	nw.	2 h'r	2 h'r	mod.	.....	clear?
S. S. Strathleven, N. 34° 15′ E. 22° 44′	29.85	758.2	69.0	20.6	89	w.	.....	.....	6	.....	6	.....	w.	.....	.....	6	w.	showery
S. S. Sunbeam, Penarth, Wales	29.50	749.3	49	9.4	78	wnw.	.....	.....	7	.....	6	.....	wnw.	6 h'r	6 h'r	.....	.....	hailing.
Bg. Teneriffe, N. 39° 03′. W. 73° 52′	30.04	763.0	.....	.....	.....	n.	.....	.....	6	.....	.....	.....	.....	o	o	mod.	ene.	
Bk. Truro, N. 46° 35′, W. 41° 00′†*†	30.18	766.6	.....	.....	.....	sse.	.....	.....	4	.....	10	.....	sse.	12 h'r	12 h'r	sm'h	.....	cloudy.
U.S.F.C.S.S.Fish Hawk, Washington, D. C†	30.31	769 9	35	1.7	80	nne.	.....	.....	1	.....	o	.....	.....	o	o	.....	.....	clear.
Bk. Usko, N. 37° 18′ W. 67° 27′*†	.....	.....	64	17.8	.....	nnw.	.....	.....	9	.....	3	.....	nw.	2 h'r	2 h'r	h'vy	n.	threatening.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.37	771.3	64.4	18.	.....	ne.	.....	.....	5	.....	6?	.....	ne.	o	o	.....	.....	clear?
Schr Viola Reppard, N. 37° 38′, W. 74° 53′†	30.08	764.0	40	4.4	.....	n.	.....	.....	3	.....	5?	.....	nne.	o	o	.....	n.	cloudy?
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762.0	.....	.....	.....	s.	.....	.....	1	.....	2	.....	s.	o	o	.....	.....	fine.
Bk. Wandering Jew, S. 20° 19′, W. 36° 43′†	30.03	762.7	73	22.8	.....	ssw.	.....	.....	7	.....	5	.....	s.	2 h'r	2 h'r	large	sw.	fair.
Bk. Warden Law, S. 35° 10′, W. 74° 54′	30.16	766.1	.....	.....	.....	se.	.....	.....	3	.....	2	.....	se.	6 h'r	6 h'r	sm'h	se.	fair.
Bgt. Willie, S. 37° 40′, E. 17° 35′*†	30.20	767.1	68	20.0	.....	w.	.....	.....	2	.....	6	....	w.	o	o	cross	sw.	fair.
S. Wm. Woodbury, N. 36° 40′, W. 71° 37′*†	30.04	763.0	55	12.8	.....	n.	.....	.....	7	.....	8	.....	n.	o	o	light	n.	cloudy.

International Chart I. November 19, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 20, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.13	765.3	64.8	18.2	90	n.	.....	.....	4	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.03	762 8	70.5	21.4	35	nnw.	.....	.....	4	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	29.93	760.3	71.6	22.0	64	sw.	.....	.....	4	.....	2	.....	.....	0.118	3.0	fair	Fonfréde.
Tunis	.....	.....	30.00	761.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.17	766.4	75.6	24.2	23	n.	.....	.....	2	.....	1	.....	.....	0	0	very fair	Pérès.
Tebessa	.....	.....	30.14	765.5	59.4	15.2	62	n.	... ...	.....	3	.....	3	.....	.....	0	0	pretty fair	Dognon.
Geriville	.....	.....	.....	.....	67.3	19.6	18	w.	.....	.....	1	.....	2	.....	.....	0	0	fair	Lonchamp.
Laghouat	.....	.....	30.19	766.7	66.2	19.0	24	ssw.	.....	.....	2	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.13	765.3	68.4	20.2	42	.....	.....	.....	.....	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	29.66	753.3	29.75	755.6	65.0	18.3	86	ese.	2	0.9	.....	.....	9	.....	.....	0.08	2.0	dull	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.06	738.0	29.62	752.4	36.3	2.4	93	e.	.....	.....	2	.....	10	.....	.....	0.244	6.2	rain & snow	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.77	730.7	29.55	750.6	36.3	2.4	72	sw.	0.7	0.3	.....	.....	7	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.78	731.1	29.70	754.3	32.0	0.0	85	s.	.....	.....	2	.....	10 s	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.37	720.5	29.65	753.0	35.6	2.0	89	sw.	.....	.....	2	.....	8	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.30	718.9	29.77	756.2	35.4	1.9	64	nw.	.....	.....	2	.....	6	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.15	715.1	29.52	749.8	36.1	2.3	85	sw.	.....	.....	1	.....	10	.....	.....	0.087	2.2	gloomy	The Staff.
Lemberg	28.65	727.6	29.67	753.5	34.3	1.3	68	sw.	.....	.....	1	.....	2	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.39	746.4	29.50	749.3	48.9	9.4	87	wnw.	.....	.....	1	.....	10	.....	.....	0.394	10.0	.....	I. R. Hydrographic Office.
Szathmar	29.26	743.2	29.72	754.9	35.6	2.0	66	se.	.....	.....	2	.....	10	.....	.....	0.071	1.8	.....	Joseph Midlinszay, S. J.
Szegedin	29.43	747.5	29.72	754.8	36.0	2.2	93	s.	.....	.....	2	.....	10	.....	.....	0.177	4.5	.....	Karl Stancel.
Trieste	29.47	748.5	29.57	751.1	45.0	7.2	74	n.	.....	.....	1	.....	8	.....	.....	0.105	4.2	.....	Royal Academy.
Vienna	28.80	731.6	29.53	750.1	37.6	3.1	74	se.	.....	.....	2	.....	9	.....	.....	0.020	0.5	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.16	740.7	29.26	743.2	34.8	1.6	69	w.	8	3.6	.....	.....	2	.....	.....	0.305	7.7	misty	W. Boswell
Armagh, Observatory	29.13	739 9	29.37	746.0	42.0	5.6	84	wsw.	13	5.8	.....	.....	5	.....	.....	.....	.....	d. clouds	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.32	744.7	45.7	7.6	80	w.	39	17.4	.....	.....	9	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	28.76	730.5	29.30	744.2	41.1	5.1	90	wnw.	12	5.4	.....	.....	10	.....	.....	.....	.....	gloomy	Thomas Mackereth.
Bradford, Yorkshire	28.87	733 3	29.26	743.2	40.7	4.8	85	nw.	.....	.....	2	.....	10	.....	.....	0.15	3.8	overcast	McLandsborough&Preston
Bridgetown, Barbadoes	29.90	759.4	29.93	760.2	82.0	27.8	70	ne.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	38.4	3.6	95	w.	.....	.....	0–6	.....	10	.....	.....	.....	.....	drizzling	John McLaren.
Chatham, School M. E.	29.23	742.4	29.36	745.7	43.1	6.2	74	sw.	.....	.....	1	.....	8	.....	.....	blank	blank	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.40	746.7	29.63	752.6	46.0	7.8	61	wnw.	.....	.....	5	.....	5	.....	.....	.....	.....	squally	The Staff.
Fort Napier, Natal	27.58	700 5	29.79	756.7	65.0	18.3	68	n.	.....	.....	1	.....	9	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	87.0	30.6	58	n.	.....	.....	1.	.....	2	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.14	765 5	30.19	766.8	67.5	19.7	77	w.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.03	737 3	29.24	742.7	37.1	2.8	89	n.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.21	741.9	29.38	746.2	41.1	5.1	87	wsw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	The Staff.
Guernsey	29.40	746 7	29.70	754.4	48.0	8.9	62	nw.	.....	.....	5	.....	6	.....	.....	.....	.....	showery	A. Collenette, F. M. S.
Kew, Observatory	29.36	745.7	29.40	746.7	42.1	5.6	89	w.	17	7.6	.....	.....	10	.....	.....	.....	.....	raining	The Staff.
Leicester, Museum	29.08	738 6	29.34	745.2	38.4	3.6	96	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.91	759.7	29.99	761.7	67.6	19.8	96	sw.	.....	.....	2	.....	2	.....	.....	.....	.....	blue sky	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.92	760.0	29 97	761.2	77.0	25.0	67	nw.	.....	.....	1	.....	7	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.82	732.0	29.34	745.2	43.7	6.5	71	w.	.....	.....	6	.....	8	.....	.....	.....	.....	threatning	Warren Middleton.
Oxford, Radcliffe Obs'y	29.16	740.7	29.39	746.5	45.0	7.2	76	w.	.....	.....	5	.....	8	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.51	749.5	29.58	751.3	45.5	7.5	83	nw.	.....	.....	3	.....	10	.....	.....	.....	.....	showery	John Merrifield.
Sandwick Manse, Orkneys	29.21	741.9	29.31	744.5	37.8	3.2	95	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	29.80	756 9	29.86	758.4	52.4	11.3	77	sw.	.....	.....	1	.....	9	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.02	737.1	29.30	744.2	42.3	5.7	87	w.	.....	.....	1	.....	8	.....	.....	0.10	2.5	overcast	W. F. Cooper.
Silloth Rectory	29.23	742.4	29.26	743.2	43.0	6.1	85	w.	.....	.....	2	.....	5	.....	.....	0.015	0.4	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.31	744.5	42.5	5.7	83	w.	20	8.9	.....	.....	10	.....	.....	.....	.....	overcast	I. New.
Stratfield Turgiss	29.20	741.7	29.42	747 3	44.7	7.1	80	nw.	.....	.....	3	.....	8	.....	.....	.....	.....	squally	Rev. O. H. Griffiths, F.M.S.
Truro, Royal Institution	29.58	751.3	29.62	752.3	50	10.0	71	nw.	.....	.....	7	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.72	754.9	29.74	755.4	48.9	9.4	62	wnw.	37	16.5	.....	.....	6	.....	.....	blank	blank	squally	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.44	747.8	29.48	748.8	33	0.6	96	n.	42	18.8	.....	.....	10 n	.....	.....	0.610	15.5	light snow	H. J. Cundall, C. E.
Chatham, N. B*	29.66	753.4	29.72	754.9	32	0.0	88	n.	21	9.4	.....	.....	10 s	.....	n.	0	0	cloudy	G. A. Blair.
Father Point, Quebec*	30.0c	702.0	30.02	762.5	26	— 3.3	76	nne.	35	15.6	.....	.....	10 s	.....	calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	28.91	734.3	29.76	755.9	28	— 2.2	77	sw	20	8.9	.....	0	0	.....	.....	0	0	fair	James Stewart.
Halifax, N. S*	29.39	746.5	29.53	750.0	34	1.1	81	nw.	14	6.3	.....	.....	10 n	.....	.....	0.020	0.5	cloudy	A. Allison.
Kingston, Ontario*	29.83	757.7	30.18	766.6	29	— 1.7	77	n.	3	1.3	.....	.....	10 s	.....	n.	0	0	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	29.89	759.2	30.11	764 8	26	— 3.3	80	nw.	6	2.7	.....	2 c	2 s	.....	.....	0	0	fair	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.53	750.0	30.27	768.8	29	— 1.7	88	n.	3	1.3	.....	2 k	5 ks	n.	n.	0	0	fair	Rev. R. Mosley.
Port Dover, Ontario	29.47	748.5	30.20	767.1	28	— 2.2	100	ne.	7	3.1	.....	10 k	0	ne.	.....	0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.58	751.3	30.26	768.6	31	— 0.6	88	ne.	5	2.2	.....	.....	10 n	.....	ne.	inap.	inap.	cloudy	M. Payne.
Quebec, Quebec*	29.72	754.9	30.07	763.8	24	— 4.4	73	calm	.....	.....	0	5 c	hz.	calm	.....	0	0	hazy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.76	755.9	30.24	768.1	25	— 3.9	88	nw.	2	0.9	.....	0	fg	.....	.....	0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.49	749.0	30.24	768.1	30	— 1.1	92	e.	3	1.3	.....	.....	10ks	.....	.....	0	0	cloudy	
St. Andrews, N. B	29.67	753.6	29.73	755.1	30	— 1.1	65	nnw.	15	6.7	.....	.....	10 n	.....	.....	0	0	cloudy	
Sydney, C. B*	29.16	740.7	29.22	742.2	39	3.9	92	ne.	19	8.5	.....	.....	10 n	.....	.....	1.81	46.0	light rain	T. C. Hill, C. E
Toronto, Ontario*	29.85	758.2	30.25	768.3	30	— 1.1	69	n.	6	2.7	.....	.....	10 ks	.....	w.	0	0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.62	752.3	29.69	754.1	34	1.1	92	n.	6	2.7	.....	.....	10 n	.....	.....	0.02	0.5	light snow	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.76	730.5	30.23	767.8	28.0	—2.2	100	nw.	.....	.....	1	.....	10 n	.....	.....	0	0	overcast	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	40	4.4	100	n.	1	0.4	.....	.....	fg	.....	.....	0.68	17.3	foggy	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.99	761.7	30.02	762.5	72.0	22.2	84	ese.	10.1	4.5	.....	.....	10 ks	.....	.....	0	0	light haze	John Duthie.
Cape Town, C. G. H. Obs'y	29.94	760.5	29.98	761.5	74.8	23.8	63	s.	32	14.3	.....	0	2	.....	.....	0	0	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
CHINESE (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.36	771.1	48.2	9.0	81	sw.	5.8	2.6	.....	3 c	0	se.	.....	0.083	2.1	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.48	774.2	30.50	774.8	48.9	9.4	81	nne.	2.7	1.2	.....	10 ck	0	w.	.....	0.098	2.5	covered	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.19	741.4	29.24	742.6	31.8	— 0.1	90	ne.	.....	.....	2	.....	9	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	29.25	743.0	29.28	743.6	28.9	— 1.7	94	ene.	.....	.....	2	.....	7	.....	.....	.....	.....	.....	Overloerer Laurids en.
Godthaab, Greenland	29.97	761.1	30.01	762.2	21 0	— 6.1	87	ssw.	.....	.....	2	.....	10	.....	.....	0	0	.....	S. Kleinschmidt.
Ivigtut	29.98	761.5	30.00	762.0	25.7	— 3.5	.....	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.86	758.4	29.90	759.5	34.9	1.6	82	ne.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.50	749.2	29.53	750.1	41.0	5.0	86	ne.	13	6	.....	.....	8	.....	.....	.....	.....	.....	Overloerer Hergh.
Vestervig	29.18	741.2	29.28	743.6	27.5	— 2.5	92	calm	.....	.....	0	.....	4	.....	.....	.....	.....	.....	Loerer Oesterbol.
Jacobshavn	29.82	757.5	29.87	758.7	16.0	— 8.9	.....	e.	.....	.....	4	.....	8	.....	.....	.....	.....	snowing	
FRENCH.																			
Agen, Normal School	29.38	746.2	30.02	762.6	55.0	12.8	93	nw.	.....	.....	1	.....	8	.....	nw.	0.579	14.7	light rain	M. Labroue, Director.
Alençon, Normal School	29.10	739.2	29.65	753.2	41.7	5.4	97	w.	.....	.....	1	.....	10 n	e.	e.	0.197	5.0	raining	M. Nicot, Director.
Arras, Engineer School	29.15	740.8	29.42	747.2	39.7	4.3	90	nw.	.....	.....	1	.....	10	.....	.....	0.630	16.0	covered	M. Fénéon, Command't.
Avignon, Normal School	29.68	753.8	29.76	755.8	54.3	12.4	57	nnw.	.....	.....	1	.....	5	.....	nw.	0.067	1.7	cloudy	M. Giraud, Director.
Bar-sur-Seine	28.98	736.1	29.54	750.4	41.9	5.5	84	wsw.	.....	.....	3	.....	8	.....	w.	0.091	2.3	very cloudy	M. Saillard, Director
Beauvais, Normal School	29.21	742.0	29.48	748.8	43.0	6.1	70	wnw.	.....	.....	2	.....	5	.....	nw.	0.528	13.4	cloudy	M. Frère Eugène Marie
Besançon, Normal School	28.65	727.8	29.52	749.7	43.3	6.3	77	sw.	.....	.....	2	.....	10 n	.....	sw.	0.79	20.	raining	M. Gobin, Director.
Bordeaux, Observatory	29.59	751.6	29.85	758.3	50.7	10.4	69	wsw.	.....	.....	1	.....	5	.....	w.	0.350	8.9	cloudy	M. Rayet, Director.
Bourges, Normal School	29.14	740.1	29.69	754.1	45.5	7.5	71	calm	.....	.....	0	.....	kn	.....	wsw.	0.12	3.	.....	M. Mulet, Director.
Brest, Naval Observatory	29.54	750.4	29.79	756.6	48.6	9.2	78	wnw.	.....	.....	2	.....	8	.....	wnw.	0.079	2 0	hailing	M. de Kermaree, Dir.
Caen, Normal School	29.45	748.0	29.52	749.9	44.2	6.8	88	w.	.....	.....	1	.....	10	.....	.....	0.16	4.	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.08	738.7	29.40	746.8	42.4	5.8	84	nw.	.....	.....	4	.....	8	e.	se.	0.067	1.7	very cloudy	M. Jadot, Director.
Charleville, Normal School	28 89	733.7	29.41	746.9	36.3	2.4	86	w.	.....	.....	1	.....	10	.....	.....	0.043	1.1	covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.33	719.6	29.70	754.3	45.7	7.6	58	w.	.....	.....	4	.....	2	.....	wnw.	0.224	5.7	¼ covered	M. Allnard, Director.
Cluny, Normal School	28.83	732.2	29.69	754.1	47.1	8.4	75	w.	.....	.....	2	.....	6	.....	w.	0.232	5.9	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.58	725.8	29.45	747.9	37.4	3	93	w.	.....	.....	3	.....	10	w.	w.	0.575	14.6	covered	Dr. Coulet, Director.
Gap, Normal School	27.17	690.2	29.74	755.4	41.0	5	74	.....	.....	.....	.....	.....	3	.....	w.	0	0	.....	M. Jeangirard, Director.
Grésque, du Rhone	28.61	726.7	29.74	755.3	50.9	10.5	70	nw.	.....	.....	3	.....	3	.....	nw.	0.161	4.1	.....	M. Kina, Director.
Grenoble, Normal School	28.98	736.0	29.76	756.0	44.2	6.8	77	sw.	.....	.....	1	.....	kn	.....	nw.	0.591	15.0	.....	M. Abbard, Director.
Guéret	28.07	713.0	29.75	755.6	43.7	6.5	75	w.	.....	.....	3	.....	n	.....	w.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.39	746.4	29.66	753.4	46.4	8	89	w.	.....	.....	2	0	5 n	.....	w.	0.12	3.	rain & hail	M. Olitrault, Director.
Lescar, Normal School	29.41	747.1	29.98	761.6	49.1	9.5	80	w.	.....	.....	3	.....	10	.....	.....	1.024	26.0	raining	M. Chauvin, Director.
Lorient, Naval Observatory	29.67	753.7	29.77	756.2	54.3	12.4	90	w.	.....	.....	3	.....	5	nw.	w.	0.213	5.4	½ covered	Lt. T. Carré, Director
Lyon, St. Genis-Laval	28.65	727.8	29.68	753.9	47.5	8.6	46	wnw.	.....	.....	4	.....	5	.....	nw.	0.138	3.5	fair	M. André, Director.
Mans, Normal School	29.37	745.9	29.67	753.7	42.3	5.7	88	nw.	.....	.....	1	.....	.....	.....	.....	0.043	1.1	.....	M. Piboen, Director.
Marseille, Observatory	29.48	748.9	29.76	755.8	55.4	13.0	66	wnw.	.....	.....	4	.....	8	.....	wnw.	0.031	0.8	.....	M. Stephan, Director.
Mt. Louis	24.61	625.2	29.46	748.2	42.8	6.0	41	sw.	18.6	8.3	.....	.....	6	.....	.....	0.028	0.7	.....	M. Carè for Dr. Fines.
Montpellier, Normal School	29.63	752 5	29.76	755.8	53.6	12	65	n.	.....	.....	4	.....	0	.....	.....	0	0	clear	M. Galzin, Director.
Nancy, Normal School	28.65	727.7	29.45	748 0	38.5	3.6	83	sw.	.....	.....	1	.....	n	.....	.....	0.217	5.5	.....	M. Hasse, Director
Nantes, Observatory	29.62	752.3	29.78	750.4	52.9	11.6	52	wnw.	.....	.....	1–3	0	3 k; kn	.....	wnw.	0.020	0.5	.....	M. Lavocque, Director.
Perpignan, Observatory	29.75	755.6	29.86	758.4	56.7	13.7	51	nw.	26.2	11.7	.....	.....	7	nw.	nw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.96	532.5	.....	.....	19.9	— 6.7	.....	nw.	.....	.....	3-4	.....	10	.....	nw.	1.063	27.0	snowy	Gen'l de Nansouty, Dir
Privas, Normal School	28.66	727.9	29.74	755.4	48.9	9.4	36	n.	.....	.....	1	.....	1	.....	n.	0	0	clear	M. Taillieu.
Puy de Dôme Obs'y, Summit	24.76	629.0	.....	.....	25.9	— 3.4	100	w.	.....	.....	6	.....	10	.....	.....	1.183	27.5	covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.80	756.9	29.83	757.7	50.0	10.0	84	wnw.	.....	.....	2	.....	5	.....	ssw.	2.36	60.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.58	751.4	29.80	750.9	50.4	10.2	62	wsw.	.....	.....	1	.....	1	.....	wsw.	0.165	4.2	clear	M. Brotier, Director.
Rodez, Normal School	27.65	702.4	29.85	758.2	39.0	3.9	97	n.	.....	.....	3	.....	kn	.....	.....	0.665	16.9	.....	M. Seger, Director.
Rouen, Normal School	29.40	746.8	29.45	748.0	46.4	8	69	nw.	.....	.....	4	.....	2	nw.	.....	0.736	18.7	slightly cl'dy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	47.5	8.6	73	nw.	.....	.....	1	.....	.....	nw.	se.	0.492	12.5	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.34	745.3	29.51	749.5	46.0	7.8	58	nw.	.....	.....	2	.....	6	.....	nw.	0.083	2.1	.....	M. Renou, Director.
Toulouse, Observatory	29.22	742.3	29.95	760 7	48.7	9.3	80	w.	.....	.....	4	.....	10	nw.	.....	0.520	13.2	covered	M. Baillaud, Director.
Tours	29.50	749 3	29.68	753.8	47.1	8.4	89	w.	.....	.....	3	.....	8	nw.	wnw	0.012	0.3	very cloudy	M. de Tastes.
Versailles, Observatory	29.02	737.1	29.51	749.6	43.5	6.4	67	nw.	.....	.....	3	.....	.....	.....	.....	0.126	3.2	.....	Dr. A. Bérigny, Director.
GERMAN.																			
Ansbach	27.98	710.6	29.45	747.9	36.7	2.6	83	sw.	.....	.....	2	.....	7	sw.	.....	0.114	2.9	.....	Prof. Jnedt.
Bamberg	28.59	726.2	29.42	747.2	39.2	4.0	80	sw.	.....	.....	2	.....	8	.....	sw.	0.138	3.5	raining	Prof. Dr. Hoh.
Berlin	29.10	739 2	29.28	743 8	38.1	3.4	73	sw.	.....	.....	2	.....	1	.....	.....	0.071	1.8	.....	Prof. Dr. Arndt.
Breslau	28.93	734.7	29.45	747 9	37.4	3.0	76	s.	.....	.....	2	.....	6	.....	.....	0.008	0.2	.....	Royal University Obs'y.
Carlsruhe	29.00	736.5	29.43	747.5	42.4	5.8	75	sw.	.....	.....	3	.....	1	sw.	.....	0.465	11.8	.....	Albert Senz.
Cassel	28.58	725.9	29.29	744.0	34.9	1.6	98	s.	.....	.....	2	.....	10	sw.	.....	0.157	4.0	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.05	737.9	29.42	747 2	40.1	4.5	79	sw.	.....	.....	1	.....	6	.....	.....	0.157	4.0	.....	Physical Society.
Friedrichshafen	28.087	713.1?	29.54	750.2	39.9	4.4	77	sw.	.....	.....	8	.....	10	w.	.....	0.016	0.4	raining	Wilhelm, Chief Tel.
Hamburg	29.17	740.8	29.26	743.1	34.3	1.3	94	sw.	.....	.....	3	.....	10	.....	.....	0.303	7.7	.....	E. Preller.
Kiel	29.21	742.0	29.23	742.4	33.8	1.0	82	ene.	.....	.....	2	.....	10	.....	.....	0.101	4.1	snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.94	735.1	29.37	745.9	38.5	3.6	70	sw.	.....	.....	3	.....	9	.....	.....	0.087	2.2	.....	H. Lepping, Asst.
Magdeburg	29.12	739.6	29.31	744.4	36.9	2.7	79	ssw.	.....	.....	3	cs	5 ks	w.	sw.	0.055	1.4	.....	Weather Observatory.
Memel	29.37	746.1	29.42	747.2	30.0	— 1.1	94	sse.	.....	.....	5	.....	10	.....	.....	.....	.....	snowing	Issermann.
Munich	27.65	702.2	29.47	748.6	37.8	3.2	85	sw.	.....	.....	3	.....	9	sw.	.....	0.213	5.4	.....	Central Station.
Neufahrwasser	29.34	745.2	29.35	745.6	35.6	2.0	85	se.	.....	.....	3	.....	10	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	28.89	733 8	29.41	746.9	41.9	5.5	82	ssw.	.....	.....	3	.....	6	sw.	.....	0	0	.....	Dicknether.
Stuttgart	28.51	724.2	29.42	747.2	37.8	3.2	93	sw.	.....	.....	1	.....	10	.....	.....	0.959	1.5	.....	Prof. Dr. Schoder.
Wustrow	29.24	742.6	29.26	743.2	32.4	0.2	92	se.	.....	.....	1	.....	10 8	.....	.....	0.138	3.5	.....	Profs. Brandes & Rein.
GREEK.																			
Athens	29.56	750.7	29.94	760.5	62.1	16.7	.....	w.	.....	.....	1.5	.....	1	.....	.....	0	0	clear	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	30.10	764 5	30.16	765.9	80.5	26.9	47	wsw.	16.0	7.2	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.54	750 4	30.02	762.5	81.9	27.7	29	n.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.91	759.8	29.95	760.8	80.3	26.8	76	nw.	13.0	5.8	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.09	713.5	29.94	760 4	82.9	28.3	26	wnw.	7.0	3.1	.....	.....	1	.....	.....	0	0	d. clouds	
Trichinopoly	29.67	753.6	29.95	760.8	78.2	25.7	78	e.	1.0	0.4	.....	.....	10	.....	.....	0.12	3.0	overcast	
Bellary	28.46	722.8	29.93	760.1	80.3	26.8	40	e.	4.0	1.8	.....	.....	5	.....	.....	0	0	d. clouds	
Belgaum	27 40	695.9	29.93	760.3	78.4	25.8	40	nne.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.36	745 8	30.13	765.3	67.7	19.8	41	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.17	740.8	30.10	764.4	68.2	20.1	50	w.	1.0	0.4	.....	.....	2	.....	.....	0	0	.....	
Agra	29.54	750.2	30.12	764.9	75.2	24.0	34	nw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.96	735.6	30.02	762.4	76.9	24.9	35	e.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.70	728.9	30.09	764 2	71.8	22.1	33	e.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.69	754.1	30.07	763.9	75.2	24.0	39	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.76	755.8	30.08	764.0	65.3	18.5	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.89	759.2	30.08	764.0	68.9	20.5	56	n.	2.1	0.9	.....	.....	2	n.	n.	0	0	.....	
Hazaribagh	28.01	711.5	30.09	764 2	64.7	18.2	51	n.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.94	760.5	30.03	762.6	72.0	22.2	73	ne.	3 0	1.3	.....	.....	2	.....	.....	0	0	d. clouds	
Calcutta, Alipore	30.01	762.2	30.03	762.8	73.9	23.3	63	nne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.91	759.8	30.03	762.8	70.8	21.6	72	calm	1.4	0.6	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.91	759.7	30.00	762.0	74.1	23.4	80	calm	1.1	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.73	755.1	30.08	764.0	68.1	20.1	77	ne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.92	760.1	29.95	760.7	81.9	27.7	79	sse.	4.0	1.8	.....	.....	9	.....	ese.	0.11	2.8	raining	
Jeypore	28.64	727.3	30.11	764.8	72.7	22.6	40	nne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
ITALIAN.																			
Udine	29.14	740.2	29.56	750.8	45.1	7.3	55	calm	0	0	.....	.....	8	.....	.....	0	0	.....	Prof. Giovanni Cloding.
Milan	29.12	739.7	29.65	753.1	42.8	6.0	60	w.	2.5	1.1	.....	.....	9	sw.	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.46	748.3	29.57	751.1	41.7	5.4	55	n.	3.8	1.7	.....	.....	9	w.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.72	729.5	29.64	752.8	41.0	5.0	54	nw.	1.3	0.6	.....	.....	5	e.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	WEATHER.	OBSERVERS.
ITALIAN.—Continued.																			
Genoa	28.56	725.4	29.54	750.3	51.4	10.8	60	nw.	4.9	2.2			2	sw.		0	0		Prof. G. M. Garibaldi.
Mondovi	27.71	703.9	29.66	753.4	35.8	2.1	60	w.			2		1	sw.		0	0		Prof. D. C. Bruno
Pesaro	29.52	749.9	29.57	751.1	46.0	7.8	78	wnw.	1.3	0.6			9	wsw.		0	0		Prof. Luigi Guidi.
Florence	29.29	743.9	29.54	750.4	50.5	10.3	91	ne.			2		8	wsw.		0.142	3.6		Prof. Costantino Pittier.
Leghorn	29.41	747.1	29.50	749.2	57.0	13.9	59	w.	4.3	1.9			9			0.429	10.9		Prof. P. Monte.
Rome	29.48	748.8	29.66	753.3	52.9	11.6	95	ssw.	0.7	0.3			10			0.622	15.8		Prof. P. Tachini.
Lecce	29.46	748.3	29.71	754.7	60.3	15.7	90	sw.	11.2	5.0			10	sw.		0.165	4.2		Prof. C. de Giorgi.
Cosenza	28.92	734.5	29.81	757.1	58.3	14.6	78	w.	11.2	5.0			10	sw.		1.795	45.6		Prof. D. Conti.
Cagliari	29.58	751.2	29.77	756.1	67.3	19.6	53	w.			4		7	wnw.		0.024	0.6		Prof. A. Pacinotti.
Palermo	29.61	752.2	29.86	758.5	67.1	19.5	51	wsw.	12.5	5.6			5	wsw.		0	0		Prof. G. Cacciatore.
Syracuse	29.87	758.6	29.91	759.7	67.3	19.6	55	wsw.	16.8	7.5			7	wsw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.17	741.0	29.69	754.1	58.8	14.9	85	w.	11.2	5.0			10	sw.		0.177	4.5		Prof. F. Brioschi.
Stelvio	21.60	548.5			18.5	— 7.5	91	sw.			2		10			0	0	covered	Prof. P. F. Denza.
Valdobbia	21.63	549.3			19.4	— 7.0	77	n.			8		10			0	0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.26	768.5	30.29	769.3	39.3	4.1	85	w.			4		10 u;ck		w.	0.264	6.7	raining	Hattori.
Awomori	30.17	766.3	30.21	767.3	35.0	1.7	77	sw.	14.5	6.5			10 n			0.019	0.5	light snow	K. Ogawa.
Hakodate	30.14	765.5	30.15	765.7	36.0	2.2	64	wsw.	12.0	5.4			10			0	0	overcast	
Hiroshima					43.9	6.6	80	nne.	4.9	2.1		0	0			0	0	clear	Y. Miwa.
Kanazawa	30.31	769.8	30.41	772.5	40.5	4.7	86	se.	5.9	2.6			10			0.520	13.3	cloudy	S. Endo.
Kioto	30.22	767.6	30.40	772.1	39.4	4.1	90	calm	0	0		1 ck	1 ck			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.19	766.9	30.40	772.2	46.7	8.2	78	ne.	0.6	0.3		0	0			0	0	clear	S. Takehayashi.
Nemuro	30.08	764.0	30.15	765.8	31.5	— 0.3	71	nw.	6.0	2.7		10	0			0	0	cloudy	
Niigata	30.32	770.1	30.36	771.1	39.6	4.2	91	se.	6.4	2.9			10 cks		w.	0.005	0.1	cloudy	M. Morita.
Nobiru	30.26	768.5	30.27	768.9	38.1	3.4	79	nw.	7.4	3.3		3 ck	1 s	w.		0	0	fair	H. Midzushina.
Osaka	30.38	771.6	30.39	772.0	39.8	4.3	84	nne.	2.2	1.0		0	0			0	0	clear	
Sapporo					30.0	— 1.1	82	sw.	6.0	2.7			10			0.100	2.5	covered	
Tokei Obs'y, Yeddo	30.25	768.3	30.33	770.3	39.3	4.1	69	nnw.	4.9	2.1		0	0			0	0	clear	The Staff.
Wakayama	30.34	770.7	30.40	772.2	42.1	5.6	77	ne.	6.2	2.8		0	0			0	0	clear	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.86	758.4	30.04	763.0	79.2	26.2	57	ne.	10.5	4.7		4ck;cs	3 k;n	ssw.	se, e.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.70	602.1	29.92	760.1	52.2	11.2	79	ssw.	lnap.	lnap.		1 c	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.35	618'5	30.13	765.3	50.0	10.0	85	nne.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.76	756.0	30.03	762.6	66.0	18.9	64	nnw.	0.9	0.4		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.6	30.21	767.4	47.8	8.8	80	calm	0	0		3 ck	0			0	0	clear	The Staff.
Morelia	24.26	616.1	29.93?	767.6?	52.3	11.3	67	ssw.	1.8	0.8		1 c	2 k	e.		c	0	blue sky	M. Tena, M. D.
Orizaba											2					0	0		Prof. M. M. Chazaro.
Pabellon, Aguascallientes	23.93	607.8	30.02?	752.6?	49.1	9.5	75	n.								0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.39	594.0	30.25	768.4	46.2	7.9	33	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.56	573.1	30.27	769.3	43.4	6.5	79	wsw.	6.3	2.8		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.32	744.7	29.32	744.7	40.1	4.5		ssw.			4					0.059	1.5		
Groningen	29.19	741.4	29.21	742.8	36.0	2.2		sw.			1					0.079	2.0		
Helder	29.24	742.6	29.24	742.6	38.8	3.8		s.			2					0.248	6.3		
Hellevoetsluis	29.28	743.8	29.28	743.8	42.4	5.8	75	w.			1					0.028	0.7		
Utrecht	29.24	742 6	29.28	743.8	40.8	4.9	84	wsw.			2		8			0.138	3.5	very cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.26	743.3	29.33	744.9	32.4	0.2	43	sse.	4	2			6			0	0		
Brono	29.72	754.9	29.76	755.9	23.9	— 4.5	54	ne.	18	8			1			0	0		
Christiania	29.21	742.0	29.36	745.9	26.6	— 3.0	78	ene.	13	6			10			0.012	0.3	snowing	
Gjæsvær	29.95	760.7	29.97	761 3	23.0	— 5.0		s.			6		2						
Lodingen	29.62	757.5	29.87	758.7	24.4	— 4.2	59	ene.			4		0			0	0		
PORTUGUESE.																			
Angra, Azores	30.29	769.3	30.44	773.2	64.4	18.0	74	se.	8.7	3.9			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.16	740.6	30.16	766.0	60.8	16.0	62	wnw.	9.8	4.4			6	nw.		c	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.19	766.7	30.28	769.0	69.1	20.6	51	e.	13.6	6.1			6	nne.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.93	760.3	30.30	769.5	59.5	15.3	83	nw.	13.6	6.1			9			0	0		The Staff.
Ponta Delgada, Azores	30.41	772.3	30.48	774.1	63.0	17.2	88	ese.	4.3	1.9			10			0.059	1.5	light rain	
Saint Paul de Loando	29.71	754.6	29.91	759.8	72.5	22.5	87	sse.	0.7	0.3			2	w.		0	0		
Serra da Estrella	25.26	641.7	30.12	765.1	36.3	2.4	100	nw.	43.4	19.4			8			0	0		
RUSSIAN.																			
Akmollinski	29.35	745.5	30.54	775.6	13.8	—10.1	87	ene.	4	2			10 n			0	0		Major K. Lasarew.
Archangel	30.24	768.1	30.26	768.6	11.8	—11.2	93	e.	9	4			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.01	762.3	29.93	760.2	46.6	8.1	79	se.	16	7			10			0	0	heavy clouds	Capt. Wisganow.
Barnaul	29.89	759.2	30.44	773.2	9.1	—12.7	79	w.	9	4			7			0	0		Meteorological Obs'y.
Dorpat	29.43	747.5	29.69	754.0	24.1	— 4.4	95	ese.	11	5			10 n			0	0		Observatory.
Ekaterinburg	29.49	749.0	30.54	775.8	13.5	—10.3	78	calm	0	0			10			0.039	1.0		Meteorological Obs'y.
Kasan	29.93	760.2	30.21	767.4	31.8	— 0.1	90	se.	11	5			10			blank	blank		Observatory.
Kertch	29.60	751.9	29.62	752.4	59.5	15.3	93	calm	0	0		0	8 n			0	0		Lagorio & Sastyrjes.
Kieff	28.91	734 2	29.56	750.9	28.9	— 1.7	100	nw.	9	4			10ks;n					snowing	Observatory.
Lugan	29.44	747.7	29.64	752.9	46 2	7.9	88	ese.	13	6			10			blank	blank		Meteorological Obs'y.
Nikolaiev	29.52	749.7	29.59	751.5	44.2	6.8	96	wsw.	18	8			10 n			0.335	8.5		Capt. Kurdakow.
Pekin, China	30.28	769.0	30.42	772 6	35.4	1.9	62	calm	0	0		0	6 ks			0	0		Physical Observatory.
St. Petersburg	29.80	757.0	29.82	757.4	25.9	— 3.4	72	se.	13	6			10 n			0.028	0.7	light clouds	Central Physical Obs'y.
Semipalatinsk	29.88	758.9	30.60	777.2	16.5	— 8.6	85	nw.	9	4			10			0.020	0.5		Major Lasarew.
Tashkend, Laboratory	28.63	727.2	30.24	768.0	48.6	9.2	52	calm	0	0			1						Teich, A. M.
Tiflis	28.52	721.4	29.96	760.9	48.0	8.9	59	calm	0	0			1						Physical Observatory.
Tomsk	29.94	760.5	30.24	768.2	12.2	—11.0	85	nw.	11	5		9 cs	0			0	0	snowing	
Vladivostock	30.21	767.3	30.28	769.0	25.2	— 3.8		e.	4	2			10						
Warsaw	29.08	738.6	29.51	749.6	34.9	1.6	71	ssw.	13	6		0	0			0	0		Astronomical Obs'y.
Wilna	29.17	741.0	29.61	752.1	27.7	— 2.4	87	sse.	7	3		0	7 ks						Berg, Assistant.
Yeniseisk	29.79	756.7	30.11	764.7	9.1	—12.7	81	w.	9	4			10			0.008	0.2	heavy clouds	M. O. Marks.
SCOTTISH.													6			0.008	0.2		
Monach Lt			29.17	740.9	47	8.3	92	se.			6		10			0.5	13.	raining	J. Youngclause
North Unst			29.40	746.7				ne.			6		5						Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.68	753 8	29.78	756.5	60.8	16	49	w.				6cs;ck	0			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.01	762.3	30.07	763.8	52.5	11.5	78	nw.	5.6	2.5			10			0.350	8.9	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.06	687.4	30.09	764.3	46.4	8.0	81	sw.	5.8	2.6		0	1			0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	27.79	705.9	30.01	762.3	54.9	12.7	62	w.	21.7	9.7		0	8			0	0	almost cov	The Staff.
Murcia, Met. Obs'y	29 83	757.0	29.97	761.2	71.6	22.0	55	wnw.	4.3	1.9		0	1			0	0	almost clear	Olayo Diaz, Director.
Oviedo	29.23	742.4	30.11	764.7	46.4	8.0	93	e.	22.1	9.9			10 kn			0.583	14.8	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.28	743.7	30.20	767.0	50.9	10.5	78	nw.	9.4	4.2			8			0.134	3.4	almost cov	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.89	759.2	29.95	760.7	76.5	24.7	94	s.	0	0		3 c	6 k		e.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.12	765.0	30.22	767.5	58.6	14.8	73	w.	3.4	1.5		0	2		w.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.91	759.7	30.00	762.0	74.8	23.8	97	calm	0	0		5 cs	2 k	sw.	sw.	0	0	d. clouds	Manuel Maese.
Tuguegarao, Philippine Id's	29.90	759.5	30.03	762.8	74.7	23.7	95	nw.	3.6	1.6			10 kn		ene.	0.41	10.4	rainy	José L. Yrastorza.
SWEDISH																			
Haparanda	29.90	759.4	29.94	760.4	15.8	— 9.0	94	e.			4		10					snowing	
Umea	29.63	752.5	29.68	753.8	26.1	— 3.3	91	e.			2		10			0.327	8.3		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
SWEDISH—Continued.																			
Hernosand	29.43	747.6	29.48	748.9	30.9	— 0.6	88	ene.	.....	.....	2	.....	10	.....	.....	0.228	5.8	.....	
Stockholm	29.16	740.6	29.34	745.1	31.6	— 0.2	92	se.	.....	.....	2	.....	10	.....	.....	0.327	8.3	snowing.....	
Wisby	29.22	742.2	29.28	743.7	32.4	0.2	89	ese.	.....	.....	2	.....	10	.....	.....	0.063	1.6	snowing.....	
Sub-series.																			
Upsala	29.25	742.9	29.34	745.1	29.8	— 1.2	93	ene.	4.7	2.1	.....	.....	9	.....	s.	0.134	3.4	.....	S. G. Fineman.
SWISS.																			
Geneva	28.26	717.8	29.72	754.9	42.8	6.0	75	ssw.	.....	.....	5	.....	10	.....	.....	0.079	2.0	covered.....	The Observatory.
TURKISH.																			
Constantinople	.....	.....	29.88	758.9	51.4	10.8	67	ese.	6	2.5	.....	.....	10	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	29.80	756.9	46.8	8.2	.....	s.	.....	.....	1	.....	10	.....	.....	0.28	7	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.97	761.2	64.0	17.8	92	sw.	.....	.....	4	.....	10 n	.....	sw.	0.35	8.9	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.02	762.5	30.10	764.5	31	— 0.6	78	n.	3	1.3	.....	1 c	4 s	n.	n.	0	0	fair.....	J. O. Barnes.
Alpena, Michigan	29.56	750.8	30.26	768.6	25	— 3.9	88	w.	3	1.3	.....	3 k	4 s	w.	.....	0	0	fair.....	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.19	639.8	30.29	769.4	24	— 4.4	56	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	W. C. Barnes.
Assinnaboine, Ft., Montana	27.31	693.7	30.29	769.4	25	— 3.9	64	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	B. O. Lenoir.
Atlanta, Georgia	28.80	731.5	30.02	762.5	35	1.7	96	ne.	28	12.5	.....	.....	10 n	.....	ne.	0.85	21.6	light rain....	H. C. Smith.
Atlantic City, New Jersey	30.08	764.0	30.09	764.3	28	— 2.2	77	nw.	8	3.0	.....	7 k	0	nw.	.....	0	0	fair.....	Jas. M. Watson.
Augusta, Georgia	29.89	759.2	30.09	764.3	41	5.0	88	e.	7	3.1	.....	.....	10 n	.....	e.	0.32	8.1	light rain....	John Healy.
Baltimore, Maryland	30.11	764.8	30.16	766.1	38	3.3	62	n.	4	1.8	.....	6 k	fg.	ne.	.....	0	0	fair.....	Geo W Felger.
Barnegat, New Jersey	30.05	763.3	30.07	763.8	31.0	— 0.6	88	nw.	18	8.0	.....	0	0	.....	.....	0	0	clear.....	G. A. Hill.
Bennett, Fort, Dakota	28.48	723.4	30.17	766.3	28	— 2.2	77	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	A. Pritchard.
Benton, Fort, Montana	27.38	695.4	30.34	770.6	23	— 5.0	73	calm	0	0	.....	5 ck	0	.....	.....	0	0	fair.....	S. Wheaton.
Bismarck, Dakota	28.15	715.0	30.07	763.8	33	0.6	71	w.	16	7.2	.....	0	0	.....	.....	0	0	clear.....	Cyrus Cramer.
Block Island, Rhode Island	29.92	760.0	29.95	760.7	29	— 1.7	67	n.	26	11.6	.....	0	0	.....	.....	0	0	clear.....	J. T. Elker.
Boise City, Idaho	27.36	694.9	30.30	769.6	26	— 3.3	88	w.	2	0.9	.....	4 k	0	w.	.....	0	0	fair.....	B. E. Light.
Boston, Massachusetts	29.76	755.9	29.92	760.0	24.0	— 4.4	73	nw.	12	5.4	.....	2 ck	3 s	w	w.	0	0	fair.....	O. B. Cole.
Brownsville, Texas	30.12	765.0	30.17	766.3	44.0	6.7	76	n.	7	3.1	.....	2 c	0	.....	.....	0	0	clear.....	M. McCarty.
Buffalo, New York	29.44	747.8	30.22	767.6	32	0.0	82	nw.	6	2.7	.....	.....	10 s	.....	nw	inap.	inap.	cloudy	W. Finn.
Buford, Fort, Dakota	28.22	716.8	30.20	767.1	27	— 2.8	84	w.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	F. A. Mellen.
Burlington, Vermont	29.80	756.9	30.11	764.8	28.4	— 2.0	69	n.	15	6.7	.....	.....	10 s	.....	n.	0	0	cloudy.....	W. B Gates.
Cairo, Illinois	29.66	753.4	30.08	764.0	38.8	3.8	64	ne.	12	5.4	.....	.....	10 s	.....	ne.	0	0	threatening.	W. H. Ray.
Cape Henry, Virginia	30.12	765.0	30.14	765.5	40	4.4	73	n.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	A. K. Alderson.
Cape May, New Jersey	30.08	764.0	30.11	764.8	38.0	3.3	53	nw.	26	11.6	.....	0	0	.....	.....	0	0	clear.....	W. E. Smith.
Cape Mendocino, California	29.30	744.2	29.98	761.5	44	6.7	93	se.	36	16.1	.....	.....	0	.....	.....	0	0	clear.....	J. J. McLean.
Cedar Keys, Florida	29.79	756.7	29.81	757.2	61	16.1	93	e.	22	9.8	.....	.....	10 n	.....	e.	0.65	16.5	heavy rain..	F. W. Mixer.
Champaign, Illinois	29.34	745.2	30.20	767.1	37.0	2.8	56	e.	9	4.0	.....	.....	10 s	.....	e.	0	0	cloudy.....	L. A. Welsh.
Charleston, S. Carolina	30.03	762.7	30.09	764.3	41	5.0	92	ne.	16	7.2	.....	.....	10 n	.....	.....	0.35	8.9	light rain....	J. H. Smith.
Charlotte, N. Carolina	29.22	742.2	30.10	764.5	35.0	1.7	79	ne.	4	1.8	.....	7 cs	0	.....	.....	0	0	fair.....	D. O'Donoghue.
Chattanooga, Tennessee	29.15	740.4	30.00	762.0	40.5	4.7	85	ne.	8	3.6	.....	.....	10 n	.....	ne.	0.06	1.5	light rain....	B. L. Goulding.
Cheyenne, Wyoming	24.07	611.4	30.28	769.1	35.3	1.8	37	nw.	12	5.4	.....	0	3 s	.....	.....	0	0	clear.....	E. McGovern.
Chicago, Illinois	29.49	749.0	30.23	767.8	37.8	3.2	68	se.	4	1.8	.....	7 k	0	ne.	.....	0.03	0.8	fair.....	J. Mitchell.
Chincoteague, Virginia	30.09	764.3	30.11	764.8	36	2.2	61	n.	20	8.9	.....	0	0	.....	.....	0	0	clear.....	C. F. Dickens.
Cincinnati, Ohio	29.52	749.8	30.21	767.3	36	2.2	69	w.	4	1.8	.....	1 c	0	w.	n.	0	0	clear.....	R. B. Watkins.
Cleveland, Ohio	29.48	748.8	30.25	768.3	36.1	2.3	60	ne.	8	3.6	.....	.....	10 s	.....	ne.	0.01	0.3	cloudy.....	J. B. Newlin.
Coleman City, Texas	28.24	717.3	30.13	765.3	35	2.2	92	nw.	8	3.6	.....	0	0	.....	nw.	0.02	0.5	fair.....	L. Dorman.
Columbus, Ohio	29.33	745.0	30.22	767.6	36	2.2	69	ne.	3	1.3	.....	.....	10 ks	.....	ne.	0	0	cloudy.....	D. Cuthbertson.
Concho, Fort, Texas	28.22	716.8	30.23	767.8	31.0	— 0.6	88	w.	3	1.3	.....	c	0	.....	.....	0.02	0.5	clear.....	J. McGlone.
Custer, Fort, Montana	26.98	685.3	30.30	769.6	22	— 5.6	67	e.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	W. B. Lamar.
Davenport, Iowa	29.50	749.3	30.19	766.8	42	5.6	65	ne.	2	0.9	.....	.....	10ks	.....	sw.	0	0	cloudy.....	R. R. Martin.
Davis, Fort, Texas	25.28	642.1	30.18	766.6	27	— 2.8	70	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	J. Williams.
Dayton, Washington T'y	28.41	721.6	30.19	766.8	32.4	0.2	94	sw.	3	1.3	.....	.....	10 s	.....	.....	0.02	0.5	threatening.	H. Clifford.
Deadwood, Dakota	25.44	646.2	30.26	768.6	28.5	— 1.9	80	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	G. W. Scott.
Delaware Breakwater, Del	30.11	764.8	30.13	765.3	38	3.3	72	n.	27	12.1	.....	0	1 k	.....	n.	0	0	clear.....	T. S. Townsend.
Denison, Texas	29.33	745.0	30.17	766.3	38.0	3.3	100	nw.	6	2.7	.....	.....	10 s	.....	.....	1.31	33.3	cloudy.....	J. W. Byram.
Denver, Colorado	24.77	629.1	30.27	768.8	36.0	2.2	64	s.	5	2.2	.....	0	0 s	.....	.....	0	0	fair.....	F. M. Neal.
Des Moines, Iowa	29.23	742 4	30.18	766.6	40	4.4	65	sw.	5	2.2	.....	.....	10 s	.....	sw.	0	0	cloudy.....	F. W. Conrad.
Detroit, Michigan	29.53	750.0	30.27	768.8	36.0	2.2	79	n.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	C. F. R. Wappenhans.
Dodge City, Kansas	27.44	697.0	30.18	766.6	24	— 4.4	76	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	V. P. Temple.
Dubuque, Iowa	29.46	748.3	30.21	767.3	35.4	1.9	89	sw.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. Harvey Smith.
Duluth, Minnesota	29.22	742.2	30.01	762.2	33	0.6	88	s.	6	2.7	.....	0	9 s	.....	.....	0	0	cloudy.....	N. B. Conger.
Eagle Pass, Texas	29.45	748 0	30.28	769.1	38.0	3.3	82	nw.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	F. Belford.
Eagle Rock, Idaho	25.47	646.9	30.33	770.4	5	—15.0	69	n.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	J. M. Clifford.
Eastport, Maine	29.68	753.9	29.75	755.6	31.0	— 0.6	85	n.	20	8.9	.....	.....	0	.....	.....	0	0	clear.....	D. C. Murphy.
Elliott, Fort, Texas	27.35	694.7	30.28	769.1	19	— 7.2	58	calm	0	0	.....	0	0	.....	n.	0	0	cloudy.....	W. J. Cundall.
El Paso, Texas	26.42	671.1	30.27	768.8	30.0	— 1.1	96	w.	1	0.4	.....	0	0	.....	.....	0.11	2.8	clear.....	J. O'Dowd.
Erie, Pennsylvania	29.47	748.5	30.23	767.8	35	1.7	69	n.	3	1.3	.....	.....	10 s	.....	n.	0	0	clear.....	Peter Wood.
Escanaba, Michigan	29.50	749.3	30.20	767.1	32.0	0.0	78	sw.	1	0.4	.....	0	3 s	.....	.....	inap.	inap.	cloudy.....	George Heathcote.
Fredericksburg, Texas	28.34	719.8	30.16	766.1	39	3.9	92	nw.	8	3.6	.....	.....	10 s	.....	.....	0	0	clear.....	Frank Halwegler.
Galveston, Texas	30.00	762.0	30.05	763.3	44	6.7	76	nw.	33	14.8	.....	.....	10ks	.....	.....	0	0	cloudy.....	E. O'C. MacInerney.
Grand Haven, Michigan	29.54	750 3	30.24	768.1	32.0	0.0	78	e.	3	1.3	.....	.....	10 s	.....	n.	0.32	8.1	cloudy.....	J. Mueller.
Grant, Fort, Arizona	25.35	643.9	30.19	766.8	32	0.0	65	ne.	4	1.8	.....	0	0	.....	w.	0	0	cloudy	Robert U. Lord.
Hatteras, North Carolina	30.09	764.3	30.11	764.8	43	6.1	68	ne.	22	9.8	.....	6 c	hz.	n.	.....	0	0	clear.....	R. M. Crawford.
Helena, Montana	25.86	656.8	30.24	768.1	35	1.7	56	sw.	4	1.8	.....	0	0	.....	.....	0	0	fair.....	N. C. Smith.
Henrietta, Texas	29.05	737.9	30.09	764.3	36	2.2	89	calm	0	0	.....	.....	10 s	.....	.....	0	0	clear.....	J. P. Sherry.
Huron, Dakota	28.59	726.2	30.07	763.8	27.8	— 2.3	64	se.	3	1.3	.....	0	0	.....	.....	0.08	2.0	cloudy.....	S. W. Glenn.
Indianapolis, Indiana	29.35	745.5	30.19	766.8	34	1.1	78	e.	3	1.3	.....	1 c	3 s; hz	.....	e.	0	0	clear.....	O. Schutze
Indianola, Texas	30.10	764.5	30.13	765.3	44.0	6.7	76	n.	9	4.0	.....	10 k	0	n.	.....	0	0	fair.....	I. A. Reed.
Jacksboro, Texas	28.96	735.6	30.18	766 6	34	1.1	61	nw.	6	2.7	.....	0	0	.....	.....	0	0	cloudy.....	D. J. Carr.
Jacksonville, Florida	29.84	757.9	29.89	759.2	59	15.0	93	ne.	7	3.1	.....	.....	10 n	.....	.....	0.12	3.0	clear.....	J. W. Smith.
Keogh, Fort, Montana	27.62	701.5	30.28	769.1	28	— 2.2	77	sw.	5	2.2	.....	0	0	.....	.....	0.04	1.0	light rain....	A. Schneider.
Keokuk, Iowa	29.50	749.3	30.19	766.8	41.0	5.0	57	calm	0	0	.....	.....	10 s	.....	.....	0	0	clear.....	F. Z. Gosewisch.
Key West, Florida	29.90	759.4	29.92	760.0	65.0	18.3	73	se.	5	2.2	.....	0	0	.....	.....	0	0	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	30.12	765.0	30.14	765.5	42	5.6	65	n.	26	11.6	.....	0	0	.....	.....	0	0	clear.....	H. Mc P. Baldwin.
Knoxville, Tennessee	28.98	736.1	30.05	763.3	34	1.1	78	ne.	6	2.7	.....	hz.	5 k	.....	ne.	0	0	fair.....	J. A. Cody.
La Crosse, Wisconsin	29 35	745.5	30.17	766.3	38	3.3	73	s.	6	2.7	.....	.....	4 s	.....	.....	0	0	fair.....	S. C. Emery.
Leavenworth, Kansas	29.27	743.4	30.21	767.3	38	3.3	82	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy.....	A. W. Browne.
Lewiston, Idaho	29.38	746.2	30.25	768.3	34.0	1.1	94	s.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy.....	W. Bell.
Little Rock, Arkansas	29.70	754.4	30.02	762.5	37	2.8	89	nw.	10	4 5	.....	.....	10 n	.....	n.	1.29	32.8	light rain....	W. U. Simens.
Los Angeles, California	29.72	754.9	30.12	765.0	44	6.7	60	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	T. S. Collins.
Louisville, Kentucky	29.53	750.0	30.12	765.0	34	1.1	71	ne.	12	5.4	.....	0	3 s	.....	.....	0	0	clear.....	L. M. Dey.
Lynchburg, Virginia	29.47	748.5	30.19	766.8	27	— 2.8	77	calm	0	0	.....	0	2 s	.....	.....	0	0	clear.....	Lewis Dunne.
Mackinaw City, Michigan	29.55	750.6	30.24	768.1	26.5	— 3.1	82	sw.	7	3.1	.....	3 cs	0	nw.	.....	0	0	clear.....	F. K. Day.
Macon, Fort, North Carolina	30.10	764.5	30.11	764.8	39	3.9	82	n.	22	9.8	.....	10 cs	0	.....	.....	0	0	cloudy.....	F. P. Chaffee.
Madison, Wisconsin	29.16	740.7	30.24	768.1	36	2.2	89	se.	4	1.8	.....	.....	10 s	.....	se.	0	0	cloudy.....	O. A. Shaw.
Maginnis, Fort, Montana	25.66	651.8	30.17	766.3	28	— 2.2	47	nw.	22	9.8	.....	0	0	.....	.....	0	0	clear.....	F. Burke.
McKavett, Fort, Texas	27.90	708.6	30.28	769.1	34	1.1	88	nw.	4	1.8	.....	0	0	.....	.....	inap.	inap.	clear.....	J. E. Thatcher.
Marquette, Michigan	29.38	746.2	30.15	765.8	31	— 0.6	78	s.	10	4.5	.....	0	0	.....	.....	0	0	clear.....	J. Gilligan.
Memphis, Tennessee	29.63	752.6	29.98	761.5	37	2.8	100	n.	8	3.6	.....	.....	10 n	.....	.....	1.08	27.4	light rain....	D. T. Flannery.
Milwaukee, Wisconsin	29.43	747.5	30.22	767.6	34	1.1	88	calm	0	0	.....	0	9ks; fg	.....	.....	0	0	cloudy	W. Line.
Missoula, Fort, Montana	26.85	682.0	30.26	768.6	28	— 2.2	70	n.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	J. H. Young.
Mobile, Alabama	29.71	745.6	29.75	755.6	52	11.1	86	w.	10	4.5	.....	.....	10 s	.....	w.	0.63	16.0	cloudy.....	C. A. Read.
Montgomery, Alabama	29.58	751.3	29.82	757.4	45.5	7.5	91	e.	18	8.0	.....	.....	10 n	.....	e.	0.72	18.3	light rain....	J. B. McLaughlin.

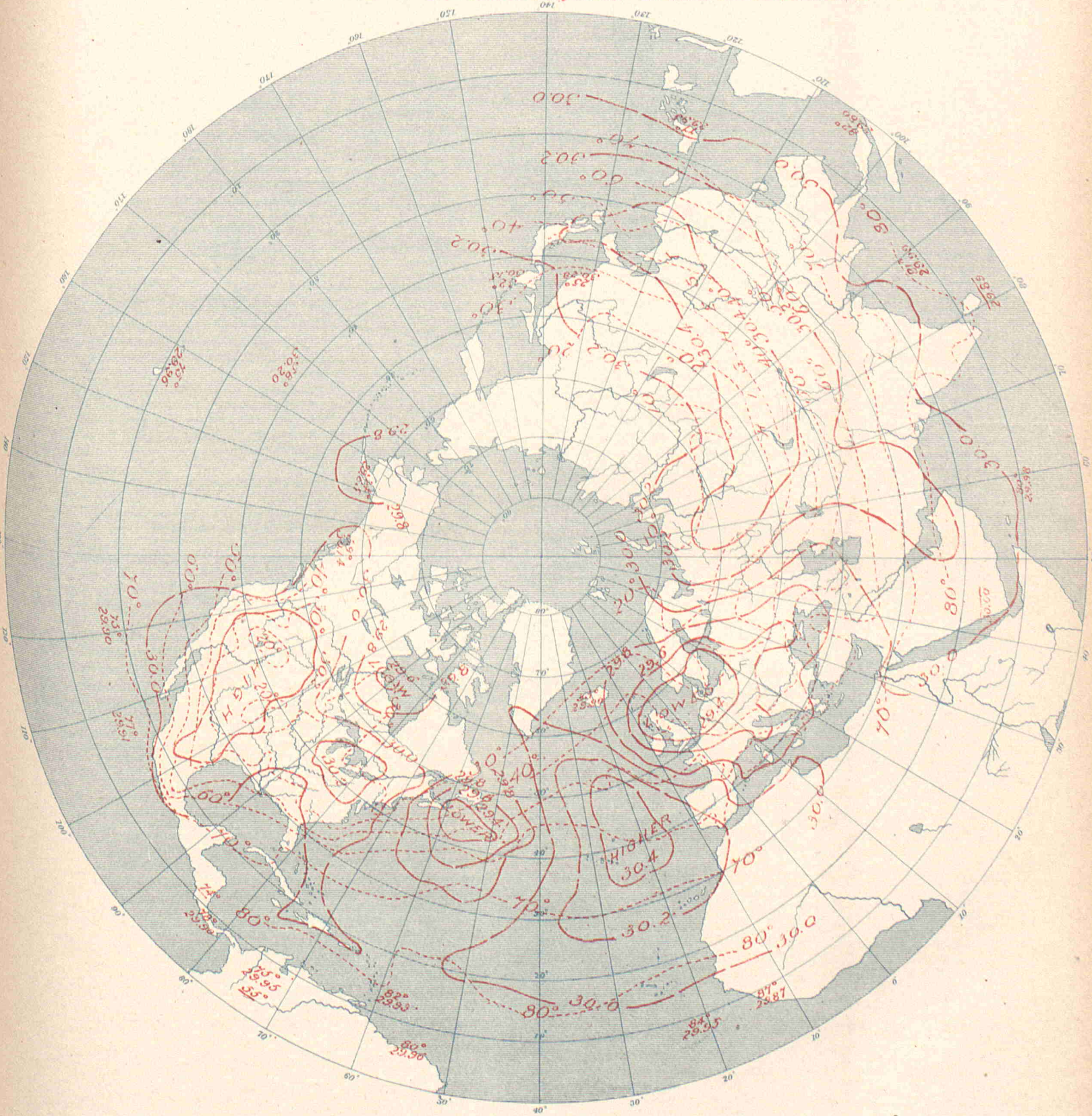
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	28.87	733.3	29.93	760.2	30	— 1.1	88	s.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.17	740.9	30.23	767.8	37.5	3.1	58	ne.	5	2.2	.....	.....	10 s	.....	ne.	0	0	cloudy	J. C. Sprigg, jr
Mt. Washington, N. H	23.44	595.4	30.00	762.0	9.0	—12.8	83	ne.	36	16.1	.....	6 cs	2 s	ne.	ne.	0	0	cloudy	J. G. Linsley.
Nashville, Tennessee	29.38	746.2	29.98	761.5	38.5	3.6	68	ne.	10	4.5	.....	10 cs	0	sw.	.....	0	0	cloudy	L. N. Jesunofeky.
New Haven, Connecticut	29.89	759.2	30.01	762.2	25	— 3.9	64	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	J. H. Sherman.
New London, Connecticut	29.91	759.7	29.96	761.0	27	— 2.8	64	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. G. Lynch.
New Orleans, Louisiana	29.81	757.2	29.87	758.7	49.5	9.7	82	w.	14	6.3	.....	.....	10 s	.....	w.	0.35	8.9	cloudy	L. Dunne.
Newport, Rhode Island	29.89	759.2	29.94	760.5	28.2	— 2.1	79	nw.	13	5.8	.....	0	0	.....	.....	0	0	clear	W. McGillivray.
New York, New York	29.90	759.4	30.08	764.0	28	— 2.2	77	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.12	765.0	30.15	765.8	38	3.3	82	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	Wm. Davis.
North Platte, Nebraska	27.08	687.8	30.16	766.1	18.6	— 7.4	72	w.	8	3.6	.....	0	0	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.09	2.3	.....	J. Dascomb.
Omaha, Nebraska	28.94	735.1	30.18	766.6	31.0	— 0.6	78	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	A. Pollak.
Oswego, New York	29.82	757.4	30.16	766.1	34.6	1.4	73	ne.	14	6.3	.....	.....	10 s	.....	n.	inap.	inap.	cloudy	S. W. Beall.
Palestine, Texas	29.54	750.3	30.11	764.8	39.0	3.9	89	nw.	12	5.4	.....	.....	10 n	.....	nw.	0.39	9.9	light rain	L. M. Pindell.
Pensacola, Florida	29.73	755.1	29.76	755.9	55.1	12.8	86	sw.	14	6.3	.....	.....	10 s	.....	sw.	0.94	23.9	cloudy	M. McGauran.
Philadelphia, Pa	30.02	762.5	30.12	765.0	33.5	0.8	70	nw.	15	6.7	.....	.....	10 ks	.....	nw.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.82	452.6	30.48	774.2	15	— 9.4	76	w.	10	4.5	.....	0	0	.....	.....	0	0	clear	H. Hall.
Pioche, Nevada	24.15	613.4	30.29	769.4	31	— 0.6	65	calm	0	0	.....	0	0	.....	.....	0	0	clear	O. N. Kitchel.
Pittsburg, Pennsylvania	29.37	746.0	30.22	767.6	37.0	2.8	61	nw.	4	1.8	.....	.....	10 s	.....	nw.	0	0	cloudy	W. Daly.
Poplar River, Montana	27.92	709.2	30.21	767.3	.....	.....	.....	sw.	.....	.....	1	0	0	.....	.....	0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	29.87	758.7	29.88	758.9	52.5	11.4	71	nw.	38	17.0	.....	.....	10 s	.....	nw.	0.85	21.6	cloudy	M. Herman.
Port Huron, Michigan	29.55	750.6	30.27	768.8	32.7	0.4	82	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	W. O. Bailey.
Portland, Maine	29.82	757.4	29.87	758.7	32.0	0.0	68	n.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	W. W. Eichelberger.
Portland, Oregon	29.93	760.2	30.00	762.0	43.0	6.1	93	nw.	3	1.3	.....	.....	10 s	.....	.....	0.38	9.7	cloudy	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	42	5.6	74	ne.	23	10.3	.....	sk.	4 ks	.....	ne.	0	0	fair	F. S Coburn.
Prescott, Arizona	24.86	631.4	30.20	767.1	25.3	— 3.7	76	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass	29.85	758.2	29.88	758.9	33	0.6	68	n.	10	4.5	.....	0	8 s	.....	n.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	29.88	758.9	29.89	759.2	70	21.1	73	s.	16	7.2	.....	10 cs	0	s.	.....	0	0	cloudy	W. J. Evans.
Red Bluff, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. van Dyk.
Rochester, New York	29.50	749 3	30.20	767.1	33	0.6	78	n.	6	2.7	.....	.....	10 s	.....	.....	0.04	1.0	cloudy	E. W. McGann
Roseburg, Oregon	29.40	746.7	29.97	761.2	43	6.1	83	calm	0	0	.....	.....	10 s	.....	w.	8	0	cloudy	J. J. Nanry.
Sacramento, California	30.07	763.8	30.15	765.8	41.4	5.2	92	e.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. A. Barwick
St. Louis, Missouri	29.54	750.3	30.17	766.3	36.0	2.2	92	ne.	7	3.1	.....	hz.	2 s	.....	.....	0	0	dense haze	J. H. Weber.
St. Paul, Minnesota	29.15	740.4	30.07	763.8	30.0	— 1.1	88	s.	13	5.8	.....	8 k	0	n.	.....	0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	28.91	734.3	29.84	757.9	30	— 1.1	88	nw.	8	3.6	.....	0	2 k	.....	.....	0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.82	655.8	30.39	771.9	26	— 3.3	45	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Craig.
San Antonio, Texas	29.46	748.3	30.18	766.6	42.5	5.8	74	nw.	10	4.5	.....	0	5 s	.....	n.	0	0	fair	T. J. Kenan.
San Diego, California	30.03	762 7	30.10	764.5	43.1	6.2	86	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.52	749.8	30.24	768.1	39.7	4.3	57	ne.	13	5.8	.....	.....	10 s	.....	.....	0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.06	763.5	30.09	764.3	31.0	— 0.6	78	nw.	24	10.7	.....	0	0	.....	.....	0	0	clear	B. A. Blundon.
San Francisco, California	30.08	764.0	30.15	765.8	46	7.8	93	n.	3	1.3	.....	0	fg.	.....	n.	0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.27	591.0	30.31	769.9	23	— 5.0	44	n	22	9.8	.....	0	0	.....	.....	0	0	clear	H. U. Jones.
Savannah, Georgia	29.94	760.5	30.04	763.0	43	6.1	80	ne.	12	5.4	.....	.....	10 n	.....	ne.	0.12	3.0	light rain	H. W. Ford.
Shaw, Fort, Montana	26.50	673.1	30.32	770.1	29	— 1.7	80	w.	1	0.4	.....	4 cs	0	.....	.....	0	0	fair	A. L. Mathews.
Shreveport, Louisiana	29.77	756.1	30.02	762.5	40	4.4	89	n.	8	3.6	.....	.....	10 s	.....	n.	0.88	22.4	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.89	733.8	30.20	767.1	35	1.7	85	nw.	4	1.8	.....	0	0	.....	.....	0.67	17.0	clear	W. M. Mattingly.
Silver City, New Mexico	24.38	619.2	30.22	767.6	24.0	— 4.4	88	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	30.07	763.8	30.14	765.5	38.9	3.8	73	ne.	4	1.8	.....	.....	10 ks	.....	ne.	0.04	1.0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.60	751.8	30.09	764.3	40.0	4.4	89	w.	4	1.8	.....	.....	10 s	.....	.....	1.02	25.9	cloudy	J. B. Campbell.
Smithville, North Carolina	30.07	763.8	30.11	764.8	39	3.9	65	n.	8	3.6	.....	10 cs	0	w.	.....	0	0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.16	715.3	30.24	768.1	26	— 3.3	76	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	D. Moore.
Springfield, Illinois	29.48	748.8	30.20	767.1	40	4.4	60	ne.	4	1.8	.....	.....	10 s	.....	e.	0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	29.86	758.4	30.00	765.2	28	— 2.2	56	n.	.....	.....	2	1 cs	0	.....	.....	0	0	clear	Charles Mayr.
Springfield, Mo	28.63	727.2	30.14	765.5	33.5	0.8	88	ne.	6	2.7	.....	0	4 s	.....	.....	0.02	0.5	fair	J. B. Marbury.
Starkville, Miss	29.33	745.0	29.83	757.7	44	6.7	96	n	8	3.6	.....	.....	10 n	.....	n.	1.74	44.2	light rain	C. Dill.
Stevenson, Fort, Dakota	28.08	713.2	30.06	763.5	30	— 1.1	81	nw.	16	7.2	.....	0	0	.....	.....	0	0	clear	W. Burrows
Stockton, Fort, Texas	27.14	689.3	30.26	768.6	26.0	— 3.3	88	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.86	758.4	29.91	759.7	33.4	0.8	78	nw.	21	9.4	.....	.....	10 s	.....	n.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.41	696.2	30.25	768.3	30	— 1.1	88	calm	.....	.....	0	0	0	.....	.....	0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.52	749.8	30.24	768.1	30	— 1.1	78	n.	4	1.8	.....	0	1 s	.....	.....	0	0	clear	A. Buell.
Tucson, Arizona	27.71	703.8	30.17	766.3	37	2.8	72	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.83	757.7	30.21	767.3	36	2.2	79	ne.	6	2.7	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. Daly.
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. C. Imlay.
Verde, Fort, Arizona	.....	.....	.....	.....	29.9	— 1.2	59	nw.	.....	.....	1	0	0	.....	.....	0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.62	752.3	29.89	759.2	42.0	5.6	88	nw.	16	7.2	.....	.....	10 s	.....	nw.	1.33	33.8	cloudy	James Keneally.
Visalia, California	29.76	755.9	30.14	765.5	34.0	1.1	96	e.	3	1.3	.....	0	0	.....	.....	0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.54	623.3	30.28	769.1	18.9	— 7.3	91	w.	7	3.1	.....	4 k	0	.....	.....	0	0	fair	T. M. Ambler.
Washington, D. C	30.05	763.3	30.17	766.3	36.7	2.6	71	calm	0	0	.....	10 k	0	nw.	.....	0	0	cloudy	B. M. Pursell.
West Las Animas, Colorado	26.09	662.7	30.21	767.3	17.5	— 8.1	70	sw.	5	2.2	.....	0	0	.....	.....	0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.53	750.0	30.16	766.1	36.5	2.5	65	nw.	4	1.8	.....	.....	10 n	.....	.....	inap.	inap.	light snow	B. F. Hough.
Wilmington, N. Carolina	30.08	764.0	30.14	765.5	38	3.3	72	ne.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.72	653.3	30.25	768.3	26.5	— 3.1	82	e.	10	4.5	.....	0	4 s	.....	sw.	0	0	fair	J. Grover.
Yankton, Dakota	28.68	728.5	30.06	763.5	32	0.0	68	sw.	10	4.5	.....	0	0	.....	.....	0	0	clear	J. H. Atfield.
Yuma, Arizona	29.95	760.7	30.10	764.5	48.0	8.9	42	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3	.....	.....	55.0	12.8	74	e.	1	0.4	.....	3 cs	5ks;8	n.	n.	0.16	4.1	cloudy	Joaquin Gomez.
Havana, Cuba, W. I	29.87	758.7	29.93	760.2	62.4	16.9	86	s.	4	1.8	.....	1 cs	0	.....	.....	0	0	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I	29.99	761.7	30.00	762.0	68	20.0	78	n.	2	0.9	.....	0	1 s	.....	sw.	0	0	fine	Robert Johnston.
Navassa, W. I	29.85	758.2	29.93	760.2	78	25.6	67	ne.	7	3.1	.....	3 cs	2 k	e.	ne.	0.80	20.3	fair	F. M. Everett.
Paramaribo, S. A	29.96	761.0	29.96	761.0	80	26.7	82	se.	.....	.....	2	4 c	5 k	e.	e.	0.360	9.1	.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	75	23.9	94	calm	.....	.....	0	.....	10 ks	.....	n.	0.19	4.8	raining	Francisco J. Cisneros.
Rivas, Nicaragua, C. A	.....	.....	.....	.....	74	23.3	96	e.	.....	.....	1	0	0	.....	.....	0.01	0.3	clear	Earl Flint.
Santiago de Cuba, W. I	29.96	761.0	29.99	761.7	76	24.4	76	calm	0	0	.....	4 ck	6 ks	.....	ne.	0	0	cloudy	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.59	751.6	29.65	753.1	34	1.1	88	se.	.....	.....	5	.....	10 n	.....	.....	0.27	6.9	rainy	W. J. Fisher.
St. Thomas, W. I	29.89	759.2	30.01	762.2	78	25.6	69	n.	.....	.....	.....	.....	8 k	.....	n.	0	0	cloudy	Aug. Walloe.
York Factory, B. A	29.50	749.3	29.56	750.8	31.5	— 0.3	95	sw	10	4.5	.....	1 c	2 s	sw.	sw.	0	0	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, N. 31° 10′ E. 122° 20′	30.50	774.7	55	12.8		ne.			2-3		4	ne.				2	ne.	d. clouds.
H. M. S. Amethyst, Colonia, Uruguay †	30.03	762.7	67.5	19.7	87	n.			2-3		10							misty.
H. M. S. Audacious, N. 10° 09′, E. 57° 58′	29.88	758.9	80	26.7	74	ne.			4		3	e.				3	ene.	d. clouds.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	30.01	762.2	71	21.7	85	wsw.			2-3							2	wsw.	blue sky.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	30.13	765.3	78.5	25.8	86	wnw.			2		0							blue sky.
H. M. S. Cleopatra, N. 31° 14′, E. 121° 28′	30.49	774 4	57	13.9	87	nne.			1-2		10							d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C.	30.01	762.2	42	5.6	91	n.			2		10							raining.
H. M. S. Curacoa, Kobe, Japan	30.22	767.6	49.5	9.7	93	nne.			1		6							d. clouds.
H. M. S. Diamond, S. 31° 21′, E. 158° 26′ *†	30.04	763.0	69	20.6	70	nne.			4		3					1	nne.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	29.86	758.4	64.5	18.1	70	wnw.			2-3		6	wnw.						d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.88	758 9	77.5	25.3	86	s.			3-4		2	s.						d. clouds.
H. M. S. Flamingo, Port of Spain, Trinidad, W. I.	29.91	759.7	82	27.8	91	sse			1		3	se.						d. clouds.
H. M. S. Flying Fish, N. 32° 44′, E. 129° 52′	30.39	771.9	52	11.1	79	calm			0		3							d. clouds.
H. M. S. Gannet, S. 27° 40′, W. 71° 50′	30.06	763.5	62	16.7	80	ssw.			2		10					4	ssw.	misty.
H. M. S. Griffon, N. 17° 04′ W. 72° 24′	29.84	757.9	80	26.7	82	nne.			2		1					1	ne.	blue sky.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.18	766.6	72	22.2	95	e.			1		10	ne.						d. clouds.
H. M. S. Kingfisher, N. 16° 10′ W. 108° 45′	29.91	759.7	77	25.0		ene.			3		2	ne.				2	ne.	d. clouds.
H. M. S. Lark, S. 10° 35′, E. 162° 37′	29.91	759.7	80.3	26.8	89	se.			2		6					2	se.	d. clouds.
H. M. S. Liffey, S. 29- 56′, W. 71° 20′	29.95	760.7	62	16.7		n.			1		10							d. clouds.
H. M. S. Magpie, N. 34° 41′ E. 128° 19′	30.43	772.9	48.8	9.3	53	wsw.			1		0					2	ene.	misty.
H. M. S. Northampton, Halifax, N. S.	29.52	749.8	36	2.2	90	ne.			1		10							d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.49	749.0	69	20.6	100	calm			0									raining.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.80	756.9	82	27.8	85	s.			1		1							blue sky.
H. M. S. Rocket, S. 5° 05′ W. 81° 10′	30.01	762.2	68	20.0	90	s.			2		2							d. clouds.
H. M. S. Sappho, S. 44° 00′, W. 117° 18′	30.00	762.0	50.2	10.1	86	w.			4-5		2	w.				4	w.	d. clouds.
H. M. S. Superb, N. 39° 37′, E. 19° 56′ *	29.98	761.5	65	18.3	35	ese.			3-4		5	se.				4	ese.	squally.
H. M. S. Sylvia, Sandy Point, Patagonia	29.27	743 4	47.5	8.6	77	w.			3-5		5							squally.
H. M. S. Thetis, S. 27° 50′ W. 71° 34′	30.06	763.5	61	16.1	88	s.			2		10					4	s.	misty.
H. M. S. Tourmaline, Aden, Arabia	30.02	762.5				ese.			5		2	ne.						d. clouds.
H. M. S. Woodlark, N. 26° 20′, E. 51° 12′	30.13	765.3	79.5	26.4	70	calm			0		3	s.						d. clouds.
H. M. S. Zephyr, N. 39° 01′, E. 117° 39′	30.41	772 4	35	1.7	70	sw.			1		0							blue sky.
Portuguese Naval																		
Rio Lima, Fogo, Cape Verd Islands	30.01	762.3	84.2	29.0	71						2		ne.			1	sw.	d. clouds.
Tamega, Macao, China	30.21	767.2	73.4	23.0	78	e.			2		0							blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	29.75	755.6	56	13,3	80	w.	9	4.0			10		w.	0.74	18.8			cloudy.
Navy Yard, Portsmouth, N. H.	29.90	759.4	26	— 3.3	7	n.	10	4.5			10		ne.					cloudy.
Naval Hospital, Yokohama, Japan*	30.15	765.8	43	6.1	54	calm			0		0			0	0			clear.
Adams, Sitka, Alaska*†	30.21	767.3	37	2.8	90	e.			1		10							cloudy.
Alaska, Honolulu, Sandwich Island	29.96	761.0	75	23.9	72	ne.			2		8		n.	0	0	sm'h		cloudy.
Alliance, Hampton Roads, Va*†	30.15	765.8	38	3.3	100	nnw.			3		2			0	0			fair.
Ashuelot, Kobe, Japan	30.42	772.7	49	9.4	85	calm			0		2		calm					clear.
Brooklyn, Keel Point, Patagonia	29.41	747.0	54	12.2	67	wsw.	21	9.4			5		wsw.	0	0	sm'h		fair.
Colorado, New York, N. Y.	30.15	765.8	28	— 2.2	100	nw.	15	6.7			0			0	0			clear.
Enterprise, Norfolk, Va	30.17	766.3	39	3.9	81	nw.	2	0.9			2		nw.					clear.
Essex, Callao, Peru	29.95	760.7	64	17.8	83	calm			0		8					sm'h	sse.	fair.
Franklin, Norfolk, Va	30.16	766.1	39	3.9	71	nnw.	6	2.7			2		calm	0	0			fair.
Galena, Montevideo, Uruguay	29.85	758.2	70	21.1	100	ssw.			1		10					sm'h		cloudy.
Hartford, S. 48° 18′, W. 65° 03′*	29.35	745.5	51	10.6	93	wsw.			4		2		light	light		sm'h	s;w	clear.
Independence, Mare Island, Cal.	30.15	765.8	40	4.4	91	calm			0		0							hazy.
Iroquois, Callao, Peru	29.97	761.2	65	18.3	83	calm			0		10							overcast.
Jamestown, Newport, R. I	29.92	760.0	30	— 1.1	89	nw.			4		8					sm'h		fair.
Kearsarge, Norfolk, Va	30.12	765.0	40	4.4	91	nw.			2		2					sm'h		clear.
Lackawanna, Valparaiso, Chili*	29.99	761.7	62	16.7	77	calm			0		0							clear.
Lancaster, Palermo, Sicily*	29.83	757.7	71	21.7	71	sw.			4		5		sw.			sm'h		fair.
Michigan, Erie, Pa	29.98	761.5	47	8.3	69	nne.			3		10		n.					cloudy.
Minnesota, New York, N. Y.	30.17	766.3	28	— 2.2	77	nw.	8	3.6			0							clear.
Monocacy, Yokohama, Japan *	30.11	764.8	45	7.2	92	nnw.			2		2		calm					fair.
New Hampshire, Newport, R. I.	29.97	761.2	31	— 0.6	79	nw.			5		0					sm'h		clear.
Nipsic, Palermo, Sicily*	29.82	757.4	70	21.1	52	w.			4		5		w.			sm'h		fair.
Onward, Callao, Peru	30.11	764.8	62	16.7	94	calm			0		10					long	w.	cloudy.
Palos, Tientsin, China*	30.39	771.9	36	2.2	80	wsw.			1		8		w.					fair.
Pensacola, Callao, Peru*	29.94	760.5	62	16.7	94	nnw.	3	1.3			10			0	0	sm'h		cloudy.
Powhatan, Boston, Mass.	29.94	760.5	23	— 5.0	86	nw.			1		2							fair.
Quinnebaug, N. 41° 16′, E. 11° 45′*	29.68	753.9	58	14.4	87	w.			6		10		w.			r'gh	w.	overcast.
Ranger, N. 16° 04′, W. 98° 35′	29.99	761.7	78	25.6	95	ene.			2		8			0	0	sm'h		fair.
Richmond, Yokohama, Japan*	30.23	767.8	46	7.8	60	nne.			2		0			0	0			clear.
Saratoga, N. 26° 01′, W. 79° 35′	29.86	758.4	72	22.2	85	sw.			3		2		s.	0	0	sm'h		fair.
St. Louis, League Island, Pa.	30.37	771.4	33	0.6	89	nw.			2		8		sse.					cloudy.
Swatara, N. 18° 45′, W. 49° 49′ *	29.84	757.9	80	26.7	82	e.			1		2		s.			long	ne.	fair.
Tennessee, Hampton Roads, Va	30.11	764.8	38	3.3	71	nnw.	9	4.0			0			0	0			clear.
Vandalia, Hampton Roads, Va*	30.14	765 5	38	3.3	90	nw.			2		0							clear.
Wabash, Boston, Mass.	29.91	759.7	23	— 5.0	73	nw.	7	3.1			2		n.	0	0			fair.
Wachusetts, Mare Island, Cal†	30.15	765.8	39	3.9	100	var.			0-1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.22	767.6	48	8.9	85	nw.			1		2		calm					fair.
Yantic, Norfolk, Va	30.11	764.8	42	5.6	83	nnw.			2		2							clear.
Merchant Marine.																		
S. S. Circassian, Liverpool, Eng.*	29.36	745.7	44	6.7	84	nw.			5		6		nw.	8 h'r	8 h'r			showery.
S. S. Grecian, Buenos Ayres, Argentine, Rep*	29.88	758.9	73	22.8	81	nnw.			5		10		nnw.	4 h'r	4 h'r	sm'h		cloudy.
S. S. Nova Scotian, N. 51° 23′ W. 11° 24′	29.79	756.7	50	10.0		nw.			6		8		nw.			long	wnw.	squally.
S. S. Polynesian, N. 54° 53′, W. 20° 35′*	30.18	766.0	48	8.9		nw.			8		8		nw.	hail	hail	hv'y	nw.	cloudy.
S. S. British Crown, N. 49° 45′, W. 22° 07′ †	30.47	773.9	54	12.2		nnw.			3		8		nnw.	0	0	h'vy	nw.	cloudy
S. S. Indiana, N. 45° 25′ W. 52° 32′			47	8.3	85	sw.			4		2?		sw.			mod.	sw.	raining.
S. S. Lord Clive, Fastnet, Ireland*†	29.60	751.8				wnw.			7		3		wnw.	sq'lls	sq'lls	high	wnw.	
S. S. Lord Gough, N. 39° 00′, W. 72° 30′	29.98	761.5	40	4.4		nw.			5		8		nw.	0	0	mod.	nw.	cloudy.
S. S. Pennsylvania, N. 49° 48′, W. 34° 40′†	30.21	767.3	55	12.8		sw.			4		10		sw.	0	0	long	sw.	misty.
S. S. Castor, N. 48° 53′, W. 7° 15′*	29.67	753.0	48.2	9		nw.			6		7		wnw.			7	nw.	squally.
S. S. Jason, N. 47° 51′, W. 34° 38′						var.			6		6 k					6	var.	gloomy.
S. S. Stella, N. 40° 31′ W. 68° 00′	29.75	755.7	42.8	6		ne.			4		6		ene.			3	ne.	d. clouds.
S. S. Anchoria, N. 41° 33′, W. 64° 06′†	29.74	755 4				nw.			5		1		nnw.	shr's	sh'rs	h'vy	ne	showery.
S. S. Bolivia, New York, N. Y.	29.98	761.5	28	— 2.2	100	ne.			2		0			0	0			clear.
S. S. Devonia, N. 41° 55′, W. 58° 27′†	29.38	746.2	48	8.9		wsw.			6		9		wsw.			r'gh	wsw.	squally.
S. S. Dorian, Boston, Mass*	29.76	755.9																
S. S. Ethiopia, N. 54° 53′ W. 15° 50′	29.70	754.4	49	9.4	100	nw.			7		5		nw.	2 h'r	2 h'r	h'vy	nw.	squally.
S. S. Galatia, N. 19° 54′, E. 87° 33′ †	30.16	766.1	79.3	26.3		ne.			4		0			0	0	sm'h	nne.	clear.
S. S. Utopia, N. 40° 06′, E. 14° 18						wnw.			8		9		nw.	0	0	high	wnw.	cloudy.
S. S. Ailsa, N. 34° 04′, W. 74° 07′†	30.02	762.5	57	13.9	81	ne.			5		5		ne.	0	0	cross	var.	fair.
S. S. Alpin, N. 15° 59′ W. 73° 58′	29.95	760.7				ene.			3				e.	0	0	sm'h	ene.	fine.
S. S. Alvo, N. 21° 50′, W. 74° 10′	30.03	762.7	77	25.0		ene.			4		4 k			0	0	short	ene.	fine.
S. S. Ambrose, N. 24° 58′, W. 65° 58′†	30.02	762.5				w.			3		2		w.	0	0	2	n.	fine.
British Merchant, N. 17° 57′, W. 122° 25′	29.90	759.4	75	23.9	93	ne.			6		9							raining.
Bk. Coppename, N. 36° 35′, W. 18° 40′	30.45	773 4	64	17.8	68	ne.			4		9							d. clouds.
Dynomene, N. 12° 40′, E. 88° 00′	29.89	759.2	80.5	26.9	96	ne.			5		9							misty.
May Hulse, S. 17° 51′, W. 33° 25′	29.93	760.2	76.5	24.7	93	w.			3		9							overcast.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.	Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																	
Markland, N. 50° 12′, W. 11° 35′	29.88	758.9	48.5	9.2	73	wnw.		9		8					6	w.	squally.
S. S. Olympus, N. 30° 37′. E. 32° 18′					44	wnw.		2		1							blue sky.
Inchkeith, S. 37° 14′, W. 60° 15′	30.14	765.5	58.4	14.7	?	var.		1		10							raining.
S. S. Mexico, N. 23° 20′, W. 106° 50′†	30.00	762.0	71.6	22.0	73	e.		1		0					sm'h		clear.
S. S. Gallia, N. 51° 05′, W. 13° 15′	29.84	757.9	52	11.1	73	w.		8		5		nw.	sh'rs	sh'rs	high	nw.	
S. S. Marathon. Constantinople, Turkey	29.90	759.4	64	17.8		sw.		4		6		sw.	12 h'r	12 h'r			cloudy.
S. S. Scyth a, N. 45° 00′, W. 44° 30′	29.65	753.1	68	20.0	97	se.		6		10		se.	6 h'r	6 h'r	h'vy	se.	dull.
S. S. Colina, N. 49° 47′, W. 29° 21′ †.	30.38	771.6				sse.		2		10		sse.	o	o	long	n.	foggy.
S. S. Labradore, New York, N. Y			44.6	7									rain	rain			
S. S. Arizona, N. 51° 17′ W. 14° 42′	29.96	761.0	46	7.8		nw.		7		5		nw.	o	o	high	nw.	hail sq'ls
S. S. Wisconsin, N. 50° 10′, W. 34° 06′.	30.07	763.8	53	11.7		s.		6		1		sw.	2 h'r	2 h'r.	sli't	ssw.	clear.
S. S. Wyoming, N. 41° 12′ W. 66° 02′*	29.65	753.1	34	1.1		nw.		4		8		nnw.	o	o	long	n.	fair.
S. S. Bohemia, Hamburg, Germany†	29.12	739.6				sse.		2		5?		se.	snow	snow			overcast.?
S. S. Cimbria, N. 42° 48′. W. 58° 05′	29.35	745.5	46.4	8.0		w.		9		6		wsw.	3 h'r.	3 h'r.	h'vy	nnw.	cloudy.
S. S. Gellert N. 50° 06′, W. 12° 19′	29.95	760.7	56	13.3		wsw.		7		8		nw.	2 h'r	2 h'r	h'vy	nw.	stormy.
S. S. Silesia, New York, N. Y †	30.06	763.5	31	— 0.6		nnw.		1		1		nw.	o	o			
S. S. Vandalia, N. 52° 10′, E. 2° 44′	29.36	745.7	46.0	7.8		nw.		4		3		nw.	o	o	mod.	nw.	fair.
S. S. Wieland, Havre Roads, France	29.59	751.6				nnw.		6		8		n.	6 h'r	6 h'r	high	nnw.	stormy.
S. S. Mentmore, N. 41° —′, W. 62° —′ *	29.51	749 5				wnw.		6		5		wnw.	o	o	high	nw.	threatening.
S. S. Nessmore, N. 52° 15′, W. 22° 56′	30.50	774.7	52.4	11.3	93	wnw.		7		5		wnw.	6 h'r	6 h'r	h'vy	wtfw.	squally.
S. S. Archimedes, N. 50° 12′, W. 13° 03	29.85	758.2				wnw.		8		3		wnw.	1 h'r	1 h'r	h'vy	nw.	squally
S. S. Hevellus, S. 21° 30′ W. 39° 30′*†	30.24	768.1	73	22.8		se.		4		4		ene.	o	o			clear.
S. S. Ptolmey, N. 18° —′, W. 55° 45′	30.03	762.7	80.2	26.8	82	calm		0		4		nnw.	o	o	4	nnw.	blue sky.
S. S. Bulgarian, N. 50° 59′, W. 30° 27′*	30.36	771.1				s.		4		10		sw.	o	c	mod.	nw.	cloudy.
S. S. City of San Antonio, N. 30° 12′, W. 76° 10′†	29.94	760.5	72	22.2		ne.		3		8		ne.	o	o	h'vy	ne.	cloudy.
S. S. Colorado, N. 33° 35′. W. 77° 35′†	30.10	764.5	47	8.3		nnw.		4		10		nne.	o	o	mod.	nne.	cloudy.
S. S. San Marcos, N. 25° 25′, W. 79° 55′	30.17	766.3	82	27.8		ne.		1		0					sm'h		very fine.
S. S. Archimede, Palermo, Sicily*†	29.85	758.2	66	18.9	74	w.		5		3		w.	o	o			fair.
S. S. Glenapp, Rio de Janeiro, Brazil †	29.96	761.0	78	25.6		var.		2		0			o	o			clear.
S. S. Glenfyne, N. 29° 44′, W. 66° 48′						n.		3		1		n.	o	o	long	n.	fair.
S. S. Chalmette, N. 33° 35′, W. 77° 38′†	30.07	763.8	55	12.8		nne.		4		10		ne.	o	o	long	ne.	cloudy.
S. S. Lone Star, N. 27° 28′, W. 87° 00′ †	29.86	758.4	70	21.1		w.		5		5		w.	4 h'r	4 h'r	large	s;w.	fair.
S. S. New York, N. 24° 30′ W. 81° 25′†	29.87	758.7	74.0	23.3		sw.		4		0			o	o	sm'h		clear.
S. S. Denmark, N. 49° 50′, W. 7° 19′	29.83	757.7	50	10.0		wnw.		6		2		nw.	shr's	shr's	r'gh	nw.	squally.
S. S. Egypt, N. 49° 59′ W. 34° 34′*†	30.23	767.8				sw.		4		5?		nw.	3 h'r	3 h'r	mod.	sw.	clear?
S. S. Erin, N. 50° 04′, W. 26° 05′	30.59	777.0	51	10.6		se.		3		10		sw.	o	o	h'vy	nnw.	overcast.
S. S. Helvetia, New York, N. Y	30.08	764 0	35	1.7		n.		1		1		n.	o	o			clear.
S. S. Holland, N. 48° 39′, W. 20° 06′	30.51	774.9	52	11.1		nw.		5		8		wnw.	2 h'r	2 h'r	mod.	nw.	cloudy.
S. S. The Queen, N. 43° 08′, W. 47° 45′*†	29.45	748.0	52	11.1		ssw.		5		10		sw.	4 h'r	4 h'r	mod.	ssw.	hazy.
S. S. Santiago, Cienfuegos, Cuba, W. I.	30.08	764.0	78	25.6	86	calm		0					o	o			fine.
S. S. City of Alexandria, N. 26° 10′, W. 80° 03′†	30.00	762.0	73	22.8		ssw.		2		6?		w.	o	o	h'vy	nne.	clear ?
S. S. City of Merida, N. 30° 00′, W. 79° 52′			73.4	23		ne.		3		10		ne.	2 h'r	2 h'r		ne.	misty.
S. S. Knickerbocker, N. 34° 34′, W. 74° 45′ *†	29.98	701.5	50	10.0		nne.		9								sw.	
S. S. Leerdam, N. 49° 50′ W. 35° 17′*	30.06	763.5	55.5	13.1		wnw.		2–5							mod		cloudy.
S. S. America, N. 49° 31′ W. 7° 56′ *	29.74	755.4	48.5	9.2	78	wnw.		6		6		wnw.	o	o	h'vy	wnw.	squally.
S. S. Donau, N. 47° 20′. W. 40° 45′	29.98	761.5				ese.		5–6		8		sw.	4 h'r	4 h'r	cross	se.	
S. S. Elbe, Bremerhaven, Germany	29.32	744.7	35.6	2.0	100	sw.		2		10			2 h'r	2 h'r			covered.
S. S. Ohio, Galveston Roads Texas	30.14	765.5				nw.		6		9		nw.	2 h'r	2 h'r	mod.	nw.	cloudy.
S. S. Salier, Bremerhaven, Germany						nw.		2		8		nw.	3 h'r	3 h'r			fair.
S. S. Strassburg, N. 49° 10′ W. 4° 32′	29.64	752.8				nw.		7–9		10		nw.	2 h'r	2 h'r	h'vy	nw.	stormy.
S. S. Belgic, Hong Kong, China†	30.23	767.8	72	22.2	80	se.		5		8		e.	o	o	sm'h		cloudy.
S. S. Oceanic, N. 36° 40′ W. 167° 47′ *	30.20	767.1	58	14.4	58	nw.		7		9?		nw.			mod	sw.	clear ?
S. S. City of Augusta, N. 33° 36′, W. 77° 41′†	30.03	762.7				nne.		6		8		nne.	o	o	short	nne.	cloudy.
S. S. Mississippi, Astoria, Oregon†	29.97	761.2	48	8.9	78	ne.		2		10		e.					light rain.
S. S. Oregon, Columbia River †.	29.89	759.2	43.5	6.4	92	ene.		4		10		se.					light rain.
S. S. Ancon, N. 34° 35′, W. 120° 40′†	30.06	763.5	51	10.6	86	n.		4		0					sm'h		hazy.
S. S. Dakota, Victoria, B. C.†	29.43	747.5	41	5.0	82	se.		6		10		se.	8 h'r	8 h'r	sm'h		cloudy.
S. S. Orizaba, N. 37° 12′, W. 121° 40′†	30.02	762.5	54	12.2	80	sw.		2		8					long	sw.	cloudy.
S. S. State of California, N. 46° 15′, W. 124° 10′*†	29.88	758.9	48	8.9	76	e.		5		10		w.			mod.	w.	cloudy.
S. S. Australia, Sydney, N. S. W	30.01	762 2	72	22.2	85	ne.		2		1?		nne.	o	o			cloudy.
S. S. City of New York, Sydney, N. S. W †	29.92	760 0	74	23.3	76	nne.		2		10		nne.	1 h'r	1 h'r			cloudy.
S. S. City of Pekin, Hong Kong, China †	30.38	771.6	72	22.2	80	e.		4		8		ne.	o	o			cloudy.
S. S. City of Rio de Janeiro, N. 32° 40′, W. 120° 14′†	30.10	764.5	56	13.3	81	nw.		2		2		nw.	o	o	light	nw.	fine.
S. S. City of Sydney, N. 20° 21′, W. 158° 04′ †	30.08	764.0	75	23 9	68	ne.		4		2		ne.	o	o	mod.	ne.	fair.
S. S. Grenada, N. 8° 28′, W. 83° 50′†	29.90	759.4	78	25.0	86	wnw.		1		5?		s.	4 h'r	4 h'r	sm'h	w.	clear.?
S. S. San José, N. 16° 49′, W. 99° 52′*†	30.22	767.6				w.		2	2 c	0	wnw.		o	o			
S. S. Bermuda, Basseterre, Guadulope W. I †	29.93	760.2	78	25.6		ene.		2		2		ene.	½h'r	½h'r	sm'h		fine.
S. S. Caracas, N. 31° 30′, W. 71° 50′ †	30.02	762.5	66	18.9	89	nne.		3		10		nne.	2½h'r	2½h'r.	hv'y	nne.	drizzling.
S. S. Claudius, N. 35° 20′, W. 73° 10†	30.06	763.5				nnw.		5		8		wnw.	o	o	r'gh	var.	fair.
S. S. Valencia, N. 15° 49′. W. 68° 17′†	30.03	762.7	82	27.8	73	ne.		2		2		e.	o	o	gentle	nne.	fine.
S. S. Belgenland, N. 48° 20′, W. 16° 45′†	30.44	773 2	52	11.1	86	nnw.		8		8		nnw.	o	o	h'vy	nw.	cloudy.
S. S. Nederland, N. 46° 20′, W. 48° 58′ †	29.75	755.6	47	8.3		se.		4		10					long	se.	foggy.
S. S. Pennland, Antwerp, Belgium	29.43	747.5	36	2.2	100	ssw.		3		7		wsw.	4 h'r	4 h'r			showery.
S. S. Rhynland, Jersey City, N. J	30.10	764.5	29	— 1.7	78	wnw.		3		0							clear.
S. S. Waesland, N. 41° 23′, W. 64° 11′	29.76	755.9	48	8.9	92	nnw.		6		10		n.	rain	rain	cross	ene.	cloudy.
S. S. Maas, N. 45° 55′, W. 49° 10′	29.44	747.8	57.6	14.2	78	e.		6		10			8 h'r	8 h'r	5	s.	raining.
S. S. P. Caland, Rotterdam, Holland	29.29	744.0	40.5	4.7	94	w.		3		5		wnw.					cloudy.
S. S. Schiedam, N 40° 24′ W. 71° 12′	29.93	760.2	48.9	9.4	76	nw.		4		4		nw.	1 h'r	1 h'r	long	nw.	fair.
S. S. W. A. Scholten, New York, N. Y	30.23	767.8	29.1	— 1.6	88	calm		0		2		nw.	o	o			
S. S. State of Georgia, off North of Ireland †	29.23	742.4				wnw.		7		8		w.	rain	rain	r'gh	w.	squally.
S. S. State of Indiana, N. 43° 38′, W. 57° 25′†	29.28	743.7	45	7.2		w.		5		6		w.	12 h'r	12 h'r	cross	e.,n.	showery.
S. S. State of Nevada, New York, N. Y†	30.08	764.0	30	— 1.1		n.		1		0			o	o			clear.
S. S. Hekla, N. 56° 00′, W. 22° 00′ *†	30.22	767.5	47.5	8.6		nw.		7–9		8		nw.	sqll's	sqll's	long	nw.	squally.
S. S. Thingvalla, N. 59° 18′, W. 5° 57′†	29.38	746.2	43.7	6.5		se.		2		3		se.	rain	snow	long	wnw.	clear.
S. S. Iowa, N. 50° 46′, W. 24° 36′ *†	30.56	776.2	50	10.0		w.		3		8		wnw.	3 h'r	3 h'r	r'gh	wnw.	fair.
S. S. Plantyn, N. 43° 11′, W. 45° 33′	29.44	747.8						8					9 h'r	9 h'r	cross	s.	
S. S. Britannic, N. 50° 24′, W. 29° 10′†	30.37	771.4	52	11.1	93	sw.		3		3		w.	o	o	mod	wnw.	fair.
S. S. Celtic, N. 42° 24′, W. 48° 54′†	29.39	746.5	48	8.9	78	sw.		2		10			o	o	h'vy	s.	foggy
S. S. Germanic, St. George's Channel †	29.70	754.4	49	9.4		se.		5–6		6		wnw.	sh'rs	sh'rs	mod.		d clouds.
S. S. Lepanto, N. 43° 00′, W. 41° 30′*	29.84	757.9	67	19.4		se.		9		10		sse.	rain	rain	h'vy	se.	raining.
S. S. Marengo, N. 49° 32′, W. 60° 46′*†	29.68	753.9				wnw.		8		6		wnw.	1 h'r	1 h'r	h'vy	w.	squally.
S. S. Romano, N. 43° 11′, W. 56° 26′	29.27	743.4	52	11.1		sw.		7		8		sw.	o	o	h'vy	sw	
S. S. Salerno, Constantinople, Turkey			60	15.6		calm		0		10		sw.	o	o	sm'h		overcast.
S. S. Catherine Whiting, Philadelphia, Pa†	30.12	765.0				nw.		5				nw.	o	o			
S. S. Norman, N. 39° 14′, W. 75° 04′	30.05	763.3				n.		5					o	o	sm'h		clear.
S. S. Saxon, Philadelphia, Pa *†	30.28	769.1	34	1.1		nw.		4		1		nw.					fine.
MISCELLANEOUS.																	
Bk. Adelaid, N. 18° 34′ W. 65° 55′ *†	30.01	762.2	80	26.7		n.		2				n.	o	o	light	nnw.	clear.
Bg. Alcira, Maracaybo, Venezuela	29.92	760.0	84	28.9		ene.		2		2		ne.	o	o			clear.
S. Annie, M. Law, Kobe, Japan *†	30.32	770.1	51	10.6		ne.		2		3		n.	o	o			fine.
Hk. Anna Thormann, S. 16° 52′. E. 93° 06′*	29.99	761.7	75.0	23.9	78	ese.		6	c	4 k	w.	se.	o	o	r'gh	sse.	fair.
Bk. Antonio Lopez, N. 21° 36′, W. 52° 44′ *	30.04	763.0	80	26.7	78	calm		0		1					sm'h		clear.
Bk. Aquidneck, S. 6° 51′, W. 34° 05′ *†	30.10	764.5				ese.		2				se.			light	se.	clear.
Bk. Aureola, Queenstown, Ireland			48	8.9		nw.		6		6		nw.	5 h'r	5 h'r			squally.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—(ontinued.																		
Bk. Alba, N. 57° 19′, E. 6° 42′*†	29.33	745.0	36	2.2	.....	w.	.....	.....	6	.....	.....	... .	.....	.....	.....	.....	.....	
Bk. Bayonnaise, N. 18° 04′, W. 53° 00′*†	30.08	764.0	.....	.....	.....	wnw.	.....	.....	1	.....	5?	.....	w.	0	0	r'gh	se.	clear?
Sch. Bonny Doon, N. 41° 00′ W. 49° 15′*†	29.53	750.0	.....	.....	.....	ssw.	.....	.....	9	.....	8	.....	sw.	1 h'r	1 h'r	rg'h	sw.	drizzling.
S. S. Burswell, N. 36° 16′ W. 33° 27′ *†	30.21	767.3	77	25.0	.....	se.	.....	.....	4	.....	6	.....	se.	0	0	str'g	sse.	fine.
Bk. Champion, N. 47° 46′, W. 7° 48′†	29.80	756.9	50.0	10.0	.....	nnw.	.....	.....	7	.....	8	.....	wnw.	3 h'r	3 h'r	h'vy	nw.	drizzling.
Schr. Chas. F. Heyer, Apalachicola, Fla ..	29.77	756.1	62	16.7	94	nw.	.....	.....	3	.....	10 s	.....	nw.	1.05	26.7	.....	.....	cloudy.
Schr.C. R. Flint, Cedar Keys, Fla†	29.79	756.7	59	15.0	.....	se.	.....	.....	4	.....	10	.....	se.	3 h'r	3 h'r	.....	.....	stormy.
S. Cornelius, N. 38° 16′, W. 55° 20′ ..	.....	.....	63.5	17.5	.....	nw.	.....	.....	4	.....	8	.....	wnw.	4 h'r	4 h'r	long	wnw.	cloudy.
S. S. D. J. Foley, N. 19° 45′, W. 74° 35′	.....	.....	81	27.2	.....	nne.	.....	.....	3	.....	5	....	e.	0	0	sm'h	.....	fine.
Bkt. David Preston, N. 28° 45′ W. 89° 20′ *†	29.98	761.5	63	17.2	.....	n.	.....	.....	.....	.....	8	.....	n.	0	0	r'gh	n.	
Bk. Don Quixote, Pasoeroen Roads, Java*	29.88	758.9	91	32.8	.....	nw.	.....	.....	4	.....	3?	.....	nw.	0	0	sm'h	.....	cloudy.*
Bk. E. D. Bigelow, N. 44° 44′, W. 25° 40′*†	30.42	772.7	.....	.....	.....	sw.	.....	.....	1	.....	2	.....	.....	0	0	long	nw.	fair
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†	30.17	766.3	43	6.1	.....	nnw.	.....	.....	2	.....	4	.....	calm	0	0	.....	.....	clear.
S. E. J. Spicer, New York, N. Y	30.09	764.3	39	3.9	100	wsw.	.....	.....	6	.....	2	.....	nw.	0	0	.....	.....	clear.
Bk. Eliza Barss, Bermuda, W. I†	29.88	756.9	.....	.....	.....	w.	.....	.....	4	.....	5?	.....	w.	0	0	.....	.....	cloudy.†
S. Enoch Train, Off Antigua, W. I*†	30.08	764.0	.....	.....	.....	e.	.....	.....	2	.....	0	.....	.....	0	0	h'vy	nnw.	clear.
Bk. Essex, Muscat, Arabia*†	30.10	764.5	82	27.8	.....	nnw.	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	nnw.	fine.
Schr. F. E. McDonald, Barnegat, N. J†	30.21	767.3	.....	.....	.....	nnw.	.....	.....	5	.....	0	.....	.....	.....	.....	.....	.....	
S. S. Foscolia, S. 1° 08′, W. 38° 45′*†	29.55	750.6	.....	.....	.....	e.	.....	.....	7	.....	8	.....	e.	0	0	rg'h	e.	cloudy.
Bk. Freya, N. 21° 02′, W. 31° 01′	.....	.....	77	25.0	.....	e.	.....	.....	3	.....	10	.....	nw.	1 h'r	1 h'r	mod.	ese	cloudy.
Bg. George. N. 40° 14′, W. 63° 55 *†	29.73	755.1	.....	.....	.....	w.	.....	.....	6	.....	8	.....	w.	0	0	cross	var.	clearing
S. Glendon, S 17° 45′, W. 101° 00′†	30.01	702.2	75	23.9	.....	e.	.....	.....	4	.....	2	.....	e.	0	0	sm'h	.....	clear.
S. Grecian, N. 20° 53′, W. 59° 25′†	30.04	763.0	81	27.2	78	nne.	.....	.....	1	.....	3	.....	sw.	0	0	mod.	nw.	clear.
Bk. Grey Eagle, N. 33° 54′, W. 54° 12′*†	29.65	753.1	72	22.2	.....	wnw.	.....	.....	6	.....	2	.....	w.	1 h'r	1 h'r	h'vy	wnw.	fair.
Bk. Gronsvaer, S. 42° 00′, E. 160° 10′†..	30.13	765.2	68.0	20.0	100	n.	.....	.....	4	.....	3	.....	n.	0	0	4	sw.	foggy.
Bk. Hattie G. McFarland, New York, N. Y†	30.12	765.0	27	—2.8	.....	nw.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	clear.
Schr Hattie Weston, Icaque, Trinidad W. I*†	29.95	760.7	83	28.3	.....	calm	.....	.....	0	.....	5	.....	e.	1 h'r	1 h'r	sm'h	e.	fair
S. Hedwig, N. 32° 40′, W. 76° 04′	30.04	703.0	59.5	15.3	85	nne.	.....	.....	7	.....	10	.....	nne.	0	0	6	ne.	squally.
Bk. Heinrich & Tonio, N. 39° 24′, W. 55° 33′*†	29.53	750.0	61	16.1	.....	wnw.	.....	.....	5	.....	6	.....	wnw.	3 h'r	3 h'r	mod.	wnw.	squally.
Schr. Isabel Alberto, Cedar Keys, Florida†	29.83	757.7	.....	.....	.....	ese.	.....	.....	4	.....	10	.....	ese.	h'vy	h'vy	.....	.....	cloudy.
S. Ivy, Cork, Ireland†	29.89	759.2	43	6.1	.....	w.	.....	.....	8	.....	3	.....	w.	.....	.....	.....	.....	squally.
Schr. James Slater, N. 8° 01′, W. 51° 46′†.	29.95	760.7	84	28.9	.....	ene.	.....	.....	3	.....	2	.....	ese.	0	0	sm'h	nne.	
Schr. Jennie N. Huddell, Savannah, Ga†	29.99	761.7	52	11.1	93	ne.	.....	.....	5	.....	10	.....	ne.	.....	.....	hv'y	.....	raining.
S. S. John Hopkins, Boston, Mass	.....	.....	30	—1.1	.....	n	.....	.....	5	.....	2	.....	n.	0	0	long	ne.	fair.
Schr. John L. Thomas, Vivorilla Cays, C. A *†	30.04	763.0	.....	.....	.....	n.	.....	.....	1	.....	1	....	ene.	0	0	light	n.	clear.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.84	757.9	.....	.....	.....	ssw.	.....	.....	2	.....	2	....	.....	0	0	.....	.....	clear.
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.14	765.5	80	26.7	78	e.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear.
Light House Tender, Laurel, Key West, Fla†	29.92	760.0	73	22.8	.....	s.	.....	.....	1–2	.....	2	....	ssw.	4½h'r	4½h'r	.....	.....	clear.
Bk. Liberia, N. 7° 50′, W. 21° 50′.*..	29.85	758.2	84	28.9	79	ne.	.....	.....	1–2	.....	4	.....	var.	0	0	small	s.	
Bg. Lilian, N. 9° 40′, W. 58° 40′†	29.92	760.0	84	28.9	.....	ene.	.....	.....	3	.....	3	.....	ne.	½h'r	½h'r	sm'h	.....	squally.
Bg. L. & W. Armstrong, N. 38° 45′, W. 70° 56′*†	30.00	762.0	.....	.....	.....	nw.	.....	.....	8	.....	3	.....	nnw.	0	0	hv'y	var.	clear.
S. S. Madrid, N. 33° 28′, W. 58° 15′*†	29.90	759.4	68	20.0	79	w.	.....	.....	5	.....	1	.....	wnw.	shr's	shr's	r'gh	nw.	fine.
S. S. Malabar, N. 16° 02′, E. 41° 25′*†	30.00	762.0	.....	.....	.....	sse.	.....	.....	2	.....	0	.....	.....	0	0	mod	sse.	clear.
Bg. Mary Gibbs, N. 27° 25′, W. 79° 39′*†	29.86	758.4	70	21.1	.....	se.	.....	.....	2	.....	3?	.....	ssw.	0	0	4	n.	cloudy.†
Bk. Matilda C. Smith, N. 38° 21′, W. 17° 00′*†	30.55	776.0	.....	.....	.....	nne.	.....	.....	4	.....	3	.....	nne.	4 h'r	4 h'r	mod.	nne.	fine.
Bg. Mattie B. Russell, N. 32° 30′ W. 77° 00′*†	30.20	767.1	.....	.....	.....	nne.	.....	.....	6	.....	9	.....	ne.	light	light	long	nne.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	30.03	762.7	.....	.....	.....	ene.	.....	.....	.....	.....	.....	.....	e.	0	0	long	ene.	fair.
S. M. P. Grace, N. 12° 47′, W. 119° 27′*	29.82	757.4	80	26.7	.....	e.	.....	.....	1	.....	7	.....	ese.	0	0	r'gh	con	squally.
Bg. Myrtle, N. 37° 05′, W. 72° 08′†	30.00	762.0	.....	.....	.....	w.	.....	.....	9	.....	8	.....	n.	0	0	long	ne.	cloudy.
Bg. O. C. Clary, N. 25° 50′, W. 60° 08′*†	29.95	760.7	76	24.4	77	w.	.....	.....	4	.....	1	.....	w.	.....	.....	long	n.	clear.
S. Orealla, N. 5° 29′, E. 80° 30′*	29.79	756.7	.....	.....	.....	wsw.	.....	.....	3	.....	6	.....	wsw.	1 h'r	1 h'r	sm'h	.....	showery.
Bk. Orpheus, N. 40° 40′, W. 45° 20′	29.96	761.0	66	18.9	.....	ssw.	.....	.....	4	.....	6 ks	.....	sw.	2 h'r	2 h'r	mod.	w.	fair.
S Paramita, San Francisco, Cal†	30.04	763.0	54	12.2	.....	s.	.....	.....	1	.....	.....	.....	s.	0	0	.....	.....	smoky.
S. S. Peconic, N. 37° 34′, W. 59° 49′*†	29.50	749.3	62	16.7	.....	w.	.....	.....	6	.....	8	.....	wsw.	0	0	r'gh	wnw.	cloudy
S. S. Radnorshire, N. 15° 57′, E. 41° 10′*†	29.96	761.0	.....	.....	.....	se.	.....	.....	3	.....	0	....	.....	0	0	h'vy	se.	clear.
S. St. Francis, S. 15° 00′, W. 101° 00′†	30.11	764.8	70	21.1	.....	ese.	.....	.....	5	.....	3	.....	ese.	0	0	mod.	se.	fine.
Bk. Scud, Genada, W. I*†	29.92	760.0	.....	.....	.....	ne.	.....	.....	4	.....	7	.....	ene.	5 h'r	5 h'r	.....	.....	rainy.
Bk. Southern Belle, Off Dover, Eng*†	29.30	744.2	52	11.1	.....	nw.	.....	.....	5	.....	.....	.....	.....	0	0	sm'h	.....	hazy.
S. S. Strathleven, N. 33° 10′, E. 27° 33′	30.07	763.8	69.0	20.6	66	wnw.	.....	.....	3	.....	5	....	wnw.	.....	.....	5	wnw.	d. clouds.
S. S. Sunbeam, Penarth, Wales	29.40	746.7	43.5	6.4	79	w.	.....	.....	4	.....	4	.....	w.	5 h'r	5 h'r	.....	.....	d. clouds.
Bg. Teneriffe, N. 39° 35′ W. 73° 00′	30.00	762 0	.....	.....	.....	n.	.....	.....	6	.....	.....	....	.....	0	0	mod.	.....	
Bk. Truro, N. 45° 20′, W. 44° 20′ *†	29.76	755.9	.....	.....	.....	se.	.....	.....	6–7	.....	10	.....	se.	.....	.....	long	se.	showery.
U. S. F. C. S. S. FishHawk, Washington, D. C†..	30.27	768.8	40	4.4	82	n.	.....	.....	2	.....	10	....	n.	0	0	.....	.....	cloudy.
Bk. Usko, N. 37° 09′, W. 64° 26′*	29.60	751.8	69	20.6	.....	nw.	.....	.....	4	.....	6	.....	nw.	7 h'r	7 h'r	h'vy	nne.	cloudy.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.37	771.3	64.4	18	.....	var.	.....	.....	.....	.....	8	.....	.....	6 h'r	6 h'r	.....	.....	
Schr. Viola Reppard, N. 37° 58′, W. 74° 06′†	30.08	764.0	42	5.6	.....	n.	.....	.....	3	.....	1	....	.....	0	0	mod.	ne.	
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762.0	... .	.....	.....	s.	.....	.....	1	.....	1	.....	s.	0	0	.....	.....	fine.
Bk. Wandering Jew, S. 21° 35′, W. 38° 19′†	30.09	764.3	73	22.8	.....	sse.	.....	.....	5	.....	5	.....	ssw.	0	0	long	ssw.	fair.
Bk. Warden Law S. 33° 09′, W. 72° 14′	30.14	765.5	.....	.....	.....	s.	.....	.....	6	.....	2	.....	s.	0	0	mod.	s.	fair.
Bgt. Willie, S. 37° 15′, E. 19° 35′*†	30.10	764.5	70	21.1	.....	wsw.	.....	.....	2	.....	2	.....	wsw.	0	0	long	ssw.	clear.
S. Wm. Woodbury, N. 36° 27′, W. 68° 00′*†..	29.97	761.2	58	14.4	.....	n.	.....	.....	7	.....	8?	.....	n.	0	0	high	n.	clear?

International Chart I. November 20, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 21, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.06	763.4	61.5	16.4	83	se.	.....	.....	6	.....	2	.....	.....	0	0	fair	Malaterre.
Algiers	.....	.....	29.91	759.7	62.2	16.8	48	nnw.	.....	.....	6	.....	0	.....	.....	0.402	10.2	clear	Thève.
La Calle	.....	.....	29.82	757.3	58.6	14.8	91	w.	.....	.....	5	.....	5	.....	.....	1.693	43.0	cloudy	Fonfrède.
Tunis	.....	.....	29.84	757.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.07	763.8	59.7	15.4	49	ne.	.....	.....	1	.....	2	.....	.....	0.059	1.5	fair	Pérès.
Tebessa	.....	.....	29.99	761.7	61.5	16.4	36	n.	.....	.....	3	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	58.6	14.8	24	w.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair	Louchamp.
Laghouat	.....	.....	30.06	763.4	64.4	18.0	28	se.	.....	.....	7	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	29.98	761.4	66.2	19.0	51	.....	.....	.....	.....	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	29.47	748.5	29.56	750.8	58.0	14.4	94	wsw.	3	1.3	.....	.....	10	.....	.....	2.06	52.3	showery	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.13	740 0	29.70	754.3	38.8	3.8	97	e	.....	.....	1	.....	8	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.83	732.2	29.61	752.1	36.7	2.6	75	wsw.	2.5	1.1	.....	.....	3	.....	.....	0.043	1.1	.....	Dr. Wierzbiski.
Eperies	28.73	729.7	29.63	752.6	34.9	1.6	83	s.	.....	.....	2	.....	fg.	.....	.....	0.205	5.2	.....	Julius Mikolik.
Gratz	28.41	721.6	29.69	754.0	37.0	2.8	80	w.	.....	.....	2	.....	2	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.20	716.2	29.63	752.7	46.6	8.1	48	nw.	.....	.....	2	.....	2	.....	.....	0.031	0.8	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.30	718.8	29.67	753 6	37.8	3.2	81	wsw.	.....	.....	3	.....	9	.....	.....	0.071	1.8	.....	The Staff.
Lemberg	28.58	725.8	29.60	751.7	32.7	0.4	89	sw.	.....	.....	2	.....	10	.....	.....	0.024	0.6	.....	Dr. T. Stanecki.
Pola	29.50	749.3	29.61	752.2	43.5	6.4	91	ene.	.....	.....	1	.....	10	.....	.....	0.417	10.6	thund'r st'rm	I. R.Hydrographic Office.
Szathmar	29.24	742.7	29.70	754.4	34.3	1.3	87	sw.	.....	.....	4	.....	10	.....	.....	0.091	2.3	.....	Joseph Midlinszay, S. J.
Szegedin	29.47	748.4	29.76	755.8	34.9	1.6	96	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.55	750.5	29.65	753.1	48.7	9.3	66	calm	.....	.....	0	.....	7	.....	.....	0.047	1.2	.....	Royal Academy.
Vienna	28.95	735.3	29.67	753.7	42.4	5.8	61	wsw.	.....	.....	2	.....	2	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.61	752.1	29.71	754.6	37.3	2.9	85	wnw.	17	7.6	.....	.....	9	.....	.....	0.290	7.4	raining	W. Boswell
Armagh, Observatory	29.67	753.6	29.92	760.0	41.9	5.5	91	sw.	9	4.0	.....	.....	10	.....	.....	.....	.....	overcast	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.84	757.9	44.3	6.8	75	nw.	15	6.7	.....	.....	10	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	29.28	743.7	29.83	757.7	40.5	4.7	87	wnw.	12	5.4	.....	.....	8	.....	.....	.....	.....	d. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.39	746.5	29.79	756.7	40.1	4.5	75	w	.....	.....	1	.....	2	.....	.....	0.02	0.5	blue sky	McLandsborough&Preston.
Bridgetown, Barbadoes	29.93	760.2	29.96	761.0	78.0	25.6	90	ne.	.....	.....	2	.....	8	.....	.....	.....	.....	overcast	Corpl. J. Surgenor, A. H.C.
Cardington	.....	.....	.....	.....	42.6	5.9	79	nw.	.....	.....	1.0	.....	2	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E	29.67	753.6	29.80	756.9	41.7	5.4	79	sw.	.....	.....	1	.....	2	.....	.....	blank	blank	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.80	756.9	30.04	763.0	47.8	8.8	65	nw.	.....	.....	3	.....	9	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.64	702.0	29.86	758.4	83.0	28.3	33	e.	.....	.....	1	.....	4	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	88.0	31.1	66	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.17	766.3	30.23	767 8	58.5	14.7	84	nw.	.....	.....	4	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H C.
Glasgow, Observatory	29.59	751.6	29.79	756.7	41.2	5.1	72	w.	.....	.....	1	.....	10 k	.....	.....	blank	blank	d. clouds	Harry Urquhart, Asst
Greenwich, Royal Obs'y	29.66	753.4	29.83	757.7	40.7	4.8	72	nw.	.....	.....	4	.....	6	.....	.....	.....	.....	misty	The Staff.
Guernsey	29.64	752.8	29.95	760.7	46.0	7.8	69	n.	.....	.....	2	.....	4	.....	.....	blank	blank	d. clouds	Harry Urquhart, Asst
Kew, Observatory	29.81	757.2	29.85	758.2	42.0	5.6	65	nw.	12	5.4	.....	.....	6	.....	.....	.....	.....	d. clouds	A. Collenette, F. M. S
Leicester, Museum	29.56	750.8	29.82	757.4	41.5	5.3	79	nw.	.....	.....	1	.....	.....	.....	.....	.....	.....	misty	The Staff.
Malta, Mediterranean	29.82	757.4	29.89	759.2	69.4	20.8	99	sw.	.....	.....	2	.....	2	.....	.....	.....	.....	misty	J. C. Smith.
Nassau, Bahamas	29.84	757.9	29.89	759.2	67.2	19.6	98	sw.	.....	.....	3	.....	10	.....	.....	blank	blank	blue sky	Corpl. Keene, A. H. C.
Oscott, St. Mary's College	29.32	744.7	29.85	758.2	41.6	5.3	82	w.	.....	.....	4	.....	5	.....	.....	.....	.....	overcast	C. S. Duncombe.
Oxford, Radcliffe Obs'y	29.63	752.6	29.86	758.4	43.4	6.3	71	wnw.	.....	.....	5	.....	0	.....	.....	.....	.....	misty	Warren Middleton.
Plymouth	29.90	759.4	29.98	761.5	45.4	7.4	89	nw.	.....	.....	2	.....	10	.....	.....	.....	.....	misty	The Staff.
Sandwick Manse, Orkneys	29.51	749.5	29.61	752.1	38.2	3.4	89	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	overcast	John Merrifield.
Soutari Cemetery, Turkey	29.75	755.6	29.81	757.2	63.2	17.3	70	sw.	.....	.....	3	.....	8	.....	.....	.....	.....	misty	Rev. C. Clouston, L L.D.
Sheffield	29.52	749.8	29.80	750.9	42.2	5.7	81	nw.	.....	.....	2	.....	10	.....	.....	0.02	0.5	d. clouds	W. H. Lyne.
Silloth Rectory	29.79	756.7	29.82	757.4	39.5	4.2	79	n.	.....	.....	1	.....	10	.....	.....	0.265	6.7	overcast	W. F. Cooper.
Stonyhurst, Observatory	.....	.....	29.84	757.9	41.3	5.2	76	w.	5	2.2	.....	.....	10	.....	.....	.....	.....	overcast	Rev. F. Redford, M. A.
Stratfield Turgiss	29.65	753.1	29.87	758.7	43.1	6.2	75	nw.	.....	.....	3	.....	10	.....	.....	.....	.....	foggy	I. New.
Truro, Royal Institution	29.98	761.5	30.02	762.5	51	10.6	78	w.	.....	.....	6	.....	10	.....	.....	.....	.....	d. clouds	Rev. C. H. Griffith, s. F. M. S.
Valencia, Observatory	30.08	764.0	30.11	764.8	45.6	7.6	85	w.	20	8.9	.....	.....	10	.....	.....	.....	.....	gloomy	W. Newcombe.
Canadian.																		raining	The Met'g'l Office.
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charlottetown, P. E. Island	29.42	747.3	29.46	748.3	37	2.8	95	n.	16	7.2	.....	.....	10 n	.....	calm	0.950	24.1	light rain	Hon. J. Ferguson
Chatham, N. B*	29.68	753.9	29.74	755.4	30	— 1.1	96	nw.	15	6.7	.....	.....	10 n	.....	nw.	0.08	2.0	cloudy	H. J. Cundall, C. E
Father Point, Quebec*	29.87	758.7	29.89	759.2	29	— 1.7	88	ne.	25	11.2	.....	.....	10 s	.....	calm	0	0	threatening	G. A. Blair.
Fort Garry, Manitoba*	29.08	738.6	29.93	760.2	31	— 0.6	78	nw.	16	7.2	.....	.....	10 s	.....	nw.	0	0	cloudy	J. McWilliams.
Halifax, N. S*	29.40	748.3	29.60	751.8	32	0.0	92	nw.	12	5.4	.....	10 k	0	n.	.....	0.160	4.1	cloudy	James Stewart.
Kingston, Ontario*	29.66	753.4	30.02	762.5	22	— 5.6	87	ne.	2	0.9	.....	5 c	5 s	calm	calm	0	0	cloudy	A. Allison.
Montreal, Quebec*	29.77	756.2	29.99	761.7	20	— 6.7	93	e.	2	0.9	.....	.....	10 s	.....	.....	0	0	fair	A. P. Knight, M. A.
Parry Sound, Ontario*	29.24	742.7	29.96	761.0	30.0	— 1.1	78	se.	8	3.6	.....	5 k	5 ks	w.	w.	0	0	cloudy	C. H. McLeod, C. E.
Port Dover, Ontario	29.37	746.0	30.11	764.8	24	— 4.4	87	ne.	4	1.8	.....	10 k	0	s.	.....	0	0	cloudy	Rev. R. Mosley.
Port Stanley, Ontario	29.33	745.0	30.01	762.2	30	— 1.1	88	ne.	4	1.8	.....	.....	10 n	.....	sw.	0	0	cloudy	H. Morgan.
Quebec, Quebec*	29.63	752.6	29.98	761.5	15	— 9.4	83	w.	.....	.....	1	0	2	.....	sw.	0	0	cloudy	M. Payne.
Rockliffe, Ontario*	29.53	750.0	30.03	762.7	19	— 7.2	84	n.	2	0.9	.....	.....	fg.	.....	.....	0	0	fair	Capt. Ashe, R. N.
Saugeen, Ontario*	29.20	741.7	29.94	760.5	31	— 0.6	92	se.	16	7.2	.....	.....	10 s	.....	.....	0	0	cloudy	W. H. McIntyre.
St. Andrews, N. B	29.72	754.9	29.77	756.1	24	— 4.4	68	nw.	5	2.2	.....	0	0	.....	.....	0	0	cloudy	
Sydney, C. B*	29.31	744.5	29.37	746.0	38	— 3.3	96	s.	1	0.4	.....	.....	10 n	.....	.....	0.37	9.4	clear	
Toronto, Ontario*	29.62	752.3	30.02	762.5	26	— 3.3	21	n.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	T. C. Hill, C. E
Yarmouth, N. S*	29.68	753.9	29.74	755.4	33	0.6	85	nw.	6	2.7	.....	2 ck	8 k	n.	nw.	0.20	5.1	cloudy	Magnetic Observatory.
Sub-series.																			Lt. F. E. Wilmot, R N.
Mount Forest	29.50	749.3	29.96	761.0	28.0	— 2.2	88	sw.	.....	.....	2	.....	10 s	.....	.....	0	0	.....	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	37.	2.8	100	sw.	.....	.....	.....	.....	fg	.....	.....	0	0	foggy	John Delany
Cape Colony.																			
Cape St. Francis Lt. House	30.10	764.5	30.13	765.3	71.0	21.7	73	ene.	6.0	2.7	.....	0	9 k	.....	.....	0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	30.15	765.8	30.19	766.8	78.5	25.8	63	s.	25	11.2	.....	0	2	.....	.....	0	0	.....	The Staff, for D.Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.06	763.5	36.0	2.2	82	sw.	10.1	4.5	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.32	770.2	30.35	770.8	48.2	9.0	98	n.	1.8	0.8	.....	.....	10 n	.....	.....	0.087	2.2	raining	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.47	748.4	29.51	749.6	31.5	— 0.3	87	nw.	.....	.....	2	.....	8	.....	.....	.....	.....	hazy	Oversergent Fischer.
Fanöe	29.55	750.5	29.57	751.1	27.3	— 2.6	89	ene.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.95	760.8	30.00	761.9	21.4	— 5.9	95	n.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	S. Kleinschmidt.
Ivigtut	29.82	757.3	29.84	757.8	16.3	— 8.7	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.50	749.3	29.54	750.4	33.4	0.8	83	ne.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.53	750.0	29.56	750.9	34.2	1.2	87	calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.45	748.1	29.55	750.5	26.8	— 2.9	91	calm	.....	.....	0	.....	1	.....	.....	.....	.....	.....	Loerer Oesterboi.
Jacobshavn	29.96	760.9	30.00	762.1	11.8	—11.2	.....	sw.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.23	742.5	29.90	759.4	43.9	6.6	88	w.	.....	.....	1	ck	n	.....	nw.	0.799	20.3	.....	M. Labroue, Director.
Alençon, Normal School	29.33	745.0	29.88	759.0	42.4	5.8	88	ne.	.....	.....	1	.....	n	n.	n.	0.118	3.0	.....	M. Nicot, Director.
Arras, Engineer School	29.51	749.5	29.76	755.9	42.8	6.0	87	nw.	.....	.....	1	.....	kn	.....	.....	0.165	4.2	.....	M. Fénéon, Command't.
Avignon, Normal School	29.67	753.7	29.75	755.7	51.4	10.8	50	nnw.	.....	.....	1	.....	0	.....	.....	0.020	0.5	clear	M. Giraud, Director.
Bar-sur-Seine	29.24	742.6	29.81	757.1	38.8	3.8	89	nnw.	.....	.....	1	.....	10 k	.....	wnw.	0.138	3.5	covered	M. Saillard, Director.
Beauvais, Normal School	29.55	750.5	29.82	757.3	43.3	6.3	79	nnw.	.....	.....	1	.....	5	.....	n.	0.252	6.4	cloudy	M. Frère Eugène Marie.
Besançon, Normal School	28.84	732.4	29.73	755.2	40.6	4.8	90	sw.	.....	.....	1	.....	kn	.....	w.	0.098	2.5	.....	M. Gobin, Director.
Bordeaux, Observatory	29.56	750.9	29.83	757.6	48.4	9.1	72	wnw.	.....	.....	1	.....	5	.....	.....	0.622	15.8	cloudy	M. Rayet, Director.
Bourges, Normal School	29.00	736.6	29.63	752.7	41.9	5.5	85	calm	.....	.....	0	.....	n	.....	ssw.	0.071	1.8	.....	M. Malet, Director.
Brest, Naval Observatory	29.80	756.9	30.04	703.1	48.2	9.0	70	n.	.....	.....	2	.....	2	.....	n.	0.295	7.5	.....	M. de Kérmaree, Dir.
Caen, Normal School	29.80	757.0	29.88	758.9	45.3	7.4	69	.....	.....	.....	2	.....	2	.....	nw.	0.2	5.	slightly cl'dy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.48	748.8	29.81	757.1	39.4	4.1	82	e.	.....	.....	1	.....	5	.....	.....	0.012	0.3	cloudy	M. Jadot, Director.
Charleville, Normal School	29.26	743.3	29.78	756.5	39.9	4.4	93	w.	.....	.....	1	.....	5	.....	.....	0.24	6.	½ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.38	720.8	29.76	755.6	42.1	5.6	78	ne.	.....	.....	1	.....	10	.....	.....	0.004	0.1	covered	M. Allnard, Director.
Cluny, Normal School	28.91	734.2	29.80	756.8	43.2	6.2	74	sw.	.....	.....	1	.....	8	.....	.....	0.161	4.1	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.89	733.9	29.78	756.5	37.8	3.2	90	w.	.....	.....	1	.....	10	w.	w.	0.130	3.3	covered	Dr. Coulet, Director.
Gap, Normal School	27.16	689.9	29.72	754.9	42.1	5.6	85	.....	.....	.....	.....	.....	1	.....	n.	0.08	2.	.....	M. Jeangirard, Director.
Grenoble, du Rhone	28.60	726.4	29.74	755.3	45.9	7.7	48	nw.	.....	.....	3	.....	1	.....	nw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	28.90	734.0	29.80	756.8	43.9	6.6	74	ese.	.....	.....	1	ck	0	n.	.....	0.335	8.5	.....	M. Ablard, Director.
Guéret	28.19	715.9	29.76	755.8	41.0	5	77	w.	.....	.....	3	.....	n	.....	w.	0.236	6.0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.66	753.3	29.93	760.3	46.4	8	75	nnw.	.....	.....	2	0	5 n	.....	nnw.	0.51	13.	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.24	742.7	29.81	757.2	45.3	7.4	83	w.	.....	.....	2	.....	10	.....	.....	1.165	29.6	raining	M. Chauvin, Director.
Lorient, Naval Observatory	29.89	759.3	30.00	761.9	49.1	9.5	86	n.	.....	.....	2	.....	8	nw.	n.	0.157	4.0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.73	729.8	29.82	757.4	37.9	3.3	87	w.	.....	.....	1	.....	8	.....	nw.	0.091	2.3	very cloudy	M. André, Director.
Mans, Normal School	29.52	749.9	29.84	757.8	40.8	4.9	85	n.	.....	.....	1	.....	.....	.....	nne.	0.217	5.5	.....	M. Piboen, Director.
Marseille, Observatory	29.46	748.3	29.73	755.2	50.2	10.1	61	nw.	.....	.....	2	.....	2	.....	nw.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.54	623.2	29.38	746.2	34.3	1.3	58	wsw.	9.4	4.2	.....	.....	7	w.	.....	0.256	6.5	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.80	757.0	29.93	760.3	51.8	11	72	nw.	.....	.....	4	.....	5	w.	nw.	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	28.88	733.5	29.68	753.8	39.2	4.0	83	wsw.	.....	.....	2	.....	kn.	.....	w.	0.102	2.6	.....	M. Hasse, Director.
Nantes, Observatory	29.75	755.7	29.91	759.8	49.5	9.7	66	n.	.....	.....	1–3	0	7 k; kn	.....	n.	0.008	0.2	.....	M. Larocque, Director.
Perpignan, Observatory	29.67	753.6	29.78	750.5	53.2	11.8	45	nw.	16.8	7.5	.....	.....	10	nnw.	nw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20 82	528.9	.....	.....	13.6	—10.2	.....	nw.	.....	.....	3–4	.....	10	.....	nw.	2.56	65.0	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.68	728.5	29.77	756.1	46.0	7.8	59	n.	.....	.....	1	.....	5	n	n.	0	0	cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.80	629.8	.....	.....	26.6	— 3.0	100	w.	.....	.....	6	.....	10	.....	.....	0.390	9.9	rain & fog	M. Allnard, Director.
Rochefort, Naval Obs'y	29.83	757 7	29.86	758.5	49.5	9.7	84	calm	.....	.....	0	.....	8	.....	.....	1.18	30.	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.84	757.9	30.06	703.5	47.1	8.4	81	nnw.	.....	.....	3	.....	2	.....	s.	0	0	slightly cl'dy	M. Brotier, Director.
Rodez, Normal School	27.63	701.7	29.83	757.7	36.7	2.6	89	nw.	.....	.....	1	.....	10	.....	se.	0.12	3.	light rain	M. Seger, Director.
Rouen, Normal School	29.81	757.1	29.85	758.3	43.2	6.2	88	sw.	.....	.....	1	.....	5	n.	.....	0.110	2.8	cloudy	M. Moutilot.
Saint Lô	.....	.....	.....	.....	46.0	7.8	70	n.	.....	.....	1	.....	.....	n.	nw.	0.220	5.6	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.65	753.2	29.82	757.4	37.9	3.3	98	sw	.....	.....	1	.....	.....	.....	.....	0.067	1.7	.....	M. Renou, Director.
Toulouse, Observatory	29.16	740.7	29.88	759.0	41.4	5.2	94	wsw.	.....	.....	2	.....	10	w.	.....	0.429	10.9	covered	M. Baillaud, Director.
Tours	29.63	752.6	29.81	757 2	45.7	7.6	77	nnw.	.....	.....	1	.....	10	.....	nne.	0.028	0.7	covered	M. de Tastes.
Versailles, Observatory	29.30	744.7	29.81	757.2	40.3	4.6	90	nw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
GERMAN.																			
Ansbach	28.22	716.9	29.72	754.8	33.4	0.8	80	w.	.....	.....	2	.....	6	nw.	.....	0.228	5.8	.....	Prof. Jnedt.
Bamberg	28.77	730.8	29.60	751.9	35.6	2.0	77	sw.	.....	.....	1	.....	6	sw.	.....	0.197	5.0	.....	Prof. Dr. Hoh.
Berlin	29 33	745.0	29.51	749.6	37.8	3.2	87	w.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.25	737.9	29.58	751.2	34.5	1.4	82	w.	.....	.....	2	.....	10	.....	.....	0.008	0.2	light snow	Royal University Obs'y.
Carlsruhe	29.28	743.6	29.72	754.9	39.9	4.4	89	sw.	.....	.....	3	.....	10	sw.	.....	0.016	0.4	.....	Albert Senz.
Cassel	28.82	732.0	29.53	750.1	35.2	1.8	87	s.	.....	.....	2	.....	5	s.	.....	0.075	1.9	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.32	744.7	29.69	754.0	36.3	2.4	91	ssw.	.....	.....	1	.....	5	.....	.....	0.200	6.6	.....	Physical Society.
Friedrichshafen	28.28?	718.2?	29.74	755 5	41.0	5.0	76	sw.	.....	.....	3	.....	0	sw.	.....	0.295	7.5	.....	Wilhelm, Chief Tel.
Hamburg	29 44	747.7	29.53	750.0	32.0	0.0	100	wsw.	.....	.....	2	.....	10	.....	.....	0.083	2.1	snow & fog	E. Preller.
Kiel	29.51	749.6	29 53	750.0	34.2	1.2	86	calm	.....	.....	0	.....	8	.....	.....	0.177	4.5	snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.17	740 9	29.60	751.8	35.6	2.0	85	sw.	.....	.....	2	.....	6	w.	.....	0.217	5.5	.....	H. Leppig, Asst.
Magdeburg	29.35	745.6	29.55	750.5	37.6	3.1	81	ssw.	.....	.....	1	cs	4 k	n.	wsw.	0	0	.....	Weather Observatory.
Memel	29.53	750 0	29.58	751.2	32.5	0.3	87	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	covered	Issermann.
Munich	27.85	707.4	29 69	754 2	38.7	3.7	73	w.	.....	.....	3	.....	8	w.	.....	0.035	0.9	.....	Central Station.
Neufahrwasser	29.52	749.7	29.53	750.1	29.7	— 1.3	94	se.	.....	.....	2	.....	8	ssw.	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.15	740.3	29.67	753.5	39.6	4.2	92	w.	.....	.....	2	.....	10	w.	.....	0.008	0.2	.....	Dicknether.
Stuttgart	28.73	729 8	29.65	753.0	39.2	4.0	84	w.	.....	.....	1	.....	10	.....	.....	0.028	0.7	.....	Prof. Dr. Schoder.
Wustrow	29.50	749.4	29.53	750.0	33.4	0.8	96	ne.	.....	.....	1	.....	10	.....	.....	0.157	4.0	.....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.50	749.3	29.88	758.9	71.1	21.7	.....	s.	.....	.....	3.0	0	5 k	.....	.....	0	0	.....	Schmidt & Wourlisoh.
INDIAN.																			
Kurrachee	30.02	762.5	30.07	763.8	78.7	25.9	61	w.	14.0	6.3	.....	.....	2	.....	.....	0	0	d. clouds	
Deesa	29.50	749.3	29.98	761.4	81.3	27.4	34	ssw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.89	759.2	29.93	760.1	80.0	26.7	73	nnw.	12.0	5.4	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.06	712.8	29.91	759.7	82.6	28.1	22	ne.	5.0	2.2	.....	.....	3	ese.	.....	0	0	d. clouds	
Trichinopoly	29.64	752.8	29.92	760.0	73.6	23.1	95	calm	0	0	.....	.....	10	.....	.....	0.07	1.8	overcast	
Bellary	28.42	721.8	29.89	759 2	80.4	26.9	34	ne.	2.0	0.9	.....	.....	2	.....	.....	0	0	d. clouds	
Belgaum	27.37	695.2	29.90	759.4	78.9	26.1	39	ne.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.28	743.8	30.06	763.4	65.6	18.7	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.09	739.0	30.02	762.5	68.0	20.0	42	w.	1.0	0.4	.....	.....	4	w.	.....	0	0	.....	
Agra	29.47	748.5	30.05	763.2	73.2	22.9	29	nw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.93	734.8	29.99	761.7	73.9	23.3	28	ene.	4.0	1.8	.....	.....	3	ne	.....	0	0	d. clouds	
Jubbulpore	28.66	728.0	30.05	763.3	70.6	21.4	32	ne.	2.0	0.9	.....	.....	2	n.	.....	0	0	d. clouds	
Lucknow	29.65	753.0	30.04	763.0	68.8	20.4	52	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.70	754.5	30.03	762.8	63.8	17.7	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.85	758 2	30.04	763.0	68.2	20.1	59	nne.	1.4	0.6	.....	.....	3	nne.	nne.	0	0	.....	
Hazaribagh	27.95	710 0	30.03	762.7	64.2	17.9	57	nnw.	4.2	1.9	.....	.....	1	.....	.....	0	0	blue sky	
Cuttack	29.90	759.3	29.98	761.5	73.8	23.2	71	ne.	2.0	0.9	.....	.....	2	.....	.....	0	0	d. clouds	
Calcutta, Allpore	29.96	760 9	29.98	761.4	68.8	20.4	75	n.	1.0	0.4	.....	.....	1	.....	.....	0	0	d. clouds	
Dhubri	29.87	758.7	29.99	761.8	71.0	21.7	72	ene.	7.0	3.1	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.86	758.5	29.96	760.8	75.6	24.2	83	nw.	1.2	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.70	754.5	30.05	763.4	66.6	19.2	79	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.86	758.5	29.88	759.1	81.1	27.3	78	sw.	2.5	1.1	.....	.....	8	.....	e.	0.10	2.5	d. clouds	
Jeypore	28.57	725.6	30.04	762.9	73.7	23.2	38	n.	2.6	1.2	.....	.....	2	n.	.....	0	0	d. clouds	
ITALIAN.																			
Udine	29.24	742.8	29.66	753.4	44.2	6.8	64	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.17	740.8	29.70	754.3	41.0	5.0	66	se.	3.1	1.4	.....	.....	0	.....	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.54	750.2	29.65	753.1	41.9	5.5	75	n.	4.9	2.2	.....	.....	5	sw.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.77	730.7	29.69	754.2	42.6	5.9	60	e.	0.7	0.3	.....	.....	0	ese.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.39	746.4	29.58	751.3	50.0	10.0	33	n.	8.7	3.9			0			0	0		Prof. G. M. Garibaldi.
Mondovi	27.73	704.3	29.68	753.9	37.6	3.1	55	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.60	751.9	29.65	753.1	45.9	7.7	91	ssw.	7.4	3.3			10			0.122	3.1		Prof. Luigi Guidi.
Florence	29.35	745.6	29.61	752.2	48.2	9.0	77	ne.			2		10	sw.		0.091	2.3		Prof. Costantino Pittier.
Leghorn	29.45	748.0	29.54	750.2	54.7	12.6	60	wsw.	9.8	4.4			4			0	0		Prof. P. Monte.
Rome	29.44	747.8	29.62	752.3	58.3	14.6	62	sw.	14.3	6.4			8			0.012	0.3		Prof. P. Tachini.
Lecce	29.45	748.0	29.71	754.5	59.0	15.0	83	ssw.	6.9	3.1			10	sw.		0.110	2.8		Prof. C. de Giorgi.
Cosenza	28.87	733.2	29.76	756.0	55.0	12.8	77	sw.	2.5	1.1			10	w.		1.209	30.7		Prof. D. Conti.
Cagliari	29.52	749.7	29.71	754.7	54.9	12.7	61	nw.			2		9			0.028	0 7		Prof. A. Pacinotti.
Palermo	29.50	749.2	29.74	755.5	66.2	19.0	51	wsw.	11.2	5.0			5	wsw.		0.146	3.7		Prof. G. Cacciatore.
Syracuse	29.71	754.6	29.75	755.7	68.2	20.1	62	wsw.	8.7	3.9			5	wsw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.15	740.3	29.67	753.6	56.1	13.4	74	w.	1.3	0.6			10	w.		0.205	5.2		Prof. F. Brioschi.
Stelvio	21.71	551.5			15.1	— 9.4	78	ne.			2		8			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.70	551.1			16.9	— 8.4	77	e.			2		4			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.09	764.3	30.12	765.1	41.7	5.4	87	calm			0	0 ck	0	w.		0.425	10.8	fair	Hattori.
Awomori	30.05	763.3	30.09	764.3	43.2	6.2	80	s.	8.7	3.9		10 cs	0	w.		0.307	9.3	cloudy	K. Ogawa.
Hakodate	30.00	763.0	30.07	763.8	35.3	1.8	83	calm	0	0			10			0.300	7.6	raining	
Hiroshima					53.4	11.9	68	s.	10.7	4.7		2 cs	8 ck			0	0	covered	Y. Miwa.
Kanazawa	30.06	763.4	30.16	766.1	46.2	7.9	71	se.	4.5	2.0			10			0	0	cloudy	S. Endo.
Kioto	30.07	763.8	30.25	768.3	46.6	8.1	69	nw.	0.5	0.2			10ck;s			0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	30.09	764.2	30.30	769.5	52.9	11.6	80	n.	2.1	0.9		10c;cs	0	w.		0.070	1.8	cloudy	S. Takahayashi.
Nemuro	30.07	763.8	30.14	765.5	35.5	1.9	96	calm	0	0		0	0			0	0	clear	
Niigata	30.09	764.3	30.13	765.3	43.8	6.6	89	s.	2.5	1.1			10 cks		w.	0.205	5.2	covered	M. Morita.
Nobira	30.14	765.5	30.15	765.9	40.6	4.8	92	nw.	4.2	1.9		9ck;cs	0	sw.		0	0	cloudy	H. Midzushima.
Osaka	30.22	767.6	30.24	768.0	48.0	8.9	73	ne.	6.0	2.7		3 ck	7 s	w.		0.010	0.2	cloudy	
Sapporo					32.1	0.1	85	s.	5.4	2.4		2	0			0	0	clear	
Tokei Obs'y, Yeddo	30.13	765.4	30.21	767.4	41.9	5.5	87	nnw.	3.0	1.3		10 ck	0	nnw.		0	0	overcast	The Staff.
Wakayama	30.13	766.6	30.24	768.1	50.6	10.3	75	ne.	2.4	1.1			10		w.	0.027	0.7	raining	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.84	757.9	30.03	762.7	80.0	26.7	55	ene.	12.5	5.6		0	2 k;ks		e.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.70	602.0	29.92	760.0	52.2	11.2	87	wsw.	imp.	imp.		0	0			0	0	light haze	Prof. Vicente Fernandez.
Leon	24.42	620.3	30.30	769.6	45.1	7.3	83	ne.			1	1 c	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.76	756.0	30.02	762.6	66.5	19.2	87	ene.	0.9	0.4		4 cs	0	sw.		0	0	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23.17	588.4	30.31	769.9	47.1	8.4	86	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.25	616.0	30.21	767.3	52.2	11.2	69	ne.	1.8	0.8		1 c	1 k	e.	e.	0	0	clear	M. Tena, M. D.
Orizaba																			Prof. M. M. Cházaro.
Rebellon, Aguascalientes	23.96	608.6	30.06	763.5	47.3	8.5	73	n.			2					0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.4	30.24?	763.1?	40.4	8.0	72	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.57	573.2	30.30	769.7	42.9	6.3	61	n.	3.4	1.5		2	0	ne.		0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.71	754.7	29.71	754.7	44.6	7.0		wnw.			3					0.197	5.0		
Groningen	29.54	750 2	29.59	751.6	37.0	2.8		nne.			1					0.020	0.5		
Helder	29.01	752.2	29.01	752.2	42.1	5.6		nw.			2					0.177	4.5		
Hellevoetsluis	29.68	753.8	29.68	753.8	42.3	5.7	74	w.			3					0.276	7.0		
Utrecht	29.03	752.6	29.08	753.8	42.3	5.7	75	nw.			2		5			0.114	2.9	cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.48	748.9	29.55	750.5	30.6	— 0.8	66	sse.	4	2			7			0	0		
Brono	29.00	751.8	29.04	752.8	25.2	— 3.8	69	e.	4	2			4			0	0		
Christiania	29 37	746.0	29.52	749.9	28.0	— 2.2	71	nnw.	0	0			1			0.004	0.1		
Glæsvær	29.07	753.6	29.09	754.2	23.7	— 4.6		calm					10						
Lodingen	29.65	753.0	29.69	754.2	22.5	— 5.3	75	n.			2		0			0	0		
PORTUGUESE.																			
Angra, Azores	30.30	769.7	30.46	773.6	64.8	18.2	71	se.	11.2	5.0			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.20	741.6	30.21	767.4	54.7	12.6	61	sw.	13.6	6.1			9	nw.		0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.22	767.5	30.30	769.7	69.6	20.9	59	e.	3.1	1.4			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.98	761.5	30.35	770.8	56.1	13.4	60	n.	21.7	9.7			9			0	0		The Staff.
Ponta Delgada, Azores	30.43	773.0	30.50	774.8	63.3	17.4	67	se.	3.1	1.4			3			blank	blank		
Saint Paul de Loando	29.70	755.9	29.96	761.0	74.1	23.4	81	wsw.	0.7	0.3			10			0	0		
Serra da Estrella	25.33	643.3	30.24	768.1	32.4	0.2	100	nw.					9			0.055	1.4		
RUSSIAN.																			
Akmolinski	29.47	748.5	30.68	779.2	6.6	—14.1	96	e.	4	2		0	0			0	0		Major K. Lasarew.
Archangel	29.64	752.9	29.66	753.4	20.8	— 6.2	98	ese.	13	6			10			0.047	1.2		Capt. Sselliwerstow.
Astrakhan	30.14	705.5	30.00	763.4	47.3	8.5	79	ese.	4	2			10			blank	blank		Capt. Wisganow.
Barnaul	29.98	761.5	30.54	775.6	8.2	—13.2	86	w.	0	4			10			0.055	1.4		Meteorological Obs'y.
Derpat	29.39	740.0	29.65	753.1	20.1	— 6.6	100	se.	7	3			10 n			0.039	1.0		Observatory.
Ekaterinburg	29.48	748.7	30.51	775.0	23.2	— 4.9	95	se.	11	5			10			0	0		Meteorological Obs'y.
Kasan	29.81	757.1	30.09	764.3	33.3	0.7	79	sse.	16	7		10 c	0			0.205	5.2		Observatory.
Kertch	29.91	759.8	29.93	760.3	54.5	12.5	96	s.	4	2			9 n			0	0		Lagorio & Sastyrea.
Kieff	28.96	735.6	29.02	752.3	29.8	— 1.2	98	e.	9	4			10 n					snowing	Observatory.
Lugan	29.09	754.1	29.89	759.3	47.1	8.4	73	sw.	0	4			8			0	0		Meteorological Obs'y.
Nikolaiev	29.63	752.5	29.70	754.3	49.6	9.8	96	s.	13	6			10 n			0.083	2.1		Capt. Kurdakow.
Pekin, China	29.93	760.1	30.07	763.7	30.7	2.6	70	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	29.04	752.8	29.05	753.2	22.8	— 5.1	90	sw.	9	4			9 n			0.181	4.6		Central Physical Obs'y.
Semipalatinsk	29.90	761 0	30.70	779.8	5.7	—14.6	91	w.	9	4			8			imp.	imp.		Major Lasarew.
Tashkend, Laboratory	28.56	725 3	30.14	765.6	52.5	11.4	38	calm	0	0			0						Teich, A. M.
Tiflis	28.03	727.2	30.03	762.8	03.3	17.4	49	nw.	13	6		0	2 k			0	0		Physical Observatory.
Tomsk	30.15	765.8	30.40	773.6	13.5	—10.3	89	w.	2	1									
Vladivostock	29.78	756 4	29.85	758 1	35.8	2.1		calm	0	0			10 n			0	0		
Warsaw	29.11	739.5	29.55	750.6	33.8	1.0	83	s.	4	2			10						Astronomical Obs'y.
Wilna	29.22	742.3	29.66	753.4	28.4	— 2.0	88	se.	16	7			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.04	763.1	30.36	771.2	8.2	—13.2	86	w.	4	2			10			0	0		M. O. Marks.
SCOTTISH.																			
Monach Lt			29.67	753.6	46	7.8	92	sw.			4		10			0.2	5.	raining	J. Youngclause.
North Unst			29.50	749.3				n.			7		10						Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.72	754.8	29.82	757.4	56.3	13.5	47	nw.	6.3	2.8		0	1			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.97	761.3	30.03	762.8	50.0	10.0	86	nw.	7.6	3.4			10			0.894	22.7	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.09	688.2	30.16	766.1	40.1	4.5	79	nw.	8.5	3.8		0	6			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.84	707.0	30.11	764.7	48.4	9.1	51	nw.	20.1	9.0		0	4			0	0	cloudy	The Staff.
Murcia, Met. Obs'y	29.88	758 9	29.99	761.8	61.0	16.1	50	wnw.	8.7	3.9		1	3			0	0	clouds	Olayo Diaz, Director.
Oviedo	29.24	742.8	30.12	765.1	48.2	9.0	88	ne.	13.6	6.1			10 n		w.	0.098	2.5	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.34	745 2	30.26	768.5	51.8	11.0	76	n.	18.6	8.3		5				0.201	5.1		R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.87	758.8	29.93	760.3	78.0	25.6	87	ne.	5.5	2.5		5 c	4 ks		ne.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.13	765.2	30.23	767.8	57.2	14.0	60	nw.	7.2	3.2		3	4	w.	w.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.91	759.8	30.00	762.1	78.8	26.0	92	sw.	5.6	2.5		6 ks	2 k	sw.	sw.	0.394	10.0	d. clouds	Manuel Maese.
Tuguegarao, Philippine Id's	29.85	758.2	29.98	761.6	73.9	23.3	96	sse.	0	0			10 kn		ese.	0.60	15.2	rainy	José L. Yrastorza.
SWEDISH																			
Haparanda	29.66	753.4	29.70	754.4	15.8	— 9.0	94	n.			2		10			0.283	7.2		
Umea	29.62	752.3	29.07	753.6	19.4	— 7.0	92	ne.			6		9			0.043	1.1		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	29.55	750.5	29.60	751.8	26.6	— 3.0	91	ne.	.....	.....	4	.....	10	.....	.....	0.339	8.6	.....	
Stockholm	29.16	740.7	29.34	745.2	33.4	0.8	89	s.	.....	.....	2	.....	10	.....	.....	0.157	4.0	.....	
Wisby	29.35	745.5	29.41	747.0	33.4	0.8	78	sw.	.....	.....	4	.....	5	.....	.....	0.110	2.8	.....	
Sub-series.																			
Upsala	29.24	742.7	29.33	744.9	32.9	0.5	96	ese.	5.6	2.5	.....	.....	10	.....	.....	0.094	2.4	snowing	S. G. Fineman.
Swiss.																			
Geneva	28.34	719.7	29.78	756.5	46.2	7.9	55	sw.	.....	.....	2	.....	5	.....	.....	0.217	5.5	cloudy	The Observatory.
Turkish.																			
Constantinople	.....	.....	29.86	758.4	63.9	17.7	65	sw.	14	6.5	.....	.....	9	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	29.81	757.2	61.2	16.2	.....	s.	.....	.....	1	.....	10	.....	.....	0.39	10.	raining	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.20	767.1	70.7	21.5	58	w.	.....	.....	1	.....	3 s	.....	w.	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	29.93	760.2	30.01	762.2	35	1.7	58	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. O. Barnes.
Alpena, Michigan	29.19	741.4	29.89	759.2	30	— 1.1	88	sw.	0	2.7	.....	.....	10 n	.....	.....	0.01	0.3	light snow	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.15	638.8	30.25	768.3	27	— 2.8	61	e.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	W. O. Barnes.
Assinnaboine, Ft., Montana	27.09	688.1	30.07	763.8	31	— 0.6	71	ne.	16	8.0	.....	0	9 s	.....	nw.	0	0	cloudy	B. O. Lenoir.
Atlanta, Georgia	28.81	731.8	30.03	762.7	35.5	1.9	84	nw.	5	2.2	.....	.....	10 s	.....	.....	0.97	24.6	cloudy	H. C. Smith.
Atlantic City, New Jersey	29.96	761.0	29.97	761.2	28	— 2.2	77	n.	5	2.2	.....	2 cs	0	.....	.....	0	0	clear	Jas. M. Watson.
Augusta, Georgia	29.74	755.4	29.94	760.5	39	3.9	86	n.	12	5.4	.....	.....	10 n	.....	n.	2.10	53.3	light rain	John Healy.
Baltimore, Maryland	30.01	762.2	30.06	763.5	31	— 0.6	68	n.	2	0.9	.....	7 cs	fg.	w.	.....	0	0	fair	Geo W Felger.
Barnegat, New Jersey	29.96	761.0	29.98	761.5	32.0	0.0	78	n.	9	4.0	.....	2 k	0	.....	.....	0	0	clear	G. A. Hill.
Bennett, Fort, Dakota	28.58	725.9	30.27	768.8	23	— 5.0	76	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.09	688.1	30.05	763.3	30	— 1.1	70	ne	6	2.7	.....	0	6 ks	.....	.....	0	0	fair	S. Wheaton.
Bismarck, Dakota	28.28	718.3	30.20	767.1	22	— 5.6	87	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	29.92	760.0	29.95	760.7	33	0.6	68	n.	15	6.7	.....	0	0	.....	.....	0	0	clear	J. T. Elker.
Boise City, Idaho	27.11	688.6	30.05	763.3	29	— 1.7	88	s.	4	1.8	.....	4 k	0	w.	.....	0	0	fair	B. E. Light.
Boston, Massachusetts	29.77	756.1	29.93	760.2	26.0	— 3.3	76	nw.	9	4.0	.....	0	hz;sk	.....	nw.	0	0	clear	O. B. Cole.
Brownsville, Texas	30.20	767.1	30.26	768.6	45.0	7.2	83	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.23	742.4	30.01	762.2	27.8	— 2.3	78	e.	4	1.8	.....	1 ck	8 s	ne.	ne.	0	0	cloudy	W. Linn.
Buford, Fort, Dakota	28.06	712.7	30.04	763.0	26	— 3.3	88	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.70	754.4	30.01	762.2	24.3	— 4.3	78	e.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. B Gates.
Cairo, Illinois	29.75	755.6	30.17	766.3	35.8	2.1	75	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. H. Ray.
Cape Henry, Virginia	29.94	760.5	29.96	761.0	42	5.6	82	n.	13	5.8	.....	0	8 s	.....	.....	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	29.96	761.0	29.99	761.7	32.0	0.0	88	n.	12	5.4	.....	3 cs	0	n.	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	29.28	743.7	29.96	761.0	49	9.4	100	se.	.....	.....	9	.....	10ks	.....	se.	0.44	11.2	cloudy	J. J. McLean.
Cedar Keys, Florida	29.86	758.4	29.88	758.9	49	9.4	86	nw.	20	8.9	.....	.....	10ks	.....	nw.	1.10	27.9	cloudy	F. W. Mixer.
Champaign, Illinois	29.20	741.7	30.06	763.5	32.0	0.0	68	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	L. A. Welsh.
Charleston, S. Carolina	29.67	753.6	29.73	755.1	40	4.4	100	nw.	15	6.7	.....	.....	10 s	.....	nw.	1.30	33.0	threatening	J. H. Smith.
Charlotte, N. Carolina	29.00	738.1	29.94	760.5	35.5	1.9	69	n.	13	5.8	.....	.....	10 s	.....	n.	inap.	inap.	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.22	742.2	30.07	763.8	38.0	3.3	85	w.	10	4.5	.....	0	1 s;fg	.....	.....	1.39	35.3	clear	B. L. Goulding.
Cheyenne, Wyoming	24.05	610.9	30.26	768.6	30.2	— 1.0	45	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.20	743.2	30.00	762.0	32.4	0.2	80	w.	7	3.1	.....	0	0	.....	.....	0	0	clear	J. Mitchell.
Chincoteague, Virginia	29.96	761.0	29.98	761.5	34	1.1	78	n.	16	7.2	.....	.....	10ks	.....	e.	0	0	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.40	746.7	30.09	764.3	33	0.6	100	ne.	1	0.4	.....	.....	10 s	.....	e.	0	0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.26	743.2	30.03	762.7	26.1	— 3.3	87	se.	6	2.7	.....	.....	10 s	.....	nw.	0	0	cloudy	J. B. Newlin.
Coleman City, Texas	28.41	721.6	30.30	769.6	32	0.0	100	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.14	740.1	30.03	762.7	30	— 1.1	97	n.	2	0.9	.....	0	6 s	.....	n.	0	0	fair	D. Cuthbertson.
Concho, Fort, Texas	28.28	718 3	30.29	769.4	32.3	0.2	81	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.80	680.7	30.12	765.0	25	— 3.9	88	se.	8	3.6	.....	.....	10 s	.....	calm	0	0	cloudy	W. B. Lamar.
Davenport, Iowa	29.40	746.7	30.10	764.5	34	1.1	71	w.	5	2.2	.....	0	hz.	.....	.....	0	0	clear	R. R. Martin.
Davis, Fort, Texas	25.36	644.1	30.26	768.0	32	0.0	65	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.12	714.2	29.90	759.4	33.3	0.7	80	sw.	8	3.6	.....	.....	1 0 s	.....	sw.	0.07	1.8	cloudy	H. Clifford.
Deadwood, Dakota	25.36	644.1	30.20	767.1	23.5	— 4.7	88	calm	0	0	.....	0	0	.....	.....	0	0	clear	G. W. Scott.
Delaware Breakwater, Del.	29.96	761.0	29.98	761.5	35	1.7	89	n.	16	7.2	.....	4 cs	0	w.	.....	0	0	fair	T. S. Townsend.
Denison, Texas	29.46	748.3	30.30	769.6	35.0	1.7	89	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24.77	629.1	30.27	768.8	31.2	— 0.4	74	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.24	742.7	30.19	766.8	33	0.6	68	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. W. Conrad.
Detroit, Michigan	29.25	742.9	29.99	761.7	40.0	4.4	73	s.	9	4.0	.....	.....	10 k	.....	nw.	0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.59	700.8	30.33	770.4	27	— 2.8	77	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.31	744.5	30.00	763.5	31.5	— 0.3	68	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. Harvey Smith.
Duluth, Minnesota	29.16	740.7	29.95	760.7	37	2.8	72	sw.	7	3.1	.....	0	8 s	.....	sw.	0.01	0.3	cloudy	N. B. Conger.
Eagle Pass, Texas	29.46	748.3	30.29	769.4	36.0	2.2	79	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.32	643.1	30.18	766.6	5	—15.0	79	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	29.73	755.1	29.80	756.9	25.0	— 3.9	80	nw.	16	7.2	.....	0	1 s	.....	.....	0.14	3.6	clear	D. O. Murphy.
Elliott, Fort, Texas	27.41	696.2	30.34	770.6	23	— 5.0	64	nw.	8	3.6	.....	7 c	0	nw.	.....	0	0	fair	W. J. Cundall.
El Paso, Texas	26.41	670.8	30.26	768.6	28.0	— 2.2	88	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.24	742.7	30.00	762.0	31	— 0.6	78	s.	2	0.9	.....	.....	10 s	.....	nw.	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.18	741.2	29.88	758.9	31.0	— 0.6	81	w.	4	1.8	.....	0	9 s	.....	w.	0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.45	722.6	30.27	768.8	36	2.2	100	calm	0	0	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	30.18	766.6	30.24	768.1	48	8.9	77	n.	6	2.7	.....	0	hz.	.....	.....	0	0	clear	E. O'C. MacInerney.
Grand Haven, Michigan	29.22	742.2	29.92	760.0	42.0	5.6	65	sw.	12	5.4	.....	.....	10 k	.....	w.	0	0	cloudy	J. Mueller.
Grant, Fort, Arizona	25.24	641.1	30.08	764.0	40	4.4	54	e.	4	1.8	.....	0	5 k	.....	.....	0	0	fair	Robert C. Lord.
Hatteras, North Carolina	29.80	756.9	29.82	757.4	48	8.9	80	ne.	26	11.6	.....	.....	10 s	.....	ne.	0	0	cloudy	R. M. Crawford.
Helena, Montana	25.66	651.8	30.04	763.0	30	— 1.1	49	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	29.26	743.2	30.30	769.6	31	— 0.6	88	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. P. Sherry.
Huron, Dakota	28.75	730.2	30.23	767.8	24.2	— 4.3	73	w.	8	3.6	.....	0	0	.....	.....	0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.23	742.4	30.07	763.8	31	— 0.6	85	sw.	1	0.4	.....	2 ck	hz	nw.	.....	0	0	light haze	O. Schutze
Indianola, Texas	30.23	767.8	30.26	768.6	49.0	9.4	77	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	I. A. Reed.
Jacksboro, Texas	29.00	736.6	30.22	767.6	40	4.4	82	calm	0	0	.....	8 ck	0	w.	.....	0	0	fair	D. J. Carr.
Jacksonville, Florida	29.81	757.2	29.86	758.4	47	8.3	77	nw.	7	3.1	.....	.....	10 s	.....	nw.	1.61	40.9	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.52	699.0	30.19	766.8	24	— 4.4	70	e.	5	2.2	.....	8 ck	0	nw.	.....	0	0	cloudy	A. Schneider.
Keokuk, Iowa	29.45	748.0	30.14	765.5	32.0	0.0	78	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. Z. Gosewisch.
Key West, Florida	29.84	757.9	29.86	758.4	71.0	21.7	84	w.	23	10.3	.....	.....	10 ks	.....	w.	0.67	17.0	threatening	R. H. Paxton.
Kittyhawk, North Carolina	29.87	758.7	29.89	759.2	48	8.9	71	ne.	26	11.6	.....	0	9 s	.....	ne.	0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.00	736.6	30.07	763.8	34	1.1	83	ne.	2	0.9	.....	0	4 s;sk	.....	.....	0	0	fair	J. A. Cody.
La Crosse, Wisconsin	29.22	742.2	30.04	763.0	32	0.0	78	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	S. C. Emery.
Leavenworth, Kansas	29.32	744.7	30.26	768.6	33	0.6	88	calm	0	0	.....	0	sk.	.....	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.97	735.8	29.84	757.9	37.5	3.1	92	e.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	W. Bell.
Little Rock, Arkansas	29.87	758.7	30.20	767.1	38	3.3	82	nw.	4	1.8	.....	0	0	.....	.....	inap.	inap.	clear	W. U. Simons.
Los Angeles, California	29.72	754.9	30.12	765.0	44	6.7	68	ne.	4	1.8	.....	0	3 s	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.48	748.8	30.07	763.8	36	2.2	79	nw.	2	0.9	.....	0	sk.	.....	.....	0	0	clear	L. M. Dey.
Lynchburg, Virginia	29.30	744.2	30.02	762.5	30	— 1.1	74	ne.	2	0.9	.....	0	8 s	.....	ne.	0	0	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.17	740.9	29.86	758.4	35.0	1.7	89	sw.	5	2.2	.....	10 k	0	nw.	.....	0.28	7.1	cloudy	F. R. Day.
Macon, Fort, North Carolina	29.79	756.7	29.80	756.9	44	6.7	100	ne.	32	14.3	.....	.....	10 n	.....	.....	0.20	5.1	light rain	F. P. Chaffee.
Madison, Wisconsin	28.96	735.6	30.02	762.5	33	0.6	82	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	C. A. Shaw.
Maginnis, Fort, Montana	25.44	646.2	29.94	760.5	32	0.0	52	w.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	F. Burke.
McKavett, Fort, Texas	27.85	704.0	30.23	767.8	34	1.1	81	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.08	738.6	29.85	758.2	35	1.7	69	w.	7	3.1	.....	10 k	0	w.	.....	0	0	cloudy	J. Gilligan.
Memphis, Tennessee	29.84	757.9	30.19	766.8	36	2.2	79	nw.	6	2.7	.....	0	0	.....	.....	0.18	4.6	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.19	741.4	29.98	761.5	33	0.6	78	w.	13	5.8	.....	0	0	.....	.....	0	0	clear	W. Line.
Missoula, Fort, Montana	26.56	674.6	29.97	761.2	27	— 2.8	67	calm	0	0	.....	0	4 s	.....	.....	0	0	fair	I. H. Young.
Mobile, Alabama	30.07	763.8	30.11	764.8	43	6.1	74	n.	12	5.4	.....	.....	10 s	.....	n.	0	0	cloudy	C. A. Read.
Montgomery, Alabama	29.85	758.2	30.09	764.3	36.7	2.7	93	nw.	4	1.8	.....	0	1 s	.....	.....	0.17	4.3	clear	J. B. McLaughlin.

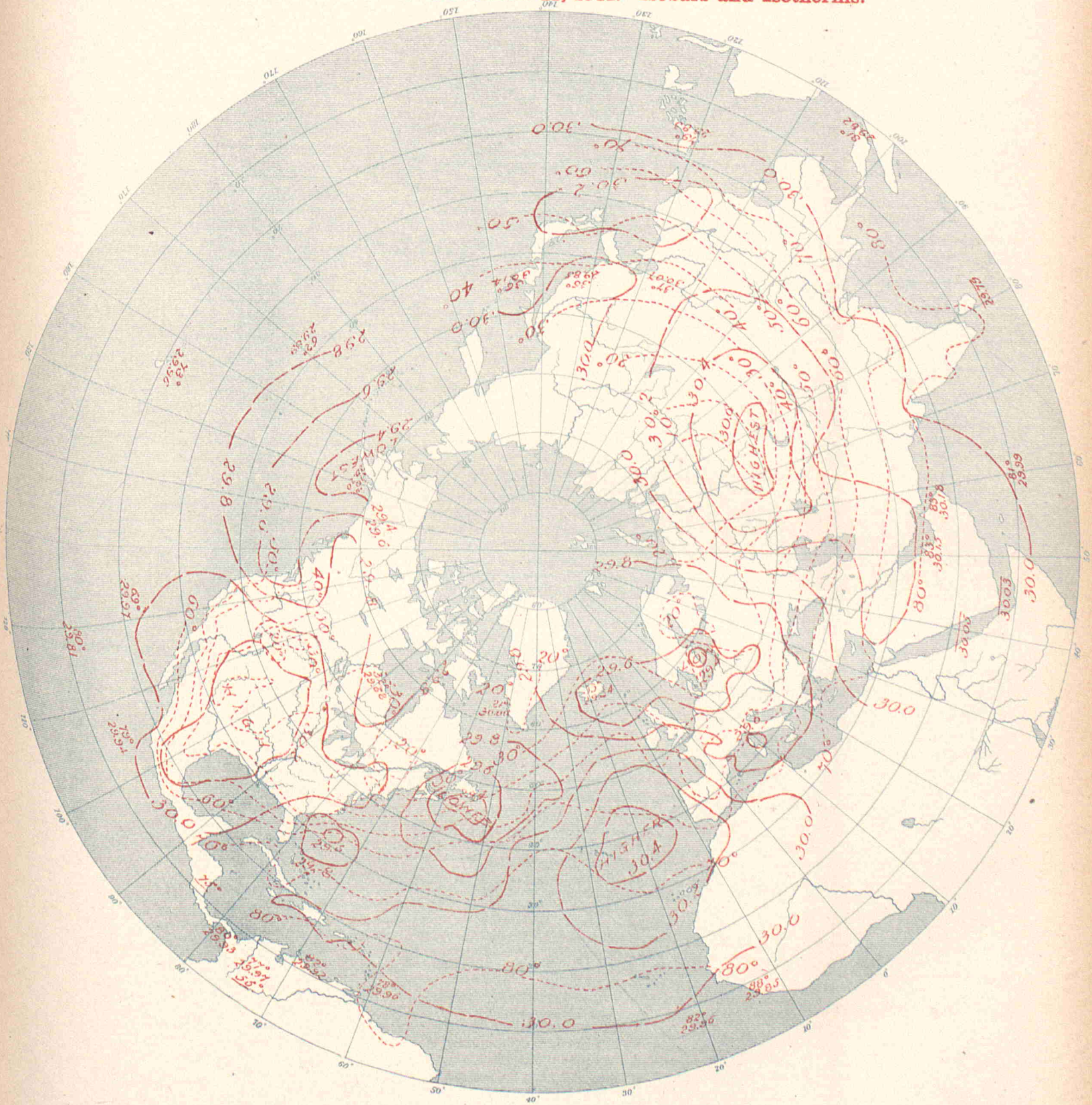
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.00	736.6	30.06	763.5	26	— 3.3	88	w.	10	4.5			10 s			0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.00	736.6	30.06	763.5	26.0	— 3.3	83	calm	0	0		0	fg.			0	0	clear	J. C. Sprigg, jr
Mt. Washington, N. H.	23.47	596.1	30.03	762.7	15.0	— 9.4	15	nw.	37	16.5		0	0			0	0	clear	J. G. Linsley.
Nashville, Tennessee	29.50	749.3	30.10	764.5	35.0	1.7	79	w.	5	2.2		0	0			0.03	0.8	clear	L. N. Jesunofsky.
New Haven, Connecticut	29.85	758.2	29.97	761.2	24	— 4.4	88	n.	2	0.9		0	sk.			0	0	clear	J. H. Sherman.
New London, Connecticut	29.93	760.2	29.98	761.5	29	— 1.7	56	calm	0	0		0	0			0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.08	764.0	30.14	765.5	48.8	9.3	75	n.	10	4.5		0	9 s		n.	0	0	cloudy	L. Dunne.
Newport, Rhode Island	29.90	759.4	29.95	760.7	31.6	— 0.2	76	nw.	8	3.6		0	0			0	0	clear	W. McGillivray.
New York, New York	29.82	757.4	30.00	762.0	31	— 0.6	78	w.	4	1.8		5 cs	0	w.		0	0	fair	J. B. Merrill.
Norfolk, Virginia	29.92	760.0	29.95	760.7	41	5.0	82	n.	4	1.8		0	9s;fg		n.	0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.23	691.6	30.31	769.9	21.6	— 5.8	82	calm	0	0		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	29.58	751.3	29.62	752.3	39.0	3.0	89	calm	0	0			10 n			0.34	8.6	light rain	J. Dascomb.
Omaha, Nebraska	29.03	737.3	30.27	768.8	31.7	— 0.2	55	w.	4	1.8		0	0			0	0	clear	A. Pollak.
Oswego, New York	29.66	753.4	30.00	762.0	35.0	1.7	67	sw.	6	2.7			10 s		nw.	0	0	cloudy	S. W. Beall.
Palestine, Texas	29.70	754.4	30.27	768.8	38.5	3.6	86	nw.	4	1.8			fg.			inap	inap.	dense fog	L. M. Pindell.
Pensacola, Florida	30.04	763.0	30.07	763.8	42.2	5.7	65	nw.	11	4.9		0	7 s		n.	0	0	fair	M. McGauran.
Philadelphia, Pa	29.92	760.0	30.02	762.5	31	— 0.6	88	n.	4	1.8		2 cs	0	sw.		0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.83	452.9	30.49	774.4	16	— 8.9	76	w.	32	14.3		0	0			0	0	clear	H. Hall.
Pioche, Nevada	24 05	610.9	30.19	766.8	35	1.7	53	s.	8	3.6		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.20	741.7	30.05	763.3	27.5	— 2.5	88	nw.	3	1.3			fg.			0	0	dense fog	W. Daly.
Poplar River, Montana	27.73	704.3	30.02	762.5				nw.			4	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.13	765.3	30.14	765.5	47.1	8.4	86	n.	27	12.1			10 s		n.	0	0	cloudy	M. Herman.
Port Huron, Michigan	29.27	743.4	29.99	761.7	32.4	0.2	94	s.	4	1.8			8o s			0	0	cloudy	W. O. Bailey.
Portland, Maine	29.86	758.4	29.91	759.7	32	0.0	78	n.	2	0.9		0	0			0	0	clear	W. W. Eichelberger.
Portland, Oregon	29.64	752.8	29.71	754.6	46.0	7.8	93	se.	6	2.7		0	5 s		s.	0.48	12.2	fair	M. L. Hearne.
Portsmouth, N. C.					50	10.0	93	ne.	43	19.2			10 s		ne.	0	0	cloudy	F. S Coburn.
Prescott, Arizona	24.84	630.9	30.18	766.6	29.3	— 1.5	70	sw.	1	0.4		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	29.87	758.7	29.90	759.4	34	1.1	78	n.	8	3.6		3 k	0	nw.		inap.	inap.	clear	P. T. Jenkins.
Punta Rassa, Florida	29.82	757.4	29.83	757.7	68	20.0	63	nw.	23	10.3		0	9 ks		nw.	0.20	5.1	cloudy	W. J. Evans.
Red Bluff, California																			E van Dyk.
Rochester, New York	29.32	744.7	30.02	762.5	24	— 4.4	73	sw.	7	3.1		10 k	hz.			0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.17	740.9	29.74	755.4	46	7.8	93	s.	1	0.4			10 n		sw.	0.06	1.5	light rain	J. J. Nanry.
Sacramento, California	30.07	763.8	30.15	765.8	47.4	8.6	93	s.	4	1.8			10 n			0.05	1.3	light rain	J. A. Barwick
St. Louis, Missouri	29.53	750.0	30.16	766.1	32.7	0.4	94	w.	9	4.0			fg.			0	0	clear	J. H. Weber.
St. Paul, Minnesota	29.12	739.6	30.04	763.0	30.0	— 1.1	77	w.	8	3.6		0	1 s			0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.02	737.1	29.95	760.7	32	0.0	83	nw.	12	5.4		0	6 s			0	0	fair	C. B Dilley.
Salt Lake City, Utah	25.66	651.8	30.22	767.6	29	— 1.7	59	calm	0	0		0	1 s			0	0	clear	J. Craig.
San Antonio, Texas	29.54	750.3	30.26	768.6	39.5	4.2	82	calm	0	0		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.02	762 5	30.09	764.3	51.1	10.6	96	ne.	2	0.9			fg.			0	0	dense fog	A. C. Dobbins.
Sandusky, Ohio	29.29	744.0	30.01	762.2	32	0.0	78	sw.	10	4.5		0	0			0	0	clear	M. H. Perry.
Sandy Hook, New Jersey	29.97	761.2	30.00	762.0	34.0	1.1	79	n.	7	3.1		5 cs	0	nw.		0	0	fair	B. A. Blundon.
San Francisco, California	30.06	763.5	30.13	765.3	53.5	11.9	90	sw.	5	2.2		0	4 s		sw.	0.01	0.3	fair	N. Gorom.
Santa Fé, New Mexico	23.31	592.1	30.35	770.9	39	3.9	36	e.	7	3.1		1 c	0			0	0	clear	H. U. Jones.
Savannah, Georgia	29.74	755.4	29.83	757.7	40	4.4	82	nw.	14	6.3			10 n		n.	0.52	13.2	light rain	H. W. Ford.
Shaw, Fort, Montana	26.24	666.5	30.06	763.5	21	— 6.1	73	w.	4	1.8		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.99	761.7	30.24	768.1	38	3.3	82	nw.	2	0.9		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.01	736.8	30.32	770.1	27.5	— 2.5	69	n.	4	1.8		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.41	620.0	30.25	768.3	27.0	— 2.8	77	nw.	2	0.9		0	6 s			0	0	fair	N. D. Lane.
Sitka, Alaska	29.75	755.6	29.82	757.4	31.4	— 0.3	78	ne.	7	3.1		0	0			0	0	clear	F. W. Fickett.
Smith, Fort, Arkansas	29.76	755.9	30.26	768.6	32.3	0.2	88	calm	0	0		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	29.67	753.6	29.71	754.6	44	6.7	93	ne.	26	11.6			10 n		ne.	0.19	4.8	light rain	O. Parker.
Spokane Falls, Wash. Ter.	27.78	705.6	29.86	758.4	34	1.1	81	ne.	4	1.8			10 s			0.02	0.5	cloudy	D. Moore.
Springfield, Illinois	29.40	746.7	30.12	765.0	34.5	1.4	79	w.	7	3.1		0	0			0	0	clear	T. B. Jennings.
Springfield, Massachusetts	29.82	757.4	29.96	761.0	26	— 3.3	56				1	0	fg.			0	0	clear	Charles Mayr.
Springfield, Mo	28.74	730.0	30.25	768.3	31.5	— 0.3	88	n.	4	1.8		0	0			0	0	clear	J. B. Marbury.
Starkville, Miss	29.65	753.1	30.15	765.8	35	1.7	89	nw.	8	3.6		0	0			0.47	11.9	clear	C. Dill.
Stevenson, Fort, Dakota	28.23	717.0	30.20	767.1	20	— 6.7	84	nw.	6	2.7		0	0			0	0	clear	W. Burrows
Stockton, Fort, Texas	27.17	690.1	30.29	769.4	31.0	— 0.6	88	sw.	3	1.3		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.85	758.2	29.90	759.4	30.8	— 0.7	74	nw.	12	5.4		0	0			0	0	clear	
Thomas, Camp, Arizona	27.38	695.4	30.22	767.6	37.5	3.1	83	e.			1		10 ks		w.	0	0	cloudy	G. Liebmann.
Toledo, Ohio	29.28	743.7	30.01	762.2	34	1.1	72	sw.	5	2.2			10 s		w.	0	0	cloudy	J. T. Fitzgerald.
Tucson, Arizona	27.63	701.8	30.09	764.3	42	5.6	60	se.	2	0.9		0	8 ks			0	0	cloudy	A. Buell.
Umatilla, Oregon	29.52	749.8	29.90	759.4	34	1.1	89	e.	5	2.2		0	7 s			0.01	0.3	fair	J. L. Whiteside.
Uvalde, Texas																			J. Daly.
Verde, Fort, Arizona					32.3	0.2	62	nw.			1	6 cs	4 s	n.	w.	0	0	cloudy	E. C. Imlay.
Vicksburg, Mississippi	29.92	760.0	30.19	766.8	39.0	3.9	89	calm	0	0			fg.			0.05	1.3	dense fog	D. Brooks.
Visalia, California	29.76	755.9	30.14	765.5	36.2	2.3	89	ne.	2	0.9		0	0			0	0	clear	James Kenealy.
Washakie, Fort, Wyoming	24.45	621.0	30.19	766.8	18.8	— 7.3	87	calm	0	0			9 s			0	0	cloudy	O. D. Stewart
Washington, D. C.	29.94	760.5	30.06	763.5	26.0	— 3.3	84	n.	1	0.4		5 c	0	nw.		0	0	fair	T. M. Ambler.
West Las Animas, Colorado	26 15	664.2	30.27	768.8	16	— 8.9	76	ne.	4	1.8		0	2 s			0	0	clear	B. M. Purssell.
Williamsport, Pa	29.44	747.8	30.07	763.8	24.8	— 4.0	88	w.	1	0.4		8 cs	0			inap.	inap.	cloudy	F. H. Brandenburg.
Wilmington, N. Carolina	29.68	753.9	29.74	755.4	42	5.6	74	ne.	20	8.9			10 ks		ne.	0.19	4.8	threatening	B. F. Hough.
Winnemucca, Nevada	25.53	648.5	30.06	763.5	32.5	0.3	76	sw.	5	2.2		0	1 s		sw.	0	0	clear	Samuel A. Haney.
Yankton, Dakota	28.85	732.8	30.23	767.8	29	— 1.7	67	w.	7	3.1		0	0			0	0	clear	J. Grover.
Yuma, Arizona	29.88	758.9	30.04	763.0	51.0	10.6	30	ne.	6	2.7			10 s		w.	0	0	cloudy	J. H. Atfield.
Sub-series.																			W. S. Delano.
Bogota, U. S. Columbia	22.03	559.6			55.5	13.1	74	ne.	1	0.4			10 s		w.	0.04	1.0	foggy	Joaquin Gomez.
Havana, Cuba, W. I.	29.81	757.2	29.88	758.9	75.1	23.9	85	w.	15	6.7		0	9n;k		w.	0.08	2.0	cloudy	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	30.01	762.2	30.02	762.5	70	21.1	84	n.	1	0.4		10 c	0			0	0		Robert Johnston.
Navassa, W. I.	29.89	759.2	29.97	761.2	74	23 3	83	ne.	9	4.0			10			0.25	6.3	cloudy	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	79	26.1	87	e.			2	5 ck	3 s	e.		0.220	5.6	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.97	761.2	77	25.0	89	calm			0		10 ks		n.	0.07	1.8	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75	23.9	98	ne.			1	0s;c	2 ks	se.	ne.	0	0		Earl Flint.
Santiago de Cuba, W. I.	29.97	761.2	30.00	762.0	74	23.3	76	calm	0	0		5 cs	0			0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.14	740.1	29.20	741.7	36	2.2	89	se.			6		10 n			1.44	36.6	heavy rain	W. J. Fisher.
St. Thomas, W. I.	29.95	760.7	30.07	763.8	77	25.0	69	se.				3 c	4 k	e.	se.	0.05	1.3	fair	Aug. Walloe.
York Factory R A	29.62	752.3	29.68	753.9	31.5	— 0.3	100	s.	16	7.2			10 n		s.	0.13	3.3	snowing	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Ning-Po, China	30.34	770.6	54	12.2	.....	nw.	.....	.....	1	.....	7	w.	.....	.....	.....	.....	.....	misty.
H. M. S. Amethyst, Colonia, Uruguay†	30.03	762.7	70.5	21.4	62	ssw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Audacious, N. 9° 52′, E. 60° 14′	29.79	756.7	81	27.2	87	ne.	.....	.....	3-4	.....	3	ene.	.....	.....	.....	2	ene.	d. clouds.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	30.14	765.5	71	21.7	71	ne.	.....	.....	3	.....	.....	.....	.....	.....	.....	1	nne.	blue sky.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	30.16	766.1	71.5	21.9	67	nnw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Cleopatra, N. 31° 14′, E. 121° 28′	30.32	770.1	55	12.8	100	n.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	29.57	751.1	43	6.1	83	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	raining.
H. M. S. Curacoa, Kobe, Japan	30.14	765.5	52.5	11.4	66	calm	.....	.....	0	.....	8	sw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Diamond, S. 32° 22′, E. 155° 35′ *†	29.96	761.0	70	21.1	71	nw.	.....	.....	7	.....	5	nw.	.....	.....	.....	6	nw.	d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	29.88	758.9	63	17.2	91	ene.	.....	.....	1-2	.....	9	ene.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.89	759.2	76.5	24.7	86	sw.	.....	.....	2	.....	9	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flamingo, San Fernando, Trinidad, W. I.	29.90	759.4	80	26.7	.....	calm	.....	.....	0	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flying Fish, N. 32° 44′ E. 129° 52′	30.28	769.1	58	14.4	81	n.	.....	.....	1	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Gannet, S. 29° 35′, W. 72° 45′	29.94	760.5	61	16.1	88	nw.	.....	.....	2	.....	10	.....	.....	.....	.....	4	ssw.	overcast.
H. M. S. Griffon, N. 17° 33′ W. 74° 17′	29.84	757.9	80	26.7	82	ese.	.....	.....	3	.....	2	se.	.....	.....	.....	1	se.	d. clouds.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.05	763 3	70	21.1	95	n.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Kingfisher, N. 14° 18′ W. 107° 21′	29.94	760.5	79	26.1	.....	ene.	.....	.....	3	.....	2	ne.	.....	.....	.....	2	ne.	d. clouds.
H. M. S. Lark. S. 11° 10′, E. 162° 23′	29.93	700.2	81.3	27.4	85	se.	.....	.....	4	.....	10	.....	.....	.....	.....	3	ne.	thund'r sh's
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.88	758.9	62	16.7	.....	n.	.....	.....	3	.....	10	.....	.....	.....	.....	3	n.	d. clouds.
H. M. S. Magpie, N. 32° 39′, E. 128° 16′	30.23	767.8	49.9	9.9	73	wsw.	.....	.....	2	.....	8	w.	.....	.....	.....	.....	.....	misty.
H. M. S. Northampton, Halifax, Nova Scotia	.....	.....	37.5	3.1	90	nw.	.....	.....	4	.....	10	nnw.	.....	.....	.....	.....	.....	overcast.
H. M. S. Nelson, Melbourne, Australia	29.35	745.5	60	15.6	94	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	raining.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.82	757.4	81	27.2	89	ene.	.....	.....	1	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Rocket, S. 6° 00′, W. 81° 00′	30.04	763.0	64	17.8	100	s.	.....	.....	2	.....	2	.....	.....	.....	.....	3	sw.	misty.
H. M. S. Sappho, S. 44° 15′, W. 112° 30′	30.17	766.3	51.2	10.7	86	w.	.....	.....	5	.....	6	w	.....	.....	.....	4	sw.	d. clouds.
H. M. S. Superb N. 39° 37′. E. 19° 56′ *	29.84	757.9	68	20.0	74	ssw.	.....	.....	5	.....	6	ssw.	.....	.....	.....	5	ssw.	showery.
H. M. S. Sylvia, Sandy Point, Patagonia	29.51	749.5	47.7	8.7	75	wnw.	.....	.....	3-5	.....	6	wnw.	.....	.....	.....	.....	.....	squally.
H. M. S. Thetis, S. 29° 34′, W. 71° 48′	29.96	761.0	61	16.1	88	s.	.....	.....	3	.....	10	.....	.....	.....	.....	5	s.	misty.
H. M. S. Tourmaline, Aden, Arabia	30.03	762.7	.....	.....	.....	ese.	.....	.....	4	.....	2	ne.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Woodlark, Al Bidaa, Arabia	30.05	763.3	82.5	28.1	63	ene.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Zephyr, N. 39° 01′, E. 117° 43′	30.21	767.3	37	2.8	90	sw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.10	764.5	82.4	28.0	74	ne.	.....	.....	2	.....	3	.....	ne.	.....	.....	2	se.	d. clouds.
Tamega, Macao, China	30.15	765.8	75.6	24.2	66	n.	.....	.....	2	.....	10	.....	e.	.....	.....	.....	.....	overcast
Swedish Naval.																		
Vanadis, N. 36° 16′, W. 6° 25′	30.21	767.4	56.7	13.7	86	nnw.	.....	.....	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla.	29.90	759.4	45	7.2	67	nnw.	5	2.2	.....	.....	8	.....	n.	0	0	.....	.....	fair.
Navy Yard, Portsmouth, N. H.	29.91	759.7	27	— 2.8	?	nw.	7	3.1	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Naval Hospital, Yokohama, Japan*	30.05	763.3	52.5	11.4	68	sw.	.....	.....	2	.....	10	.....	sw.	0	0	.....	.....	cloudy.
Adams, Sitka, Alaska *†	29.89	759.2	31	— 0.6	89	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear.
Alaska, Honolulu, Sandwich Islands	29.96	761.0	73	22.8	81	ne.	.....	.....	2	.....	5	.....	n.	0.15	3.8	sm'h	.....	fair.
Alliance, Hampton Roads, Va*†	29.98	761.5	42	5.6	91	n.	.....	.....	2	.....	5	.....	.....	0	0	.....	.....	fair.
Ashuelot, Kobe, Japan	30.33	770.4	53	11.7	79	nne.	.....	.....	1	.....	10	.....	w.	.....	.....	.....	.....	light rain.
Brooklyn, Keel Point, Patagonia	29.63	752.6	51	10.6	78	calm	0	0	.....	.....	5	.....	wsw.	0	0	sm'h	.....	fair.
Colorado, New York, N. Y.	30.10	764.5	32	0.0	89	calm	0	0	.....	.....	5	.....	calm	0	0	.....	.....	fair.
Enterprise, Norfolk, Va	29.99	761.7	44	6.7	75	ne.	.....	.....	2	.....	5	.....	n.	.....	.....	.....	.....	fair.
Essex, Callao, Peru	30.00	762.0	66	18.9	90	se.	.....	.....	1	.....	8	.....	.....	.....	.....	sm'h	.....	fair.
Franklin, Norfolk, Va.	29.95	760.7	42	5.6	75	nne.	6	2.7	.....	.....	10	.....	sw.	0	0	.....	.....	cloudy.
Galena, Montevideo, Uruguay	29.84	757.9	70	21.1	95	nw.	.....	.....	3	.....	2	.....	sw.	.....	.....	mod.	sw.	fair.
Hartford, S. 49° 17′, W. 65° 18′*	29.60	751.8	50	10.0	86	w.	.....	.....	4	.....	5?	.....	.....	0	0	mod.	w.	clear.?
Independence, Mare Island, Cal.	30.14	765.5	50	10.0	93	se.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	light rain.
Iroquois, Callao, Peru	30.04	763.0	65	18.3	89	s.	.....	.....	2	.....	8	.....	s.	.....	.....	.....	.....	cloudy.
Jamestown, Newport, R. I.	29.92	760.0	34	1.1	79	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Kearsarge, Norfolk, Va.	29.94	760.5	43	6.1	100	ne.	.....	.....	2	.....	8	.....	.....	.....	.....	.....	.....	cloudy
Lackawanna, Valpariso, Chili*	29.90	759.4	.....	.....	.....	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Lancaster, Palermo, Sicily*	29.66	753.4	68	20.0	74	w.	.....	.....	3	.....	5	.....	w.	.....	.....	sm'h	.....	fair.
Michigan, Erie, Pa.	30.12	765.0	44	6.7	67	sw.	.....	.....	2	.....	10	.....	sw.	.....	.....	.....	.....	cloudy.
Minnesota, New York, N. Y.	30.12	765.0	29	— 1.7	68	nw.	6	2.7	.....	.....	0	.....	.....	.....	.....	.....	.....	clear.
Monocacy, Yokohama, Japan*.	30.07	763.8	50	10.0	93	ssw.	.....	.....	2	.....	10	.....	sw.	.....	.....	.....	.....	cloudy.
New Hampshire, Newport, R. I.	29.99	761.7	33	0.6	79	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Nipsic, Palermo, Sicily*.	29.71	754.6	68	20.0	56	wsw.	.....	.....	3	.....	5	.....	w.	.....	.....	sm'h	.....	fair.
Onward, Callao, Peru†	30.13	765.3	64	17.8	89	ssw.	.....	.....	2	.....	8	.....	n.	.....	.....	long	w.	cloudy.
Palos, Tientsin, China*	30.03	762.7	38	3.3	80	wsw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Pensacola, Callao, Peru*	29.95	760.7	65	18.3	89	sw.	3	1.3	.....	.....	8	.....	.....	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass	29.90	759.4	26	— 3.3	88	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear.
Quinnebaug, N. 42° 11′, E. 10° 04′*	29.58	751.3	58	14.4	57	W.	.....	.....	4	.....	8	.....	W.	.....	.....	mod.	w.	cloudy
Ranger, N. 15° 33′, W. 96° 08′	30.01	762 2	79	26.1	86	ne.	.....	.....	2	.....	2	.....	.....	0	0	sm'h	.....	clear.
Richmond, Yokohama, Japan*	30.16	766.1	51	10.6	86	sw.	.....	.....	1	.....	10	.....	sw.	0	0	.....	.....	cloudy.
Saratoga, N. 29° 27′, W. 78° 46′	29.65	753.1	67	19.4	79	W.	.....	.....	6-7	.....	10	.....	w.	0	0	r'gh	w.	overcast
St. Louis, League Island, Pa.	30.28	769.1	26	— 3.3	100	nnw.	.....	.....	1	.....	8	.....	.....	.....	.....	.....	.....	cloudy.
Swatara, N. 19° 16′ W. 50° 51′*	29.96	761.0	80	26.7	78	ene.	.....	.....	3	.....	5	.....	e.	.....	.....	sm'h	.....	fair.
Tennessee, Hampton Roads, Va.	29.92	760.0	40	4.4	91	n.	7	3.1	.....	.....	10	.....	.....	0	0	.....	.....	cloudy.
Vandalia, Hampton Roads, Va*	29.92	760.0	43	6.1	75	n.	.....	.....	2	.....	5	.....	n.	.....	.....	.....	.....	fair.
Wabash, Boston, Mass.	29.91	759.7	26	— 3.3	88	nw.	3	1.3	.....	.....	.....	.....	.....	0	0	.....	.....	clear.
Wachusetts, Mare Island, Cal†	30.13	765 3	50	10.0	100	sw.	.....	.....	1	.....	10	.....	calm	.....	.....	sm'h	.....	rainy.
Wyandotte, Washington, D. C.	30.07	763.8	47	8.3	85	ese.	.....	.....	2	.....	5	.....	sw.	.....	.....	.....	.....	fair.
Yantic, Norfolk, Va	29.93	760.2	43	6.1	83	n.	.....	.....	1	.....	8	.....	.....	.....	.....	.....	.....	cloudy.
Merchant Marine.																		
S. S. Grecian, Buenos Ayres, Argentine Rep.*	29.86	758.4	70	21.1	70	s.	.....	.....	4	.....	0	.....	.....	4 h'r	4 h'r	sm'h	.....	clear.
S. S. Nova Scotian, N. 51° 15′, W. 15° 36′	30.14	765.5	50	10.0	.....	wnw.	.....	.....	5	.....	10	.....	w.	.....	.....	long	wnw.	cloudy.
S. S. Polynesian, N. 54° 12′, W. 27° 41′*	29.95	760.7	52	11.1	.....	sw.	.....	.....	5	.....	10	.....	sw.	0	0	r'gh	wsw.	foggy.
S. S. British Crown, N. 50° 40′, W. 14° 47′†	30.25	768.3	56	13.3	.....	wsw.	.....	.....	4	.....	10	.....	nw.	8 h'r	8 h'r	h'vy	n	raining.
S. S. Indiana, N. 47° 16′, W. 40° 19′	.....	.....	42	5.6	91	sw.	.....	.....	3	.....	10	.....	sw.	.....	.....	mod	s.	fine.
S. S. Lord Clive, N. 51° 12′, W. 14° 34′*†	30.10	764.5	.....	.....	.....	wsw.	.....	.....	4	.....	10	.....	.....	14 h'r	14h'r	st'g	wnw.	misty.
S. S. Lord Gough, N. 40° 58′ W. 07° 27′	29.80	756.9	40	4.4	.....	wnw.	.....	.....	5	.....	8	.....	nw.	0	0	mod.	nnw.	cloudy.
S. S. Ohio, Liverpool, Eng.	29.98	761 5	49	9.4	93	wnw.	.....	.....	4	.....	6	.....	nw.	.....	.....	.....	.....	cloudy.
S. S. Pennsylvania, N. 48° 00′, W. 41° 25′ †	29.71	754.6	55	12.8	.....	nw.	.....	.....	4	.....	10	.....	sw.	.....	.....	mod.	s.	cloudy.
S. S. Castor, N. 47° 38′ W. 11° 00′*	30.16	766.1	53.6	12	.....	nnw.	.....	.....	3	.....	7	.....	nnw.	.....	.....	7	nnw.	fair.
S. S. Jason, N. 49° 04′, W. 29° 11′*	29.89	759.2	.....	.....	.....	wnw.	.....	.....	3-4	.....	10 n	.....	.....	.....	.....	4	wnw.	foggy.
S. S. Stella, N. 40° 20′ W. 71° 47′	29.87	758.6	42.8	6	.....	n.	.....	.....	2	.....	2	.....	ne.	.....	.....	2	ne.	d. clouds.
S. S. Anchoria, N. 43° 02′, W. 57° 51′†	29.64	752.8	.....	.....	.....	nw.	.....	.....	5	.....	1	.....	nw.	sh's	sh's	sm'h	.....	clear.
S. S. Bolivia, New York, N. Y.	29.92	760.0	31	— 0.6	100	calm	.....	.....	0	.....	8	.....	.....	0	0	.....	.....	fine.
S. S. Devonia, N. 42° 34′, W. 58° 20′†	29.50	749.3	48	8.9	.....	WsW.	.....	.....	4	.....	5	.....	WsW.	.....	.....	short	wsw.	fair.
S. S. Dorian, Boston, Mass*	29.76	755.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Ethiopia, N. 54° 17′, W. 22° 00′	29.92	700.0	55.5	13.1	100	wnw.	.....	.....	5	.....	6	.....	wnw.	4 h'r	4 h'r	h'vy	nw.	squally.
S. S. Galatia, N. 16° 28′, E. 85° 52′†.	29.84	757.9	83.3	28.5	.....	ne.	.....	.....	0	.....	7	.....	ne.	0	0	sm'h	nne.	cloudy.
S. S. Utopia, N. 41° 39′ E. 11° 21′	.....	.....	60	15.6	71	W.	.....	.....	0	.....	8	.....	w.	2 h'r	2 h'r	high	w.	cloudy.
S. S. Ailsa, N. 37° 30′, W. 73° 48′†	29.98	761 5	50	10.0	72	ne.	.....	.....	5	.....	.....	.....	ne.	0	0	mod.	ne.	fair.
S. S. Alpin, N. 17° 45′ W. 76° 30′	29.96	761.0	.....	.....	.....	e.	.....	.....	2	.....	.....	.....	n.	0	0	sm'h	ene.	fine.
S. S. Alvo, off Jamaica, W. I.	29.94	760.5	77	25.0	.....	sse.	.....	.....	4	.....	10 n	.....	.....	.....	.....	small	ese.	drizzling.
S. S. Antillas, N. 17° 28′, W. 68° 25′	.....	.....	86	30.0	.....	ese.	.....	.....	2	.....	5?	.....	se.	0	0	sm'h	.....	cloudy.?
S. S. Ambrose, N. 28° 07′, W. 67° 43′†	29.99	761.7	.....	.....	.....	sw.	.....	.....	3	.....	3	.....	sw.	0	0	2	w.	fine.
British Merchant, N. 21° 33′, W. 123° 56′	29.97	761.2	69	20.6	96	ene.	.....	.....	5	.....	10	.....	.....	.....	.....	.....	.....	raining.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE—Continued.																	
Bk. Coppename, N. 34° 03′, W. 20° 35′	30.40	772.1	66	18.9	66	s.			5	8							d. clouds.
Dynomene, N. 14° 50′ E. 87° 30′	29.82	757.4	80.5	26.9	96	nne.			6	9							misty.
May Hulse, S. 18° 51, W. 33° 51′	29.96	761.0	79	26.1	74	w.			2	7							d. clouds.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.93	760 2	88	31.1	49	n.			2	1							blue sky
Inchkeith, S. 37° 31′ W. 2° 41′	30.12	765.0	59.6	15.3	?	nw.			5	10							raining.
S. S. Mexico, N. 23° 02′, W. 108° 12′ †	30.00	762.0	75.6	24.2	70	nw.			1	8		nw.			sm'h		fair.
S. S. Gallia, N. 50° 14′, W. 20° 55′	30.26	768.6	54	12.2	100	wsw.			6	8		w.	shr's	shr's	mod.	wnw.	
S. S. Marathon, Constantinople, Turkey	29.87	758.7	67	19.4		sw.			5	6		sw.	o	o			cloudy.
S. S. Scythia, N. 47° 10′, W. 37° 40′	29.78	756.4	65	18.3	94	se.			6	10		se.	6 h'r	6 h'r	h'vy	se.	dull.
S. S. Colina, N. 52° 14′, W. 23° 49′ †	30.19	766.8				ssw.			3	8		ssw.	o	o	mod.	w.	cloudy.
S. S. Labradore, New York, N. Y			48.2	9									o	o			
S. S. Arizona, N. 51° 00′, W. 23° 17′	30.21	767.3	49	9.4		wsw.			4	10		w.	o	o	mod.	w.	overcast.
S. S. Wisconsin, N. 51° 07′ W. 25° 46′	30.04	763.9	52	11.1		sw.			5	5		sw.	o	o	sli't	sw.	fair.
S. S. Wyoming, N. 40° 35′, W. 73° 05′*	29.85	758.2	38	3.3		nnw.			2	0			o	o	sm'h		clear.
S. S. Bohemia, Hamburg, Germany †	29.41	747.0				ssw.			1	9		sw.	snow	snow			overcast.
S. S. Cimbria, N. 44° 35′, W. 51° 53′	29.40	746.7	48.2	9.0		ese.			6	10		var.	5 h'r	5 h'r	mod.	ese.	cloudy.
S. S. Gellert, N. 50° 53′, W. 24° 31′	30.29	769.4	56	13.3		sw.			4	2		w.	2 h'r	2 h'r	mod.	wnw.	clear.
S. S. Silesia, New York, N. Y †	29.96	761.0	29.5	— 1.4		nnw.			2	0			o	o			
S. S. Vandalia, N. 54° 00′, E. 8° 18′	29.63	752.6	36.3	2.4		nne.			3	8		nne.	o	o	mod.	nne.	cloudy.
S. S. Wieland, Alderney Island, English Channel	30.02	762.5				wnw.			5	10		nnw	sqll's	sqll's	r'gh	wnw.	squally.
S. S. Mentmore, N. 40° —′ W 67° —′ *	29.82	757.4				wnw.			3	8		wnw.	4 h'r	4 h'r	sm'h	nw.	clearing.
S. S. Nessmore, N. 51° 32′ W. 29° 28′			54	12.2	93	wsw.			6	8		wnw.	o	o	h'vy	w.	cloudy.
S. S. Archimedes, N. 51° 21′, W. 8° 12′	29.94	760.5				w.			3	10		calm	o	o	sm'h		hazy.
S. S. Hevelius, S. 17° —′, W. 37° —′ *†	30.16	766.1	74	23.3		se.			3	2		ne	o	o			clear.
S. S. Ptolemy, N. 20° 45′, W. 58° 15′	30.11	764.8	80.2	26.8	78	var.			2	5			o	o	3	nnw.	d. clouds.
S. S. Bulgarian, N. 49° 58′, W. 36° 21′ *	29.77	756 1				s.			5	10		sw.	1 h'r	1 h'r	mod.	sw.	
S. S. City of San Antonio, N. 32° 32′, W. 75° 10′ †	29.56	750.8	67	19.4		e.			9	10		ese.	10 h'r	10 h'r	h'vy	ene.	stormy.
S. S. Colorado, N. 30° 25′, W. 80° 50′			43	6.1		ne.			3	10		wnw.	18 h'r	18 h'r	high	wnw.	cloudy.
S. S. San Marcos, N. 30° 00′, W. 80° 00′			58	14.4		w.			6			w.			h'vy	w.	cloudy.
S. S. Archimede, N. 38° 52′, E. 9° 52′ *†	29.72	754.9	66	18.9	74	wnw.			5	4		w.	2 h'r	2 h'r	r'gh	w.	fair.
S. S. Glenapp, Rio de Janeiro, Brazil †	29.96	761.0				var.			2	0			o	o			clear.
S. S. Glenfyne, N. 27° 14′, W. 63° 55′						sw.			4	1		sw.	o	o	long	n.	fair.
S. S. Chalmette, N. 29° 43′, W. 80° 40′ †	29.79	756.7	54	12.2		nnw.			6	5		nw.	10 h'r	10 h'r	mod.	sw.	clearing.
S. S. Lone Star, N. 24° 41′, W. 83° 13′ †	29.92	760.0	72	22.2		wnw.			4	7		wnw.	2 h'r	2 h'r	large	wnw.	squally.
S. S. New York, N. 25° 30′, W. 84° 50′ †	29.93	760.2	70.0	21.1		nw.			7	8		nw.	o	o	h'vy	wnw.	cloudy.
S. S. Denmark, St. Catherine's Point, Eng	29.80	756.9	44	6.7		n.			6	5		ne.	sq'lls	sq'lls			squally.
S. S. Egypt, N. 48° 09′, W. 41° 06′ *	29.75	755.6				wsw.			5	10		wsw.	3 h'r	3 h'r	long	ssw.	cloudy.
S. S. Erin, N. 50° 56′ W. 18° 45′			57	13.9		wnw.			7	8		w.	o	o	h'vy	wnw.	overcast.
S. S. Helvetia, New York, N. Y	29.95	760.7	34	1.1		nw.			1	2		n.	o	o			clear.
S. S. Holland, N. 48° 20′, W. 26° 20′	30.21	767.3	58	14.4		s.			6	5		ssw.	1 h'r	1 h'r	mod.	sw.	fair.
S. S. The Queen, N. 44° 51′ W. 42° 19′ *†	29.76	755.9	60	15.6		wsw.			4	5?		calm	3 h'r	3 h'r	mod.	w.	clear.?
S. S. Santiago, N. 21° 03′ W. 79° 53′	30.10	764.5	66	18.9	84	sw.			4	10		sw.	4 h'r	4 h'r	sm'h		threatening.
S. S. City of Alexandria, Havana, Cuba, W. I †	29.99	761.7	78	25.6		nw.			8	8		n.	3 h'r	3 h'r	h'vy	nw.	rainy.
S. S. City of Merida, N. 32° 24′, W. 78° 30′						s.			3	5		s.	10 h'r	10 h'r	cross	ne.	fine.
S. S. Knickerbocker, N. 38° 15′, W. 74° 33′ *†	29.91	759.7	46	7.8		nne.			5							sw.	overcast.
S. S. Leerdam, N. 49° 18′, W. 40° 12′ *	29.61	752.1	66.2	19.0		wsw.			6						r'gh		foggy.
S. S. America, N. 49° 40′, W. 12° 50′*	30.23	767.8	51.5	10.8	86	wnw.			6	10		wnw.	2 h'r	2 h'r	long	nw.	squally.
S. S. Donau, N. 45° 36′, W. 47° 24′	29.63	752.6				ene.			4	10		se.	4 h'r	4 h'r	r'gh	se.	cloudy
S. S. Elbe, Bremerhaven, Germany	29.50	749.4	34.7	1.5	?	sw.			2	10		sw.	10 h'r	10 h'r			covered.
S. S. Ohio, Galveston, Texas	30.29	769.4				nw.			2–3	0			o	o	sm'h	nw.	clear.
S. S. Salier, Bremerhaven, Germany	29.58	751.3	34.7	1.5		se.			3	10		se.	4 h'r	4 h'r			snowy
S. S. Strassburg, N. 46° 02′ W. 7° 00′	30.14	765.5	51	10.6	93	n.			6–7	10		n.	1 h'r	1 h'r	h'vy	n.	stormy.
S. S. Belgic, Hong Kong, China †	30.21	767.3	73	22.8	81	e.			2	5?		e.	o	o	sm'h		fair.
S. S. Oceanic N. 36° 22′, W. 172° 27′ *	29.89	759.2	62	16.7	66	s.			6	8		s.			mod.	n.	raining.
S. S. City of Augusta, N. 37° 14′, W. 75° 09′ †	29.97	761.2				nne.			3	4		n.	o	o	sm'h		clear.
S. S. Mississippi, Portland, Oregon †	29.82	757 4	49	9.4	85	sse.			3	10		sse.					light rain
S. S. Oregon, N. 44° 02′, W. 124° 13′ †	29.68	753.9	50	10.0	93	ssw.			7	8		ssw.			rg'h	s.	squally.
S. S. Ancon, N. 36° 47′, W. 122° 12′ †	30.09	764.3	54	12.2	80	ene.			3	10		ne.			sm'h		cloudy.
S. S. Dakota, N. 46° 37′, W. 124° 40′ †	29.43	747.5	51	10.6	79	ese.			7	10		se.	16 h'r	16 h'r	h'vy	s.	cloudy
S. S. Orizaba, N. 35° 10′, W. 120° 43′ †	30.12	765.0	56	13.3	75	ne.			1	fg.		w.			long	sw.	foggy.
S. S. State of California, Portland, Oregon *†	29.74	755.4	44	6.7	?	se.			2	10		se.					raining.
S. S. Australia, Sydney, N. S. W	29.77	756.1	70	21.1	90	nne.			4	10		nne.	o	o			clear.?
S. S. City of New York, Sydney, N. S. W †	29.71	754.6	72	22.2	80	nne.			5	10		nne.	o	o			cloudy
S. S. City of Pekin, Hong Kong, China †	30.35	770.9	71	21.7	75	e.			1	8		e.	o	o			cloudy
S. S. City of Rio de Janeiro N. 29° 18′ W. 117° 14′ †	30.08	764.0	61	16.1	82	nnw.			3	3		nw.	o	o	mod.	nw.	fair.
S. S. City of Sydney, N. 22° 00′, W. 156° 29′ †	30.06	763.5	72	22.2	75	ne.			4	5?		ne.	o	o	long	ne.	cloudy.?
S. S. Grenada, N. 7° 45′, W. 79° 49′ †	29.93	760.2	80	26.7	78	n.			3	10		n.	6 h'r	6 h'r	sm'h	n.	cloudy.
S. S. San José, N. 17° 46′, W. 102° 13′ *†	30.21	767.3				wnw.			2	2 c	o	nw.	o	o	light	w.	
S. S. Zealandia, N. 36° 41′, W. 124° 35′	30.12	765.0	57	13.9	81	calm			0	5		sw.			h'vy	sw.	fine.
S. S. Bermuda, N. 20° 38′, W. 63° 36′ †	30.05	763.3	80	26.7		ene.			2	1		ene.	½ h'r	½ h'r	gentle	ne.	fine.
S. S. Caracas, N. 35° 20′, W. 73° 10′ †	29.83	757.7	60	15.6	71	e.			5	10		e.	3 h'r	3 h'r	mod.	ne.	cloudy
S. S. Claudius, N. 31° 40′, W. 73° 30′ †	29.74	755.4				ene.			6	10			9 h'r	9 h'r	r'gh	ene.	
S. S. Valencia, Curacoa, W. I. †	30.02	762.5	82	27.8	77	ne.			1	2		ne.	o	o	sm'h		fine.
S. S. Belgenland, N. 48° 32′, W. 9° 30′			53	11.7	93	nw.			7	7		nnw.	o	o	h'vy	nw.	cloudy.
S. S. Nederland, N. 44° 49′, W. 53° 51′			52	11.1		calm			0	10		w.	rain	rain	cross	w.	rainy.
S. S. Pennland, Antwerp, Belgium	29.74	755.4	42	5.6	83	sw.			1	3		sw.	1 h'r	1 h'r			clear.
S. S. Rhyuland, Jersey City N. J.	30.03	762.7	33	0.6	70	w.			2	2		sw.					fair.
S. S. Wuesland, N. 42° 54′, W. 57° 53′	29.62	752.3	49	9.4	78	w.			4	7		w.	light	light	mod	wnw.	fair.
S. S. Maas, N. 47° 10′, W. 42° 55′	29.69	754.2	47.5	8.6	75	wsw.			7	8		w.	1 h'r	2 h'r	S	wsw.	fair.
S. S. P. Caland, Rotterdam, Holland	29.64	752.8	41.5	5.3	90	wnw.			3	6		nw.					raining
S. S. W. A. Scholten, New York, N. Y	30.20	767.1	33.0	0.6	94	calm			0	1		ne.	o	o			
S. S. State of Florida, Glasgow, Scotland	29.65	753.1	45	7.2		se.			3	10			8 h'r	8 h'r			cloudy
S. S. State of Indiana, N. 45° 53′, W. 52° 05′ †	29.34	745 2	47	8.3		se.			5	10		s.	6 h'r	6 h'r	cross	se.w	drizzling.
S. S. State of Nevada, New York, N. Y †	30.02	762.5	32	0.0		wnw.			1	0			o	o			clear
S. S. Hekla, N. 58° —′ W. 14° 30′ *†	29.72	755 0	49.1	9.5		var.			4–5	10		nw; s.	12 h'r	12 h'r	sm'h	nw.	
S. S. Thingvalla, N. 58° 43′, W. 12° 59′ †	29.03	752.6	43.7	6.5		ssw.			3	10		ssw.	rain	rain	mod.	ssw.	covered.
S. S. Iowa, N. 50° 07′ W. 31° 08′ *†	30.09	764.3	55	12.8		s.			6	10		s.	1 h'r	1 h'r	r'gh	s.	cloudy.
S. S. Plantyn N. 45° c9′, W. 40° 31′	29.83	757.7							1	4		sw.	o	o	cross	sw.	
S. S. Britannic, N. 49° 12′, W. 38° 04′ †	29.82	757.4	58	14.4	100	s.			4	10		ssw.	8 h'r	8 h'r	cross	var.	overcast.
S. S. Celtic, N. 45° 00′, W. 42° 00′ †	29.78	756.4	56	13.3	87	nw.			4	10		nnw.			h'vy	s.	cloudy.
S. S. Lepanto, N. 43° 00′, W. 38° 32′ *	29.95	760.7	67	19.4		ssw.			6	5?		s.	o	o	h'vy	s.	cloudy.?
S. S. Marengo, N. 49° 19′, W. 9° 40′ *†	30.11	764.8				nnw.			9	6		nnw.	o	o	light	nw.	cloudy.
S. S. Romano, N. 42° 30′, W. 59° 49′	29.58	751.3	43	6.1		sw.			5	10		sw.	o	o	h'vy	sw.	fine.
S. S. Salerno, Dardanelles, Turkey			60	15.6		sw.			9	10		sw.	o	o			
S. S. Catherine Whiting, Philadelphia, Pa†	30.00	762.0				nw.			1				o	o			
S. S. Norman, N. 39° 56′, W. 75° 08′	30.15	765.8				nw.			1				o	o			clear.
MISCELLANEOUS.																	
Bk. Adelaid, N. 19° 53′, W. 67° 31′ *†	30.05	763.3	83	28.3		ene.			4	1		ne.	o	o	sm'h	ene.	fair.
Bg. Alcira, Maracaybo, Venezuela	29.93	760.2	84	28.9		ene.			2	2		ne.	o	o			clear.
S. S. Annie M. Law, Kobe, Japan *†	30.28	769.1	50	10.0		nw.			1	0?							raining.?
Bk. Anna Thormann, S. 17° 24′, E. 90° 36′*	29.97	761.2	75.2	24.0	86	ese.			6	8 k		se.	sh'rs	sh'rs	r'g'h	se.	cloudy.
S. S. Antonio Lopez, N. 20° 29′, W. 57° 58′ *	30.10	764.5	80	26.7	80	e.			2	2			o	o	sm'h		clear.
Bk. Aquidneck, S. 9° 53′, W. 33° 34′ *†	30.20	767.1				ene to e			2			se.			light	se.	clear.
Bk. Aureola, N. 51° 23′, W. 4° 23′ *†	30.20	767.1	58	14.4		nnw.			5	8		nw.	2 h'r	2 h'r	h'vy	nw.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the Air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—(continued.																		
Bk. Alba, N. 56° 59′, E. 7° 08′*†	29.61	752.2	36.5	2.5		w.			3									snowing.
Bk. Bayonnaise, N. 17° 03′, W. 53° 57′*†	30.16	766.0				e.			4		4		e.	0	0	r'gh	se.	clear.
Sch. Bonny Doon, N. 42° 08′ W. 44° 00′*†	29.94	760.5				w.			5		10		wsw.	driz	driz	rg'h	wsw.	
S. S. Burswell, N. 34° 33′ W. 37° 58′ *†	30.15	765.8	80	26.7		sw.			1		5			1 h'r	1 h'r	str'g	con	fine.
Bk. Champion, N. 46° 06′, W. 9° 13′			58.5	14.7		n			5		2		wsw.	5 h'r	5 h'r	h'vy	nnw.	clear.
Schr. Chas. F. Heyer, Apalachicola, Fla	29.99	761.7	45	7.2	72	n.			2		10 8		n.	o	o			cloudy.
Schr. C. R. Flint, Cedar Keys, Fla†	29.81	757.2	52	11.1		n.			3		10		nnw.	5 h'r	5 h'r			cloudy.
S. Cornelius, N. 39° 19′, W. 52° 46′ *†	29.88	758.9	63.5	17.5		w.			7		7		wnw.	3 h'r	3 h'r	h'vy	w.	thnd'rst'rm
S. S. D. J. Foley, N. 23° 00′, W. 74° 25′†	30.45	773.4	77	25.0		ssw.			6		10		sw.	2 h'r	2 h'r	long	nne.	threatening.
Bkt. David Preston, N. 29° 02′ W. 89° 10′ *†	30.05	763.3	61	16.1		nw.					0			0	0			fine.
Bk. Don Quixote, Pasoeroen Roads, Java*	29.93	760.2	89	31.7		w.			2		2?		w.	0	0	sm'h		cloudy.°
Bk. E. D. Bigelow, N. 45° 10′, W. 23° 50′*†	30.40	772.1				sse.			3		2		ssw.	0	0	long	n.	fair
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†	30.00	762.0	38	3.3		n.			1		5?		nnw.	0	0			clear?
S. E. J. Spicer, New York, N. Y	29.99	761.7	37	2.8	100	nw.			5		4		w.	0	0			fair.
Bk. Eliza Barss, Bermuda, W. I†	29.88	758.9				ene.			2		2?		ne.	0	0			cloudy.?
S. Enoch Train, Off Montserat, W. I*†	30.10	764.5				ese.			2		0			0	0	sm'h		clear.
Bk. Essex, Muscat, Arabia*†	30.08	764.0	83	28.3		n.			2				ne.				n.	fine.
Schr. F. E. McDonald, N. 41° 08′, W. 71° 38′†	30.09	764.3				n.			1		0							
S. S. Foscolia, S. 1° 08′, W. 38° 45′*†	29.55	750.6				e.			6		8		e.	0	0	r'gh	e.	cloudy.
Bk. Freya, N. 20° 29′, W. 33° 59′			76	24.4		e.			4		5		nw.	0	0	mod.	ese	fair
Bg. George. N. 41° 16′, W. 61° 55 *†	29.78	756.4				nw.			6		2		nw.	sq'll	sq'll	rg'h	wnw.	clearing
S. Glendon, S 15° 35′, W. 103° 00′†	30.01	762.2	75	23.9		ese.			4		2		ese.	0	0	sm'h		clear.
S. Grecian, N. 21° 35′, W. 60° 42′†	30.13	765.3	80	26.7	70	ne.			4		3		sw.	0	0	mod.	n.	clear.
Bk. Grey Eagle, N. 32° 57′, W. 51° 30′*†	29.90	759.4	78	25.6		sw.			4		2		sw.	0	0	cross		fair.
Bk. Gronsvaer, S. 41° 12′, E. 163° 46′†	30.13	765.4	66.8	19.3	96	n.			4		3		n.	0	0	4	sw.	foggy.
Bk. Hattie G. McFarland, New York, N. Y †	30.13	765.3	28	—2.2		n.			1		3		n.	0	0			
Schr Hattie Weston, Icaque, Trinidad W. I*†	29.98	761.5	82	27.8		ese.			3		10		ese.	4 h'r	4 h'r	sm'h	e.	raining.
S. Hedwig, N. 33° 14′, W. 76° 30′	29.91	749.6	64.4	18	95	ene.			9		10		ene.	0	0	7	ne.	
Bk. Heinrich & Tonio, N. 40° 08′, W. 51° 55′*†	29.63	752.6	64.5	18.1		sw.			5–7		7		wsw.	6 h'r	6 h'r	r'gh	sw.	squally.
Schr. Isabel Alberto, Cedar Keys, Florida†	29.93	760.2				n.			3		10		n.	light	light			cloudy.
S. Ivy, Cork, Ireland			46	7.8		w.			2		10		w.					drizzling.
Schr. James Slater, N. 10° 53′, W. 53° 06′†	29.97	761.2	83	28.3		ne.			6		2		ne.			long	n.	squally.
Schr. Jennie N. Huddell, Savannah, Ga†	29.80	756.9	48	8.9	100	nw.			5		10		ne.					raining.
S. S. John Hopkins, Boston, Mass			24	—4.4		n.			2		0			0	0			clear.
Schr. John L. Thomas, Vivorilla Cays, C. A *†	30.05	763.3				nw.			2		1		ese.	0	0	light	nnw.	clear.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.98	761.5				n.			5		10		n.	2 h'r	2 h'r			cloudy.
Light House Tender, Laurel, Key West, Fla†	29.85	758.2	73	22.8		wnw.			4		8		wnw.	1½h'r	1½h'r			cloudy.
Bk. Liberia, N. 7° 55′, W. 21° 30′.*..	29.96	761.0	82	27.8	79	var.			1		8		var.	4 h'r	4 h'r	small	n.	squally.
Bg. Lilian, N. 12° 10′, W. 60° —′†	30.00	762.0	84	28.9		ene.			5		4		ne.	½h'r	½h'r	mod.	nne.	squally.
Bg. L. & W. Armstrong, N. 39° 07′, W. 70° 00′*†	29.94	760.5				nnw.			2		1		nnw.	o	o	mod	nne.	clear.
S. S. Madrid, N. 33° 42′, W. 60° 45′*†	30.08	764.0	66	18.9	89	w.			4		5		w.	4 h'r	4 h'r	r'gh	nnw.	fine.
S. S. Malabar, N. 19° 01′, E. 39° 34′*†	30.05	763.3				sse.			1		0			0	0	sm'h		clear.
Bg. Mary Gibbs, N. 29° 44′, W. 79° 15′*†	29.68	753.9	66	18.9		wnw.			7		10		wnw.	½h'r	½h'r	5	cross	cloudy
Bk. Matilda C. Smith, N. 36° 50′, W. 20° 00′*†	30.60	777.2				ene.			4		8		e.	o	o	mod.		fine.
Bg. Mattie B. Russell, N. 32° 50′ W. 76° 45′*†	29.80	756.9				ene.			8		10			0	0	h'vy	ne.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	30.03	762.7				nne.							ne.	0	0	long	ne.	fair.
S. M. P. Grace, N. 11° 37′, W. 119° 47′*	29.81	757.2	80	26.7		se.			2		7		ese.	1 h'r	1 h'r	r'gh	con	squally.
Bg. Myrtle, N. 37° 30′, W. 71° 37′†	29.97	761.2				ese.			5		10		ne.	0	0	r'gh	n.	fair.
Bk. Northern Queen, N. 35° 52′, W. 74° 40′			59	15.0	?	ne.			6		5						ne.	
Bg. O. C. Clary, N. 24° 55′, W. 59° 01′*†	30.10	764.5	78	25.6	91	sse.			1		0					sm'h		clear.
S. Orealla, N. 5° 12′, E. 81° 15′*	29.79	756.7				wsw.			3		5		wsw.	5 h'r	5 h'r	long	ssw.	fine.
Bk. Orpheus, N. 41° 10′, W. 42° 25′	30.19	766.8	68	20.0		wsw.			5		6 ks		wsw.	2 h'r	2 h'r	mod.	wsw.	fair.
S Paramita, San Francisco, Calf	30.04	763.0	53	11.7		se.			1				se.	o	o			smoky.
S. S. Peconic, N. 38° —′, W. 63° 18′*†	29.66	753.4	56	13.3		w.			6		8		w.	h'vy	h'vy	r'gh	w.	cloudy.
S. S. Radnorshire, N. 13° 12′, E. 43° 03′*†	29.96	761.0				ssw.			6		0			0	0	short	sse.	clear.
S. St. Francis. S. 12° 50′, W. 103° 15′†	30.09	764.3	69	20.6		ese.			5		4		se.	o	o	mod.	se.	fine.
Bk. Scud, N. 13° 56′, W. 62° 51′*†	29.97	761.2				ne.			5		1		ne.	o	o	short	ne.	clear.
Bk. Southern Belle, Flushing, Netherlands*†	29.70	754.4	50	10.0		nne.			5					o	o	sm'h		clear.
S. S. Strathleven, N. 31° 48′, E. 31° 50′	30.18	766.6	69.0	20.6	65	nne.			2		3		ne.			3	nw.	d. clouds.
S. S. Sunbeam, Penarth, Wales	29.91	759.7	46	7.8	77	wsw.			3		10		wsw.	1 h'r	1 h'r			misty.
Bg. Teneriffe, N. 39° 45′ W. 73° 52′	29.95	760.7				nne.			5					o	o	sm'h		
Bk. Truro, N. 45° 44′, W. 45° 30′*†	29.83	757.7				se.			2–3		2		sw.	3 h'r	3 h'r	mod.	se.	fair.
U. S. F. C. S. S. FishHawk, Washington, D. C†	30.12	765.0	32	0.0		calm			0		3		calm	o	o			clear.
Bk. Usko, N. 38° 31′. W. 60° 36′*	29.68	753.9	58	14.4		wnw.			3–6		8		nw.	3 h'r	3 h'r	mod.	nw.	squally.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.37	771.3	64.4	18		n.			6		7		n.	3 h'r	3 h'r			
Schr. Viola Reppard, N. 38° 04′, W. 74° 46′†	30.00	762.0	50	10.0		ne.			1		9			o	o	mod.	ne.	cloudy.
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762 0				e.			1		0			0	0			fine.
Bk. Wandering Jew, S. 22° 51′, W. 39° 43′†	30.19	766.8	76	24.4		ne.			2		2		n.	o	o	mod.	sse.	clear.
Bk. Warden Law Valparaiso, Chili	29.95	760.7				calm			0		4		se.	o	o	sm'h	s.	fair.
Bgt. Willie, S. 35° 35′, E. 21° 45′*†.	30.16	766.1	68	20.0		ese.			6		4		ese.	light	light	cross	var.	fair.
S. Wm. Woodbury, N. 36° 20′, W. 65° 06′*†	29.95	760.7	56	13.3		n.			4		4?		n.			high	n.	cloudy.?

International Chart I. November 21, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 22, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0-10	0-10	0-10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.30	769.7	62.6	17.0	86	e.	.....	.....	1	.....	0	.....	.....	0	•0	clear	Malaterre.
Algiers	.....	.....	30.10	764.6	58.6	14.8	64	wsw.	.....	.....	3	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.04	762.9	50.0	10.0	89	w.	.....	.....	3	.....	5	.....	.....	0	0	cloudy	Fonfrède.
Tunis	.....	.....	29.96	760.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.26	768.7	54.7	12.6	50	n.	.....	.....	2	.....	5	.....	.....	0	0	cloudy	Pérès.
Tebessa	.....	.....	30.11	764.7	46.8	8.2	62	n.	.....	.....	5	.....	4	.....	.....	0	0	cloudy	Dognon.
Geriville	.....	.....	.....	.....	46.0	7.8	38	n.	.....	.....	6	.....	3	.....	.....	0	0	pretty fair	Lonchamp.
Laghouat	.....	.....	30.20	767.1	53.6	12.0	43	w.	.....	.....	7	.....	4	.....	.....	0	0	cloudy	Abraham.
Biskra	.....	.....	30.13	765.4	68.0	20.0	41	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	29.85	758.2	29.94	760.5	54.5	12.5	79	wsw.	4	1.8	.....	.....	2	.....	.....	0.21	5.3	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.37	745 9	29.93	760.2	40.6	4.8	75	sw.	.....	.....	3	.....	8	.....	.....	0	0	.....	Prof. Ivan Stozir.
Oracow, I. R Observatory	28.97	735.8	29.76	755.8	35.6	2.0	64	wsw.	7.4	3.3	.....	.....	10	.....	.....	0	0	.....	Dr. Wierabiski.
Eperies	28.91	734 2	29.82	757.4	33.8	1 0	83	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.62	726.9	29.91	759.7	36.3	2.4	81	w.	.....	.....	2	.....	3	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.37	720.6	29.84	758.0	35.6	2.0	89	nw.	.....	.....	1	.....	10	.....	.....	0.118	3.0	snowing	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.49	723.6	29.87	758.6	37.9	3.3	69	w.	.....	.....	2	.....	10	.....	.....	0	0	gloomy	The Staff.
Lemberg	28.74	730 0	29.76	756.0	32.5	0.3	74	s.	.....	.....	1	.....	0	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.76	755.8	29.87	758.7	48.9	9.4	54	ne.	.....	.....	1	.....	4	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.34	745.2	29.79	756.7	36.7	2.6	75	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	Joseph Midlinszay, S. J.
Szegedin	29.60	751.7	29.88	759.0	41.0	5.0	87	w.	.....	.....	1	.....	6	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.81	757.2	29.91	759.8	50.0	10.0	48	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	Royal Academy.
Vienna	29.12	739.7	29.85	758.3	41.0	5.0	63	w.	.....	.....	4	.....	8	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	28.99	736.3	29.09	738.9	41.5	5.3	96	s.	2	0.9	.....	.....	10	.....	.....	0.055	1.4	raining	W. Boswell
Armagh, Observatory	29.19	741.4	29.42	747.3	51.1	10.6	95	wsw.	15	6.7	.....	.....	10	.....	.....	.....	.....	raining	S. Call.
Bidston, Liverpool Obs'y	.....	...	29.37	746.0	50.6	10.3	94	wsw.	47	21.0	.....	.....	10	.....	.....	.....	.....	raining	John Hartnup.
Bolton, Sharples	28.80	731.5	29.33	745.0	49.8	9.9	100	w.	64	28.6	.....	.....	10	.....	.....	.....	.....	raining	Thomas Mackereth.
Bradford, Yorkshire	28.91	734.3	29.31	744.5	51.7	10.9	87	sw.	.....	.....	6	.....	10	.....	.....	0.06	1.5	raining	McLandsborough&Preston.
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	76.0	24.4	92	ne.	.....	.....	3	.....	8	.....	.....	.....	.....	raining	Corpl. J. Surgenor, A. H.C.
Cardington	.....	.....	.....	.....	54.0	12.2	76	w.	.....	.....	4.0	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E.	29.40	746.7	29.53	750.0	51.6	10.9	82	w.	.....	.....	2	.....	9	.....	.....	blank	blank	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.60	751.8	29.92	757.4	54.0	12.2	80	w.	.....	.....	6	.....	7	.....	.....	.....	.....	squally	The Staff.
Fort Napier, Natal	27.49	698.2	29.71	754 6	90.0	32.2	41	e.	.....	.....	1	.....	5	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.88	758 9	87.0	30.6	58	w.	.....	.....	2	.....	3	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.24	768.1	30.32	770.1	62.0	16.7	90	ne.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H C.
Glasgow, Observatory	28.97	735.8	29.17	740 9	51.5	10.8	89	wsw.	.....	.....	5	.....	10 n	.....	.....	.....	.....	gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.38	746.2	29.55	750.6	51.5	10.8	80	wsw.	.....	.....	5	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.50	749.3	29.80	756.9	54.0	12.2	79	wnw.	.....	.....	5	.....	10	.....	.....	blank	blank	overcast	A. Collenette, F. M. S
Kew, Observatory	29.53	750 0	29.56	750.8	52.6	11.4	76	w.	20	8.9	.....	.....	7	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.18	741.2	29.44	747.8	51.0	10.6	91	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.84	757 9	29.91	759 7	62.0	16.7	95	w.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.02	762 5	30.06	763.5	69.5	20.8	58	n.	.....	.....	3	.....	8	.....	.....	.....	.....	overcast	C. S. Duncombe.
Oscott, St. Mary's College	.....	.....	.....	.....	.....	.....	.....	w.	.....	.....	0	.....	10	.....	.....	.....	.....	raining	Warren Middleton.
Oxford, Radcliffe Obs'y	29.32	744.7	29.55	750.6	52.3	11.3	83	sw.	.....	.....	6	.....	9	.....	.....	.....	.....	threatening	The Staff.
Plymouth	29.72	754 9	29.79	756.7	52.1	11.2	92	w.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	John Merrifield.
Sandwick Manse, Orkneys	29.02	737 1	29.12	739.6	42.8	6.0	94	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	showery	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.76	755.9	29.83	757.7	65.2	18.4	61	sw.	.....	.....	3	.....	7	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29 08	738 6	29.35	745.5	51.9	11.1	94	wsw.	.....	.....	6	.....	10	.....	.....	0.08	2.0	drizzling	W. F. Cooper.
Silloth Rectory	29.22	742.2	29.26	743.2	48.6	9.2	99	wsw.	.....	.....	5	.....	10	.....	.....	0.040	1.0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.34	745.2	50.0	10.0	94	sw.	47	21.0	.....	.....	10	.....	.....	.....	.....	raining	I. New.
Stratfield Turgiss	29 38	746.2	29.60	751.8	52.2	11.2	83	w.	.....	.....	3-4	.....	8	.....	.....	.....	.....	squally	Rev. C. H. Griffith, F M.S.
Truro, Royal Institution	29.77	756.1	29.82	757.4	55	12.8	86	w.	.....	.....	7	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.71	754.6	29.74	755.4	52.6	11.4	94	sw.	31	13.9	.....	.....	10	.....	.....	.....	.....	drizzling	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson
Charlottetown, P. E. Island	29.83	757.7	29.87	758.7	36	2.2	88	ne.	6	2.7	.....	.....	10 s	.....	ne.	0.110	2.8	cloudy	H. J. Cundall, C. E
Chatham, N. B*	29.89	759.2	29.96	761.0	31	— 0.6	92	ne.	8	3.6	.....	2 k	8 ks	ne.	ne.	0.01	0.3	cloudy	G. A. Blair.
Father Point, Quebec*	29.95	760.7	29.97	761.2	28	— 2.2	96	calm	0	0	.....	.....	10 s	.....	calm	0.04	1.0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.20	741.7	30.07	763.8	20	— 6.7	87	nw.	8	3.6	.....	.....	10 s	.....	nw.	inap.	inap.	cloudy	James Stewart.
Halifax, N. S*	29.72	754.9	29.86	758.4	35	1.7	92	n.	4	1.8	.....	8 k	0	.....	.....	0	0	cloudy	A. Allison.
Kingston, Ontario*	29.55	750.6	29.90	759.4	31	— 0.6	85	w.	3	1.3	.....	10 cs	10 ks	calm	w.	0	0	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	29.71	754.6	29.93	760.2	23	— 5.0	96	e.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.15	740 4	29.87	758.7	31	— 0.6	88	n.	4.0	1.8	.....	.....	10 n	.....	ne.	0.15	3.8	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.21	741.9	29.93	760.2	30	— 1.1	100	w.	4	1.8	.....	2 k	0	w.	.....	0	0	fair	H. Morgan.
Port Stanley, Ontario	29.27	743.4	29.94	760.5	31	— 0.6	78	w.	10	4.5	.....	0	0	.....	.....	0	0	clear	M. Payne.
Quebec, Quebec*	29.61	752.1	29.95	760.7	25	— 3.9	88	e.	.....	.....	1	.....	10 k	.....	e.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.41	747.0	29.85	758.2	20	— 6.7	84	se.	1	0.4	.....	.....	fg.	.....	.....	0	0	foggy	W. H. McIntyre.
Saugeen, Ontario*	29.16	740 7	29.89	759.2	33	0.6	100	e.	2	0.9	.....	.....	10 s	.....	.....	0.06	1.5	cloudy	.....
St. Andrews, N. B	29.82	757.4	29.87	758.7	32	0.0	89	ene.	7	3.1	.....	.....	10 n	.....	.....	0	0	cloudy	.....
Sydney, C. B*	29.80	756.9	29.87	758.7	36	2.2	96	calm	0	0	.....	8 k	fg.	ne.	.....	0	0	fair	T. C. Hill, C. E
Toronto, Ontario*	29.51	749.5	29.91	759.7	29	— 1.7	88	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	Magnetic Observatory.
Yarmouth, N. S*	29.75	755.6	29.82	757.4	32	0.0	92	e.	1	0.4	.....	10 k	sk.	se.	.....	0	0	cloudy	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.45	722.6	29.92	760.0	31.0	— 0.6	89	w.	.....	.....	1	.....	10	.....	w.	0	0	overcast	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	37	2.8	90	nw.	3	1.3	.....	.....	10	.....	.....	0.80	20.3	overcast	John Delany
Cape Colony.																			
Cape St. Francis Lt. House	29.90	759.4	29.93	760.2	73.0	22.8	84	sse.	16.8	7.5	.....	0	2 k	.....	.....	0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.94	760.5	29.98	761.5	85.0	29.4	45	sse.	19	8.5	.....	0	2	.....	.....	0.150	3.8	.....	The Staff, for D.Gil.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Tchang-kia-tchouang			30.11	764.9	39.9	4.4	85	se.	0.9	0.4		0	0			0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.24	768.1	30.27	768.8	49.5	9.7	95	ene.	0.9	0.4		7 ck	0	sw.		0.055	1.4	very cloudy	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.44	747.8	29.49	749.0	32.5	0.3	87	sw.			2		3					hazy	Oversergent Fischer.
Fanöe	29.34	745.1	29.36	745.7	31.8	— 0.1	100	sse.			4		10					foggy	Overloerer Lauridsen.
Godthaab, Greenland	29.98	761.6	30.03	762.7	15.1	— 9.4	69	nne.			4		0						S. Kleinschmidt.
Ivigtut	29.79	756.7	29.81	757.2	12 0	—11.1		calm			0		0						
Stykkisholm, Iceland	29.36	745.7	29.40	746.8	29.8	— 1.2	96	ne.			6		8						A. O. Thorlacius.
Thorshavn	29.15	740.5	29.19	741.4	41.7	5.4	92	sse.	9	4			10					raining	Overloerer Bergh.
Vestervig	29.21	741.9	29.30	744.3	33.1	0.6	89	s.			6		10						Loerer Oesterboi.
Jacobshavn	30.15	765.9	30.20	767.1	5.2	—14.9		e.			2		4						
FRENCH.																			
Agen, Normal School	29.52	749.8	30.18	766.6	51.8	11	93	nw.			1		10 n		w.	0.185	4.7	light rain	M. Labroue, Director.
Alençon, Normal School	29.33	745.0	29.88	759.0	51.1	10.6	97	w.			1		10 n	e.	e.	0.433	11.0	raining	M. Nicot, Director.
Arras, Engineer School	29.37	746.1	29.63	752.5	50.4	10.2	90	w.			4		10 n			0.205	5.2	covered	M. Fénéon, Command't.
Avignon, Normal School	29.98	761.5	30.00	763.5	47.5	8.6	61	nw.			1		5		nw.	0	0	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.24	742.7	29.81	757.2	41.4	5.2	94	sw.			2		10			0.028	0.7	light rain	M. Saillard, Director.
Beauvais, Normal School	29.44	747.8	29.71	754.6	49.8	9.9	92	w.			2		10		w.	0.024	0.6	covered	M. Frère Eugène Marie.
Besançon, Normal School	28.98	736.0	29.89	759.1	37.9	3.3	90	e.			2		10		sw.	0.134	3.4	raining	M. Gobin, Director.
Bordeaux, Observatory	29.85	758.3	30.12	765.0	52.2	11.2	84	wnw.			2		8		wnw.	0.114	2.9	al. covered	M. Rayet, Director.
Bourges, Normal School	29.35	745.5	29.91	759.7	47.8	8.8	92	calm			0		10		sw.	0.031	0.8	raining	M. Malet, Director.
Brest, Naval Observatory	29.77	756.2	30.02	762.4	53.6	12.0	87	wnw.			4		8		wnw.	0.244	6.2		M. de Kermaree, Dir.
Caen, Normal School	29.67	753.7	29.75	755.6	53.6	12	76	w.			2		10			0.256	6.5	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.43	747.4	29.75	755.7	40.5	4.7	93	ne.			1		5			0.075	1.9	cloudy	M. Jadot, Director.
Charleville, Normal School	29.18	741.2	29.70	754.4	37.0	2.8	75	sse.			1		10					light rain	M. Grimard, Director
Clermont-Ferrand Obs'y	28.57	725.6	29.95	760.7	44.2	6.8	74	sw.			3		8		w	0.008	0.2	¼ covered	M. Allnard, Director.
Cluny, Normal School	29.11	739.3	29.98	761.4	37.8	3.2	93	sw.			1		10		sw.	0.028	0.7		M. de Villemontée, Dir.
Commercy, Normal School	28.91	734.2	29.80	756.8	37.4	3	93	sw.			3		10	sw.	sw.	0.067	1.7	covered	Dr. Coulet, Director.
Gap, Normal School	27.43	696.6	30.02	762.6	40.3	4.6	59	s.			1		3		nw.	0.020	0.5		M. Jeaugirard, Director.
Gréasque, du Rhone	28 89	733.9	30.06	763.4	43.5	6.4	60	nnw.			4		7		w.	0	0		M. Kina, Director.
Grenoble, Normal School	29.28	743.6	30.07	763.7	39.6	4.2	80	ne.			1		cn			0	0		M. Ablard, Director.
Guéret	28.38	720.8	30.00	761.9	41.0	5	94	e.			3		n		w.	0.236	6.0		M. Delorme, Dir.
Lamballe, Normal School	29.61	752.1	29.89	759.1	54.0	12.2	86	w.			4	0	5 n		w.	0.250	6.5	hazy	M. Ollitrault, Director.
Lescar, Normal School	29.60	751.9	30.17	766.4	50.9	10.5	91	w.			1		10			0.362	9.2	raining	M. Chauvin, Director.
Lorient, Naval Observatory	29.93	760.1	30.03	762.7	58.3	14.6	70	wnw.			2		5		wnw.	0.315	8.0	½ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.95	735.2	30.04	763 0	36.9	2.7	95	sse.			2		10		s.	0.008	0.2	light rain	M. André, Director.
Mans, Normal School	29.61	752.0	29.91	759.7	50.4	10.2	95	wnw.			3				wnw.	0.335	8.5		M. Piboen, Director.
Marseille, Observatory	29.75	755.6	30.02	762.6	48.9	9.4	5b	nw.			1		9		nw.	inap.	inap.		M. Stephan, Director.
Mt. Louis	24.81	630.2	29.65	753.2	36.5	2.5	72	sw.	3.8	1.7			8			0.409	10.4		M Caré for Dr. Fines.
Montpellier, Normal School	29.90	759.4	30.03	762.8	48.9	9.4	73	w.			2		5	w.		0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	28.93	734.9	29.73	755.2	37.4	3.0	83	ssw.			2		n		w.	0.047	1.2		M. Hasse, Director
Nantes, Observatory	29.89	759.1	30.02	762.5	54.9	12.7	74	wnw.			1–3		10 n; kn		wnw.	0.244	6.2		M. Larocque, Director.
Perpignan, Observatory	29.95	760.7	30.06	763.6	52.9	11.6	56	s.	5.6	2.5			10		nw.	0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.20	538.4			17.6	— 8.0		nw.			4–5		10		nw.	1.850	47.0	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.97	735 7	30.06	763.5	39.7	4.3	83	nw.			1		5	n.	s.	0	0	cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.89	632.2			27.7	— 2.4	100	w.			9		10			0.583	14.8	rain & fog	M. Allnard, Director.
Rochefort, Naval Obs'y	30.04	763.0	30.07	763.8	54.3	12.4	83	wsw.			3		10		w.	1.02	26.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.86	758.4	30.08	764.0	54.3	12.4	76	wsw.			1		2		wsw.	0.35	9.	slightly cl'dy	M. Brotier, Director.
Rodez, Normal School	27.87	707.8	30.08	764.0	38.1	3.4	90	nw.			1		10			0.094	2.4	snowing	M. Seger, Director.
Rouen, Normal School	29.65	753.0	29.69	754.2	51.4	10.8	97	w.			3		8		nw.	0.177	4.5	very cloudy	M. Mouillot.
Saint Lô					53.1	11.7	84	w.			1		10	w.	w.	0.398	10.1	raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.58	751.2	29.74	755.4	49.3	9.6	96	w.			1		10		w.	0.051	1.3		M. Renou, Director.
Toulouse, Observatory	29.46	748.2	30.19	766.7	51.1	10.6	86	w.			1		10	w.		0.012	0.3	covered	M. Baillaud, Director.
Tours	29.72	755.0	29.90	759.5	51.8	11.0	86	wsw.			1		10		w.	0.390	9.9	rainy	M. de Tastes.
Versailles, Observatory	29.25	743.0	29.74	755.5	49.3	9.6	97	w.			3					0.102	2.6		Dr. A. Bérigny, Director.
GERMAN.																			
Ansbach	28 33	719.6	29.82	757.5	35.2	1.8	80	sw.			2		10	sw.		0.039	1.0	heavy rain	Prof. Jnedt.
Bamberg	28.89	733.8	29.72	755.0	36.5	2.5	84	sw.			1		10			0.130	3.3	rain & snow	Prof. Dr. Hoh.
Berlin	29.42	747.2	29.60	751.8	36.0	2.2	91	s.			2		10			0.228	5.8	snowing	Prof. Dr. Arndt.
Breslau	29.17	741.0	29.70	754.3	34.9	1.6	82	w.			2		10			0.008	0.2		Royal University Obs'y.
Carlsruhe	29.32	744.7	29.76	756.0	40.3	4.6	78	sw.			5		10	sw.		1.122	28.5	raining	Albert Senz.
Cassel	28.84	732.5	29.55	750.6	34.9	1.6	93	s.			4		10	s.		0.043	1.1	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.36	745.8	29.73	755.1	38.8	3.8	90	ssw.			2		10			0.140	3.7	raining	Physical Society.
Friedrichshafen	28.437	722.1?	29.91	759.7	41.5	5.3	66	ssw.			7		10	wsw.		0.327	8.3		Wilhelm, Chief Tel.
Hamburg	29.44	747 7	29.53	750.0	33.8	1.0	100	sw.			3		10			0.003	1.6	foggy	E. Preller.
Kiel	29.46	748.2	29.47	748.6	33.8	1.0	81	ssw.			2		10			0.012	0.3	snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.24	742.7	29.67	753.6	35.6	2.0	95	sw.			2		10			0	0		H. Leppig, Asst.
Magdeburg	29.40	746.8	29.60	751.8	35.6	2.0	91	ssw.			1		10 n			0.114	2.9	raining	Weather Observatory.
Memel	29.52	749.9	29.53	750.1	32.5	0.3	94	s.			4		10 s					foggy	Issermann.
Munich	28.01	711.5	29.86	758.5	38.3	3.5	63	w.			4		5	w.		0.024	0.6		Central Station.
Neufahrwasser	29.56	750.8	29.58	751.2	33.4	0.8	89	nw.			2		10			0.055	1.4	light snow	A. Lothes.
Neustadt, Palatinate	29.17	740.8	29.69	754.0	38.7	3.7	100	w.			2		10	w.		0.205	5.2		Dicknether.
Stuttgart	28.81	731.8	29.72	755.0	39.6	4.2	74	w.			5		10			0.394	10.0		Prof. Dr. Schoder.
Wustrow	29.50	749.3	29.53	749.9	32.4	0.2	89	se.			3		10 s			0	0		Profs. Brandes & Reimer
GREEK.																			
Athens	29.46	748.2	29.84	757.8	69.1	20.6		s.			6.0		7			0	0		Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	29.96	761.1	30.02	762.4	79.9	26.6	58	wsw.	10.0	4.5			3	ssw.		0	0	d. clouds	
Deesa	29.46	748.4	29.94	760 4	81.4	27.4	32	nne.	6.0	2.7			1	sw.		0	0	d. clouds	
Bombay	29.84	757.8	29.87	758.8	78.7	25.9	68	nnw.	18.0	8.0			5	w.		0	0	d. clouds	
Poona, Yarrowda	28 02	711.6	29.87	758.6	79.9	26.6	20	nne.	8.0	3.6			4	ene.		0	0	d. clouds	
Trichinopoly	29.53	750.0	29.81	757.1	79.5	26.4	73	ne.	1.0	0.4			10			0.07	1.8	overcast	
Bellary	28.37	720.5	29.84	757.9	78.0	25.6	34	e.	4.0	1.8			2			0	0	blue sky	
Belgaum	27.31	693.7	29.85	758.1	76.0	24.4	23	ne.	8.0	3.6			0			0	0	blue sky	
Lahore	29.26	743.3	30.04	762.9	65.6	18.7	53	calm	0	0			0			0	0	blue sky	
Roorkee	29.06	738.2	29.99	761.8	67.2	19.6	50	calm	0	0			0			0	0		
Agra	29.43	747.6	30.01	762.3	73.2	22.9	30	nw.	2.0	0.9			0			0	0	blue sky	
Nagpur	28.88	733.7	29.94	760.5	74.5	23.6	28	ene.	4.0	1.8			3	e.		0	0	d. clouds	
Jubbulpore	28.69	728.8	30.08	764.0	72.1	22.3	34	ne.	4.0	1.8			0			0	0	blue sky	
Lucknow	29.61	752.1	30.00	762.0	71.2	21.8	47	calm	0	0			0			0	0	blue sky	
Allahabad	29.65	753.1	29.98	761.4	63.8	17.7	69	calm	0	0			0			0	0	blue sky	
Patna	29.80	756.8	29.99	761.7	67.6	19.8	54	w	1.2	0.5			2	w.	w.	0	0		
Hazaribagh	27.92	709.1	30.00	762.1	60.7	15.9	63	wnw.	4.1	1.8			9			0	0	d. clouds	
Cuttack	29.85	758.2	29.94	760.4	74.0	23.3	74	ne.	1.0	0.4			2			0	0	d. clouds	
Calcutta, Alipore	29.92	760.0	29.94	760.6	68.5	20.3	75	nnw.	3.0	1.3			3			c	0	d. clouds	
Dhubri	29.81	757.3	29.94	760.4	70.4	21.3	74	e.	2.9	1.3			0			0	0	blue sky	
Chittagong	29.82	757.4	29.91	759.8	78.2	25.7	78	calm	1.6	0.7			0			0	0	blue sky	
Sibsagar	29.66	753.4	30.01	762.2	65.0	18.3	81	ne.	2.0	0.9			4			0	0	blue sky	
Zanzibar, Africa	29.78	756.4	29.80	757.0	84.6	29.2	72	ssw.	4.3	1.9			4		e.	0	0	d. clouds	
Jeypore	28.53	724.8	30.00	762.0	73.4	23.0	34	nne.	4 2	1.9			0			0	0	blue sky	
ITALIAN.																			
Udine	29.50	749.3	29.92	759.9	46.6	8.1	44	calm	0	0			4			0	0		Prof. Giovanni Clodig.
Milan	29.42	747.3	29.95	760.8	38.5	3.6	73	sw.	1.8	0.8			2			0	0		Prof. Schiapparelli.
Padua	29.81	757.2	29.93	760.1	44.2	6.8	67	w.	0.7	0.3			5	ne.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.01	736.7	29.93	760.2	42.8	6.0	60	ese.	3.8	1.7			4	n.		0	0		Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.74	755.3	29.93	760.2	51.8	11.0	31	ne.	0.7	0.3	.....	.....	4	calm	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.97	710.4	29.92	760.0	45.3	7.4	23	e.	.....	.....	2	.....	2	n.	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.85	758.1	29.89	759.3	46.8	8.2	67	nnw.	19.9	8.9	.....	.....	4	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.66	753.4	29.92	760.0	49.1	9.5	66	wsw.	.....	.....	2	.....	1	.....	.....	0.067	1.7	....	Prof. Costantino Pitter.
Leghorn	29.80	756.9	29.89	759.1	50.9	10.5	39	ene.	3.1	1.4	.....	.....	5	.....	.....	0	0	....	Prof. P. Monte.
Rome	29.69	754.0	29.86	758.5	52.5	11.4	53	n.	4.3	1.9	.....	.....	0	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	29.57	751.0	29.82	757.5	54.5	12.6	72	ne.	6.3	2.8	.....	.....	9	sw.	.....	0.220	5.6	.....	Prof. C. de Giorgi.
Cosenza	29.00	736.5	29.89	759.3	51.4	10.8	75	wsw.	3.1	1.4	.....	.....	10	sw.	.....	0.579	14.7	.....	Prof. D. Conti.
Cagliari	29.75	755.6	29.95	760.6	54.0	12.2	61	nw.	.....	.....	4	.....	9	.....	.....	0.024	0.6	.....	Prof. A. Pacinotti.
Palermo	29.66	753.4	29.91	759.7	55.6	13.1	69	nw.	9.4	4.2	.....	.....	5	nw.	.....	0.394	10.0	.....	Prof. G. Caccianiore.
Syracuse	29.78	756.4	29.82	757.5	63.7	17.6	52	wnw.	15.0	6.7	.....	.....	5	wnw.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.32	744.7	29.85	758.1	53.2	11.8	67	w.	0	0	.....	.....	3	nw.	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	21.85	555.1	.....	.....	14.7	— 9.6	58	n.	.....	.....	2	.....	8	.....	.....	0	0	misty	Prof. P. F. Denza.
Valdobbia	21.90	556.3	.....	.....	16.7	— 8.5	69	n.	.....	.....	2	.....	9	.....	.....	0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.96	760.9	29.98	761.7	46.3	7.9	85	w.	.....	.....	4	.....	10 n	.....	w.	0.272	6.9	raining	Hattori.
Awomori	29.90	759.4	29.94	760.5	41.5	5.3	71	wsw.	12.9	5.8	.....	.....	10 ks	.....	w.	0.149	3.8	overcast	K. Ogawa.
Hakodate	29.95	760.6	29.96	760.9	43.0	6.1	65	wsw.	9.0	4.0	.....	2	0	wnw.	.....	0	0	clear	
Hiroshima	.....	.....	.....	.....	52.6	11.4	82	sw.	3.5	1.5	.....	0	0	.....	.....	0	0	clear	Y. Miwa.
Kanazawa	30.00	762.1	30.11	764.7	53.0	11.7	68	s.	12.1	5.4	.....	4	6	w.	.....	0.530	13.4	cloudy	S. Endo.
Kioto	29.97	761.2	30.15	765.8	42.3	5.7	95	sw.	0.9	0.4	.....	1 ck	0	.....	.....	0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.02	762.6	30.23	767.8	55.6	13.1	94	calm	0	0	.....	.....	10 n	.....	nw.	0.020	0.5	light rain	S. Takehayashi.
Nemuro	29.74	755.4	29.80	756.9	40.2	4.6	92	wsw.	6.0	2.7	.....	0	2	.....	.....	0	0	clear	
Niigata	29.99	761.7	30.03	762.7	49.4	9.7	94	se.	3.5	1.5	.....	.....	10 ck	.....	w.	0.210	5.3	cloudy	M. Morita.
Nobiru	29.96	761.0	29.98	761.4	42.4	5.8	88	sse.	3.9	1.7	.....	1ck;cs	0	w.	.....	0	0	fair	H. Midzushina.
Osaka	30.12	765.0	30.13	765.4	47.3	8.5	91	s.	1.3	0.5	.....	4 ck	0	w.	.....	0	0	fair	
Sapporo	.....	.....	.....	.....	33.9	1.1	88	nw.	1.8	0.8	.....	0	8	.....	.....	0.155	3.9	cloudy	
Tokei Obs'y, Yeddo	29.94	760.6	30.02	762.6	44.4	6.9	89	calm	0	0	.....	0	0	.....	.....	0	0	clear	The Staff.
Wakayama	30.10	764.6	30.16	766.1	49.4	9.7	83	ene.	5.4	2.4	.....	7	3	wnw.	wnw.	0	0	cloudy	Y. Kuwamuen.
MAURITIUS.																			
Mauritius Observatory	29.77	756.1	29.96	761.0	80.0	26.7	60	ne.	13.5	6.0	.. ..	2 c;cs	4 k;ks	wnw.	ne.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.70	602.0	29.88?	760.0?	47.8	8.8	76	nw.	inap.	inap.	.....	0	0	.....	.....	0	0	foggy	Prof. Vicente Fernandez.
Leon	24.40	619.7	30.30	769.6	42.8	6.0	77	nnw.	.....	.....	1	0	0	.....	.....	0	0	foggy	Prof. M. Leal.
Mazatlan	29.79	756.7	30.05	763.4	66.0	18.9	89	e.	1.6	0.8	.....	0	0	.....	.....	0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.16	588.3	30.35	770.9	41.9	5.5	66	calm	0	0	.....	0	0	.....	.....	0	0	fine	The Staff.
Morelia	24.38	619.2	30.36	771.0	52.0	11.1	67	ne.	0.9	0.4	.....	0	0	.....	.....	0	0	fine	M. Tena, M. D.
Orizaba	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Chazaro.
Pabellon, Aguascallentes	24.00	609.7	30.12	764.9	38.1	3.4	66	calm	.. ..	.....	0	.....	.....	.....	.....	0	0	.....	M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.0	30.30	769.7	40.1	4.5	70	calm	0	0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.66?	573.3?	30.26	768.5	43.3?	9.8?	57	e.	3.4	1.5	.....	0	0	.....	.....	0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.48	748.7	29.48	748.7	46.4	8.0	.....	wsw.	.....	.....	5	.....	.....	.....	.....	0.024	0.6	.....	
Groningen	29.35	745.4	29.40	746.8	36.1	2.3	....	s.	.....	.....	3	.....	.....	.....	.....	0.110	2.8	.....	
Helder	29 31	744.4	29.31	744.4	42.4	5.8	.....	ssw.	.....	.....	4	.....	.....	.....	.....	0.437	11.1	.....	
Hellevoetsluis	29.43	747.5	29.43	747.5	43.0	6.1	97	wsw.	.....	.....	3	.....	.....	.....	.....	0.331	8.4	....	
Utrecht	29.37	746.0	29.42	747.2	40.8	4.9	97	sw.	.....	.....	3	.....	10	.....	.....	0.539	13.7	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.21	742.0	29.28	743.6	34.2	1.2	68	calm	0	0	.....	.....	6	.....	.....	0	0	.....	
Brono	29.38	746.3	29.42	747.3	23.0	— 5.0	57	e.	4	2	.....	.....	1	.....	.....	0	0	.....	
Christiania	29.28	743.7	29.43	747.6	21.6	— 5.8	85	ne.	7	3	.....	.....	10	.....	.....	.....	.....	snowing	
Gjæsvær	29.36	745.8	29.39	746.4	33.8	1.0	.....	ne.	.....	.....	6	.....	10	.....	.....	.....	.....	snowing	
Lodingen	29.40	746.7	29.45	747.9	23.4	— 4.8	84	n.	.....	.....	1	.....	1	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.25	768.3	30.40	772.2	63.9	17.7	82	sse.	8.1	3.6	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.35	745.5	30.36	771.3	57.7	14.3	41	sw.	4.9	2.2	.....	.....	2	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.22	767.6	30.31	769.8	69.1	20.6	48	e.	7.4	3.3	.....	.....	3	ne.	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	30.07	763.8	30.44	773.1	59.3	13.5	43	ne.	11.9	5.3	.....	.....	1	n.	.....	0.004	0.1	.....	The Staff.
Ponta Delgada, Azores	30.41	772.3	30.48	774.1	66.6	19.2	64	se.	8.1	3.6	.....	.....	3	n.	.....	0.020	0.5	.....	
Saint Paul de Loando	29.73	755.2	29.94	760.4	75.2	24.0	75	w.	1.8	0.8	.....	.....	0	.....	.....	0	0	.....	
Serra da Estrella	25.56	649.3	30.34	770.7	48.6	9.2	56	n.	9.4	4.2	.....	.....	0	.....	.....	0	0	.....	
RUSSIAN.																			
Akmolinski	29.61	752.0	30.81	782.6	9.5	—12.5	92	ese.	2	1	.....	0	1 s	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	29.50	749 2	29.52	749.7	20.8	— 6.2	95	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	30.24	768.2	30.16	766.1	49.1	9.5	65	se.	7	3	.....	.....	10 k;s	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	30.40	772.1	30.97	786.7	0.5	—17.5	87	w.	2	1	.....	.....	3	.....	.....	0	0	light clouds	Meteorological Obs'y.
Dorpat	29.30	744.1	29.55	750.5	26.4	— 3.1	100	sw.	4	2	.....	8 ck	0	.....	.....	0.079	2.0	.....	Observatory.
Ekaterinburg	29.32	744.7	30.34	770.5	30.7	— 0.7	77	sse.	7	3	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Kasan	29.69	754.0	29.97	761.1	34.0	1.1	93	sse.	20	9	.....	.....	10	.....	.....	0.555	14.1	.....	Observatory.
Kertch	29.82	757.4	29.84	757.9	59.0	15.0	94	calm	0	0	.....	5 ck	0	.....	.....	0	0	.....	Lagorio & Sastyrea.
Kieff	29.12	739.6	29.78	756.4	32.2	0.1	94	s.	2	1	.....	cs	10 ks	.....	.....	.....	.....	.....	Observatory.
Lugan	29.57	751.1	29.78	756.3	53.8	12.1	86	ssw.	18	8	.....	.....	10	.....	.....	0.161	4.1	.....	Meteorological Obs'y.
Nikolaiev	29.69	754.1	29.76	755.9	42.8	6.0	97	calm	0	0	.....	.....	10 n	.....	.....	0.488	12.4	.....	Capt. Kurdakow.
Pekin, China	30.09	764.2	30.23	767.8	37.2	2.9	69	calm	0	0	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.51	749.6	29.53	750.0	25.2	— 3.8	84	sse.	7	3	.....	.....	10	.....	.....	0	0	.....	Central Physical Obs'y.
Semipalatinsk	30.31	769.8	31.06	788.9	2.5	—16.4	85	w.	4	2	.....	.....	10	.....	.....	inap.	inap.	.....	Major Lasarew.
Tashkend, Laboratory	28.59	726.2	30.20	767.0	47.3	8.5	49	calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.72	729.6	30.13	765.2	64.9	18.3	45	n.	2	1	.....	1 c	0	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.59	777.0	30.91	785.2	— 6.7	—21.5	87	n.	2	1	.....	2 c	0	.....	.....	.....	.....	.....	
Vladivostock	29.81	757.2	29.87	758.8	37.4	3.0	.....	sw.	7	3	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.22	742.3	29.66	753.4	32.4	0.2	90	wsw.	16	7	.....	0	8 k	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.21	741.9	29.64	752.9	32.5	0.3	100	ssw.	7	3	.....	.....	10	.....	.....	0.012	0.3	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.61	777.6	30.95	786.2	—15.5	—26.4	76	calm	0	0	.....	.....	0	.....	.....	0	0	.....	M. O Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.21	741.9	49	9.4	93	nw.	.....	.....	4	10	5	nw.	.....	0.7	18.	showery	J. Youngclause.
North Unst	.....	.....	29.26	743.2	.....	.....	.....	se.	.....	.....	1	3	4	n.	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.99	761.7	30.10	764.4	56.5	13.6	54	nw.	4.3	1.9	.....	0	6	.....	.....	0	0	clouds	Antonio Reve, Director.
Bilbao, Met. Obs'y	30.24	768 2	30.30	769.7	56.5	13.6	81	nw.	6.0	2.7	.....	.....	10	.....	.....	0.213	5.4	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.35	694.8	30.44	773.1	42.8	6.0	74	nw.	8.7	3.9	.....	.....	10	.....	.....	0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	28.09	713.4	30.37	771.5	50.7	10.4	53	w.	1.6	0.7	.....	7	0	n.	.....	0	0	light clouds	The Staff.
Murcia, Met. Obs'y	30.11	764.7	30.24	768.0	60.8	16.0	52	nnw.	6.5	2.9	.....	2	4	se.	.....	0	0	cloudy	Olayó Diaz, Director.
Oviedo	29.44	747.7	30.32	770.0	55.4	13.0	78	e.	8.5	3.8	.....	.....	10 kn	.....	n.	0	0	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.49	749.1	30.41	772.5	49.5	9.7	88	calm	0	0	.....	.....	10	.....	.....	0.004	0.1	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.88	758.9	29.93	760.3	81.0	27.2	84	ene.	8.8	3.9	.....	3 c	6 ks	....	ese.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.21	767.4	30.31	769.9	63.5	17.5	29	ne.	4.4	1.9	.....	0	8	.....	sw.	0	0	.....	Capt. C. Pujazon, R. N
San Juan de Porto Rico, W.I.	29.93	760.3	30.02	762.6	77.4	25.2	95	nw.	5.6	2.5	.....	3 cs	2 k	nw.	nw.	0	0	.....	Manuel Maese.
Tuguegarao, Philippine Id's	29.85	758.3	29.99	761.7	78.2	25.7	92	se.	1.1	0.4	.....	7 ck	0	se.	.....	0.19	4.8	cloudy	José L. Yrastorza
SWEDISH																			
Haparanda	29.52	749.8	29.56	750.8	11.5	—11.4	93	nw.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	29.45	747.9	29.50	749.2	15.8	— 9.0	91	ne.	.....	.....	2	.....	10	.....	.....	0.059	1.5	.....	

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	29.30	744.1	29.35	745.4	21.9	— 5.6	90	ne.	.....	.....	6	.....	10	.....	.....	0.209	5.3	.....	
Stockholm	29.21	741.8	29.38	746.3	27.9	— 2.3	87	w.	.....	.....	2	.....	10	.....	.....	0.012	0.3	.....	
Wisby	29.39	746.5	29.45	748.0	33.8	1.0	75	wnw.	.....	.....	4	.....	10	.....	.....	.....	.....	hailing	
Sub-series.																			
Upsala	29.27	743.5	29.36	745.7	25.2	— 3.8	93	nw.	4.7	2.1	.....	.....	10	.....	.....	0.012	c.3	.....	S. G. Fineman.
Swiss.																			
Geneva	28.58	725.8	30.06	763.5	35.4	1.9	93	nnw.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	The Observatory.
Turkish.																			
Constantinople	.....	.....	29.89	759.2	67.3	19.6	59	sw.	17	7.5	.....	.....	6	.....	sw.	0.150	3.8	.....	The Observatory.
Valona	.....	.....	29.89	759.1	54.0	12.2	.....	se.	.....	.....	1	.....	10	.....	.....	0.91	23.1	raining	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syrja	.....	.....	30.13	765.3	70.0	21.1	55	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	29.88	758.9	29.96	761.0	33	0.6	60	n.	4	1.8	.....	0	2 8	.....	n.	0	0	clear	J. O. Barnes.
Alpena, Michigan	29.24	742.7	29.94	760.5	32	0.0	88	w.	6	2.7	.....	.....	10 8	.....	.....	0.04	1.0	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.06	636.5	30.16	766.1	29	— 1.7	54	ne.	4	1.8	.....	0	0 8	.....	.....	0	0	fair	W. C. Barnes.
Assinnaboine, Ft., Montana	27.26	692.4	30.24	768.1	27	— 2.8	67	n.	1	0.4	.....	0	0 8	.....	.....	inap.	inap.	fair	B. O. Lenoir.
Atlanta, Georgia	28.93	734.8	30.15	765.8	37.0	2.8	66	n.	8	3.6	.....	hz.	4 8	.....	.....	0.01	0.3	fair	H. C. Smith.
Atlantic City, New Jersey	29.88	758.9	29.89	759.2	30	— 1.1	78	n.	10	4.5	.....	0	0	.....	.....	0	0	clear	Jas. M. Watson.
Augusta, Georgia	29.96	761.0	30.16	766.1	36	2.2	89	nw.	1	0.4	.....	7 c	0	w.	.....	0.24	6.1	fair	John Healy.
Baltimore, Maryland	29.97	761.2	30.02	762.5	34	1.1	79	nw.	5	2.2	.....	0	fg.	.....	.....	0	0	clear	Geo W Felger.
Barnegat, New Jersey	29.87	758.7	29.89	759.2	33.0	0.6	88	n.	17	7.6	.....	1 k	0	.....	.....	0	0	clear	G. A. Hill.
Bennett, Fort, Dakota	28.26	717.8	29.95	760.7	30	— 1.1	80	nw.	15	6.7	.....	3 ck	5 8	nw.	nw.	0	0	cloudy	A. Pritchard.
Benton, Fort, Montana	27.32	693.9	30.28	769.1	25	— 3.9	88	calm	0	0	.....	.....	10 8	.....	.....	0.01	0.3	cloudy	S. Wheaton.
Bismarck, Dakota	28.14	714.7	30.06	763.5	27	— 2.8	88	ne.	8	3.6	.....	.....	10 n	.....	.....	0.06	1.5	light snow	Cyrus Cramer.
Block Island, Rhode Island	29.80	756.9	29.83	757.7	37	2.8	82	n.	21	9.4	.....	3ck;cs	0	.....	.....	0	0	clear	J. T. Elker.
Boise City, Idaho	27.36	694.9	30.30	769.6	30	— 1.1	88	ne.	4	1.8	.....	.....	10 8	.....	calm	inap.	inap.	cloudy	B. E. Light.
Boston, Massachusetts	29.70	754.4	29.86	758.4	30.0	— 1.1	77	nw.	12	5.4	.....	.....	10k;fg	.....	e.	0	0	cloudy	O. B. Cole.
Brownsville, Texas	30.03	762.7	30.08	764.0	52.4	11.3	93	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.14	740.1	29.92	760.0	36.8	2.7	83	w.	6	2.7	.....	.....	10 8	.....	nw.	inap.	inap.	cloudy	W. Finn.
Buford, Fort, Dakota	28.19	716.0	30.17	766.3	23	— 5.0	88	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.63	752.6	29.94	760.5	26.3	— 3.2	76	e.	1	0.4	.....	2 cs	3 8	sw.	w.	0	0	fair	W. B. Gates.
Cairo, Illinois	29.76	755.9	30.18	766.6	36.8	2.7	81	ne.	4	1.8	.....	hz.	2 8;fg	.....	.....	0	0	clear	W. H. Ray.
Cape Henry, Virginia	30.00	762.0	30.02	762.5	41	5.0	82	nw.	28	12.5	.....	.....	10 8	.....	.....	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	29.90	759.4	29.93	760.2	40.0	4.4	65	n.	28	12.5	.....	0	0	.....	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	29.49	749.0	30.17	766.3	48	8.9	71	se.	.....	.....	.....	2 cs	0	nw.	.....	0.02	0.5	clear	J. J. McLean.
Cedar Keys, Florida	30.13	765.3	30.15	765.8	45	7.2	83	nw.	6	2.7	2	0	0	.....	.....	0	0	clear	F. W. Mixer.
Champaign, Illinois	29.24	742.7	30.10	764.5	31.7	— 0.2	63	nw.	10	4.5	.....	.....	10 8	.....	nw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.04	763.0	30.10	764.5	41	5.0	92	n.	6	2.7	.....	0	0	.....	.....	0.89	22.6	clear	J. H. Smith.
Charlotte, N. Carolina	29.21	741.9	30.09	764.3	35.0	1.7	69	n.	2	0.9	.....	0	fg.	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.34	745.2	30.19	766.8	36.5	2.5	74	w.	3	1.3	.....	0	2 8	.....	.....	0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	23.95	608.3	30.16	766.1	33.2	0.7	50	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.31	744.5	30.05	763.3	34.2	1.2	74	w.	5	2.2	.....	.....	10 8	.....	.....	0	0	cloudy	J. Mitchell.
Chincoteague, Virginia	29.93	760.2	29.95	760.7	34	1.1	78	nw.	20	8.9	.....	hz.	0	.....	.....	0	0	clear	C. F. Dickens.
Cincinnati, Ohio	29.44	747.8	30.13	765.3	35	1.7	100	w.	1	0.4	.....	.....	10 8	.....	sw.	0	0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.24	742.7	30.01	762.2	36.5	2.5	70	w.	11	4.9	.....	.....	10 8	.....	w.	0	0	cloudy	J. B. Newlin.
Coleman City, Texas	28.10	715.3	30.04	763.0	45	7.2	86	sw.	6	2.7	.....	.....	10 8	.....	sw.	0	0	cloudy	L. Dorman.
Columbus, Ohio	29.16	740.7	30.05	763.3	33	0.6	78	w.	4	1.8	.....	.....	10 ks	.....	.....	0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.02	711.7	30.03	762.7	48.8	9.3	58	sw.	16	7.2	.....	.....	10 8	.....	.....	0	0	cloudy	J. McGlone.
Custer, Fort, Montana	26.84	681.7	30.16	766.1	29	— 1.7	80	s.	2	0.9	.....	0	4 8	.....	calm	0	0	fair	W. B. Lamar.
Davenport, Iowa	29.38	746.2	30.07	763.8	37	2.8	61	nw.	2	0.9	.....	7 cs	hz.	.....	.....	0	0	fair	R. R. Martin.
Davis, Fort, Texas	25.21	640.3	30.11	764.8	50	10.0	74	se.	4	1.8	.....	.....	10 ks	.....	se.	0	0	cloudy	J. Williams.
Dayton, Washington T'y	28.41	721.6	30.19	766.8	42.7	5.9	78	sw.	6	2.7	.....	8 k	0	sw.	.....	0.19	4.8	cloudy	H. Ulford.
Deadwood, Dakota	25.20	640.1	30.03	762.7	31	— 0.6	100	s.	4	1.8	.....	.....	10 n	.....	.....	0.02	0.5	light snow	G. W. Scott.
Delaware Breakwater, Del.	29.93	760.2	29.95	760.7	40	4.4	82	nw.	31	13.9	.....	0	hz.	.....	.....	0	0	clear	T. S. Townsend.
Denison, Texas	29.17	740.9	30.01	762.2	45.8	7.7	76	s.	12	5.4	.....	0	6 8	.....	.....	0	0	fair	J. W. Byram.
Denver, Colorado	24.64	625.8	30.14	765.5	35.0	1.7	53	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.05	737.9	30.00	762.0	38	3.3	62	nw.	2	0.9	.....	.....	10 8	.....	nw.	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.27	743.4	30.01	762.2	38.0	3.3	61	w.	8	3.6	.....	.....	10 k	.....	nw.	0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.24	691.9	29.98	761.5	26	— 3.3	76	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.30	744.2	30.05	763.3	33.5	0.8	84	nw.	1	0.4	.....	.....	10s;fg	.....	nw.	0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.21	741.9	30.00	762.0	34.2	1.2	77	w.	4	1.8	.....	.....	10 8	.....	w.	0	0	cloudy	N. B. Conger.
Eagle Pass, Texas	29.26	743.2	30.09	764.3	40.0	4.4	82	se.	1	0.4	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.38	644.6	30.24	768.1	27	— 2.8	70	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	29.81	757.2	29.88	758.9	34.0	1.1	78	ne.	16	7.2	.....	.....	10 8	.....	ne.	0	0	cloudy	D. O. Murphy.
Elliott, Fort, Texas	27.14	689.3	30.07	763 8	26	— 3.3	67	calm	0	0	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.29	667.8	30.14	765.5	47.0	8.3	66	calm	0	0	.....	0	2 8	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.20	741.7	29.96	761.0	39	3.9	82	sw.	1	0.4	.....	.....	10 8	.....	w.	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.27	743.4	29.97	761.2	33.5	0.8	79	nw.	3	1.3	.....	0	8 8	.....	w.	0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.28	718.3	30.10	764.5	49	9.4	80	sw.	5	2.2	.....	5 cs	0	.....	.....	0	0	fair	Frank Halwegler.
Galveston, Texas	30.10	764.5	30.15	765.8	55	12.8	86	sw.	2	0.9	.....	8 cs	fg.	.....	.....	0	0	cloudy	E. O'C. Macinerney.
Grand Haven, Michigan	29.29	744.0	29.99	761.7	41.0	5.0	57	w.	10	4.5	.....	.....	10 8	.....	w.	0	0	cloudy	J. Mueller.
Grant, Fort, Arizona	25.28	642.1	30.12	765.0	42.5	5.8	35	e.	6	2.7	.....	0	0	.....	.....	0	0	clear	Robert O. Lord.
Hatteras, North Carolina	29.97	761.2	29.99	761.7	41	5.0	73	n.	26	11.6	.....	6 k	hz.	se.	.....	0.33	8.4	fair	R. M. Crawford.
Helena, Montana	25.73	653.5	30.11	764.8	39	3.9	50	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	N. O. Smith.
Henrietta, Texas	28.93	734.8	29.97	761.2	46	7.8	93	se.	10	4.5	.....	.....	10 8	.....	se.	0	0	cloudy	J. P. Sherry.
Huron, Dakota	28.35	720.1	29.83	757.7	32	0.0	78	e.	15	6.7	.....	0	5 8	.....	e.	0	0	fair	S. W. Glenn.
Indianapolis, Indiana	29.20	743.2	30.10	764.5	34	1.1	82	w.	2	0.9	.....	2 c	hz.	.....	.....	0	0	light haze	O. Schutze
Indianola, Texas	30.07	763.8	30.10	764.5	55.5	13.1	80	calm	0	0	.....	8 ck	0	w.	.....	0	0	cloudy	I. A. Reed.
Jacksboro, Texas	28.76	730.5	29.98	761.5	47	8.3	77	se.	4	1.8	.....	.....	10 8	.....	.....	0	0	cloudy	D. J. Carr.
Jacksonville, Florida	30.07	763.8	30.12	765.0	45	7.2	83	nw.	5	2.2	.....	3 cs	0	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.49	698.2	30.16	766.1	28	— 2.2	77	nw.	12	5.4	.....	0	8 g	.....	w.	0.01	0.3	cloudy	A. Schneider.
Keokuk, Iowa	29.36	745.7	30.06	763.5	37.0	2.8	79	calm	0	0	.....	.....	10 8	.....	.....	0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.09	764 3	30.11	764.8	60.0	15.6	75	n.	20	8.9	.....	.....	9 ks	.....	n.	0 31	7.9	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	29.99	761.7	30.01	762.2	36	2.2	69	nw.	18	8.0	.....	3 cs	sk.	n.	.....	0.07	1.8	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	29.10	739.9	30.18	766.6	30.3	— 0.9	94	n.	1	0.4	.....	3 c	sk.	.....	.....	0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.19	741.4	30.01	762.2	35	1.7	69	s.	4	1.8	.....	.....	10 8	.....	.....	0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.07	738.4	30.01	762.2	37	2.8	82	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.30	744.2	30.17	766.3	41.5	5.3	88	e.	4	1.8	.....	.....	10 8	.....	.....	0.06	1.5	cloudy	W. Bell.
Little Rock, Arkansas	29.77	756.1	30.10	764.5	40	4.4	89	calm	0	0	.....	3 ck	sk.	.....	.....	0	0	dense smoke	W. U. Simons.
Los Angeles, California	29.68	753.9	30.08	764.0	40	4.4	65	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.52	749.8	30.11	764.8	39	3.9	73	sw.	4	1.8	.....	4 cs	sk.	.....	.....	0	0	fair	L. M. Dey.
Lynchburg, Virginia	29.35	745.5	30.07	763.8	31	— 0.6	68	w.	1	0.4	.....	3 c	0	w.	.....	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.27	743.4	29.96	761.0	36.0	2.2	79	nw.	4	1.8	.....	.....	10 8	.....	w.	0.01	0.3	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.03	762.7	30.04	763.0	37	2.8	82	n.	23	10.3	.....	0	0	.....	.....	0.57	14.5	clear	F. P. Chaffee.
Madison, Wisconsin	28.98	736.1	30.05	763.3	36	2.2	79	sw.	4	1.8	.....	.....	10 8	.....	sw.	0	0	cloudy	C. A. Shaw.
Maginnis, Fort, Montana	25.61	650.5	30.12	765.0	23	— 5.0	70	ne.	4	1.8	.....	.....	10 n	.....	ne	0.03	0.8	light snow	F. Burke.
McKavett, Fort, Texas	27.86	707.6	30.24	768.1	45	7.2	76	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.17	740.9	29.94	760.5	33	0.6	68	w.	6	2.7	.....	.....	10 n	.....	.....	0.01	0.3	light snow	J. Gilligan.
Memphis, Tennessee	29.78	756.4	30.13	765.3	40	4.4	82	sw.	2	0.9	.....	0	fg	.....	.....	0	0	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.23	742.4	30.02	762.5	36	2.2	61	w.	6	2.7	.....	7ck;cs	0	w.	.....	0	0	fair	W. Line.
Missoula, Fort, Montana	26.72	678.7	30.13	765.3	36	2.2	92	ne.	3	1.3	.....	.....	10 8	.....	.....	0.07	1.8	threatening	J. H. Young.
Mobile, Alabama	30.15	765 8	30.19	766.8	38	3.3	89	nw.	3	1.3	.....	1 c	0	.....	.....	0	0	clear	C. A. Read.
Montgomery, Alabama	29.94	760.5	30.18	766.6	37	2.8	96	calm	0	0	.....	1 cs	fg	.....	.....	0	0	clear	J. B. McLaughlin.

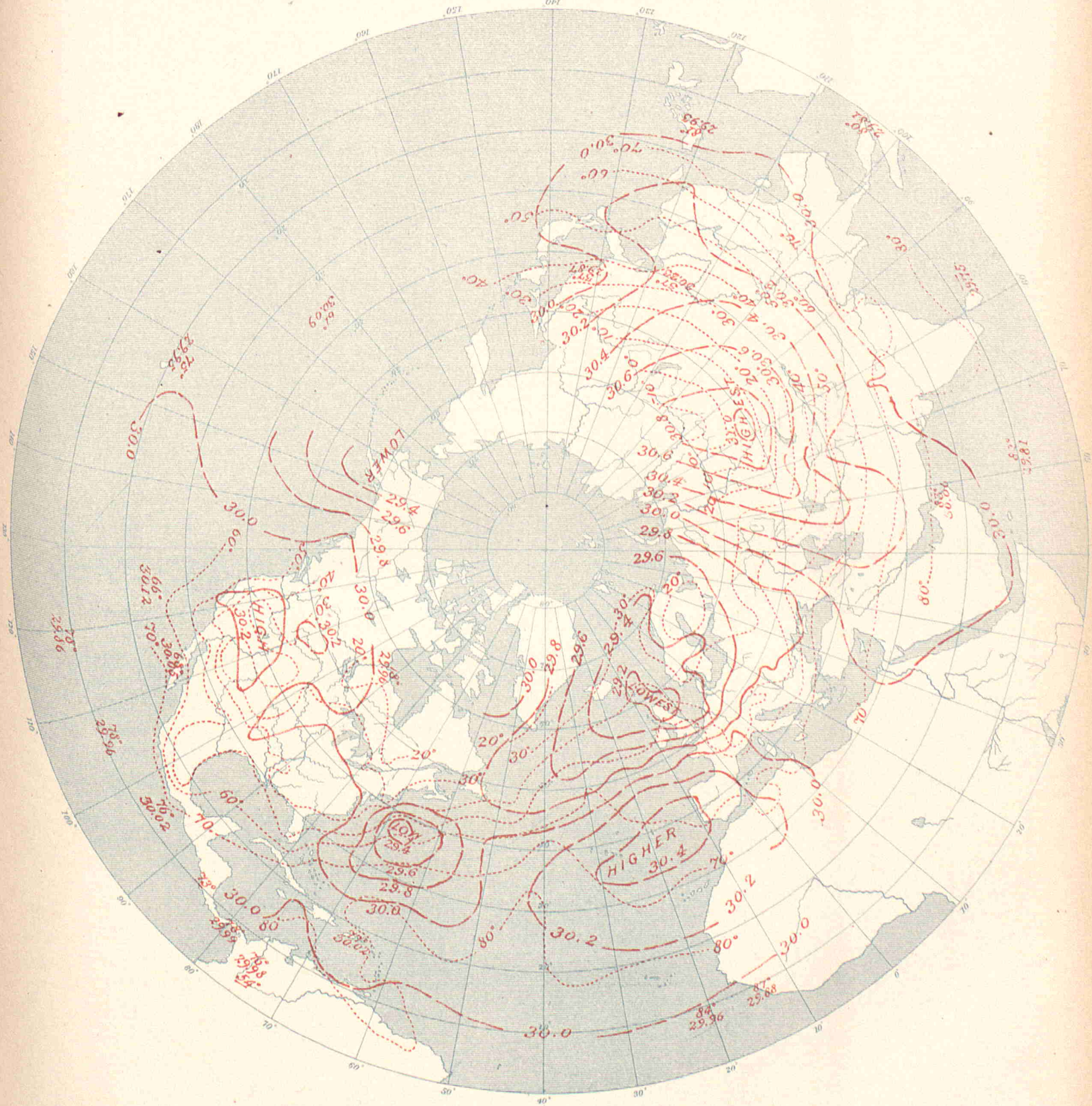
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	28.95	735.3	30.01	762.2	27	— 2.8	88	n.	6	2.7			10 s			0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.02	737.1	30.08	764.0	37.5	3.1	84	sw.	1	0.4		0	8 k		w.	0	0	cloudy	J. C. Sprigg, jr
Mt. Washington, N. H.	23.47	596.1	30.03	762.7	16.0	— 8.9	58	nw.	8	3.6		8 cs	0			0	0	cloudy	J. G. Linsley.
Nashville, Tennessee	29.56	750.8	30.16	766.1	33.5	0.8	88	nw.	2	0.9		7 cs	0	w.		0	0	fair	L. N. Jesunofsky.
New Haven, Connecticut	29.76	755.9	29.88	758.9	28	— 2.2	77	n.	8	3.6		5 cs	0	s.		0	0	fair	J. H. Sherman.
New London, Connecticut	29.83	757.7	29.88	758.9	31	— 0.6	57	n.	4	1.8		5 ck	0	s.		0	0	fair	J. G. Lynch.
New Orleans, Louisiana	30.15	765.8	30.21	767.3	48.7	9.3	62	ne.	5	2.2		1 c	sk.			0	0	clear	L. Dunne.
Newport, Rhode Island	29.80	756.9	29.84	757.9	33.2	0.7	70	nw.	9	4.0		6 c	1 ks	sw.		0	0	fair	W. McGillivray.
New York, New York	29.74	755.4	29.92	760.0	32.5	0.3	88	n.	8	3.6		0	fg.			0	0	clear	J. B. Merrill.
Norfolk, Virginia	29.99	761.7	30.02	762.5	37	2.8	72	n.	11	4.9		0	hz.			0	0	clear	Wm. Davis.
North Platte, Nebraska	26.88	682.7	29.96	761.0	21.6	— 5.8	73	n	8	3.6		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y.	30.05	763.3	30.09	764.3	48.0	8.9	93	s.	1	0.4			10 n			0.70	17.8	light rain	J. Dascomb.
Omaha, Nebraska	28.68	728.5	29.92	760.0	39.2	4.0	67	s.	10	4.5		0	2 s		w.	0	0	clear	A. Pollak.
Oswego, New York	29.58	751.3	29.92	760.0	34.0	1.1	73	s.	5	2.2			10 s		w.	0	0	cloudy	S. W. Beall.
Palestine, Texas	29.54	750.3	30.11	764.8	47.0	8.3	77	s.	9	4.0		6 cs	0	se.		0	0	fair	L. M. Pindell.
Pensacola, Florida	30.17	766.3	30.20	767.1	40.0	4.4	82	nw.	4	1.8		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	29.86	758.4	29.96	761.0	33.5	0.8	70	nw.	7	3.1		0	hz.			0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.62	447.5	30.28	769.1	8	—13.3	83	n.	60	26.8		0	0			0	0	clear	H. Hall.
Ploche, Nevada	24.07	611.4	30.21	767.3	29.8	— 1.2	49	s.	3	1.3		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.17	740.9	30.02	762.5	35.0	1.7	69	w.	4	1.8		0	6k; s		w.	0	0	fair	W. Daly.
Poplar River, Montana	27.90	708.6	30.19	766.8				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.18	766.6	30.19	766.8	51.1	10.6	80	nw.	9	4.0		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.27	743.4	29.99	761.7	30.8	— 0.7	88	sw.	4	1.8		0	2 s			0	0	clear	W. O. Bailey.
Portland, Maine	29.80	756.9	29.85	758.2	31.0	— 0.6	78	n.	13	5.8		7 cs	0			0	0	fair	W. W. Elchelberger.
Portland, Oregon	30.12	765.0	30.19	766.8	47.2	8.4	93	s.	5	2.2			10 s		s.	0.90	22.9	cloudy	M. L. Hearne.
Portsmouth, N. C.					41	5.0	73	n.	27	12.1		hz.	hz.			0.36	9.1	light haze	F. S Coburn.
Prescott, Arizona	24.83	630.7	30.17	766.3	26	— 3.3	80	nw.	3	1.3		0	1 s			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	29.77	756.1	29.80	756.9	40.5	4.7	65	n.	10	4.5			10 s		n.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.11	764.8	30.12	765.0	48.5	9.2	71	ne.	12	5.4		0	0			0.03	0.8	clear	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.22	742.2	29.92	760.0	31.5	— 0.3	79	sw.	11	4.9		10 k	hz.			0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.63	752.6	30.20	767.1	40.6	4.8	87	nw.	2	0.9		0	9 s		w.	0.12	3.0	cloudy	J. J. Nanry.
Sacramento, California	30.14	765.5	30.22	767.6	41.8	5.4	92	nw.	4	1.8		0	0			inap.	inap.	clear	J. A. Barwick
St. Louis, Missouri	29.50	749.3	30.13	765.3	37.8	3.2	89	s.	8	3.6			fg.			0	0	dense fog	J. H. Weber.
St. Paul, Minnesota	29.06	738.1	29.98	761.5	32.0	0.0	78	w.	1	0.4		8 k	0	n.		0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.14	740.1	30.08	764.0	21	— 6.1	84	n.	10	4.5			10 s			0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.74	653.8	30.31	769.9	34	1.1	56	calm	0	0		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.36	745.7	30.08	764.0	44.5	6.9	93	calm	0	0			10 s			0	0	cloudy	T. J. Kenan.
San Diego, California	30.00	762.0	30.07	763.8	45.3	7.4	91	nw.	2	0.9		0	1 s			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.31	744.5	30.03	762.7	39.3	4.1	73	w.	9	4.0			10 s		w.	0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.86	758.4	29.89	759.2	35.0	1.7	69	n.	20	8.9		0	0			0	0	clear	B. A. Blundon.
San Francisco, California	30.15	765.8	30.22	767.6	48	8.9	96	se.	3	1.3			fg.			0	0	dense fog	N. Gorom.
Santa Fé, New Mexico	23.20	589.3	30.24	768.1	29	— 1.7	54	n.	19	8.5		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.01	762.2	30.10	764.5	41	5.0	70	nw.	5	2.2		0	hz.			0.02	0.5	clear	H. W. Ford.
Shaw, Fort, Montana	26.47	672.3	30.29	769.4	23	— 5.0	88	w.	3	1.3			10 s			0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	29.87	758.7	30.12	765.0	41	5.0	82	nw.	3	1.3			10 s			0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.64	727.4	29.95	760.7	39.5	4.2	84	se.	8	3.6		0	3 s			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.29	617.0	30.13	765.3	40.0	4.4	54	calm	0	0		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.94	760.5	30.00	762.0	35	1.7	69	e.	6	2.7			9 s		se.	0	0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.56	750.8	30.05	763.3	36.0	2.2	79	e.	6	2.7		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.04	763.0	30.08	764.0	31	— 0.6	78	nw.	5	2.2		1 c	0			0.77	19.6	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.05	712.5	30.13	765.3	36	2.2	92	sw.	5	2.2			10 s			0.29	7.4	cloudy	D. Moore.
Springfield, Illinois	29.38	746.2	30.10	764.5	37	2.8	72	s.	4	1.8		1 c	4 s	w.	w.	0	0	fair	T. B. Jennings.
Springfield, Massachusetts	29.77	756.1	29.91	759.7	27	— 2.8	64	n.			1	4 ck	4 n	s.	n.	0	0	fair	Charles Mayr.
Springfield, Mo.	28.58	725.9	30.09	764.3	39	3.9	82	se.	6	2.7		0	0			0	0	clear	J. B. Marbury.
Starkville, Miss.	29.69	754.1	30.19	766.8	40	4.4	82	nw.	4	1.8		3 c	0	nw.		0	0	clear	C. Dill.
Stevenson, Fort, Dakota	28.11	714.0	30.08	764.0	27	— 2.8	79	ne.	9	4.0			10 s			0	0	cloudy	W. Burrows
Stockton, Fort, Texas	26.83	681.5	29.95	760.7	54.0	12.2	44	sw.	8	3.6		0	9 ks		sw.	0	0	cloudy	J. F. Marshall.
Thatcher's Island, Mass.	29.81	757.2	29.86	758.4	37.8	3.2	77	n.	24	10.7			10 s		n.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27 33	694.2	30.17	766.3	35.5	1.9	90	calm			0	1 cs	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.29	744.0	30.02	762.5	40	4.4	57	sw.	6	2.7			10s;sk		w.	0	0	cloudy	A. Buell.
Tucson, Arizona	27.58	700.5	30.04	763.0	45	7.2	56	se.	2	0.9		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.84	757.9	30.22	767.6	39	3.9	89	n.	1	0.4		0	7 k; s			inap.	inap.	fair	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					27.5	— 2.5	67	n.			1	0	4 s		nw.	0	0	fair	D. Brooks.
Vicksburg, Mississippi	29.92	760.0	30.19	766.8	38.2	3.4	89	se.	8	3.6		6 ck	0	w.		0	0	fair	James Kenealy.
Visalia, California	29.81	757.2	30.19	766.8	38.3	3.5	92	se.	4	1.8		0	1 s			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.42	620.3	30.16	766.1	37.1	2.8	75	nw.	8	3.6		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	29.90	759.4	30.02	762.5	29.0	— 1.7	77	nw.	2	0.9		0	fg.			0	0	clear	B. M. Pursell.
West Las Animas, Colorado	25.95	659.1	30.07	763.8	22.5	— 5.3	73	w.	5	2.2		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.36	745.7	29.99	761.7	35	1.7	69	w.	1	0.4			10 s		w.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.03	762.7	30.09	764.3	35	1.7	69	n.	5	2.2		hz.	0			0.26	6.6	clear	Samuel A. Haney.
Winnemucca, Nevada	25.72	653.3	30.25	768.3	26	— 3.3	82	e.	10	4.5		0	4 s		sw.	0	0	fair	J. Grover.
Yankton, Dakota	28.55	725.2	29.93	760.2	35	1.7	64	s.	2	0.9		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.85	758.2	30.00	762.0	49.7	9.8	32	ne.	4	1.8		6 cs	0			0	0	fair	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.06	560.3			54.0	12.2	82	w.	2	0.9		1 ck	6ks;s		w.	0.03	0.8	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.97	761.2	30.04	763.0	69.0	20.6	68	n.	9	4.0			10 n		n.	0.19	4.8	cloudy	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	71	21.7	83	n.	1	0.4		10c;cs	0	w.		0	0		Robert Johnston.
Nassau, W. I.	29.89	759.2	29.97	761.2	77	25.0	70	e.	10	4.5		3 cs	4 k	se.	e.	0	0	cloudy	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	78	25.6	91	e.			2	5 ck	5 k	e.	e.	0	0		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.98	761.5	76	24.4	94	calm			0		10 ks		s.	0.32	8.1	cloudy	Francisco J. Olsneros.
Rivas, Nicaragua, C. A.					73	22.8	90	e.			3	3 cs	0	se.		0	0	fair	Earl Flint.
Santiago de Cuba, W. I.	29.91	759.7	29.93	760.2	74	23.3	81	n.	1.2	0.5		5 ck	2 s			0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.17	740.9	29.23	742.4	37	2.8	89	se.			5		10 n			0.35	8.9	rainy	W. J. Fisher.
St. Thomas, W. I.	29.95	760.7	30.07	763.8	78	25.6	82	se.				2 k	5 k	e.	se.	0.10	2.5	rainy	Ang. Walloe.
York Factory, B. A.	29.90	759.4	29.96	761.0	18.0	— 7.8	100	n.	18	8.0			10 n		n.	0.45	11.4	snowing	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower From.	Inch.	Mill	Character.	Direction from	
British Naval.																		
H. M. S. Albatross, Ning-Po, China	30.26	768.6	55	12.8	.....	nne.	.....	.....	1	.....	6	w.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Amethyst, Colonia, Uruguay†	29.99	761.7	72.5	22.5	71	n.	.....	.....	1-2	.....	0	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Audacious, N. 9° 24′, E. 62° 24′	29.81	757.2	82	27.8	83	ne.	.....	.....	3	.....	5	ne.	.....	.....	.....	2	ne.	showery.
H. M. S. Beacon, N. 30° 34′ E. 32° 16′	30.04	763.0	74	23.3	63	nne.	.....	.....	1	.....	.....	.....	.....	.....	.....	1	nne	blue sky
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	30.08	764.0	77.5	25.2	65	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Cleopatra, N. 31° 14′ E. 121° 28′	30.26	768.6	58.5	14.7	97	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island	30.11	764.8	43	6.1	91	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
H. M. S. Curacoa, Kobe Japan	30.02	762.5	56.5	13.6	74	calm	.....	.....	0	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Diamond, S. 33° 56′ E. 152° 10′ *†	29.82	757.4	68	20.0	90	s.	.....	.....	4-6	.....	8	.....	.....	.....	.....	4	s.	d. clouds.
H. M. Dock Yard, Bermuda, W. I.	29.66	753.4	71	21.7	85	ssw.	.....	.....	3-4	.....	5	ssw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.83	757.7	76.5	24.7	86	s.	.....	.....	4	.....	6	ssw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flamingo, San Fernando, Trinidad, W. I.	29.89	759.2	78	25.6	.....	e.	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	raining.
H. M. S. Flying Fish, N. 32° 44′, E. 129° 52′	30.29	769.4	58	14.4	76	calm	.....	.....	0	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Gannet, S. 32° 04′, W. 71° 45′	29.91	759 7	62	16.7	77	calm	.....	.....	0	.....	10	.....	.....	.....	.....	5	ssw.	misty.
H. M. S. Griffon, N. 17° 49′, W. 75° 39′	29.88	758.9	79	26.1	86	var.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.06	763.5	70	21.1	100	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Kingfisher, N. 12° 35′, W. 106° 58′	29.96	761.0	78	25.6	.....	ne.	.....	.....	1-2	.....	4	ne.	.....	.....	.....	2	ne.	d. clouds.
H. M. S. Lark, S. 13° 12′, E. 161° 03′	29.94	760.5	78.3	25.7	80	se.	.....	.....	5	.....	3	.....	.....	.....	.....	3	se.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20.′	29.90	759.4	62	16.7	.....	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	1	n.	d. clouds.
H. M. S. Magpie, N. 32° 39′, E. 128° 16′	30.17	766.3	54.5	12.5	65	wnw.	.....	.....	1-2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Northampton, Halifax, N. S.	29.80	756.9	36.5	2.5	90	n.	.....	.....	1	.....	9	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.70	754.4	62	16.7	94	w.	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	showery.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.81	757.2	80	26.7	89	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S Rocket, S. 7° 30′, W. 80° 20′	30.05	763.3	68	20.0	94	s.	.....	.....	1	.....	3	.....	.....	.....	.....	3	sw.	d. clouds.
H. M. S. Sappho, S. 44° 15′, W. 110° 00′	30.11	764.8	50.2	10.1	100	wnw.	.....	.....	1	.....	10	nw.	.....	.....	.....	3	sw.	raining
H. M. S Superb, N. 39° 11′ E. 19° 56′*	29.78	756.4	61	16.1	77	wnw.	.....	.....	3-4	.....	5	wsw.	.....	.....	.....	5	wnw.	showery
H. M. S. Sylvia, Sandy Point, Patagonia	29.13	739.9	47.0	8.3	74	nw.	.....	.....	5	.....	3	wnw.	.....	.....	.....	.....	.....	squally.
H. M. S. Thetis, S. 32° 04,′ W. 71° 50	29.92	760.0	61	15.1	88	nw.	.....	.....	2	.....	10	.....	.....	.....	.....	3	ssw.	misty.
H. M. S. Tourmaline, Aden, Arabia	30.00	762.0	.....	.....	.....	e.	.....	.....	2	.....	1	e.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, Al Bidaa, Arabia	30.02	762.5	79.5	26.4	61	nnw.	.....	.....	4-6	.....	6	nnw.	.....	.....	.....	.....	.....	squally.
H. M. S. Zephyr, N. 38° 47′, E. 118° 12′	30.21	767.3	45	7.2	76	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.11	764.8	84.2	29.0	78	ne.	.....	.....	3	.....	1	.....	ne.	.....	.....	1	se.	blue sky.
Tamega, Macao, China	30.08	764.0	75.2	24.0	72	ne.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Swedish Naval.																		
Vanadis, N. 36° 08′, W. 3° 50′	30.34	770.6	66.4	19.1	73	ese.	.....	.....	1	.....	7	.....	.....	.....	.....	.....	.....	misty.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.04	763.0	41	5.0	91	nw.	3	1.3	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Navy Yard, Portsmouth, N. H.	29.80	758.4	30	— 1.1	.....	ne.	11	4.9	.....	.....	8	.....	ne.	0	0	.....	.....	cloudy.
Naval Hospital, Yokohama, Japan*	29.87	758.7	51	10.6	64	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	foggy.
Adams, Sitka, Alaska *†	30.09	764.3	34	1.1	79	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	.....	fair.
Alaska, Honolulu, Sandwich Island	29.95	760.7	75	23.9	72	ne.	.....	.....	3	.....	2	.....	ne.	0.025	0.6	sm'h	.....	fair.
Alliance, Hampton Roads, Va*†	30.00	762.0	38	3.3	90	n.	.....	.....	2-3	.....	2	.....	.....	0	0	.....	.....	clear.
Ashuelot, N. 34° 17′, E. 133° 15′	30.16	766.1	61	16.1	82	wsw.	.....	.....	3	.....	2	.....	w.	.....	.....	.....	.....	clear.
Brooklyn, Keel Point, Patagonia	29.29	744.0	55	12.8	68	w.	22	9.8	.....	.....	5	.....	w.	0	0	sm'h	.....	fair.
Colorado, New York, N. Y.	30.00	762.0	32	0.0	89	nnw.	7	3.1	.....	.....	2	.....	calm	0	0	.....	.....	clear.
Enterprise, Norfolk, Va.	30.00	762.0	40	4.4	82	nw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear.
Essex, Callao, Peru	30.00	762.0	67	19.4	84	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy.
Franklin, Norfolk, Va.	30.01	762.2	39	3.9	91	nnw.	17	7.6	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Galena, Montevideo, Uruguay	29.85	758.2	70	21.1	75	calm	.....	.....	0	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Hartford, S. 50° 17′, W. 66° 59′*	29.26	743.2	49	9.4	85	wnw.	.....	.....	5	.....	5	.....	w.	0	0	sm'h	w.	fair.
Independence, Mare Island, Cal.	30.24	768.1	43	0.1	91	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	foggy.
Iroquois, Callao, Peru	30.03	762.7	65	18.3	94	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, Newport, R. I.	29.81	757.2	33	0.6	79	n.	.....	.....	3	.....	2	.....	ssw.	.....	.....	sm'h	.....	fair.
Kearsarge, Norfolk, Va	29.98	761.5	40	4.4	82	nnw.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	fair.
Lackawanna, Valparaiso, Chili*	29.86	758.4	59	15.0	78	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Lancaster, Palermo, Sicily*	29.81	757.2	58	14.4	81	nnw.	.....	.....	1	.....	5	.....	wnw.	.....	.....	sm'h	.....	fair.
Michigan, Erie, Pennsylvania	29.88	758.9	53	11.7	73	sw.	.....	.....	3	.....	10	.....	s.	.....	.....	.....	.....	cloudy.
Minnesota, New York, N. Y.	30.06	763.5	34	1.1	69	nw.	4	1.8	.....	.....	0	.....	.....	.....	.....	.....	.....	clear.
Monocacy, Yokohama, Japan	.....	.....	52	11.1	86	w.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	misty.
New Hampshire, Newport, R. I.	29.85	758.2	37	2.8	71	n.	.....	.....	3	.....	5	.....	.....	.....	.....	sm'h	.....	fair.
Nipsic, Palermo, Sicily*	29.86	758.4	60	15.6	66	nw.	.....	.....	2	.....	10	.....	nw.	.....	.....	sm'h	.....	cloudy.
Onward, Callao, Peru†	30.11	764.8	65	18.3	94	sse.	.....	.....	1	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos, Tientsin, China*	30.14	765.5	41	5.0	74	s.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Pensacola, Callao, Peru*	29.94	760.5	66	18.9	90	sse.	3	1.3	.....	.....	8	.....	.....	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass	29.87	758.7	27	— 2.8	89	nnw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Quinnebaug, Villafranca, France*	29.92	760.0	57	13.9	62	w.	.....	.....	2	.....	2	.....	w.	.....	.....	sm'h	.....	fair.
Ranger, N. 15° 33′, W. 95° 46′	30.02	762.5	76	24.4	86	ene.	.....	.....	3	.....	2	.....	.....	0	0	sm'h	.....	clear.
Richmond, Yokohama, Japan*	29.93	760.2	52	11.1	79	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear.
Saratoga, N. 30° 14′, W. 77° 32′	29.83	757.7	64	17.8	89	nw.	.....	.....	3-4	.....	8?	.....	nw.	light	light	long	nw.	clear.?
St. Louis, League Island, Pa.	30.17	766.3	30	— 1.1	78	nnw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear.
Swatara, N. 20° 19′, W. 52° 57′*	29.97	761.2	80	26.7	78	ene.	.....	.....	3	.....	1c	.....	ne.	.....	.....	.....	.....	cloudy.
Tennessee, Hampton Roads, Va.	29.97	761.2	38	3.3	80	nw.	15	6.7	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Vandalia, Hampton Roads, Va*	29.99	761.7	40	4.4	91	wnw.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	fair.
Wabash, Boston, Mass.	29.86	758.4	29	— 1.7	67	n.	10	4.5	.....	.....	10	.....	ne.	0	0	.....	.....	cloudy.
Wachusetts, Mare Island, Cal†	30.21	767.3	45	7.2	100	var.	.....	.....	0-1	.....	0	.....	.....	0	0	sm'h	.....	clear.
Wyandotte, Washington, D. C	30.16	766.1	52	11.1	86	nw.	.....	.....	1	.....	5	.....	w.	.....	.....	.....	.....	fair.
Yantic, Norfolk, Va.	29.94	760.5	40	4.4	82	nnw.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	clear.
Merchant Marine.																		
S. S. Grecian, Buenos Ayres, Argentine Rep*	29.85	758.2	72	22.2	85	n.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear.
S. S. Nova Scotian, N. 50° 58′ W. 21° 56′	29.74	755.4	54	12.2	.....	ssw.	.....	.....	4	.....	10	.....	sw.	.....	.....	long	w.	cloudy.
S. S. Polynesian, N. 52° 57, W. 34° 22′*	29.54	750.3	51	10.6	.....	sw.	.....	.....	5	.....	10	.....	.....	0	0	mod.	sw.	foggy.
S. S. British Crown, Queenstown, Ireland†	29.70	754.4	54	12.2	.....	w.	.....	.....	0	.....	9	.....	wnw.	10 h'r	10 h'r	sm'h	.....	overcast.
S. S. Indiana, N. 49° 10′, W. 39° 18′	.....	.....	56	13.3	87	w.	.....	.....	4	.....	2	.....	w.	.....	.....	mod.	w.	overcast.
S. S. Lord Clive, N. 51° 05′, W. 19° 45′*†	29.87	758.7	.....	.....	.....	wsw.	.....	.....	5	.....	10	.....	.....	.....	.....	str'g	w.	misty.
S. S. Lord Gough, N. 42° 45′, W 61° 05′	29.70	754.4	42	5.6	.....	ne.	.....	.....	3	.....	8	.....	ne.	0	0	sm'h	.....	cloudy.
S. S. Ohio, Liverpool, Eng.	29.42	747.3	52	11.1	?	w.	.....	.....	c	.....	9	.....	.....	.....	.....	.....	.....	rainy.
S. S. Pennsylvania, N. 46° 18′, W 47° 18′†	29.82	757.4	42	5.6	.....	wsw.	.....	.....	5	.....	9?	.....	sw.	.....	.....	mod.	sw.	clear ?
S. S. Castor, N. 46° 20′, W. 15° 00′ *	30.25	768.3	48.2	9	.....	w.	.....	.....	5	.....	8	.....	w.	.....	.....	5	nw.	raining.
S. S. Jason, N. 49° 30′, W. 22° 15′	.....	.....	.....	.....	.....	nw.	.....	.....	5	.....	6 k	.....	.....	.....	.....	4	wnw.	gloomy.
S. S. Stella, New York, N. Y.	29.89	759 1	39.2	4	.....	n.	.....	.....	3	.....	2	.....	n.	.....	.....	.....	.....	blue sky.
S. S. Anchoria, N. 44° 51′ W. 51° 36′†	29.95	760 7	.....	.....	.....	w.	.....	.....	1	.....	1	.....	nw.	sh's	sh's	sli't	var.	fine.
S. S. Devonia, N. 42° 48′, W. 58° 10′	29.77	756.1	50	10.0	.....	ene.	.....	.....	1	.....	5	.....	wsw.	.....	.....	sli't	wsw.	cloudy.
S. S. Dorian, Boston, Mass*	29.68	753.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
S. S. Ethiopia, N. 53° 14′, W. 27° 48′	29.62	752.3	52	11.1	100	wnw.	.....	.....	6	.....	10	.....	wnw.	4 h'r	4 h'r	h'vy	nw.	hazy.
S. S. Galatia, N. 13° 12′, E. 84° 30′†	29.86	758.4	81.3	27.4	.....	se.	.....	.....	7	.....	9	.....	ne.	½ h'r	½ h'r	r'gh	ene.	showery.
S. S. Alpin, Kingston, Jamaica, W. I.	29.95	760.7	.....	.....	.....	e.	.....	.....	2	.....	.....	.....	ene.	0	0	sm'h	.....	fine.
S. S. Alvo, Kingston, Jamaica, W. I.	30.04	763.0	79	26.1	.....	se.	.....	.....	1-2	4 c	0	.....	.....	0	0	.....	.....	fine.
S. S. Antillas, N. 17° 40′, W. 72° 40′	.....	.....	80	26.7	.....	n.	.....	.....	1	.....	2	.....	n.	0	0	sm'h	.....	clear.
S. S. Ambrose, N. 31° 07′ W. 69° 47′†	29.78	756.4	.....	.....	.....	w.	.....	.....	7	.....	3	.....	nw.	3 h'r	3 h'r	10	sw.	
British Merchant, N. 25° 00′ W. 125° 16′	30.12	765.0	66.4	19.1	90	nne.	.....	.....	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.
Bk. Coppename, N. 30° 58′ W. 22° 32′	30.34	770.6	67	19.4	82	se.	.....	.....	5	.....	8	.....	.....	.....	.....	.....	.....	d. clouds.
May Hulse, S. 19° 36′, W. 34° 00′	29.97	761 2	77	25.0	82	nne.	.....	.....	2	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Olympus. N. 30° 37′, E. 32° 18′	29.97	761 2	.....	.....	45	nne.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.	Character.	Direction from.	
MERCHANT MARINE.—Continued.																	
Inchkeith, S. 37° 29′, E. 2° 33′	30.29	769.4	54.6	12.6	80	sse.			5		7						d clouds.
S.S. Mexico, N. 23° 21′, W. 110° 48′†	30.09	764.3	73.6	23.1	64	nw.			2		5		nw.		sm'h		fair.
S.S. Gallia, N. 49° 04′, W. 28° 50′	29.80	756.9	61	16.1	100	sw.			6		10		rain	rain	mod.	w.	
S.S. Marathon, Constantinople, Turkey	29.88	758.9	66	18.9		sw.			6		7		sw.	o o			cloudy.
S.S. Pavonia, Mersey River, Eng*	29.41	747.0	52	11.1	93	w.			7		10		w.	18 h'r 18 h'r	mod.	w.	raining.
S.S. Scythia, N. 49° 00′, W. 30° 00′	29.79	756.7	60.5	15.8	97	ssw.			3		10		ssw.	4 h'r 4 h'r	h'vy	ssw.	misty.
S.S. Colina, N. 54° 07′, W. 17° 07′ †..	29.64	752.8				wsw.			4		8		w.	o o	long	wsw.	overcast.
S.S. Labrandore, N. 40° 06′, W. 74° —′			53.6	12										o o			
S.S. Arizona, N. 50° 51′ W. 32° 29′	29.52	749.8	53	11.7		sse.			5		10		wnw.	2 h'r 2 h'r	mod.	sw.	rain & fog.
S.S. Wisconsin, N. 51° 20′, W. 17° 00′	29.69	754.1	54	12.2		wsw.			6		10		sw.	4 h'r 4 h'r	mod.	wsw.	foggy.
S.S. Wyoming, New York, N. Y*	29.82	757.4	24	— 4.4		nnw.			4		o		o	o	sm'h		clear.
S.S. Bohemia, Hamburg, Germany†	29.46	748.3				ssw.			2		9		sw.	snow snow			overcast.
S.S. Cimbria, N. 46° 41′, W. 45° 55′	29.78	756.4	43.3	6.3		w.			7		4		wnw.	o o	long	nw.	fair.
S.S. Gellert N. 49° 48′, W. 30° 17′	29.81	757.2	52	11.1		wnw.			6		8			1 h'r 1 h'r	r'gh	wsw.	foggy.
S.S. Silesia, New York, N. Y†	29.87	758.7	29.5	—1.4		ne.			2		2			o o			
S.S. Vandalia, Hamburg, Germany	29.54	750.3	37.0	2.8													
S.S. Wieland, N. 49° 41′, W. 8° 20′	30.02	762.5				wnw.			6		10		nne.	3 h'r 3 h'r			cloudy.
S.S. Mentmore, N. 38° —′, W. 71° —′*	29.50	749.3				nw.			5		10		wnw.	12 h'r 12 h'r	high	wnw.	rainy.
S.S. Nessmore, N. 50° 09′, W. 33° 58′	29.71	754.6	56.4	13.6	94	w.			5		2		nw.	o o	sm'h	nw.	fair.
S.S. Archimedes, Port Lynas, Eng	29.41	747.0				w.			7–9		2		w.	o o	short	wsw.	hazy.
S.S. Hevelius, S. 13° —′ W. 35° —′*†	30.16	766.1	79	26.1		sse.			4		2		nw.	1 h'r 1 h'r	h'vy	var	squally.
S.S. Ptolemy, N. 23° 30′, W. 60° 45′	30.14	765.5	80.5	26.9	78	s.			2		4		ene.	1 h'r 1 h'r			cloudy.
S.S. Bulgarian, N. 48° 33′, W. 41° 16′*	29.63	752.6				sw.			2		4		wnw.		2	n.	d. clouds.
S.S. City of San Antonio, N. 34° 22′, W. 75° 10′†	29.98	761.5	54	12.2		n.			7		10		wsw.	4 h'r 4 h'r	high	sw.	
S.S. Colorado, N. 25° 40′, W. 80° 01′†	30.10	764.5	57	13.9		n.			9		2		n.	3 h'r 3 h'r	h'vy	ne.	fair.
S.S. San Marcos, N. 22° 40′, W. 79° 00′			57	13.9		ne.			2		8		nnw.	o o	small	n.	fair.
S.S. Archimede, N. 38° 15′, E 4° 01 *†	30.17	766.3	53	11.7		n.			5		0				mod	nw.	clear.
S.S. Glenapp, Rio de Janeiro, Brazil †	29.90	761.0	62	16.7	72	nnw.			6		5		nw.		h'vy	nnw.	cloudy.
S.S. Glenfyne, N. 24° 48′, W. 61° 33′						var.			3		0			o o			clear.
S.S. Chalmette, N. 25° 00′, W. 80° 15′†	30.06	763.5	59	15.0		sse.			3		2		se.	o o	sm'h	n.	fair.
S.S. Lone Star, N. 26° 25′, W. 79° 57′ †	30.06	763.5	58	14.4		nne.			4		6		nne.	o o	sm'h		cloudy.
S.S. New York, N. 27° 23′ W. 87° 00′†	30.05	763.3	64.0	17.8		nnw.			5		2		n.	o o	large	n.	fair.
S.S. Denmark, London, Eng	29.70	754.4	43	6.1		n.			4		6		nw.	o o	mod.	nw.	cloudy.
S.S. Egypt, N. 46° 39′ W. 46° 37′*†	29.85	758.2				wsw.			6		10		wsw.	sqll's sqll's			squally.
S.S. Erin, N 51° 13′. W. 11° 28′	29.85	758.2	56	13.3		wsw.			5		5?		wsw.	o o	mod.	wsw.	clear?
S.S. Helvetia, New York, N. Y	29.87	758.7	31	— 0.6		wnw.			9		10		wnw.	16 h'r 16 h'r	sm'h		overcast.
S.S. Holland, N. 47° 49′, W. 31° 53′	29.77	756.1	57	13.9		nw.			1		0			o o			clear.
S.S. The Queen, N. 46° 14′, W. 36° 08′*†	29.82	757.4	56	13.3		ssw.			5		8		w.	6 h'r 6 h'r	r'gh	ssw.	clearing.
S.S. Santiago, Santiago, Cuba, W. I			75	23.9	90	sw.			5		2		calm	3 h'r 3 h'r	mod.	wsw.	clear.
S.S. City of Alexandria, Havana, Cuba, W. I.†	30.15	765.8	73	22.8		nne.			2		0			8 h'r 8 h'r			fine.
S.S. City of Merida, N. 33° 45′, W. 76° 25′						nne.			6		8		n.	2 h'r 2 h'r	h'vy	n	rainy.
S.S. Leerdam, N. 48° 20′ W. 44° 02′*	29.57	751.1	48	8.9		nw.			4		2		nw.	12 h'r 12 h'r	cross	nw.	fine.
S.S. America, N. 49° 31′ W. 19° 01′ *	30.00	762.0	56.5	13.6	97	wsw.			8						cross		stormy.
S.S. Donau, N. 44° 14′. W. 53° 45′	29.97	761.2				wsw.			6		10		wsw.	6 h'r 6 h'r	long	wsw.	rainy.
S.S. Elbe, Bremerhaven, Germany	29.58	751.4	33.8	1.0	100	sw.			4–6		8		w.	1 h'r 1 h'r	long	wsw.	cloudy.
S.S. Hohenstaufen, N. 53° 50′, E. 7° 34′	29.42	747.3	38.3	3.5		s.			1		10			8 h'r 8 h'r			covered.
S.S. Neckar, off Borkum Island, North Sea	29.45	748.0	39.0	3.9	100	sw.			5		10		s.	o o	mod.	s.	covered.
S.S. Ohio, Galveston Texas	30.19	766.8				sse.			5		8		sw.	o o	sm'h	sw.	fair.
S.S. Salier, Bremerhaven, Germany	29.48	748.8	34.7	1.5		ssw			1–2		7		s.	o o	sm'h	se.	cloudy.
S.S. Strassburg, N. 42° 44′ W. 10° 20′	30.42	772.7	57	13.9	87	n to w.			3		10		ssw	3 h'r 3 h'r			cloudy.
S.S. Belgic, N. 22° 50′, E. 116° 20′†	30.14	765.5	72	22.2	80	ne.			2–6		5?		nw.	o o	mod.	nw.	clear?
S.S. Oceanic, N. 36° 04′ W. 177° 29′ *	30.09	764.3	61	16.1	66	nnw.			5		2		e.	o o	mod.	ne.	clear.
S.S. City of Augusta, New York, N. Y †	30.05	763.3				sw.			5		8		nw.		mod.	w.	fine.
S.S. Mississippi, Portland, Oregon †	30.26	768.6	50	10.0	79	sse.			4		1		ssw.	o o			clear.
S.S. Oregon, N. 40° 18′, W. 124° 22′†	30.23	767.8	51.5	10.8	86	se.			1		7		sw.				light rain.
S.S. Ancon, San Francisco, Cal †	30.15	765.8	47	8.3	100	sw.			2		2		sw.		light	w.	fair.
S.S. Dakota, N. 43° 13′. W. 124° 34′†	30.04	763.0	55	12.8	68	var.			1		10		sw.				foggy
S.S. Orizaba, N. 33° 46′, W. 118° 25′†	30.04	763.0	56	13.3	81	calm			4		10		s.	12 h'r 12 h'r	h'vy	con.	cloudy.
S.S. State of California, Portland, Oregon*† ..	30.10	764.5	47	8.3	92	s.			0		0				long	sw	
S.S. Australia, Sydney, N. S. W	30.03	762.7	69	20.6	95	n.			1		10		se.				cloudy.
S.S. City of New York, Sydney, N. S. W †	30.03	762 7	72	22.2	76	calm			4		1		nne.	o o			clear.
S.S. City of Pekin, Hong Kong, China †	30.27	768.8	72	22.2	67	se.			0		0			o o			clear.
S.S. City of Rio de Janeiro, N. 25° 59′, W. 113° 52′†	30.05	763.3	68	20.0	84	nw.			1		8		e.	o o			overcast.
S.S. City of Sydney, N. 23° 58′, W. 152° 42′ †	30.11	764.8	73	22.8	72	ene.			2		2		nw.	o o	light	nw.	fair.
S.S. Grenada, Panama, Panama †	29.89	759.2	78	25.6	91	nw.			5		2		ne.	o o	long	ne.	fair.
S.S. San José, N. 19° 03′, W. 104° 17′*†	30.20	767.1				w.			2		0			2 h'r 2 h'r			clear.
S.S. Zealandia, N. 34° 30′, W. 139° 28′	30.27	768.8	64	17.8	58	sw.			1	2 c	0	w.		o o	light	wnw.	
S.S. Bermuda, N. 23° 55′, W. 65° 02′†	30.11	764.8	84	28.9		s.			5		9		sw.		h'vy	sw.	gloomy.
S.S. Muriel, N. 38° 45′, W. 72° 44′	29.93	760.2	58	14.4		nnw.			1		6		s.	o o	gentle	s.	fine.
S.S. Caracas, N. 39° 20′, W. 73° 56′†	29.92	760.0	48	8.9	78	nnw.			4		2			o o	mod.	nnw.	fair.
S.S. Claudius, N. 30° 10′, W. 74° 15′†	30.02	762.5				nw.			6		3		nnw.	o o	mod	n.	fair.
S.S. Valencia, Puerto Cabello, Venezuela†	30.00	762.0	80	26.7	84	sw.			4		3		nw.	5 h'r 5 h'r	r'gh		fair.
S.S. Belgenland, off Start Point, Eng †	29.71	754.6	57	13.9	87	w.			1		7		ese.	2 h'r 2 h'r	sm. h		cloudy.
S.S. Nederland, N. 43° 16′, W. 58° 49′			48	8.9		wsw.			7		8		wnw.	o o	h'vy	w.	fair.
S.S. Pennland, Antwerp, Belgium	29.63	752.6	44	6.7	96	sse.			1		2		w.	o o	mod.	w.	fair.
S.S. Rhyniand, Jersey City, N. J	29.90	759.4	32	0.0	70	nw.			4		10		sw.	12 h'r 12 h'r			raining.
S.S. Waesland, N. 44° 37′, W. 51° 35′	29.98	761.5	49	9.4	85	w.			3		0						fair.
S.S. Maas, N. 48° 31′, W. 36° 55′	29.84	757.8	63.0	17.2		wsw.			4		6		w.	rain rain	cross	var.	fair.
S.S. P. Caland, Rotterdam, Holland	29.42	747.3	41.5	5.3	96	ssw.			2		10		sw.	9 h'r. 9 h'r	o	wsw.	overcast.
S.S. W. A. Scholten, New York, N. Y			32.5	0.3	90	nnw.			5		10						raining.
S.S. Zaandam, N. 49° 46′, W. 9° 03′*	29.87	738.7	62.2	16.8	89	w.			3		0			o o			
S.S. State of Florida, Glasgow, Scotland	29.28	743.7	51	10.6		wsw.			6		8 n		w.	22 h'r 22 h'r	6	w.	rainy.
S.S. State of Indiana, N. 48° 07′. W. 47° 00′†	29.74	755.4	39	3.9		w.			5		10		wsw.	12 h'r 12 h'r			cloudy.
S.S. State of Nevada, New York, N. Y†	29.92	760.0	34	1.1		nnw.			5		8		w.	5 h'r 5 h'r	mod.	w.	showery.
S.S. Hekla, N. 59° 15′, W. 7° 30′ *†	29.31	744.5	54.9	12.7		var.			5		8			o o			clear.
S.S. Thingvalla, N. 57° 59′, W. 18° 21′†	29.40	749.7	46.4	8.0		wsw.			1–3		10		e.	20 h'r 20 h'r	mod.	sw.	raining.
S.S. Iowa, N. 49° 01′, W. 37° 24′ *†	29.80	756.8	53	11.7		wsw.			3		10		wsw.	18 h'r 18 h'r	long	wsw.	covered.
S.S. Piantyn, N. 46° 58′, W. 34° 41′	29.82	757.4							6		0			6 h'r 6 h'r	r'gh	wsw.	clear.
S.S. Britannic, N. 47° 36′, W. 45° 35′†	29.82	757.4	54	12.2	87	wsw.			5		6?		wsw.	2½h'r 2½h'r	cross	w.	clear.?
S.S. Celtic, N. 47° 42′, W. 33° 57′	29.80	756.9	60	15.6	82	sw.			5		9		w.	o o	r'gh	w.	overcast.
S.S. Lepanto, N. 45° 03′, W. 34° 30′*	30.02	702.5	63	17.2		wsw			5		0			sh'rs sh'rs	mod.	sw.	light haze.
S.S. Marengo, N. 49° 19′, W. 13° 40′*†	29.92	760.0				ssw.			6		4		sw.	o o			fair.
S.S. Romano, N. 42° 27′, W. 65° 10′	29.67	753.6	44	6.7		ne.			8		10		ssw.	6 h'r 6 h'r	high	nw.	rainy.
S.S. Salerno, N. 38° 58′. E. 25° 00′			66	18.9		sw.			4		10		ne.	o o	light	ne.	fine.
S.S. Aries, N. 40° 35′, W. 72° 45′*†	29.80	756.9				nne.			9		10		sw.	5 h'r 5 h'r	h'vy	sw.	
S.S. Catherine Whiting, Philadelphia, Pa†	29.92	760.0				nw.			6		8		nne.	o o	mod	ne.	
S.S. Norman, N. 39° 56′, W. 75° 08′						nw.			1		0			o o			
MISCELLANEOUS.									1					o o			clear.
Bk. Adelaid, N. 21° 34′ W. 68° 38′ *†	30.10	764.5	80	26.7		ssw.			3		1		sw.	1 h'r 1 h'r	sm'h	e.	fair.
Bg. Alcira, Maracaybo, Venezuela	29.92	750.0	84	28.9		ene.			2		2		ne.	o o			clear.
S. Annie. M. Law, Kobe, Japan *†	30.09	764.3	50	10.0		w.			5		5		w.	2 h'r 2 h'r			fine.
S.S. Anna Thormann, S. 17° 53′. E. 88° 04′*	29.95	760.7	74.5	23.6	80	ese.			6	c	5 k	wsw.	se.	o o	r'gh	se.	cloudy.
Bk. Antonio Lopez, N. 14° 12′, W. 62° 58′ *	30.08	764.0	80	26.7	76	se.			4		1			o o	mod.	se.	clear.
Bk. Aquidneck, S. 12° 18′, W. 34° 27′ *†	30.20	767.1				var.			2				nw.		light	ese.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Aureola, Flat Holme Island, Eng			60	15.6		wsw.			6		10		wsw.	5 h'r	5 h'r	mod.	w.	overcast.
Bk. Alba, N. 57° 09′, E. 10° 38′ *†	29.47	748.5	35.4	1.9		s.			5									covered.
Bk. Bayonnaise, N. 16° 36′, W. 55° 48′ *†	30.12	765.0				e.			4		6?		e.	3 h'r	3 h'r	r'gh	se.	clear?
Bkt. Bonny Doon, N. 42° 38′, W. 41° 15′						sw.			6		8		wsw.	driz	driz	h'vy	sw.	
S. S. Burswell, N. 32° 56′, W. 42° 00′*†	30.21	767.3	81	27.2		calm			0		3			o	o	sli't	con.	clear.
Bk. Champion, N. 43° 31′, W. 10° 30′			58.0	14.4		wnw.			4		5		wsw.	o	o	r'gh	nnw.	fair.
Schr. Chas. F Heyer, Apalachicola, Fla	30.17	766.3	47	8.3	66	n.			1	o	o			o	o			clear.
Schr. C. R. Flint, Cedar Keys, Fla†	30.10	764.5	47	8.3		n.			1					o	o			clear.
S. Cornelius, N. 40° 29′, W. 49° 50′			65.8	18.8		wsw.			3		8		w.	1 h'r	1 h'r	long	wnw.	cloudy.
S. S. D. J. Foley, N. 26° 15′, W. 74° 32′			74	23.3		nw.			6		4		wnw.	o	o	r'gh	nw.	fair.
Bkt. David Preston, N. 29° 55′, W. 90° 05′*†	30.05	763.3	61	16.1		nw.			2		5		nw.	o	o			
Bk. Don Quixote, Pasoemean Roads, Java*	29.94	760.5	90	32.2		wnw.			3		4?		wnw.	o	o	sm'h		cloudy?
Bk. E. D. Bigelow, N. 45° 27′ W. 19° 12′*†	30.35	770.9				wsw.			5		5		wsw.	o	o	long	w.	fair.
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†.	30.01	762.2	42	5.6		nnw.			2		3		n.	o	o			clear.
S. E. J. Spicer, New York. N. Y	29.99	761.7	38	3.3	?	wsw.			4		2		nw.	o	o			clear
Bk. Eliza Barss, Bermuda, W. I †	29.66	753.4				wsw.			7		10		wsw.	o	o			cloudy.
Bk. Essex, Muscat, Arabia*†	29.96	761.0	83	28.3		n.			2				ne.					fine.
Schr. F E. McDonald, N. 41° 32′, W. 70° 32′ †	29.89	759.2				n.			1									
S S. Foscolia, N. 1° 25′ W. 40° 58′						e.			6		8		e.	o	o	r'gh	e.	cloudy.
Bk. Freya, N. 19° 40′ W. 36° 38′			76	24.4		ene.			4		10			10 h'r	10 h'r	mod.	e.	squally.
Bg. George, N. 42° 12′, W. 61° 45′*†	29.85	758.2				ne.			5		5		e.	o	o	mod.	nw.	threatening.
S. Grecian, N. 22° 48′, W. 62° 14′†.	30.17	766.3	81	27.2	74	var.			2		3		var.	1 h'r	1 h'r	long	n.	clear.
Bk. Grey Eagle, N 32° 25′, W. 49° 30′			74	23.3		ssw.			4		1		sw.	o	o	h'vy	nw.	fair.
Bk. Gronsvaer, S. 40° 23′ E. 166° 51′†	30.16	766.0	66.8	19.3	96	ne.			2		1		ne.	o	o	2	w.	fine.
Bk. Hattie G. McFarland, New York, N. Y			31	—0.6		ne.			1		3		n.	o	o			clear.
Schr. Hattie Weston, Icaque, Trinidad, W. I.*†.	30.00	762.0	83	28.3		calm			0		5		e.	3 h'r	3 h'r	sm'h	se.	fair.
S. Hedwig, N. 33° 25′, W. 75° 27′	29.99	761.7	54.5	12.5	70	nnw.			6		5		nnw.	13 h'r	13 h'r	5	ne.	fine.
Bk. Heinrich & Tonio, N. 41° 05′, W. 48° 00′*†	30.05	763.3	65	18.3		wsw.			3		4		wsw.	2 h'r	2 h'r	mod.	w.	fair.
Schr. Isabel Alberto, Cedar Keys, Fla†	30.16	766.1				n.			2		2		n.	o	o			fair.
S. Ivy, Cork, Ireland†	29.93	760.2	50	10.0		wsw.			6		8		wsw.	o	o			cloudy.
Schr. James Slater, N. 13° 27′, W. 55° 07′†	29.99	761.7	84	28.9		ne.			3		2		ene.	1 h'r	1 h'r	mod.	ne.	
S. S. John Hopkins, Boston, Mass			30	—1.1		n.			2		0			o	o			clear.
Schr. John L. Thomas, Vivorilla Cays, C. A*†.	30.10	764.5				nw.			5		8		nnw.	o	o	short	nw.	threatening
Bg. John Wesley, Cardenas, Cuba, W. I†	30.06	763.5				ssw.			1		2			o	o			clear.
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.00	762.0	83	28.3	75	nnw.			2		1							clear.
Light House Tender, Laurel, Key West, Florida†	30.08	764.0	65	18.3		nne.			2–3		9		n.	o	o			cloudy.
Bk. Liberia, N. 7° 46′ W. 20° 45′*	29.96	761.0	84	28.9	79	nne.			1		3		ne.	o	o	small	ssw.	
Bg. Lilian, N. 14° 25′, W. 61° 25′ †	30.04	763.0	85	29.4		ene.			2		2		ne.	3½h'r	3½h'r	sm'h	e.	clear.
Bg. L. & W. Armstrong, N. 40° 04′, W. 71° 28′*†	29.80	756.9				nne.			6		2		n.	o	o	mod.	ene.	clear.
S. S. Madrid, N. 34° 03′, W. 63° 08′*†	29.66	753.4	70	21.1	95	sw			8		7		wsw.	sh'rs	sh'rs	cross		h'y squalls.
S. S. Malabar, N. 22° 06′, E. 38° 00′*†	30.00	762.0				nnw.			2		0			o	o	mod.	nnw.	clear.
Bg. Mary Gibbs, N. 31° 00′, W. 78° 40′*†	29.96	761.0	60	15.6		nnw.			3		0			o	o	3	nne.	clear.
Bk. Matilda C. Smith, N. 35° 00′ W. 22° 00′*†	30.55	776.0				ese.			4		8		ese.	o	o	con.	ene.	fine.
Bg. Mattie B. Russell, N. 33° 25′, W. 76° 20′*†	30.15	765.8				n.			6		2		n.	light	light	h'vy	nne.	
Schr. Moravian, N. 12° 33′, W. 81° 43†	30.03	762.7				nne.							ne.	o	o	long	ne.	fair.
S. M. P. Grace. N. 10° 06′, W. 119° 47′4	29.86	758.4	78	25.6		var.			2		2		ese.	1 h'r	1 n'r	r'gh	con.	squally.
Bg. Myrtle, N 38° 04′, W. 72° 56′†	29.82	757.4				nnw.			4		10		nnw.	o	o	sm'h	n.	cloudy.
Bk. Northern Queen, N. 34° 45′, W. 73° 55′			61	16.1	77	nw.			8		8		nw.			r'gh	n.	
Bg. O. C. Clary, N. 24° 05′, W. 58° 19′*†	30.10	764.5	79	26.1	95	sse.			2		1		sse.			sm'h	e.	clear
S. Orealla, N. 5° 20′, E. 82° 04′*	29.75	755.6				wsw.			6		10		wsw.	1½h'r	1½h'r	long	wsw.	raining.
Bk Orpheus, N. 42° 02′, W. 39° 30′	30.19	766.8	70	21.1		s.w.			6		8 k		wsw.	o	o	mod.	wsw.	hazy.
S.Paramita, San Francisco, Cal			53	11.7		calm			0					o	o			smoky
S. S. Peconic, N. 39° —′, W. 67° 45′*†.	29.20	741.7	58	14.4		n.			9		10		n.	6 h'r	6 h'r	h'vy	n	heavy rain.
S. S. Radnorshire, N. 12° 12′, E. 46° 11′*†	29.98	761.5				ene.			2		0			o	o	mod.	ene.	clear.
S. St. Francis, S. 10° 30′, W. 105° 10′†.	30.06	763.5	71	21.7		ese.			5		3		se.	o	o	mod.	se.	fine
Bk. Scud, N. 15° 31′, W. 62° 46′*†	29.99	761.7				ne.			4		1		ne.	o	o	short	ene.	clear.
Bk. Southern Belle, Antwerp, Belgium*†	29.60	751.8	55	12.8		ssw.			6		8			3 h'r	3 h'r	sm'h		raining.
S. S. Strathleven, Suez Canal, Egypt	30.07	763.8	78.5	25.8	73	e.			2		4		e.					d. clouds.
S. S. Sunbeam, N. 49° 59′ W. 6° 12′	29.82	757.4	54	12.2	87	w.			6		7		w.	4 h'r	4 h'r	4	w.	misty.
Bk. Truro, N. 45° 44′, W. 46° 00′†*	29.96	761.0				w.			6		3		w.	3 h'r	3 h'r	r'gh	se.	fair.
U.S.F.C.S.S. Fish Hawk, Washington, D. C†	30.11	764.8	39	3.9	64	calm			0		0			o	o			clear.
Bk. Usko, N. 39° 43′ W. 58° 37′*	29.52	749.8	64	17.8		ese.			5		10			6 h'r	6 h'r	long	w.	light rain.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.41	772.3	62.6	17		ne.			3					o	o			clear.
Schr Viola Reppard, N. 38° 26′, W. 74° 31′†	29.90	759.4	46	7.8		nnw.			6		1		nw.	o	o	mod.	ne.	
Schr. Walter L. Plummer, Miragone, Hayti, W. I *†.	30.10	764.5				s.			1		0			o	o			fine.
Bk. Wandering Jew, S. 23° 57′, W. 40° 24′†.	29.95	760.7	75	23.9		se.			3		3		sse.	o	o	mod.	e.	clear.
Bk. Warden Law, Valparaiso, Chili	29.98	761.5				calm			0		10			o	o	sm'h		cloudy.
Bgt. Willie, S. 35° 10′, E. 22° 00′*†	30.01	762.2	71	21.7		sw.			1		4		sw.	o	o	r'gh	ese.	fair.
S. Wm. Woodbury, N. 37° 13′, W. 63° 23′*†	29.43	747.5	59	15.0		sw.			7		4		w.			long	wnw.	squally.

International Chart I. November 22, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 23, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.30	769.7	63.3	17.4	80	e.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.26	768.5	59.4	15.2	68	nw	.....	.....	3	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.16	766.0	58.6	14.8	78	w.	.....	.....	2	.....	6	.....	.....	0.453	11.5	cloudy	Fonfréde.
Tunis	.....	.....	30.10	764.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.34	770.7	63.0	17.2	46	nw.	.....	.....	1	.....	1	.....	.....	0	0	very fair	Pérés.
Tebessa	.....	.....	30.26	768.5	52.5	11.4	76	n.	.....	.....	2	.....	1	.....	.....	inap.	inap.	very fair	Dognon.
Geriville	.....	.....	.....	.....	56.1	13.4	30	nnw.	.....	.....	2	.....	2	.....	.....	0	0	fair	Lonchamp.
Laghouat	.....	.....	30.33	770.4	55.4	13.0	25	ese.	.....	.....	2	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.30	769.5	65.1	18.4	45	nw.	.....	.....	3	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	29.98	761.5	30.07	763.8	62.0	16.7	71	ssw.	3	1.3	.....	.....	2	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.23	742.4	29.78	756.5	46.4	8.0	62	sw.	.....	.....	4	.....	8	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.72	729.3	29.49	749.0	39.6	4.2	74	w.	9.8	4.4	.....	.....	10	.....	.....	0.020	0.5	.....	Dr. Wierzbiski.
Eperies	28.76	730.5	29.67	753.6	32.0	0.0	92	s.	.....	.....	3	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.48	723.4	29.76	755.8	41.7	5.4	78	sw.	.....	.....	2	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.37	720.6	29.84	757.8	39.6	4.2	77	nnw.	.....	.....	2	.....	9	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.37	720.6	29.72	754.8	46.4	8.0	85	w.	.....	.....	5	.....	10	.....	.....	0.476	12.1	gloomy	The Staff.
Lemberg	28.58	725.8	29.58	751.4	37.2	2.9	66	sw.	.....	.....	5	.....	10	.....	.....	0.024	0.6	.....	Dr. T. Stanecki.
Pola	29.77	756.1	29.88	759.0	52.2	11.2	63	calm	.....	.....	0	.....	4	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	29.30	744.1	29.75	755.7	38.5	3.6	73	se.	.....	.....	3	.....	10	.....	.....	0.228	5.8	.....	Joseph Midlinszky, S. J.
Szegedin	29.52	749.7	29.81	757.1	35.4	1.9	98	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.80	757.0	29.91	759.6	49.6	9.8	69	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	Royal Academy.
Vienna	28.97	735.0	29.65	753.1	49.6	9.8	69	w.	.....	.....	6	.....	9	.....	.....	0.374	9.5	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.05	737.9	29.15	740.4	43.3	6.3	96	s.	6	2.7	.....	.....	10	.....	.....	0.110	2.8	raining	W. Boswell
Armagh, Observatory	29.03	737.3	29.26	743.2	50.9	10.5	91	sw.	17	7.6	.....	.....	10	.....	.....	.....	.....	squally	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29 37	746.0	54.7	12.6	84	sw.	20	8.9	.....	.....	9	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	28.84	732.5	29.36	745.7	50.0	10.0	99	sw.	12	5.4	.....	.....	10	.....	.....	.....	.....	misty	Thomas Mackereth.
Bradford, Yorkshire	28.95	735.3	29.34	745.2	50.7	10.4	94	sw.	.....	.....	3	.....	10	.....	.....	0.01	0.3	raining	McLandsborough&Preston.
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	83.0	28.3	78	ne.	.....	.....	3	.....	6	.....	.....	.....	.....	gloomy	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	54.0	12.2	86	w.	.....	.....	1.0	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E	29.42	747.3	29.54	750.3	54.5	12.5	82	sw.	.....	.....	1	.....	9	.....	.....	.....	.....	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.43	747.5	29.66	753.4	54.0	12.2	96	sw.	.....	.....	5	.....	10	.....	.....	.....	.....	raining	The Staff.
Fort Napier, Natal	27.38	695.4	29.59	751.6	77.2	25.1	64	e.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	88.0	31.1	62	ne.	.....	.....	1	.....	2	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.21	767.3	30.26	768.6	61.8	16.6	91	ne.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	28.94	735.1	29.15	740.4	49.4	9.7	92	ssw.	.....	.....	4	.....	10 n	.....	.....	blank	blank	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.38	746.2	29.55	750.6	53.7	12.1	88	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.44	747.8	29.74	755.4	55.0	12.8	93	w.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	29.52	749.8	29.56	750.8	53 9	12.2	84	sw.	15	6.7	.....	.....	10	.....	.....	.....	.....	threatening	The Staff.
Leicester, Museum	29.18	741.2	29.44	747.8	52.7	11.5	91	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	J. C. Smith.
Malta, Mediterranean	30.00	762.0	30.07	763.8	59.6	15.3	98	nw.	.....	.....	1	.....	5	.....	.....	blank	blank	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.10	764.5	30.15	765.8	68.0	20.0	97	w.	.....	.....	1	.....	8	.....	.....	blank	blank	overcast	U. S. Duncombe.
Oscott, St. Mary's College	28.90	734.0	29.54	750.3	52.3	11.3	90	sw.	.....	.....	5	.....	9	.....	.....	.....	.....	threatening	Warren Middleton.
Oxford, Radcliffe Obs'y	29.30	744.2	29.52	749.8	53.9	12.2	84	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.57	751.1	29.64	752.8	53.8	12.1	97	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	drizzling	John Merrifield.
Sandwick Manse, Orkneys	29.01	736.8	29.11	739.4	42.1	5.6	90	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.78	756 4	29.84	757.9	54.6	12.6	91	s.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	W. H. Lyne.
Sheffield	29.10	739.1	29.37	746.0	54.9	12 7	87	sw.	.....	.....	1	.....	5	.....	.....	0.11	2.8	d. clouds	W. F. Cooper.
Silloth Rectory	29.51	749.5	29.54	750.3	51.0	10.6	93	wsw.	.....	.....	5	.....	8	.....	.....	0.030	0.8	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.37	746.0	49.5	9.7	95	sw.	17	7.6	.....	.....	10	.....	.....	.....	.....	overcast	I. New.
Strathfield Turgiss	29.39	746.5	29.60	751.8	54.2	12.3	91	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	d. clouds	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.54	750.3	29.59	751.6	56	13.3	93	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.41	747.0	29.43	747.5	52.6	11.4	94	wsw.	22	9.8	.....	.....	10	.....	.....	.....	.....	drizzling	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.69	754 1	29.73	755.1	34	1.1	92	n.	12	5.4	.....	.....	10 n	.....	calm	0.183	4.6	light snow	H. J. Cundall, C E
Chatham, N. B*	29.83	757.7	29.89	759.2	33	0.6	92	nw.	5	2.2	.....	2 ck	8 s	nw.	nw.	0.10	2.5	cloudy	G. A. Blair.
Father Point, Quebec*	29.92	760.0	29.94	760.5	31	— 0.6	96	calm	0	0	.....	.....	10 n	.....	calm	0.03	0.8	light snow	J. McWilliams.
Fort Garry, Manitoba*	29.28	743.7	30.19	766.8	9	—12.8	83	nw.	12	5.4	.....	5 k	0	nw.	.....	0.067	1.7	fair	A. Allison.
Halifax, N. S*	29.64	752.8	29.77	756.1	36	2.2	92	nw.	10	4.5	.....	.....	0	.....	.....	0.07	1.8	clear	James Stewart.
Kingston, Ontario*	29.64	752.8	29.99	761.7	37	2.8	89	sw.	2	0.9	.....	0	0	.....	.....	.....	.....	cloudy	A. P. Knight, M. A
Montreal, Quebec*	29.80	756 9	30.01	762.2	28.	— 2.2	88	s.	8	3.6	.....	10 ks	fg.	nw.	sw.	inap.	inap.	foggy	C. H. McLeod, C E.
Parry Sound, Ontario*	29.19	741.4	29.91	759.7	33	0.6	88	calm	0	0	.....	10 n	.....	.....	.....	0	0	cloudy	A. P. Payne.
Port Dover, Ontario	29.23	742.4	29.94	760.5	38	3.3	91	calm	0	0	.....	10 n	.....	ne.	ne.	0.05	1.3	light snow	Rev. R. Mosley.
Port Stanley, Ontario	29.26	743.2	29.91	759.7	42	5.6	76	sw.	6	2.7	.....	2 c	8 n	sw.	sw.	-0	0	threatening	H. Morgan.
Quebec, Quebec*	29.69	754.1	30.03	762.7	23	— 5.0	92	calm	.....	.....	0	10 k	.....	.....	sw.	0	0	cloudy	M. Payne.
Rockliffe, Ontario*	29.45	748.0	29.93	760.2	29	— 1.7	88	e.	2	0.9	.....	10 n	.....	.....	.....	0	0	cloudy	Capt. Ashe, R. N.
Saugeen, Ontario*	29.16	740 7	29.89	759.2	34	1.1	89	s.	5	2.2	.....	10 s	.....	e.	e.	inap.	inap.	light snow	W. H. McIntyre.
St. Andrews, N. B	29.84	757.9	29.89	759.2	32	0.0	89	nw.	7	3.1	.....	10 s	.....	.....	.....	0.16	4.1	light rain	
Sydney, C. B*	29.49	749.0	29.55	750.6	34	1.1	100	n.	20	8.9	.....	0	0	.....	.....	0	0	clear	
Toronto, Ontario*	29.58	751.3	29.97	761.2	35	1.7	96	w.	2	0.9	.....	10 n	.....	.....	.....	1.18	30.0	light snow	T C. Hill, C. E
Yarmouth, N. S*	29.84	757.9	29.91	759.7	38	3.3	82	nw.	6	2.7	.....	10 ks	.....	.....	.....	0.03	0.8	light rain	Magnetic Observatory.
Sub-series.												10 k	.....	nw.	nw.	0.03	0.8	cloudy	Lt. F. E. Wilmot, R N.
Mount Forest	28.46	722.9	29.92	760.0	32.0	0.0	100	s.	.....	.....	2	10 s	.....	.....	w.	0	0	overcast	Wm. Wylie
St. Johns, Newfoundland	29.26	743.2	29.52	749.8	38	3.3	100	n.	5	2.2	.....	10	.....	.....	.....	1.60	40.6	stormy	John Delany
Cape Colony.																			
Cape St. Francis Lt. House	29.90	759.4	29.93	760.2	63.0	17.2	94	sw.	12.0	5.4	.....	.....	10 n	.....	.....	0	0	rainy	John Duthie.
Cape Town, C G. H. Obs'y	30.03	762.7	30.07	763.8	74.0	23.3	53	sse.	23	10.3	.....	4	6	.....	.....	0	0	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.45	773.4	38.3	3.5	83	ne.	5.4	2.4	.....	.....	10	.....	.....	0	0	covered	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.13	765.3	30.15	765.9	56.7	13.7	98	e.	8.5	3.8	.....	.....	10 n	.....	.....	0.126	3.2	covered	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.37	745.9	29.41	747.1	36.7	2.6	93	se.	.....	.....	2	.....	10	.....	.....	.....	.....	hazy	Oversergent Fischer.
Fanöe	29.40	746.8	29.43	747.4	33.6	0.9	96	ene.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy	Overloerer Lauridsen.
Godthaab, Greenland	30.18	766.6	30.22	767.7	11.1	—11.6	78	ene.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.98	761.4	30.00	761.9	13.3	—10.4	.....	calm	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	.....
Stykkisholm, Iceland	29.17	741.0	29.22	742.1	30.6	— 0.8	90	ne.	.....	.....	8	.....	10	.....	.....	.....	.....	raining	A. O. Thoriacius.
Thorshavn	28.98	736.1	29.02	737.0	42.1	5.6	93	s.	13	6	.....	.....	10	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.31	744.4	29.40	746.8	33.8	1.0	94	calm	.....	.....	0	.....	1	.....	.....	.....	.....	.....	Loerer Oesterboi.
Jacobshavn	30.32	770.2	30.37	771.4	5.4	—14.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
French.																			
Agen, Normal School	29.53	750.0	30.23	767.8	51.4	10.8	98	w.	.....	.....	1	.....	8	.....	w.	0.492	12.5	raining	M. Labroue, Director.
Alençon, Normal School	29.32	744.6	29.87	758.6	55.0	12.8	98	sw.	.....	.....	1	.....	k	.....	ne.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.42	747.2	29.67	753.6	53.1	11.7	90	w.	.....	.....	4	.....	10	.....	.....	0.406	10.3	covered	M. Fénéon, Command't.
Avignon, Normal School	29.93	760.1	30.00	762.1	61.2	16.2	55	nw.	.....	.....	1	.....	5	.....	nw.	0	0	fair	M. Giraud, Director.
Bar-sur-Seine	29.29	743.9	29.84	758.0	53.4	11.9	85	wsw.	.....	.....	1	.....	10	.....	.....	0.189	4.8	covered	M. Saillard, Director.
Beauvais, Normal School	29.50	749.2	29.76	755.9	54.9	12.7	81	wsw.	.....	.....	2	.....	10	.....	w.	0.067	1.7	covered	M. Frère Eugène Marie.
Besançon, Normal School	28.98	736.1	29.87	758.8	50.7	10.4	95	s.	.....	.....	2	.....	10 n	.....	sw.	0.165	4.2	raining	M. Gobin, Director.
Bordeaux, Observatory	29.82	757.4	30.08	764.1	55.2	12.9	90	wsw.	.....	.....	2	.....	10	.....	.....	0.370	9.4	raining	M. Rayet, Director.
Bourges, Normal School	29.37	746.1	29.93	760.2	56.1	13.4	88	calm	.....	.....	0	.....	ku	.....	wsw.	0.063	1.6	.....	M. Malet, Director.
Brest, Naval Observatory	29.64	752.9	29.89	759.1	55.8	13.2	98	wsw.	.....	.....	3	.....	10	.....	wsw.	0.433	11.0	.....	M. de Kermaree, Dir.
Caen, Normal School	29.67	753.5	29.74	755.4	55.8	13.2	88	w.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.47	748.5	29.79	756.7	53.6	12.0	93	sw.	.....	.....	2	.....	10	.....	.....	0.177	4.5	covered	M. Jadot, Director.
Charleville, Normal School	29.18	741.2	29.70	754.4	52.2	11.2	82	wsw.	.....	.....	2	.....	10	.....	.....	0.43	11.	light rain	M. Grimard, Director
Clermont-Ferrand Obs'y	28.60	726.4	29.95	760.7	55.9	13.3	74	wsw.	.....	.....	3	.....	8	.....	w.	0	0	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.07	738.4	29.93	760.1	52.5	11.4	95	sw.	.....	.....	1	.....	10	.....	sw.	0.189	4.8	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.91	734.3	29.80	756.8	52.2	11.2	95	w.	.....	.....	3	.....	10	w.	w.	0.98	25.	covered	Dr. Goulet, Director.
Gap, Normal School	27.47	697.6	30.02	762.4	48.9	9.4	56	.....	.....	.....	.....	.....	3	.....	n.	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.85	732.7	29.97	761.3	55.9	13.3	57	nw.	.....	.....	3	.....	3	.....	w.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.26	743.3	30.05	763.2	50.7	10.4	72	se.	.....	.....	1	.....	cn	.....	.....	0.315	8.0	.....	M. Ablard, Director.
Guéret	28.43	722.1	30.02	762.4	51.8	11	93	w.	.....	.....	2	.....	n	.....	w.	0.236	6.0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.56	750.7	29 83	757.7	58.1	14.5	86	w.	.....	.....	3	.....	5 n	.....	w.	0	0	cloudy	M. Offitrault, Director.
Lescar, Normal School	29.63	752.6	30.20	767.0	53.6	12.0	86	sw.	.....	.....	1	.....	10	.....	.....	0.331	8.4	raining	M. Chauvin, Director.
Lorient, Naval Observatory	29.82	757.5	29.93	760.1	55.8	13.2	93	w.	.....	.....	1	.....	10	.....	.....	0.571	14.5	raining	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.96	735.6	30.04	762.9	47.3	8.5	95	sse.	.....	.....	1	.....	10	.....	.....	0.024	0.6	light rain	M. André, Director.
Mans, Normal School	29.56	750.8	29.85	758.3	55.2	12.9	93	sw.	.....	.....	1	.....	.....	.....	.....	0.031	0.8	.....	M. Piboen, Director.
Marseille, Observatory	29.71	754.5	29.97	761.3	58.8	14.9	59	nw.	.....	.....	3	.....	5	.....	nw.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.83	630.6	29.67	753.6	44.2	6.8	83	w.	9.4	4.2	.....	.....	3	w.	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.87	758.7	30.00	762.0	62.2	16.8	69	nw.	.....	.....	2	.....	2	nw.	.....	0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	28.95	735.2	29.73	755.1	51.8	11.0	93	ssw.	.....	.....	1	.....	n	.....	w.	0.213	5.4	.....	M. Husse, Director
Nantes, Observatory	29.80	756.9	29.90	761.0	57.4	14.1	93	wsw.	.....	.....	1-3	.....	10	.....	.....	0.232	5.9	rainy	M. Larocque, Director.
Perpignan, Observatory	29.97	761.2	30.08	764.1	62.6	17.0	53	nw.	20.6	9.2	.....	.....	8	.....	nnw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.28	540.6	.....	.....	30.6	— 0.8	.....	w.	.....	.....	1	.....	.....	.....	w.	0.457	11.6	.....	Gen'l de Nansouty, Dir.
Privas, Normal School	28.96	735.5	30.04	763.1	49.3	9.6	84	nw.	.....	.....	1	.....	5	nw.	.....	0	0	cloudy	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.08	636.9	.....	.....	39.2	4.0	100	w	.....	.....	6	.....	10	.....	.....	0.996	25.3	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	30.00	762.1	30.04	762.9	55.9	13.3	100	wsw.	.....	.....	2	.....	10	.....	wsw.	1.85	47.	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.80	756.9	30.02	762.4	56.1	13.4	98	sw.	.....	.....	1	.....	10	.....	w.	0.366	9.3	light rain	M. Brotier, Director.
Rodez, Normal School	27.89	708.3	30.05	763.3	49.3	9.6	92	nw.	.....	.....	2	.....	kn	.....	se.	0.252	6.4	.....	M. Seger, Director.
Rouen, Normal School	29.66	753.4	29.71	754.6	55 0	12.8	90	nne.	.....	.....	1	.....	8	ne.	.....	0.020	0.5	very cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	54.0	12.2	99	sw.	.....	.....	2	.....	.....	sw.	sw.	.....	.....	raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.62	752.4	29.79	756.6	57.4	14.1	80	wsw.	.....	.....	1	.....	10	.....	w.	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.46	748.3	30.19	766.8	54.3	12.4	83	wsw.	.....	.....	4	.....	10	w.	.....	0.130	3.3	covered	M. Baillaud, Director.
Tours	29.72	754.9	29.90	759.4	56.1	13.4	90	ssw.	.....	.....	1	.....	10	.....	w.	0.031	0.8	covered	M. de Tastes.
Versailles, Observatory	29.29	743.9	29.78	756.4	56.5	13.6	78	w.	.....	.....	3	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.24	717.3	29.70	754.4	44.6	7.0	95	sw.	.....	.....	4	.....	10	sw.	.....	0.689	17.5	.....	Prof. Jnedt.
Bamberg	28.79	731.2	29.62	752.3	48.7	9.3	84	sw.	.....	.....	3	.....	10	.....	.....	0.496	12.6	raining	Prof. Dr. Holl.
Berlin	29.22	742.3	29.40	746.8	43.9	6.6	99	w.	.....	.....	2	.....	10	.....	.....	0.354	9.0	.....	Prof. Dr. Arndt.
Breslau	28 91	734.2	29.43	747.4	44.4	6.9	90	w.	.....	.....	5	.....	10	.....	.....	0.063	1.6	.....	Royal University Obs'y.
Carlsruhe	29.29	744.0	29 73	755.1	50.7	10.4	87	sw.	.....	.....	10	.....	10	sw.	.....	0.209	5.3	raining	Albert Senz.
Cassel	28.79	731.3	29.50	749.4	44.2	6.8	99	s.	.....	.....	2	.....	10	s.	.....	0.630	16.0	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.30	744.3	29.67	753.5	52.2	11.2	89	w.	.....	.....	2	.....	10	.....	.....	0.097	17.7	.....	Physical Society.
Friedrichshafen	28.43?	722.1?	29.89	759.1	47.8	8.8	81	w.	.....	.....	5	.....	10	w.	.....	0.472	12.0	.....	Wilhelm, Chief Tel.
Hamburg	29.35	745.4	29.44	747.7	37.4	3.0	96	n.	.....	.....	2	.....	9	.....	.....	0.287	7.3	.....	E. Preller.
Kiel	29.40	746.8	29.42	747.2	36.7	2.6	93	ese.	.....	.....	2	.....	10	.....	.....	0.150	3.8	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.10	739.0	29.52	749.7	46.0	7.8	93	wsw.	.....	.....	3	.....	10	.....	.....	0.331	8.4	.....	H. Leppig, Asst.
Magdeburg	29.26	743.1	29.44	747.8	47.1	8.4	88	w.	.....	.....	3	.....	9 ks	.....	w.	0.110	2.8	.....	Weather Observatory.
Memel	29.47	748.6	29.52	749.7	25.5	— 3.6	93	ese.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy	Issermann.
Munich	27.95	709.9	29.80	756.8	46.2	7.9	79	w.	.....	.....	5	.....	10	.....	.....	0.437	11.1	raining	Central Station.
Neufahrwasser	29.40	746.8	29.42	747.2	34.7	1.5	74	e.	.....	.....	1	.....	10	.....	.....	0.008	0.2	.....	A. Lothes.
Neustadt, Palatinate	29.14	740.1	29.66	753.3	51.8	11.0	94	w.	.....	.....	3	.....	10	.....	.....	0.394	10.0	.....	Dicknether.
Stuttgart	28.76	730.6	29.65	753.2	51.3	10.7	82	sw.	.....	.....	6	.....	8	n.	.....	0.028	0.7	.....	Prof. Dr. Schoder.
Wustrow	29.43	747.5	29.45	748.1	34.9	1.6	89	se.	.....	.....	1	.....	10 8	.....	.....	0	0	.....	Profs. Brauns & Reimer
Greek.																			
Athens	29.48	748.7	29.86	758.4	64.4	18.0	.....	sw.	.....	.....	1.0	.....	5	.....	.....	0	0	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.96	760.8	30.01	762.1	80.1	26.7	62	wsw.	12.0	5.4	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.44	747.9	29.92	760.0	81.7	27.6	27	nnw.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.80	757 0	29.84	758.0	76.3	24.6	62	nnw.	18.0	8.0	.....	.....	9	wnw.	.....	0	0	d. clouds	
Poona, Yarrowda	27.99	711.0	29.85	758.3	76.0	24.8	21	ene.	11.0	4.9	.....	.....	9	e.	.....	0	0	d. clouds	
Trichinopoly	29.48	748.7	29.76	755 9	71.5	21.9	94	wnw.	2.0	0.9	.....	.....	10	.....	.....	0.55	14.0	overcast	
Bellary	28.30	718.7	29.76	755.9	80.0	26.7	36	ene.	4.0	1.8	.....	.....	5	.....	.....	0	0	d. clouds	
Belgaum	27.28	692.8	29.81	757.2	75.5	24.2	33	ne.	6.0	2.7	.....	.....	8	s.	.....	0	0	d. clouds	
Lahore	29.25	742.9	30.02	762.4	67.7	19.8	38	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.05	737.8	29.97	761.3	67.2	19.6	50	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.41	747.1	29.99	761,8	72.2	22.3	31	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.88	733.5	29.94	760.4	72.9	22.7	31	calm	3.0	1.3	.....	.....	4	e.	.....	0	0	d. clouds	
Jubbulpore	28.60	726.4	29.99	761.6	69.7	20.9	39	ne.	2.0	0.9	.....	.....	3	ne.	.....	0	0	d. clouds	
Lucknow	29.60	751.8	29.98	761.6	74.2	23.4	42	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.65	753.2	29.98	761.4	63.8	17.7	73	calm	0	0	.....	.....	3	w.	.....	0	0	d. clouds	
Patna	29.81	757.2	30.01	762.1	67.4	19.7	66	ne.	1.6	0.7	.....	.....	2	ne.	ne.	0	0	.....	
Hazaribagh	27.92	709.3	30.00	762.0	63.2	17.3	57	nnw.	5.4	2.4	.....	.....	9	.....	.....	0	0	.....	
Cuttack	29.86	758.3	29.94	760 4	74.5	23.6	74	ne.	3.0	1.3	.....	.....	2	.....	.....	0	0	d. clouds	
Calcutta, Alipore	29.93	760.2	29.95	760.8	72.3	22.4	65	nnw	3.0	1.3	.....	.....	2	.....	.....	0	0	d. clouds	
Dhubri	29.84	758.0	29.96	761.1	69.9	21.1	75	e.	3.5	1.6	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.83	757.6	29.92	759.9	79.0	26.1	76	nw.	1.6	0.7	.....	.....	2	.....	.....	0	0	blue sky	
Sibsagar	29.66	753.2	30.00	762.1	65.9	18.8	84	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.83	757.6	29.85	758.1	85.2	29.6	72	e.	4.2	1.9	.....	.....	4	.....	.....	0.16	4.1	d. clouds	
Jeypore	28.53	724.5	30.00	762.0	71.6	22.0	45	ne.	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.50	749.2	29.91	759.8	45.3	7.4	44	se.	1.8	0.8	.....	.....	2	.....	.....	0	0	.....	Prof. Giovanni Cloda.
Milan	29.37	746.1	29.91	759.6	44.4	6.9	61	w.	3.8	1.7	.....	.....	3	.....	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.80	756.8	29.91	759.7	43.0	6.1	61	n.	0.7	0 3	.....	.....	1	nnw.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.97	735.7	29.89	759.2	44.2	6.8	56	ene.	1.3	0.6	.....	.....	5	sse.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.71	754.5	29.90	759.4	56.8	13.8	62	se.	4.9	2.2	.....	.....	10	se.	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.94	709.7	29.89	759.3	44.1	6.7	62	n.	...	.....	2	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.85	758.1	29.89	759.3	54.0	12.2	56	wnw.	9.4	4.2	.....	.....	2	nnw.	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.69	754.0	29.95	760.6	46.9	8.3	81	nw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Costantino Pittei.
Leghorn	29.76	756.0	29.85	758.2	50.0	10.0	82	ne.	3.8	1.7	.....	.....	10	w.	.....	0	0	.....	Prof. P. Monte.
Rome	29.76	755.9	29.94	760.4	54.7	12.6	49	ne.	7.4	3.3	.....	.....	4	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	29.72	754.8	29.97	761.3	56.5	13.6	62	n.	4.9	2.2	.....	.....	2	.....	.....	0.102	2.6	.....	Prof. C. de Giorgi.
Cosenza	29.01	736.8	29.98	761.4	52.2	11.2	75	w.	1.8	0.8	.....	.....	2	nw.	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.77	756.2	29.97	761.2	61.3	16.3	73	nw.	.....	.....	6	.....	2	nw.	.....	0.091	2.3	.....	Prof. A. Pacinotti.
Palermo	29.78	756.3	30.02	762.6	60.8	16.0	58	nw.	.....	.....	.....	.....	8	nw.	.....	0.230	6.0	.....	Prof. G. Cacciatore.
Syracuse	29.94	760.4	29.98	761.5	58.1	14.5	48	s.	1.8	0.8	.....	.....	3	wsw.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.48	748.8	30.01	762.3	53.8	12.1	65	se.	0	0	.....	.....	10	ne.	.....	0.063	1.6	.....	Prof. F. Brioschi.
Stelvio	22.01	559.1	.....	.....	32.0	0.0	74	ne.	.....	.....	2	.....	4	.....	.....	0.315	8.0	misty	Prof. P. F. Denza.
Valdobbia	22.04	559.9	.....	.....	27.3	— 2.6	72	se.	.....	.....	2	.....	3	.....	.....	0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.11	764.9	30.15	765.7	41.1	5.1	59	w.	.....	.....	4	.....	9 ck	.....	w.	0	0	cloudy	Hattori.
Awomori	30.00	762.0	30.04	763.0	38.0	3.3	61	w.	20.2	9.0	.....	.....	9ck,ck	.....	w.	0.030	0.8	cloudy	K. Ogawa.
Hakodate	29.97	761.3	29.98	761.6	36.1	2.3	59	nw.	18.0	8.0	.....	2	4	w.	w.	0.060	1.5	cloudy	
Hiroshima	.....	.....	.....	.....	52.8	11.6	81	w.	2.8	1.2	.....	0	0	.....	.....	0	0	clear	Y. Miwa.
Kanazawa	30.12	765.0	30.22	767.7	40.7	8.2	82	se.	6.9	3.0	.....	.....	10	.....	.....	0.270	6.8	cloudy	S. Endo.
Kioto	30.04	763.0	30.22	767.6	42.7	5.9	91	nnw.	1.6	0.7	.....	0	1 ck	.....	nw.	0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.01	762.3	30.22	767.6	52.9	11.6	76	s.	0.6	0.3	.....	6 c	0	w.	.....	0.450	11.4	cloudy	S. Takehayashi.
Nemuro	29.74	755.4	29.80	756.9	35.5	1.9	92	nw.	12.0	5.4	.....	0	0	.....	.....	0	0	clear	
Niigata	30.16	766.0	30.20	767.1	48.0	8.9	65	nnw.	4.2	1.9	.....	.....	10 ck	.....	w.	0	0	overcast	M. Morita.
Nobiru	30.03	762.7	30.04	763.1	44.4	6.9	61	w.	16.2	7.2	.....	0	0	.....	.....	0.010	0.2	clear	H. Midzushina.
Osaka	30.19	766.9	30.21	767.3	50.2	10.1	75	nne.	2.8	1.2	.....	0	0	.....	.....	0	0	clear	
Sapporo	.....	.....	.....	.....	32.3	0.2	57	w.	5.4	2.4	.....	5	0	.....	.....	0.050	1.3	fair	
Tokei Obs'y, Yeddo	30.04	762.9	30.11	764.9	49.3	9.6	62	nw.	7.3	3.2	.....	0	0	.....	.....	0	0	clear	The Staff.
Wakayama	30.15	765.8	30.21	767.3	51.4	10.8	77	e.	2.5	1.1	.....	0	0	.....	.....	0	0	clear	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.77	756.1	29.96	761.0	79.7	26.5	58	nne.	12.0	5.4	.....	0	6 ks;n	.....	ne.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.72	602.4	29.94	760.4	50.0	10.0	94	wsw.	lnap.	lnap.	.....	0	0	.....	.....	0	0	foggy	Prof. Vicente Fernandez.
Leon	24.35	618.5	30.17	766.3	47.3	8.5	84	n.	.....	.....	1	0	0	.....	.....	0	0	clear	Prof. M. Leal.
Mazatlan	29.76	755.8	30.02	762.5	69.0	20.6	75	e.	0.9	0.4	.....	1 cs	0	.....	.....	0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.13	587.4	30.31	769.8	41.4	5.2	56	calm	0	0	.....	0	0	.....	.....	0	0	very fine	The Staff.
Morelia	24.34	618.3	30.32	770.0	51.8	11.0	65	n.	1.8	0.8	.....	0	0	.....	.....	0	0	clear	M. Tena, M. D.
Orizaba	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Chazaro.
Pabellon, Aguascalientes	23.95	608.4	30.05	763.3	47.1	8.4	72	w.	.....	.....	1	.....	.....	.....	.....	0	0	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.38	593.4	30.32	770.0	41.9	4.5	79	calm	.....	.....	0	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.55	572.8	30.23	767.8	49.7	9.7	84	wsw.	3.1	1.4	.....	0	0	.....	.....	0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.57	751.0	29.57	751.0	50.2	10.1	.....	wsw.	.....	.....	5	.....	.....	.....	.....	0.118	3.0	.....	
Groningen	29.40	746.8	29.46	748.2	46.4	8.0	.....	w.	.....	.....	1	.....	.....	.....	.....	0.228	5.8	.....	
Helder	29.46	748.3	29.46	748.3	49.1	9.5	.....	sw.	.....	.....	2	.....	.....	.....	.....	0.429	10.9	.....	
Hellevoetsluis	29.53	750.1	29.53	750.1	48.6	9.2	94	w.	.....	.....	3	.....	.....	.....	.....	0.087	2.2	.....	
Utrecht	29.49	749 0	29.54	750.2	51.6	10.9	95	wsw.	.....	.....	3	.....	8	.....	.....	0.138	3.5	very cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.23	742.4	29.29	744.0	32.0	0.0	63	e.	2	1	.....	.....	9	.....	.....	0	0	.....	
Brono	29.39	746.4	29.43	747.4	25.2	— 3.8	73	calm	0	0	.....	.....	2	.....	.....	0	0	.....	
Christiania	29.25	743.0	29.41	746.9	23.5	— 4.7	74	nne.	7	3	.....	.....	7	.....	.....	0.122	3.1	.....	
Gjæsvær	29.59	751.5	29.61	752.1	23.0	— 5.0	.....	ne.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.46	748.0	29.50	749.2	27.7	— 2.4	63	nne.	.....	.....	2	.....	0	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.21	767.4	30.37	771.3	64.8	18.2	88	ssw.	6.7	3.0	.....	.....	4	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.26	743.2	30.26	768.7	61.7	16.5	54	ese.	0.7	0.3	.....	.....	3	.....	.....	0	0	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	30.20	767.0	30.29	769.3	68.9	20.5	55	sw.	5.6	2.5	.....	.....	0	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.99	761.7	30.35	771.0	58.5	14.7	68	nne.	4.3	1.9	.....	.....	1	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.35	770.8	30.42	772.6	66.9	19.4	74	s.	3.1	1.4	.....	.....	3	.....	.....	0	0	.....	
Saint Paul de Loando	29.74	755.3	29.94	760.5	71.6	22.0	86	nw.	0.7	0.3	.....	.....	1	s.	.....	0	0	.....	
Serra da Estrella	25.47	646.8	30.25	768.3	46.4	8.0	35	w.	14.3	6.4	.....	.....	2	.....	.....	0	0	.....	
RUSSIAN.																			
Akmolinski	29.58	751.3	30.78	781.7	12.4	—10.9	72	sse.	9	4	.....	0	1 s	.....	.....	0	0,	.....	Major K. Lasarew.
Archangel	29.44	747.8	29.46	748.3	19.0	— 7.2	95	wsw.	4	2	.....	.....	10	.....	.....	c	0	.....	Capt. Sselliwerstow.
Astrakhan	30.07	763.8	29.99	761.7	49.8	9.9	91	se.	4	2	.....	.....	10	.....	.....	0.016	0.4	heavy cl'ds.	Capt. Wisganow.
Barnaul	30.50	774.8	31.08	789.3	4.1	—15.5	82	sw.	9	4	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	29.30	744.2	29.55	750.6	27.3	— 2.6	100	s.	2	1	.....	.....	10 ks	.....	.....	0.039	1.0	.....	Observatory.
Ekaterinburg	29.01	736.8	30.02	762.4	25.9	— 3.4	56	sse.	11	5	.....	.....	9	.....	.....	0	0	light clouds	Meteorological Obs'y.
Kasan	29.30	744.2	29.58	751.2	36.1	2.3	89	s.	20	9	.....	.....	10	.....	.....	0.425	10.8	light rain	Observatory.
Kertch	29.72	754.8	29.74	755.3	56.7	13.7	94	calm	0	0	.....	0	7 n	.....	.....	0	0	.....	Lagorio & Sastyres.
Kieff	29.08	738.6	29.74	755.5	27.1	— 2.7	100	s.	9	4	.....	.....	10ks;n	.....	.....	.....	.....	foggy	Observatory.
Lugan	29.50	749.3	29.71	754.5	45.1	7.3	93	wnw.	13	6	.....	.....	10	.....	.....	0.205	5.2	.....	Meteorological Obs'y.
Nikolaiev	29.79	756 7	30.86	758.5	38.3	3.5	88	n.	4	2	.....	.....	10 n	.....	.....	0	0	.....	Capt. Kurdakow.
Pekin, China	30.41	772.4	30.55	776.0	38.8	3.8	43	n.	13	6	.....	5 cs	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.54	750.4	29.56	750.8	23.0	— 5.0	93	s.	7	3	.....	.....	10	.....	.....	0.010	0.4	.....	Central Physical Obs'y.
Semipalatinsk	30.39	772.0	31.16	791.4	— 4.4	—20.2	86	e.	13	6	.....	.....	0	.....	.....	0	0	.....	Major Lasarew.
Tashkend, Laboratory	28.64	727.4	30.23	767.9	50.9	10.5	35	calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.64	727.5	30.05	763.3	60.6	15.9	57	calm	0	0	.....	9 cs	0	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.42	772.6	30.72	780.4	14.9	— 9.5	73	s.	11	5	.....	.....	10	.....	.....	.....	.....	.....	
Vladivostock	30.23	767.8	29.30	769.5	25.2	— 3.8	.....	nw.	4	2	.....	0	0	.....	.....	0	0	.....	
Warsaw	28.93	731.9	29.36	745.9	33.4	0.8	94	ssw.	11	5	.....	.....	10	.....	.....	.....	.....	heavy cl'ds.	Astronomical Obs'y.
Wilna	29.11	739.3	29.54	750.3	31.8	— 0.1	96	se.	7	3	.....	.....	10	.....	.....	0.004	0.1	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.18	766.6	30.50	774.6	14.9	— 9.5	95	wsw.	18	8	.....	.....	10	.....	.....	0.091	2.3	snowing	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.04	737.6	49	9.4	93	w.	.....	.....	7	.....	10	.....	.....	0.3	8.	sleet sh'wrs	J. Youngclause.
North Unst	.....	.....	29.12	739.6	.....	.....	.....	s.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.97	761 2	30.07	763.8	57.6	14.2	69	sw.	2.7	1.2	.....	0	0	.....	.....	0	0	clear	Antonio Reve, Director.
Bilbao, Met. Obs'y	30.16	766.0	30.22	767.5	59.5	15.3	69	se.	2.0	0.9	.....	2	7	ne.	.....	0.193	4.9	almost cov.	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.29	693.1	30.37	771.4	42.8	6.0	85	nw.	3.8	1.7	.....	.....	9	.....	.....	0	0	almost cov.	Domingo Martin.
Madrid, Royal Obs'y	28.02	711.6	30.31	769.8	47.8	8.8	66	calm	0.2	0.1	.....	0	0	.....	.....	0	0	cloudy	The Staff.
Murcia, Met. Obs'y	30.02	762.5	30.16	766.1	65.7	18.7	57	nw.	3.1	1.4	.....	0	1	.....	.....	0	0	almost clear	Olayo Diaz, Director.
Oviedo	29.33	745.0	30.21	767 3	59.0	15.0	97	e.	9.4	4.2	.....	.....	10 km	.....	calm	0	0	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.32	744.8	30.24	768.1	52.0	11.1	95	calm	0	0	.....	.....	10	.....	.....	0.185	4.7	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.91	759.7	29.97	761.1	79.0	26.1	78	ne.	8.8	3.9	.....	2 cs	3 ks	.....	e.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.17	766.3	30.27	768.8	63.7	17.6	36	nne.	6.3	2.8	.....	0	0	.....	.....	0	0	.....	Capt. C. Pujazon, R. N
San Juan de Porto Rico, W.I	29.95	760.7	30.04	763 0	75.6	24.2	98	calm	0	0	.....	.....	10 n	.....	w.	0.236	6.0	overcast	Manuel Maese.
Tuguegarao, Philippine Id's	29.87	758.8	30.01	762.2	79.9	26.6	85	se.	0.2	0.0	.....	0	0	.....	.....	0	0	clear	José L. Yrastorza
SWEDISH																			
Haparanda	29.53	750.1	29.57	751.1	— 6.9	—21.6	100	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	29.37	746.1	29.43	747.4	23.7	— 4.6	95	ne.	.....	.....	4	.....	10	.....	.....	0.256	6.5	.....	

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	29.34	745.3	29.39	746.6	28.0	— 2.2	92	nne.	.....	.....	2	.....	10	.....	.....	0.957	24.3	....	
Stockholm	29.24	742.6	29.41	747.1	28.9	— 1.7	94	ese.	.....	.....	2	.....	10	.....	.....	0.004	0.1	snowing	
Wisby	29.37	746.1	29.43	747.6	31.3	— 0.4	89	se.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Sub-series.																			
Upsala	29.30	744.3	29.39	746.5	24.6	— 4.1	97	ese.	6.3	2.8	.....	.....	10	.....	.....	0.165	4.2	snowing	S. G. Fineman.
Swiss.																			
Geneva	28.58	725.9	30.02	762.4	50.4	10.2	73	e.	.....	.....	1	.....	10	.....	.....	0.130	3.3	covered	The Observatory.
Turkish.																			
Constantinople	.....	.....	29.89	759.2	54.9	12.7	93	s.	10	4.5	.....	.....	10	.....	nw.	0.657	16.7	raining	The Observatory.
Talona	.....	.....	29.98	761 4	55.9	13.3	.....	nw.	.....	.....	1	.....	5	.....	.....	0.12	3.	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.93	760.3	72.0	22.2	65	ne.	.....	.....	1	4 c	.....	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.01	762.2	30.09	764.3	41	5.0	65	sw.	5	2.2	.....	0	9 s	.....	nw.	0	0	cloudy	J. C. Barnes.
Alpena, Michigan	29.17	740.9	29.87	758.7	35	1.7	89	se.	5	2.2	.....	.....	10 s	.....	se.	0.02	0.5	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.07	636.8	30.17	766.3	30	— 1.1	62	se.	3	1.3	.....	0	4 s	.....	.....	0	0	fair	W. C. Barnes.
Assinnaboine, Ft., Montana	27.33	694.2	30.31	769.9	8	—13.3	58	se.	1	0.4	.....	0	0	.....	.....	0.03	0.8	clear	B. C. Lenoir.
Atlanta, Georgia	28.97	735.8	30.19	766.8	40	4.4	73	sw.	6	2.7	.....	0	4 s;fg	.....	.....	0	0	fair	H. C. Smith.
Atlantic City, New Jersey	30.12	765.0	30.13	765.3	33	0.6	78	w.	5	2.2	.....	0	0	.....	.....	0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.02	762.5	30.22	767.6	35	1.7	89	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	John Healy.
Baltimore, Maryland	30.11	764.8	30.16	766.1	36	2.2	69	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	Geo W Felger.
Barnegat, New Jersey	30.10	764.5	30.12	765.0	35.0	1.7	92	w.	4	1.8	.....	0	fg.	.....	.....	0	0	clear	G. A. Hill.
Bennett, Fort, Dakota	28.66	728.0	30.35	770.9	25	— 3.9	76	nw.	14	6.3	.....	.....	10 s	.....	nw.	0.04	1.0	cloudy	A. Pritchard.
Benton, Fort, Montana	27.38	695.4	30.34	770.6	4	—15.6	76	calm	0	0	.....	0	0	.....	.....	0.22	5.6	clear	S. Wheaton.
Bismarck, Dakota	28 36	720.3	30.28	769.1	15	— 9.4	83	nw.	12	5.4	.....	.....	10 s	.....	.....	0.07	1.8	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.08	764.0	30.11	764.8	37	2.8	72	nw.	2	0.9	.....	2 cs	1 ks	.....	nw.	0	0	clear	J. T. Elker.
Boise City, Idaho	27.37	695.2	30.31	769.9	24	— 4.4	92	e.	1	0.4	.....	.....	10 s	.....	calm	0	0	cloudy	B. E. Light.
Boston, Massachusetts	29.93	760.2	30.09	764.3	30.0	— 1.1	77	w.	8	3.6	.....	0	fg.	.....	.....	0	0	clear	O. B. Cole.
Brownsville, Texas	29.97	761.2	30.02	762.5	57.4	14.1	93	calm	0	0	.....	0	0	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.20	741.7	29.98	761.5	38.4	3.6	78	se.	7	3.1	.....	3 ck	6 s	sw.	sw.	0.25	6.3	cloudy	W. Finn.
Buford, Fort, Dakota	28.42	721.9	30.40	772.1	18	— 7.8	87	nw.	4	1.8	.....	.....	10 s	.....	w.	0	0	cloudy	F. A. Mellen.
Burlington, Vermont	29.72	754.9	30.03	762.7	33.3	0.7	70	s.	5	2.2	.....	5 cs	3 s	w.	sw.	0	0	cloudy	W. B. Gates.
Cairo, Illinois	29.69	754.1	30.11	764.8	41.8	5.4	84	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. H. Ray.
Cape Henry, Virginia	30.16	766.1	30.18	766.6	39	3.9	73	s.	15	6.7	.....	0	0	.....	.....	0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.11	764.8	30.14	765.5	45.0	7.2	68	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	29.30	744.2	29.98	761.5	46	7.8	83	n.	..	.....	2	4 k	0	se.	.....	0	0	fair	J. J. McLean.
Cedar Keys, Florida	30.18	766.6	30.20	767.1	49	9.4	86	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. W. Mixer.
Champaign, Illinois	29.05	737.9	29.91	759.7	38.3	3.5	61	nw.	23	10.3	.....	.....	10 s	.....	nw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.13	765.3	30.19	766.8	49	9.4	77	ne.	5	2.2	.....	0	8 s	.....	sw.	0	0	cloudy	J. H. Smith.
Charlotte, N. Carolina	29.27	743.4	30.15	765.8	34.0	1.1	88	sw.	2	0.9	.....	0	sk.	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.32	744.7	30.17	766.3	35.0	1.7	85	w.	2	0.9	.....	0	fg.	.....	.....	0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	24.10	612.1	30.30	769.6	22.2	— 5.4	53	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	28.99	736.3	29.73	755.1	39.0	3.9	82	sw.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	J. Mitchell.
Chincoteague, Virginia	30.14	765.5	30.10	766.1	47	8.3	93	nw.	1	0.4	.....	0	fg.	.....	.....	0	0	clear	C. F. Dickens.
Cincinnati, Ohio	29.28	743.7	29.97	761.2	42	5.6	74	e.	4	1.8	.....	.....	10 s	.....	sw.	0	0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.16	740.7	29.94	760.5	34.9	1.6	73	se.	12	5.4	.....	9 k	0	w.	.....	inap	inap.	cloudy	J. B. Newlin.
Coleman City, Texas	28.28	718.3	30.17	766.3	44	6.7	86	n.	16	7.2	.....	.....	10 s	.....	n.	0	0	cloudy	L. Dorman.
Columbus, Ohio	29.04	737.6	29.93	760.2	37	2.8	72	se.	8	3.6	.....	.....	10 s	.....	se.	0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.16	715.3	30.17	766.3	45.0	7.2	76	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	J. McGlone.
Custer, Fort, Montana	27.01	686.0	30.33	770.4	16	— 8.9	83	ne.	2	0.9	.....	0	0	.....	.....	0.02	0.5	clear	W. B. Lamar.
Davenport, Iowa	29.28	743.7	29.97	761.2	34	1.1	72	nw.	20	8.9	.....	.....	10 s	.....	nw.	0	0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.24	641.1	30.14	765.5	45	7.2	80	n.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	J. Williams.
Dayton, Washington T'y	28.46	722.9	30.24	768.1	35.5	1.9	98	sw.	6	2.7	.....	.....	fg.	.....	.....	0	0	dense fog	H. Clifford.
Deadwood, Dakota	25.45	646.4	30.28	769.1	23	— 5.0	76	e.	2	0.9	.....	0	7 s	.....	nw.	0.10	2.5	fair	G. W. Scott.
Delaware Breakwater, Del.	30.13	765 3	30.15	765.8	37	2.8	82	w.	6	2.7	.....	0	hz.	.....	.....	0	0	clear	T. S. Townsend.
Denison, Texas	29.29	744.0	30.13	765.3	44.0	6.7	68	ne.	14	6.3	.....	0	5 s	.....	.....	0	0	fair	J. W. Byram.
Denver, Colorado	24.84	630.9	30.34	770.6	31.0	— 0.6	68	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.22	742.2	30.17	766.3	25	— 3.9	64	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	F. W. Conrad.
Detroit, Michigan	29.10	739.1	29.84	757.9	45.1	7.3	68	se.	10	4.5	.....	.....	10 k	.....	sw.	0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.61	701.3	30.35	770.9	23	— 5.0	73	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.16	740.7	29.91	759.7	33.8	1.0	74	w.	14	6.3	.....	.....	10 s	.....	nw.	inap.	inap.	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.19	741.4	29.98	761.5	25	— 3.9	100	nw.	12	5.4	.....	.....	10 n	.....	nw.	0.07	1.8	light snow	N. B. Conger.
Eagle Pass, Texas	29.22	742.2	30.05	763.3	49.4	9.7	86	nw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25.43	645.9	30.29	769.4	6	—14.4	80	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	29.84	757.9	29.91	759.7	32.0	0.0	78	nw.	12	5.4	.....	0	4 s	.....	nw.	0	0	fair	D. C. Murphy.
Elliott, Fort, Texas	27.43	696.7	30.36	771.1	28	— 2.2	67	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.28	667.5	30.13	765 3	58.0	14.4	83	w.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	J. O'Dowd.
Erie, Pennsylvania	29.20	741.7	29.96	761.0	39	3.9	95	s.	13	5.8	.....	.....	9 s	.....	s.	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.15	740.4	29.85	758.2	31.0	— 0.6	92	n.	13	5.8	.....	.....	10 n	.....	n.	0.06	1.5	light snow	George Heathcote.
Fredericksburg, Texas	28.30	718.8	30.12	765.0	50	10.0	100	w.	2	0.9	.....	8 cs	0	.....	.....	0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.00	762.0	30.05	763.3	65	18.3	90	s.	4	1.8	.....	.....	10ks	.....	sw	0	0	cloudy	E. O'C. MacInerney.
Grand Haven, Michigan	29.00	736.6	29.70	754.4	37.0	2.8	82	e.	7	3.1	.....	.....	10 n	.....	.....	0.04	1.0	light snow	J. Mueller.
Grant, Fort, Arizona	25.25	641.3	30.09	764.3	43	6.1	58	calm	0	0	.....	5 k	0	.....	.....	0	0	fair	Robert C. Lord.
Hatteras, North Carolina	30.18	766.6	30.20	767.1	43	6.1	74	ne.	4	1.8	.....	hz	0	.....	.....	0	0	clear	R. M. Crawford.
Helena, Montana	25.91	658.1	30.29	769.4	25	— 3.9	53	calm	0	0	.....	0	0	.....	.....	0.05	1.3	clear	N. C. Smith.
Henrietta, Texas	29.13	739 9	30.17	766 3	40	4.4	82	n.	16	7.2	.....	0	8 ks	.....	n.	0	0	cloudy	J. P. Sherry.
Huron, Dakota	28.79	731.3	30.27	768.8	21.8	— 5.7	84	nw.	13	5.8	.....	.....	10 s	.....	.....	0.05	1.3	cloudy	S. W. Glenn.
Indianapolis, Indiana	29 03	737.3	29.87	758.7	40	4.4	70	sw.	6	2.7	.....	1 ck	0	.....	.....	0	0	clear	O. Schutze
Indianola, Texas	29.99	761.7	30.02	762.5	60.6	15.9	87	w.	6	2.7	.....	0	2 s	.....	w.	0	0	clear	I. A. Reed.
Jacksboro, Texas	28.94	735.1	30.16	766.1	44	6.7	68	n.	10	4.5	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.15	765.8	30.20	767.1	47	8.3	93	w.	4	1.8	.....	0	fg.	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.70	703.6	30.37	771.4	26	— 3.3	70	w.	2	0.9	.....	.....	10 s	.....	nw.	0	0	cloudy	A. Schneider.
Keokuk, Iowa	29.36	745.7	30.05	763.3	32.0	0.0	78	w.	6	2.7	.....	2 k	0	nw.	.....	0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.11	764.8	30.13	765.3	67.0	19.4	93	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.19	766.8	30.21	767.3	41	5.0	78	sw.	7	3.1	.....	hz.	0	.....	.....	0	0	dense haze	H. Mc P. Baldwin.
Knoxville, Tennessee	29.08	738.6	30.15	765.8	29.8	— 1.2	90	calm	0	0	.....	0	fg;sk	.....	.....	0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.11	739.4	29.93	760.2	30	— 1.1	88	nw.	15	6.7	.....	.....	10 s	.....	.....	0.06	1.5	cloudy	S. C. Emery.
Leavenworth, Kansas	29.34	745.2	30.28	769.1	29	— 1.7	77	nw.	11	4.9	.....	0	0	.....	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.42	747.3	30.29	769.4	33.5	0.8	88	e.	1	0.4	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	W. Bell.
Little Rock, Arkansas	29.77	756.1	30.10	764.5	43	6.1	93	calm	0	0	.....	3 cs	sk.	.....	.....	0	0	clear	W. U. Simons.
Los Angeles, California	29.64	752.8	30.04	763.0	47	8.3	93	ne.	6	2.7	.....	.....	10 s	.....	nw.	0	0	cloudy	T. S. Collins.
Louisville, Kentucky	29.38	746.2	29.96	761.0	43	6.1	68	s.	10	4.5	.....	0	0	.....	.....	0	0	clear	L. M. Dey.
Lynchburg, Virginia	29.43	747.5	30.15	765.8	28.2	— 2.1	77	calm	0	0	.....	2 c	0	nw.	.....	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.19	741.4	29.88	758.9	36.0	2.2	79	s.	10	4.5	.....	.....	10 s	.....	e.	0.28	7.1	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.18	766.0	30.19	766.8	42	5.6	82	e.	3	1.3	.....	0	0	.....	.....	0	0	clear	F. P. Chaffee.
Madison, Wisconsin	28.72	729.5	29.79	756.7	34	1.1	89	nw.	18	8.0	.....	.....	10 n	.....	.....	0.17	4.3	light rain	C. A. Shaw.
Maginnis, Fort, Montana	25.63	651.0	30.14	765.5	25	— 3.9	53	nw.	6	2.7	.....	0	0	.....	.....	0.06	1.5	clear	F. Burke.
McKavett, Fort, Texas	27.76	705.1	30.14	765.5	45	7.2	71	s.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.09	738.9	29.86	758.4	32	0.0	88	ne.	4	1.8	.....	.....	10 n	.....	.....	0.03	0.8	light snow	J. Gilligan.
Memphis, Tennessee	29 78	756.4	30.13	765.3	42	5.6	94	s.	4	1.8	.....	2 cs	fg.	.....	.....	0	0	clear	D. T. Flannery.
Milwaukee, Wisconsin	28.90	734.0	29.69	754.1	39	3.9	89	w.	5	2.2	.....	.....	10 n	.....	.....	0.19	4.8	light rain	W. Line.
Missoula, Fort, Montana	26.89	683.0	30.30	769.6	33	0.6	88	nw.	2	0.9	.....	.....	10 s	.....	.....	0.03	0.8	threatening	I. H. Young.
Mobile, Alabama	30.13	765.3	30.17	766.3	47	8.3	86	n.	2	0.9	.....	5 ck	0	w.	.....	0	0	fair	C. A. Read.
Montgomery, Alabama	29.95	760.7	30.19	766.8	38	3.3	86	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	J. B. McLaughlin.

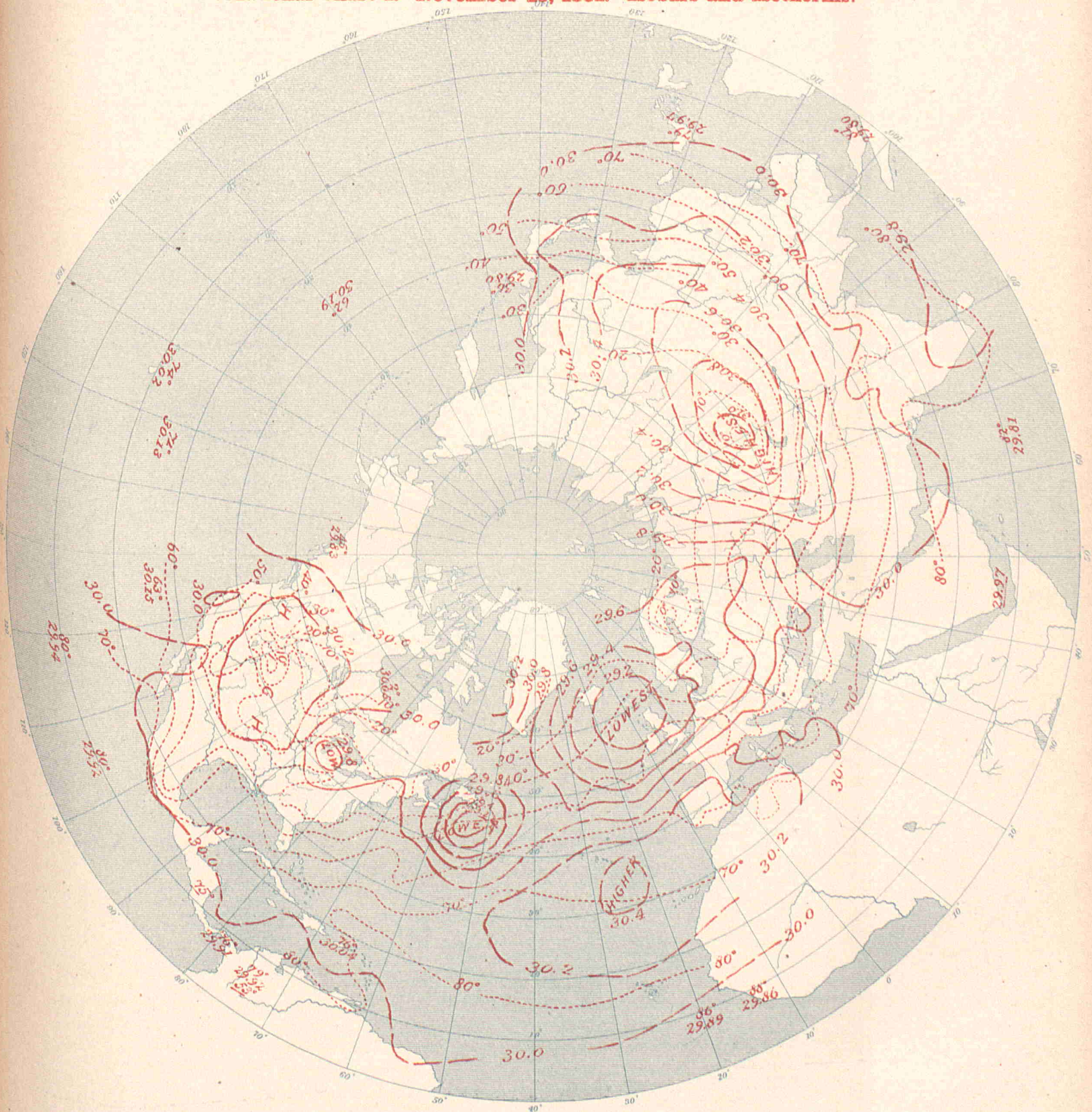
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.09	738.9	30.15	765.8	10	—12.2	80	n.	8	3.6		0	0			0.15	3.8	clear	H. Bessant.
Morgantown, W. Virginia	29.02	737.1	30.08	764.0	29.0	— 1.7	88	calm	0	0		2 ck	fg.	sw.		0	0	clear	J. C. Sprigg, jr
Mt. Washington, N. H.	23.52	597.4	30.08	764.0	9.0	—12.8	83	nw.	58	25.9			fg.		nw.	0	0	dense fog	J. G. Linsley.
Nashville, Tennessee	29.48	748.8	30.08	764.0	40.5	4.7	82	s.	6	2.7		0	sk.			0	0	dense smoke	L. N. Jesunofsky.
New Haven, Connecticut	29.98	761.5	30.10	764.5	27.5	— 2.5	82	nw.	1	0.4		8 cs	fg.	w.		0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.07	763.8	30.12	765.0	33	0.6	68	calm	0	0		10 ck	0	w.		0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.08	764.0	30.14	765.5	54.8	12.7	81	e.	4	1.8		8 c	0	w.		0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.04	763.0	30.09	764.3	37.0	2.8	72	w.	2	0.9		1 ck	1s;sk	w.		0	0	clear	W. McGillivray.
New York, New York	29.94	760.5	30.12	765.0	36.5	2.5	82	sw.	4	1.8		5 cs	fg.	sw		c	0	fair	J. B. Merrill.
Norfolk, Virginia	30.14	765.5	30.17	766.3	39	3.9	82	sw.	5	2.2		0	hz.			0	0	clear	Wm. Davis.
North Platte, Nebraska	27.30	693.4	30.38	771.6	27.6	— 2.4	68	nw.	6	2.7			10 s			0	0	cloudy	E. F. Brady.
Olympia, Washington T'y	30.10	764.5	30.14	765.5	45.0	7.2	68	n.	6	2.7			10 s			0.11	2.8	cloudy	J. Dascomb.
Omaha, Nebraska	29.95	737.9	30.29	769.4	28.5	— 1.9	72	nw.	7	3.1		0	8 s			0	0	cloudy	A. Pollak.
Oswego, New York	29.67	753.6	30.01	762.2	39.0	3.9	73	s.	8	3.6		6 cs	4 s	sw.	sw.	0.08	2.0	cloudy	S. W. Beall.
Palestine, Texas	29.48	748.8	30.05	763.3	53.0	11.7	93	s.	3	1.3		10 cs	0			0	0	cloudy	L. M. Pindell.
Pensacola, Florida	30.16	766.1	30.18	766.6	47.3	8.5	85	nw.	3	1.3		4 ck	2 s	w.	w.	0	0	fair	M. McGauran.
Philadelphia, Pa	30.04	763.0	30.14	765.5	38.5	3.6	58	calm	0	0		0	hz.			0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.68	449.1	30.34	770.6	7	—13.9	83	w.	32	14.3		0	0			0	0	clear	H. Hall.
Ploche, Nevada	24.06	611.1	30.20	767.1	28.4	— 2.0	76	nw.	5	2.2		3 c	0	sw.		0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.18	741.2	30.03	762.7	36.3	2.4	69	s.	8	3.6			10k; s		sw;s.	0	0	cloudy	W. Daly.
Poplar River, Montana	27.87	707.9	30.16	766.1				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.15	765.8	30.16	766.1	60.0	15.6	93	ne.	8	3.6			10 s		ne.	0	0	cloudy	M. Herman.
Port Huron, Michigan	29.15	740.4	29.87	758.7	34.8	1.6	92	e.	3	1.3			10 s			0.03	0.8	cloudy	W. O. Bailey.
Portland, Maine	30.00	762.0	30.05	763.3	32	0.0	54	nw.	6	2.7		0	0			0	0	clear	W. W. Eichelberger.
Portland, Oregon	30.08	764.0	30.15	765.8	40.0	4.4	89	nw.	8	3.6		0	0			0	0	clear	M. L. Hearne.
Portsmouth, N. C.					43	6.1	74	calm	0	0		hz.	hz.			0	0	light haze	F. S. Coburn.
Prescott, Arizona	24.76	628.9	30.10	764.5	24.5	— 4.2	67	w.	2	0.9		0	4 s			0	0	fair	W. H. Clendenon.
Provincetown, Mass	30.04	763.0	30.07	763.8	37.5	3.1	82	nw.	6	2.7		0	1 s; hz			0.02	0.5	clear	P. T. Jenkins.
Punta Rassa, Florida	30.16	766.1	30.17	766.3	52.5	11.4	66	n.	7	3.1		0	0			0	0	clear	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.31	744.5	30.01	762.2	35	1.7	89	s.	5	2.2			10s; fg			inap.	inap.	cloudy	E. W. McGann
Roseburg, Oregon	29.54	750.3	30.10	764.5	39.3	4.1	88	ne.	1	0.4		10 c	0	w.		0	0	cloudy	J. J. Nanry.
Sacramento, California	29.94	760.5	30.02	762.5	45.4	7.4	93	calm	0	0		0	5 s		sw.	0	0	fair	J. A. Barwick
St. Louis, Missouri	29.46	748.3	30.09	764.3	37.0	2.8	89	nw.	24	10.7			10 s		nw.	0	0	cloudy	J. H. Weber.
St. Paul, Minnesota	29.10	739.1	30.02	762.5	25.0	— 3.9	88	nw.	10	4.5			10 s		nw.	0.16	4.1	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.25	742.9	30.18	766.6	10	—12.2	89	nw.	14	6.3		0	0			0.02	0.5	clear	O. B Dilley.
Salt Lake City, Utah	25.74	653.8	30.31	769.9	30	— 1.1	57	calm	0	0		0	3 s			0	0	clear	J. Craig.
San Antonio, Texas	29.33	745.0	30.05	763.3	51.5	10.8	86	n.	1	0.4		0	5 s		n.	0	0	fair	T. J. Kenan.
San Diego, California	29.95	760.7	30.02	762.5	54.0	12.2	83	e.	6	2.7			10 s		e.	0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.15	740.4	29.87	758.7	40	4.4	73	sw.	14	6.3			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.09	764.3	30.12	765.0	36.0	2.2	79	sw.	9	4.0		3 k	hz.			0	0	clear	B. A. Blundon.
San Francisco, California	29.92	760.0	29.99	761.7	49	9.4	93	se.	10	4.5			10 n		se.	0.06	1.5	light rain	N. Gorom.
Santa Fé, New Mexico	23.24	590.3	30.28	769.1	33	0.6	50	e.	4	1.8		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.10	764.5	30.19	766.8	48	8.9	74	n.	4	1.8		0	fg.			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.46	672.1	30.28	769.1	9	—12.8	80	calm	0	0		0	0			0.06	1.5	clear	A. L. Mathews.
Shreveport, Louisiana	29.81	757.2	30.06	763.5	46	7.8	93	se.	2	0.9		0	9 s		se.	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.91	734.3	30.22	767.6	36.5	2.5	68	n.	20	8.9		0	3 s		n.	0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.32	617.7	30.16	766.1	*39.5	4.2	72	calm	0	0			10 s			0	0	cloudy	N. D. Lane.
Sitka, Alaska	29.76	755.9	29.83	757.7	44.5	6.9	52	e.	24	10.7			10 ks		e.	0	0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.67	753.6	30.16	766.1	40.5	4.7	73	nw.	4	1.8		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.15	765.8	30.19	766.8	41	5.0	72	n.	4	1.8		6 ck	0	sw.		0	0	fair	O. Parker.
Spokane Falls, Wash. Ter.	28.18	715.8	30.26	768.6	32	0.0	85	n.	4	1.8			10 s			0	0	cloudy	D. Moore.
Springfield, Illinois	29.29	744.0	30.01	762.2	38	3.3	72	w.	18	8.0			10 s		nw.	0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	29.98	761.5	30.12	765.0	30.5	— 0.8	74	se.			1	0	6 k		s.	0	0	fair	Charles Mayr.
Springfield, Mo	28.70	729.0	30.20	767.1	30	— 1.1	77	nw.	8	3.6		0	0			0	0	clear	J. B. Marbury.
Starkville, Miss	29.65	753.1	30.15	765.8	43	6.1	83	s.	5	2.2		3 c	3 k	sw.	s.	0	0	fair	C. Dill.
Stevenson, Fort, Dakota	28.32	719.3	30.30	769.6	11	—11.7	76	nw.	23	10.3		0	2 s			0.06	1.5	clear	W. Burrows
Stockton, Fort, Texas	27.05	687.1	30.17	766.3	45.0	7.2	76	nw.	3	1.3		0	6 ks			0	0	fair	J. F. Marshall.
Thatcher's Island, Mass	30.03	762.7	30.08	764.0	39.3	4.1	73	sw.	10	4.5		0	0			0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.27	692.6	30.11	764.8	34	1.1	85	se.			1	2 cs	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.11	739.4	29.84	757.9	40	4.4	65	s.	8	3.6		4 cs	4 s	sw.	sw.	0	0	threatening	A. Buell.
Tucson, Arizona	27.57	700.3	30.03	762.7	44	6.7	68	calm	0	0		2 c	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.92	760.0	30.30	769.6	32	0.0	88	nw.	1	0.4		0	7 s			0	0	fair	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					26.3	— 3.2	56	n.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.85	758.2	30.12	765.0	48.0	8.9	86	se.	6	2.7		hz.	9 s		w.	0	0	cloudy	James Kenealy.
Visalia, California	29.64	752.8	30.02	762.5	39.0	3.9	89	se.	2	0.9		7 cs	0			0	0	fair	O. D. Stewart
Washakie, Fort, Wyoming	24.56	623.8	30.30	769.6	5.1	—14.9	79	w.	3	1.3		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	30.04	763.0	30.16	766.1	28.0	— 2.2	86	calm	0	0		0	fg.			0	0	clear	B. M. Purssell.
West Las Animas, Colorado	26.18	665.0	30.30	769.6	13.5	—10.3	74	nw.	6	2.7		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.48	748.8	30.11	764.8	38	3.3	61	n.	1	0.4			10 ks		w.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.14	765.5	30.20	767.1	40	4.4	82	n.	1	0.4			fg.			0	0	dense fog	Samuel A. Haney.
Winnemucca, Nevada	25.60	650.2	30.13	765.3	33.5	0.8	71	ne.	16	7.2		0	9 s		sw.	0	0	cloudy	J. Grover.
Yankton, Dakota	28.87	733.3	30.25	768.3	30	— 1.1	68	calm	0	0		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.79	756.7	29.94	760.5	44.8	7.1	52	ne.	3	1.3		7 cs	0	sw.		0	0	fair	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3			53.0	11.7	76	calm	0	0			9ks; s		w.	0.01	0.3	cloudy	Joaquin Gomez.
Havana, Cuba, W. I.	30.03	762.7	30.10	764.5	60.1	15.6	87	se.	3	1.3		0	2 ks		e.	inap.	inap.	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	72	22.2	76	n.	2	0.9		1 c	0			0	0	fine	Robert Johnston.
Navassa, W. I.	29.90	759.4	29.98	761.5	79	26.1	78	ne.	12.2	5.5		2 k	2 ks	se.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	79	26.1	87	se.			2	5 ck	4 k	e.	e.	0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Colombia	29.36	745.7	29.92	760.0	79	26.1	89	calm			0	7 ck	2 s	calm	calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75.2	24.0	90	ne.			3	1 ck	0	se.		0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.02	762.5	30.05	763.3	74	23.3	81	n.	2.4	1.1		0	1 n			0	0	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska																0.08	2.0		W. J. Fisher.
St. Thomas, W. I.	29.94	760.5	30.06	763.5	80	26.7	82	e.				1 c	4 k	e.	e.	0	0		Aug. Walloe.
York Factory, B. A.	29.98	761.5	30.05	763.3	1.5	—16.9	86	n.	16	7.2			10 s		n.	0.20	5.1	cloudy	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
BRITISH NAVAL.																		
H. M. S. Albatross, Ning-Po, China	30.18	766.6	58	14.4	.....	calm	.....	.....	0	.....	7	W.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Amethyst, Colonia, Uruguay †	29.95	760.7	67	19.4	92	se.	.....	.....	6	.....	10	.....	.....	.....	.....	3	s.	raining.
H. M. S. Audacious, N. 9° 00′, E. 64° 49′	29.81	757.2	82	27.8	83	ne.	.....	.....	3	.....	3	ne.	.....	.....	.....	1	ene.	d. clouds.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	29.88	758.9	76	24.4	64	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	1	nne.	blue sky.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	29.92	760.0	82.5	28.1	60	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Cleopatra, N. 31° 14′, E. 121° 28′	30.15	765.8	63.5	17.5	94	e.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	raining.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C	30.19	766.8	43	6.1	95	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	overcast.
H. M. S. Curacoa, Kobe, Japan	30.12	765.0	57.5	14.2	63	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Diamond, Sydney, N. S. W*†	29.92	760.0	68	20.0	79	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. Dock-Yard, Bermuda, W. I.	30.11	764.8	60	15.6	82	nw.	.....	.....	1	.....	5	wnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.73	755.1	78	25.6	84	ssw.	.....	.....	2	.....	6	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flamingo, Port of Spain, Trinidad, W. I.	29.93	760.2	78	25.6	100	ne.	.....	.....	1–2	.....	2	ne.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flying Fish, N. 32° 44′, E. 129° 52′	30.19	766.8	57.5	14.2	78	calm	.....	.....	0	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Gannet, S. 33° 01′, W. 71° 37′	30.01	762.2	61	16.1	70	nne.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Griffon, N. 17° 48′ W. 76° 41′	29.90	759.4	79	26.1	73	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.04	763 0	71	21.7	90	e.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	raining.
H. M. S. Kingfisher, N. 11° 15′ W. 105° 33′	29.92	760.0	80	26.7	.....	e.	.....	.....	4	.....	4	se.	.....	.....	.....	4	se.	d. clouds.
H. M. S. Lark, S. 15° 15′, E. 100° 17′	29.93	760.2	74.3	23.5	83	se.	.....	.....	2	.....	9	.....	.....	.....	.....	2	se.	d. clouds.
H. M. S. Liffey, S. 29- 56′, W. 71° 20′	29.94	760.5	66	18.9	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Magpie, N. 34° 44′ E. 128° 04′	30.23	767.8	53.9	12.2	65	wnw.	.....	.....	1	.....	1	w.	.....	.....	.....	.....	.....	misty.
H. M. S. Northampton, N. 41° 50′, W. 63° 36′	29.83	757.7	48.5	9.2	77	wnw	.....	.....	6	.....	9	wnw.	.....	.....	.....	3	wnw.	d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.80	756.9	68	20.0	90	nw.	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.80	756.9	81	27.2	89	se.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Rocket, S. 9° 00′ W. 79° 22′	30.03	762.7	69	20.6	65	se.	.....	.....	1	.....	2	.....	.....	.....	.....	3	sw.	misty.
H. M. S. Sappho, S. 44° 23′, W. 109° 00′	30.08	764.0	51.2	10.7	100	e.	.....	.....	1	.....	10	e.	.....	.....	.....	3	w.	raining.
H. M. S. Superb, N. 37° 50′, E. 17° 46′*	30.00	762.0	58	14.4	75	nw.	.....	.....	3	.....	.....	.....	.....	.....	.....	3	w.	d. clouds.
H. M. S. Sylvia, Sandy Point, Patagonia	29.00	738.1	44.2	6.8	69	wnw.	.....	.....	3	.....	3	calm	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.97	761.2	.....	.....	.....	e.	.....	.....	2	.....	1	e.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, Al Bidaa, Arabia	29.99	761.7	77.5	25.3	65	n.	.....	.....	3	.....	2	nne.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Zephyr, N. 38° 07′, E. 120° 16′	30.41	772.4	44	6.7	?	ene.	.....	.....	4–5	.....	3	n.	.....	.....	.....	.....	.....	d. clouds.
PORTUGUESE NAVAL																		
Rio Lima, Porto Praya, Cape Verd Islands	30.11	764.7	82.4	28.0	77	ne.	.....	.....	1	.....	1	.....	ne.	.....	.....	1	se.	blue sky.
Tamega, Macao, China	30.06	763.0	71.6	22.0	89	ne.	.....	.....	2	.....	10	.....	.....	1½h'r	1½h'r	.....	.....	overcast.
SWEDISH NAVAL.																		
Vanadis, N. 36° 19′, W. 3° 22′	30.27	768.6	63.5	17.5	76	sse	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
UNITED STATES NAVAL.																		
Navy Yard, Pensacola, Fla	30.00	762.0	55	12.8	87	ne.	3	1.3	.....	.....	8	.....	ne.	0	0	.....	.....	fair.
Navy Yard, Portsmouth, N. H.	30.05	763.3	28	— 2.2	?	nw.	2	0.9	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Naval Hospital, Yokohama, Japan*	29.93	760.2	51.5	10.8	53	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear.
Adams, Sitka, Alaska*†	29.93	760.2	44	6.7	60	e.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Alaska, Honolulu, Sandwich Islands	30.02	762.5	74	23.3	76	ne.	.....	.....	1	.....	8	.....	ne.	0.5	13.	sm'h	.....	cloudy.
Alliance, Hampton Roads, Va*†	30.14	765 5	46	7.8	85	s.	.....	.....	1–2	.....	0	.....	.....	0	0	.....	.....	clear.
Ashuelot, N. 33° 45′, E. 131° 53′	30.22	767.6	61	10.1	66	nw.	.....	.....	2	.....	2	.....	w.	.....	.....	.....	.....	clear.
Brooklyn, Keel Point, Patagonia	29.25	742.9	51	10.6	72	w.	9	4.0	.....	.....	3	.....	nw.	0	0	sm'h	.....	fair.
Colorado, New York, N. Y.	30.10	766.1	36	2.2	80	sw.	5	2.2	.....	.....	5	.....	sw.	0	0	.....	.....	fair.
Enterprise, Norfolk, Va	30.20	767.1	41	5.0	65	ssw.	.....	.....	2	.....	2	.....	calm	.....	.....	.....	.....	clear.
Essex, Callao, Peru	29.98	761.5	66	18.9	90	sse.	.....	.....	1	.....	5	.....	se.	.....	.....	sm'h	.....	fair.
Franklin, Norfolk, Va	30.18	766.6	38	3.3	80	sw.	6	2.7	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Galena, Montevideo, Uruguay	29.87	758.7	68	20.0	84	nw.	.....	.....	3	.....	10	.....	n.	.....	.....	sm'h	.....	rainy.
Hartford, S. 52° 10′, W. 68° 30′*	29.00	736.0	45	7.2	92	sw.	.....	.....	5	.....	2	.....	w.	light	light	sm'h	w.	fair.
Independence, Mare Island, Cal.	30.03	762.7	46	7.8	92	se.	.....	.....	0–5	.....	10	.....	.....	.....	.....	.....	.....	raining.
Iroquois, Callao, Peru	30.00	762.0	66	18.9	84	se.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, Newport, R. I.	30.07	763.8	40	4.4	73	wnw.	.....	.....	3	.....	2	.....	.....	.....	.....	sm'h	.....	fair.
Kearsarge, Norfolk, Va	30.14	765.5	42	5.6	83	s.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	clear.
Lackawanna, Valparaiso, Chili*	29.95	760.7	61	10.1	82	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Lancaster, Palermo, Sicily*	29.94	760.5	65	18.3	94	w.	.....	.....	2	.....	5	.....	w.	.....	.....	sm'h	.....	fair.
Michigan, Erie, Pa.	29.95	760.7	52	11.1	72	ssw.	.....	.....	2	.....	10	.....	e.	.....	.....	.....	.....	cloudy.
Minnesota, New York, N. Y.	29.90	761.0	31	— 0.6	89	n.	3	1.3	.....	.....	2	.....	.....	.....	.....	.....	.....	fair.
Monocacy, Yokohama, Japan *	29.87	758.7	53	11.7	86	nnw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	misty.
New Hampshire, Newport, R. I.	30.14	765 5	40	4.4	73	nw.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	fair.
Nipsic, N. 38° 02′, E. 10° 27′*	30.00	762.0	65	18.3	93	nw.	.....	.....	5	.....	2	.....	nw.	.....	.....	sm'h	nw.	clear.
Onward, Callao, Peru	30.11	764.8	65	18.3	94	sse.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos, Tien-Tsin, China*	30.47	773.9	38	3.3	80	ne.	.....	.....	1	.....	10	.....	ne.	.....	.....	.....	.....	cloudy.
Pensacola, Callao, Peru*	29.93	760.2	66	18.9	84	sse.	6	2.7	.....	.....	10	.....	.....	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass.	30.07	763.8	28	— 2.2	89	wnw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	hazy.
Quinnebaug, Villefranche, France*	29.88	758.9	59	15.0	70	ssw.	.....	.....	1	.....	5	.....	calm	.....	.....	sm'h	.....	fair.
Ranger, N. 15° 33′, W. 95° 46′	29.97	761.2	73	22.8	76	n.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear.
Richmond, Yokohama, Japan*	30.02	762.5	55	12.8	62	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear.
Saratoga, N. 30° 36′, W. 77° 21′	30.03	762.7	66	18.9	84	se.	.....	.....	1–2	.....	5	.....	e.	0	0	mod	se.	cloudy.
St. Louis, League Island, Pa.	30.33	770.4	35	1.7	80	ssw.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	misty.
Swatara, N. 21° 37′, W. 55° 02 *	29.90	761.0	79	26.1	78	ene.	.....	.....	4	.....	5	.....	ne.	.....	.....	sm'h	.....	fair.
Tennessee, Hampton Roads, Va	30.14	765.5	46	7.8	54	ssw.	12	5.4	.....	.....	0	.....	.....	0	0	.....	.....	fair.?
Vandalia, Hampton Roads, Va*	30.13	765 3	44	6.7	84	sw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear.
Wabash, Boston, Mass.	30.08	764.0	28	— 2.2	88	w.	3	1.3	.....	.....	2	.....	w.	0	0	.....	.....	fair.
Wachusetts, Mare Island, Cal†	30.05	763.8	46	7.8	100	var.	.....	.....	1	.....	10	.....	calm	.....	.....	sm'h	.....	rainy.
Wyandotte, Washington, D. C	30.10	764.5	55	12.8	87	s.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear.
Yantic, Norfolk, Va.	30.12	765 0	40	4.4	91	ssw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
MERCHANT MARINE.																		
S. S. Grecian, Buenos Ayres, Argentine, Rep*	29.79	756.7	65	18.3	94	ese.	.....	.....	7	.....	10	.....	.....	3 h'r	3 h'r	sm'h	.....	overcast.
S. S. Nova Scotian, N. 50° 41′ W. 28° 22′	29.54	750.3	47	8.3	.....	w.	.....	.....	5	.....	10	.....	wnw.	.....	.....	long	wnw.	showery.
S. S. Polynesian, N. 50° 50′, W. 41° 17′*	29.95	760 7	46	7.8	.....	nnw.	.....	.....	2	.....	10	.....	ne.	0	0	cross	var.	cloudy.
S. S. British Crown, Liverpool, Eng	.....	.....	50	10.0	.....	wsw.	.....	.....	5	.....	8	.....	w.	2 h'r	2 h'r	sm'h	.....	cloudy
S. S. Indiana, N. 50° 07′ W. 31° 25′	.....	.....	47	8.3	85	nw.	.....	.....	3	.....	2	.....	nw.	.....	.....	r'gh	w.	fine.
S. S. Lord Clive, N. 51° 10′, W. 25° 08′ *†	29.00	751.8	.....	.....	.....	wnw.	.....	.....	6	.....	6	.....	wnw.	sq'lls	sq'lls	str'g	w.	squally.
S. S. Lord Gough, N. 43° 50′, W. 50° 30′	29.02	737.1	52	11.1	.....	wnw.	.....	.....	6	.....	10	.....	nw.	12 h'r	12 h'r	cross	sw.	cloudy.
S. S. Ohio, N. 51° 49′, W. 6° 40′	29.40	748.3	53	11.7	93	ssw.	.....	.....	6	.....	10	.....	sw.	.....	.....	mod.	sw.	misty.
S. S. Pennsylvania, N. 44° 54′, W. 53° 29′†	29.04	737 0	51	10.6	.....	sw.	.....	.....	5	.....	10	.....	sw.	.....	.....	r'gh	w.	foggy.
S. S. Castor, N. 45° 30′, W. 19° 00′*	29.88	758.9	57.2	14	.....	wnw.	.....	.....	5	.....	9	.....	w.	.....	.....	4	wnw.	fair.
S. S. Jason, N. 49° 50′, W. 14° 33′	.....	.....	.....	.....	.....	wnw.	.....	.....	5	.....	5ks	.....	.....	.....	.....	4	wnw.	gloomy.
S. S. Anchoria, N. 40° 52′, W. 40° 51′†	29.58	751.3	.....	.....	.....	se.	.....	.....	4	.....	1g.	.....	.....	14 h'r	14 h'r	sl't	ene.	rain & fog.
S. S. Devonia, N. 41° 45′, W. 59° 40′†	29.53	750.0	50	10.0	.....	wnw.	.....	.....	8	.....	9	.....	wnw.	.....	.....	hv'y	wnw.	cloudy.
S. S. Dorian, Boston, Mass*	29.90	761.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
S. S. Ethiopia, N. 51° 42′ W. 32° 27′	29.75	755.6	47.5	8.6	92	n.	.....	.....	4	.....	8	.....	ne.	3 h'r	3 h'r	h'vy	w.	cloudy.
S. S. Galatia, N. 10° 01′, E. 83° 30′†	29.73	755 1	80	26.7	.....	sw.	.....	.....	6	.....	9	.....	se.	4 h'r	4 h'r	r'gh	ne	squally.
S. S. Alpin, Port Antonio, Jamaica, W. I	29.95	760.7	.....	.....	.....	e.	.....	.....	2	.....	.....	.....	ne.	0	0	sm'h	.....	fine.
S. S. Alvo, Kingston, Jamaica, W. I	29.96	701.5	77	25.0	.....	sse.	.....	.....	2	.....	7	.....	.....	0	0	.....	.....	fine.
S. S. Antillas, St. Anns Bay, Jamaica, W. I	.....	.....	80	20.7	.....	ne.	.....	.....	2	.....	5?	.....	ne.	0	0	sm'h	.....	clear. ?
S. S. Ambrose, N. 33° 15′, W. 71° 03′†	30.17	760 3	.....	.....	.....	calm	.....	.....	0	.....	.....	.....	.....	0	0	5	w.	fine.
British Merchant, N. 20° 58′, W. 126° 39′	30.15	765.8	63	17.2	90	ne.	.....	.....	3	.....	8	.....	.....	.....	.....	.....	.....	showery.
Bk. Coppename, N. 28° 27′, W. 24° 15′	30.28	769 1	71.3	21.8	71	ese.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	.....	blue sky.
May Huise, S. 20° 42′, W. 34° 53′	30.04	763 0	73.2	22.9	.....	une.	.....	.....	2	.....	7	.....	.....	.....	.....	.....	.....	raining.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.97	761.2	.....	.....	33	nne.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
S. S. Inchkeith, S. 37° 17′, E. 7° 03′	30.40	772.1	53.9	12.2	83	s.	.....	.....	4	.....	4	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Mexico, N. 25° 59′, W. 113° 28′†	30.00	762.0	69.6	20.9	72	n.	.....	.....	1	.....	2	.....	nw.	.....	.....	long	wnw.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind			Clouds				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																	
S. S. Bothnia, N. 40° 28′, W. 69° 37′	30.10	764.5	49	9.4	93	n.	.....	.....	2	.. ..	6	.....	n.	o	o	mod.	con.	foggy.
S. S. Gallia, N. 47° 32′, W. 35° 17′	29.90	759.4	54	12.2	100	w.	.....	.....	6	.....	10	.....	w.	shr's	sh'rs	high	w.	squally.
S. S. Marathon, Constantinople, Turkey	29.98	761.5	56	13.3	.....	nw.	.....	.....	4	.....	9	....	nw.	18 h'r	18 h'r	.....	.....	cloudy.
S. S. Pavonia, N. 51° 40′ W. 8° 02′*	29.43	747.5	55	12.8	93	sw.	.....	.....	6	.....	10	.....	sw.	18 h'r	18 h'r	sli't	sw.	raining.
S. S. Scythia, N. 50° 49′, W. 22° 00′	29.47	748 5	54	12.2	93	w.	.....	.....	4	.....	4	.....	wnw.	sh'rs	sh'rs	mod.	wnw.	clear.
S. S. Colina, N. 55° 00′, W. 9° 54′†	29.16	740.7	.....	.....	.....	w.	.....	.....	5	.....	7?	.....	w.	o	o	mod.	w.	overcast?
S. S. Labradore, N. 41° 07′ W. 71° 56′	.....	.....	51.8	11	.....	nw.	.....	.....	3	.....	0	.....	.....	o	o	sm'h	.....	clear.
S. S. Arizona, N. 49° 27′, W. 38° 39′	29.90	759.4	49	9.4	.....	nnw.	.....	.....	4	.....	10	.....	wnw.	4 h'r	4 h'r	high	wnw.	raining.
S. S. Wisconsin, N. 51° 30′ W. 8° 30′	29.39	746.5	50	10.0	.....	w.	.....	.....	4	.....	10	.....	w.	10 h'r	10 h'r	sm'h	wsw.	foggy.
S. S. Bohemia, Hamburg, Germany †	29.35	745.5	.....	.....	.....	nw.	.....	.....	2	.....	8	.....	nw.	rain	rain	.....	nw.	clearing.
S. S. Cimbria, N. 48° 48′ W. 39° 38′	29.91	759.7	46.6	8.1	.....	e.	.....	.....	4	.....	10	.....	e.	4 h'r	4 h'r	long	wnw.	rainy.
S. S. Gellert, N. 48° 53′, W. 37° 12′	29.72	754.9	55	12.8	.....	sw.	.....	.....	5	.....	7	.....	wnw.	3 h'r	3 h'r	h'vy	wsw.	cloudy.
S. S. Silesia, New York, N. Y†	30.08	764.0	34.9	1.6	.....	sw.	.....	.....	1	.....	2	....		o	o			
S. S. Vandalia, Hamburg, Germany	29.49	749.0	42.4	5.8	.....	w.	.....	.....	2	.....	10	.....	w.	o	o	.....	.....	cloudy.
S. S. Wieland, N. 49° 40′, W. 14° 12′	29.59	751.6	.....	.....	.....	nw.	.....	.....	6	.....	10	.....	wnw.	24 h'r	24 h'r	high	wnw.	misty.
S. S. Mentmore, Chesapeake Bay*	30.11	764.8	.....	.....	.....	sw.	.....	.....	2	.....	2	.....	sw.	o	o	sm'h	.....	fair.
S. S. Nessmore, N. 49° 03′, W. 38° 58′	29.91	759.7	55	12.8	93	w.	.....	.....	6	.....	8	.....	wnw.	4 h'r	4 h'r	h'vy	cross	drizzling.
S. S. Hevelius, S. 10° —′, W. 33° —′*†	30.18	766.6	80	26.7	....	ese.	.....	.....	4	.....	0?	.....	e.	12 h'r	12 h'r	.....	.....	clear?
S. S. Ptolemy, N. 25° 15′, W. 63° 45′	30.13	765.3	76	24.4	86	ese.	.....	.....	3	.....	8	....				4	n.	threatening.
S. S. Bulgarian, N. 46° 51′ W. 46° 01′ *	29.67	753.6	..	.....	.....	ese.	.....	.....	5	.....	10	.....	var.	6 h'r	6 h'r	mod.	se.	raining.
S. S. City of San Antonio, N. 37° 30′, W. 74° 35′†	30.22	767.6	50	10.0	.....	sw.	.....	.....	2	.....	0	....		o	o	mod.	ene.	clear.
S. S. Colorado, N. 24° 50′, W. 83° 32′†	30.17	766 3	66	18.9	.....	se.	.....	.....	2	.....	8	.....	ne.	o	o	mod.	ne.	fair.
S. S. San Marcos, N. 34° 56′, W. 75° 00′	.....	.....	53	11.7	.....	n.	.....	.....	1	.....	0	....		.....	.....	mod.	nne.	clear.
S. S. Archimede, N. 37° 09′, W. 1° 16′*†	30.22	767.6	66	18.9	74	w.	.....	.....	3	.....	0	....		o	o	sm'h	nw.	clear.
S. S. Glenapp, off Rio de Janeiro, Brazil †	29.96	761.0	78	25.6	.....	se.	.....	.....	3	.....	4 k	.....	se.	o	o	.....	.....	clear.
S. S. Glenfyne, N. 22° 13′, W. 58° 58′	.....	.....	.....	.....	.....	e.	.....	.....	3	.....	2	.....	ese.	o	o	sm'h	se.	fair.
S. S. Chalmette, N. 25° 50′, W. 85° 00′†	30.16	766.1	67	19.4	.....	n.	.....	.....	3	.....	5	....		o	o	sm'h	.....	fair.
S. S. Lone Star, N. 30° 48′ W. 79° 40′ †	30.14	765.5	64	17.8	.....	nw.	.....	.....	4	.....	2	.....	nw.	o	o	large	ne.	fair.
S. S. Egypt, N. 44° 52′, W. 52° 53′ *†	29.04	737.6	.....	.....	.....	ssw.	.....	.....	5	.....	10	.....	w.	4 h'r	4 h'r	h'vy	ssw.	hazy.
S. S. Erin, N. 52° 16′, W. 6° 01′	29.44	747.8	53	11.7	.....	w.	.....	.....	6	.....	10	.....	wnw.	6 h'r	6 h'r	.....	.....	squally.
S. S. Helvetia, New York, N. Y	30.06	763.5	36	2.2	.....	sw.	.....	.....	1	.....	2	.....	w.	o	o	.....	.....	hazy.
S. S. Holland, N. 47° 12′, W. 35° 42′	29.93	760.2	61	16.1	.....	w.	.....	.....	6	.....	8	.....	wsw.	2 h'r	2 h'r	r'gh	w.	cloudy.
S. S. The Queen, N. 47° 32′, W. 27° 12′*†	29.92	760.0	54	12 2	.....	wnw.	.....	.....	6	.....	5?	.....	wnw.	sh'rs	sh'rs	mod.	wnw.	clear?
S. S. Santiago, Santiago, Cuba, W. I.	.....	.....	74	23.3	86	calm	...	.....	0	.....	4	.....	ne.	o	o	.....	.....	fine.
S. S. City of Alexandria, N. 22° 50′ W. 84° 55′†	30.18	766.6	74	23.3	.....	nne.	.....	.....	4	.....	3	.....	ne.	o	o	h'vy	nne.	fair.
S. S. City of Merida, N. 36° 40′, W. 74° 45′	.....	.....	.....	.....	.....	nw.	.....	.....	3	.....	1	.....	nw.	o	o	light	sw.	fine.
S. S. Leerdam, N. 46° 32′, W. 47° 21′*	29.23	742.4	55	12.8	.....	ese.	.....	.....	6	.....	.....	....		.....	.....	long	.....	foggy.
S. S. America, N. 49° 31′, W. 24° 41′ *	29.03	752.6	56.0	13.3	84	wnw.	.....	.....	6	.....	8	.....	wnw.	1 h'r	1 h'r	h'vy	wnw.	squally.
S. S. Donau, N. 42° 40′, W. 66° 10′	29.01	752.1	.....	.....	.....	nw.	.....	.....	6	.....	8	.....	nw.	16 h'r	16 h'r	cross	nw.	squally.
S. S. Elbe, off Norderney, Germany	29.44	747.7	40.1	4.5	100	w.	.....	.....	3–4	.....	10	....		10 h'r	10 h'r	sm'h	w.	covered.
S. S. Hohenstaufen, N. 51° 42′, E. 2° 34′	29.54	750.3	53.0	12.0	.....	wsw.	.....	.....	5	.....	3	.....	wsw.	8 h'r	8 h'r	light	wsw.	cloudy.
S. S. Neckar, off Dover, Eng	29.00	751.8	55.0	12.8	87	sw.	.....	.....	4	.....	4	.....	sw.	o	o	mod.	sw.	fair
S. S. Oder, N. 40° 34′, W. 69° 42′	30.10	764.5	44.6	7 0	.....	nnw.	.....	.....	4	.....	4	....	ene.	o	o	long	ne.	fair.
S. S. Ohio, Galveston, Texas	30.10	764.5	.....	.....	.....	se.	.....	.....	0–1	.....	7	.....	se	o	o	mod.	se.	cloudy.
S. S. Salier, Bremerhaven, Germany	29.47	748.5	.....	.....	.....	wnw.	.....	.....	1	.....	10	.....	wnw.	8 h'r	8 h'r	.....	.....	misty.
S. S. Strassburg, N. 39° 15′, W. 13° 08′	30.34	770.6	62	16.7	89	w.	.....	.....	2	.....	10	.....	w.	.....	.....	sm'h	.....	sprinkling.
S. S. Belgic, N. 24° 22′, E. 119° 07′†	30.15	765.8	71	21.7	75	ne.	.....	.....	3	.....	3	.....	ne.	o	o	mod.	ne.	clear.
S. S. Oceanic, N. 35° 48′, E. 176° 40′*	30.19	766.8	62	16.7	61	se.	.....	.....	0	.....	0	.....	se.	.....	.....	light	w.	cloudy.
S. S. City of Augusta, New York, N. Y	29.99	761.7	.....	.....	.....	ssw.	.....	.....	5	.....	1	.....	nw.	o	o	.....	.....	clear.
S. S. Mississippi, Portland, Oregon†	30.20	767.1	41	5.0	91	ne.	.....	.....	1	.....	0	....		.....	.....	.....	.....	clear.
S. S. Columbia, N. 41° 00′, W. 124° 36′†	30.04	763.0	52	11.1	83	n.	.....	.....	4	.....	6	.....	n.	.....	.....	mod	n.	fair.
S. S. Oregon, San Francisco, Cal †	29.97	761.2	50	10.0	93	calm	.....	.....	0	.....	10	....		.....	.....	.....	.....	light rain.
S. S. Ancon, San Francisco, Cal †.	29.93	760.2	48	8.9	92	se	.....	.....	3	.....	10	.....	se.	.....	.....	.....	.....	rainy.
S. S. Dakota, N. 39° 21′, W. 124° 05′ †	30.03	762.7	58	14.4	94	nw.	.....	.....	5	.....	5	.....	wsw.	o	o	ong	nw.	foggy.
S. S. Orizaba, N. 32° 40′ W. 117° 14′†	29.88	758.9	58	14.4	76	nw.	.....	.....	2	.....	8	.....	nw.	.....	.....	long	sw.	cloudy.
S. S. State of California, Portland, Oregon *†	30.06	763.5	39	3.9	91	nw.	.....	.....	2	.....	0	....		.....	.....	.....	.....	clear.
S. S. Australia, Sydney, N. S W	30.08	764.0	71	21.7	95	nne	.....	.....	3	.....	1	.....	nne.	o	o	.....	.....	clear.
S. S. City of New York, Sydney, N. S. W†	30.09	764.3	71	21.7	75	n.	.....	.....	1	.....	0	....		o	o	.....	.....	clear.
S. S. City of Pekin, Hong Kong, China †	30.23	767.8	71	21.7	75	e.	.....	.....	4	.....	10	....	e.	light	light	.....	.....	raining.
S. S. City of Rio de Janeiro, N. 23° 01′ W 110° 13′†	30.04	763.0	73	22.8	76	ne.	.....	.....	3	.....	2	.....	ne.	o	o	light	sw.	fine.
S. S. City of Sydney, N. 26° 00′ W. 148° 56′ †	30.23	767.8	71	21.7	80	e.	.....	.....	5	.....	5?	.....	ene.	o	o	r'gh	e.	cloudy.?
S. S. Grenada, Panama Panama †	29.91	759.7	76	24.4	95	nw.	.....	.....	1	.....	8?	.....	nw.	3 h'r	3 h'r	.....	.....	clear?
S. S. San Jose, N. 21° 31′ W. 105° 16′ *†	30.20	767.1	.....	.....	.....	nne.	.....	.....	2	.....	0	....		o	o	light	wnw.	
S. S. Zealandia, N. 32° 19′, W. 134° 21′	30.30	769.6	58	14.4	94	nw.	.....	.....	6	.....	10	.....	nw.	.....	.....	h'vy	nw.	gloomy.
S. S. Bermuda, N. 27° 15′, W. 66° 23′†	30.14	765.5	75	23.9	.....	n.	.....	.....	1–2	.....	3	.....	n.	1 h'r	1 h'r	h'vy	nw.	fine.
S. S Muriel, N. 35° 46′, W. 71° 20′	30.15	765.8	59	15.0	.....	nnw.	.....	.....	3	.....	8	....		o	o	long	ne.	fair.
S. S. Claudius, N. 27° 10′, W. 74° 15′ †	30.18	766.0	.....	.....	.....	ne.	.....	.....	3	.....	2	.....	s.	o	o	long	n.	fair.
S. S. Valencia, La Guayra, Venezuela †.	29.95	760.7	81	27.2	78	sw.	.....	.....	1	.....	2	.....	ese.	o	o	mod.	ne.	fine.
S. S. Belgenland, Schelde River, Germany	...	.....	55	12.8	93	sw.	.....	.....	6	.....	4?	.....	sw.	2 h'r	2 h'r	.....	.....	cloudy.?
S. S. Nederland, N. 41° 01′ W. 64° 11′†	30.02	762.5	47	8.3	.....	nw.	.....	.....	6	.....	8	.....	nw.	3 h'r	3 h'r	cross	nw.	cloudy.
S. S. Pennland, Antwerp, Belgium	29.04	752.8	51	10.6	90	s.	.....	.....	3	.....	10	.....	s.	12 h'r	12 h'r	.....	.....	overcast
S. S. Rhynland, Jersey City, N. J	30.04	763.0	35	1.7	70	nnw.	.....	.....	3	.....	0	....		.....	.....	.....	.....	fair.
S. S. Waesland, N. 46° 28′, W. 45° 54′	29.63	752.6	50	13.3	100	ssw.	.....	.....	5	.....	10	.....	sw.	8 h'r	8 h'r	con.	var.	light rain.
S. S. Maas, N. 48° 40′, W. 30° 45′	29.59	751.5	48.2	9.0	86	ssw.	.....	.....	2	.....	10	.....	wsw.	22 h'r	22 h'r	7	w.	overcast.
S. S. P. Caland, Rotterdam, Holland	29.53	750.0	50.4	10.2	99	wsw.	.....	.....	4	.....	7	.....	w.	.....	.....	.....	.....	cloudy.
S. S. W. A. Scholten, N. 40° 22′, W. 69° 45′	30.29	769.4	50.9	10.5	75	wsw.	.....	.....	3	.....	3	.....	sw.	o	o	.....	.....	
S. S. Laandam, N. 49° 50′, W. 13° 00′ *	29.50	749.3	62.6	17.0	90	wsw.	.....	.....	6	.....	0 m	.....	w.	10 h'r	10 h'r	5	w.	
S. S. State of Florida, Glasgow, Scotland	29.15	740.4	54	12.2	.....	sw.	.....	.....	2	.....	10	....		18 h'r	18 h'r	.....	.....	raining.
S. S. State of Indiana, N. 50° 16′, W. 41° 00′ †	29.89	759.2	46	7.8	.....	e.	.....	.....	5	.....	8	.....	e.	3 h'r	3 h'r	cross	var.	overcast
S. S. State of Nevada, New York, N. Y†	30.10	766.1	37	2.8	.....	wsw.	.....	.....	1	.....	5	.....	w.	o	o	.....	.....	fine
S. S. Hekla, N. 58° 50′, E. 1° 00′ *†	29.31	744.5	49.8	9.9	.....	var.	.....	.....	2–4	.....	10	.....	ssw.	8 h'r	8 h'r	sm'h	.....	raining.
S. S. Thingvalla, N. 57° 06′, W. 24° 22′†	29.37	746.0	41.0	5.0	.....	nw.	.....	.....	5	.....	8	.....	nw.	3 h'r	3 h'r	r'gh	nw.	covered.
S. S. Iowa, N. 48° 04′, W. 40° 38′ *†	29.95	760.7	50	10.0	.....	sso.	.....	.....	4	.....	10	.....	sse.	8 h'r	8 h'r	r'gh	con.	heavy rain.
S. S. Plantyn, N. 47° 56′, W. 28° 30′	29.86	758.4	.....	.....	.....	.....	.....	.....	6	.....	6	.....	wsw.	o	o	mod.	w.	squally.
S. S. Britanic, N. 45° 34′, W. 52° 29′†	29.28	743.7	54	12.2	87	sso.	.....	.....	5	.....	10	.....	sw.	2 h'r	2 h'r	high	ssw.	overcast.
S. S. Celtic, N. 49° 41′, W. 25° 09′ †	29.66	753.4	55	12.8	80	w.	.....	.....	7	.....	8	.....	wnw.	sh'rs	sh'rs	h'vy	nw.	showery.
S. S. Lepanto, N. 46° 52′, W. 30° 02′* †	30.05	763.3	57	13.9	.....	w	.....	.....	6	.....	8	.....	w.	driz.	driz.	h'vy	w.	raining.
S. S. Marengo, N. 49° 45′, W. 16° 50′*†	29.47	748.5	.....	.....	.....	sw.	.....	.....	7	... .	8	.....	sw.	11 h'r	11 h'r	r'gh	sw.	squally
S. S. Romano, N. 42° 05′, W. 70° 10′	30.05	763.5	40	4.4	.....	calm	.....	.....	0	.....	2	.....	var.	o	o	sm'h	.....	fine.
S. S. Salerno, N. 37° 05′, E. 23° 43′	.....	.....	64	17.8	.....	nw.	.....	.....	3	.....	7	....		nw.	o	o	sm'h	nw.	fine.
S. S. Catherine Whiting, Barnegat, N. J.†	30.14	765.5	.....	.....	.....	wnw.	.....	.....	1	.....	.....	....		nw.	o	o	light	ene.	
S. S. Norman, N. 39° 56′, W. 75° 08′	30.08	764 0	.....	.....	.....	nw.	.....	.....	1	.....	.....	....		.....	o	o	.....	.....	clear.
MISCELLANEOUS.																		
Bk. Adelaid, N. 22° 46′, W. 69° 02′ *†	30.14	765.5	81	27.2	.....	ene.	.....	.....	4	.....	.....	.....	e.	o	o	long	nnw.	clear.
Bg. Aleira, Maracaibo, Brazil	29.91	759.7	84	28.9	.....	ene.	.....	.....	2	.....	2	.....	ne.	o	o	.....	.....	clear.
S. Annie M. Law, Kobe, Japan *†	30.20	767.1	59	10.0	.....	n.	.....	.....	3	.....	0	....		.....	o	o	.....	.....	fine.
Bk. Anna Thormann, S. 18° 06′ E. 85° 36′*	29.94	760.4	75.0	23.9	77	se.	.....	.....	5	.....	5 k	.....	se.	o	o	mod.	ese.	fair.
S. S. Antonio Lopez, Porto Rico, W. I. *	30.04	763.0	72	22.2	87	wsw.	.....	.....	1	.....	8	....		.....	o	o	sm'h	.....	squally.
Bk. Aquidneck, S. 14° 52′ W. 35° 54′*†	30.20	767.1	.....	.....	.....	o to ne.	.....	.....	2	.....	.....	.....	var.	.....	.....	light	e.	cloudy.
Bk. Aureola, Bristol, Eng	.....	.....	58	14.4	.....	ssw.	.....	.....	6	.....	10	.....	sw.	10 h'r	10 h'r	.....	.....	raining.
Bk. Alba, N. 57° 44′, E. 9° 43′ *†	29.45	748.0	37.0	2.8	.....	w.	.....	.....	2	.....	.....	....		.....	.....	.....	.....	
Bk. Bayonnaise, N. 10° 09′, W. 57° 57′*†	30.16	766.0	.....	.....	.....	e.	.....	.....	1	.....	7?	.....	e.	2 h'r	2 h'r	r'gh	se.	clear.?
Sch. Bonny Doon, N. 42° 46′, W. 35° 57′	.....	.....	.....	.....	.....	wsw.	.....	.....	8	.....	2	.....	w.	driz.	driz.	long	wsw.	
S. S. Buswell, N. 31° 26′, W. 45° 59′*†	30.23	767.8	81	27.2	.....	ssw.	.....	.....	1	.....	4	.....	sw	o	o	str'ng	nw.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.			Force.	Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Champion. N. 41° 17′, W. 11° 54′			64.0	17.8		w.			3		2		wsw.	2 h'r	2 h'r	long	nnw.	fair.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.20	767.1	53	11.7	73	ne.			1	0	0			0	0			clear.
Schr. C. R. Flint, Cedar Keys, Fla†	30.17	766.3	51	10.6		nne.			1		0			0	0			clear.
S. Cornelius, N. 41° 29′, W. 46° 58′			69.2	20.7		ssw.			6		10		sw.	1 h'r	1 h'r	r'gh	sw.	cloudy.
S. S. D. J. Foley, N. 29° 07′, W. 74° 44′			70	21.1		n.			2		5		ne.	0	0	long	n.	fair.
Bkt. David Preston, New Orleans, La*†	30.15	765.8	69	20.6		ne.					8		sw.	0	0			
Bk. Don Quixote, Pasoeroen Roads, Java*	29.82	757.4	90	32.2		nw.			3		47		wnw.	0	0	sm'h		cloudy.?
Bk. E. D. Bigelow, N. 45° 38′, W. 14° 10′*†	29.90	759.4				wsw.			8		10		w.	3 h'r	3 h'r	h'vy	w.	drizzling
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†	30.19	766.8	42	5.6		sw.			1		2		wsw.	0	0			clear.
S. E. J. Spicer, New York, N. Y.	30.09	764.3	39	3.9	100	wsw.			6		6		w.	0	0			fair.
Bk. Eliza Barss, Bermuda, W. I†	30.08	764.0				nnw.			2		2		nw.	0	0			clear.
Bk. Essex, Muscat, Arabia*†	29.93	760.2	82	27.8		w.			3				ne.					fine.
Schr. F. E. McDonald, near Monomoy Point, Mass†	30.15	765.8				nw.			1		0							
S. S. Foscolia, N. 3° 53′, W. 43° 00′						var.			7		10		var.	14 h'r	14 h'r	long	ene.	heavy rain.
Bk. Freya, N. 19° 14′, W. 38° 15′			76	24.4		e.			4		8		e.	11 h'r	11 h'r	mod.	ese.	fair.
Bg. George, N. 42° 20′ W. 62° 00′*†	29.85	758.2				wnw.			8		8		wnw.	rain	rain	r'gh	var.	clearing
S. Grecian, N. 23° 30′, W. 63° 20′†	30.15	765.7	80	26.7	74	se.			3		6		se:	0	0	long	nw.	fair.
Bk. Grey Eagle, N. 32° 13′ W. 46° 30′			75	23.9		s.			3		5		sw.	0	0	mod.	se.	fair.
Bk. Gronsvaer, S. 40° 51′ E. 168° 05′†	30.04	763.0	65.2	18.4	99	se.			1		1		se.	0	0	2	w.	fine.
Bk. Hattie G. McFarland, New York City, N. Y†	30.19	766.8	40	4.4		se.			1		2		w.	0	0			clear.
Schr. Hattie Weston, Icaque, Trinidad, W. I*†	30.01	762.2	82	27.8		ene.			1		5		ene.	2 h'r	2 h'r	sm'h	e.	fair.
S. Hedwig, N. 33° 43′, W. 74° 44′	30.20	767.1	59.2	15.1	72	calm			0		4		n;w.	0	0	3	ne.	
Bk. Heinrich & Tonio, N. 42° 06′, W. 44° 45′*†	29.92	760.0	69	20.6		ssw.			6		8		wsw.	3 h'r	3 h'r	rg'h	ssw.	cloudy.
Schr. Isabel Alberto, Cedar Keys, Fla†	30.21	767 3				ne.			1		0			0	0			clear.
S. Ivy, Cork, Ireland†	29.73	755.1	53	11.7		w			5		9							drizzling.
Schr. James Slater, N. 16° 00′, W. 57° 22′†	30.03	762.7	82	27.8		ne.			4		2		ne.	2 h'r	2 h'r	hv'y	e.	rainy.
S. S. John Hopkins, N. 41° —′, W. 72° —′			38	3.3		w.			2		0			0	0			clear.
Schr. John L. Thomas, Vivorilla Cays, C. A*†	30.10	764.5				nnw.			5		9		n.	0	0	short	nw.	squally.
Bg. John Wesley, Cardenas, Cuba, W. I†	30.11	764.8				se.			1		0			0	0			clear.
Light House Tender, Laurel, Key West, Fla†	30.10	764.5	65	18.3		ne.			2		4		ne.	0	0			fair.
Bk. Liberia, N. 8° 32′, W. 20° 15′*	29.89	759.2	86	30.0	76	e.			3		5		e.	0	0	small		
Bg. Lilian, N. 16° 46′, W. 62° 50′†	30.05	763.3	84	28.9		ene.			4		6		ene.	0	0	sm'h		squally.
Bg. L. & W. Armstrong, N. 41° 15′, W. 72° 00′*†	30.12	765.0				nw.			1		1		nw.	0	0	sm'h		hazy.
S. S. Madrid, N. 34° 09′, W. 65° 31′*†	30.22	767.6	64	17.8	78	wnw.			4		4		wnw.	sh'rs	sh'rs	cross		
S. S. Malabar, N. 24° 54′ E. 35° 52′*†	29.50	749.3				nnw.			2		0			0	0	sm'h		clear.
Bg. Mary Gibbs, N. 31° 40′, W. 78° 00′*†	30.05	763.3	65	18.3		ese.			4		10		ssw.	0	0	4	ne.	cloudy.
Bk. Matilda C. Smith, N. 33° 34′, W. 24° 00′*†	30.46	773.7				ene.			3		7		e.	shr's	shr's	mod	nw.	fine.
Bg. Mattie B. Russell, N. 33° 15′, W. 76° 40′*†	30.26	768.6				calm			0		0			light	light	h'vy	nne	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	30.03	762.7				nne.							ne.	0	0	long	ne.	fair.
S. M. P. Grace, N. 10° 05′, W. 119° 48′*	29.94	760.5	80	26.7		calm			0		2		ese.	slight	slight	r'gh	con.	
Bg. Myrtle, N. 39° 55′, W. 71° 22′†	30.16	766.1				nw.			4		2		nw.	0	0	sm'h		fine.
Bk. Northern Queen, N. 36° 02′, W. 71° 49′ *†	30.15	765.8	68	20.0	70	nnw.			3		5		sw.				nnw.	
Bg. O. C. Clary, N. 24° 22′ W. 58° 15′*†	30.15	765.8	79	26.1	95	e.			1		4		e.			sm'h	e.	fair.
Bk. Orpheus, N. 43° 22′ W. 35° 20′	30.03	762.7	65	18.3		wsw.			4		8 k		wsw.	0	0	sm'h	wsw.	hazy.
S. Paramita, San Francisco, Cal†	29.99	761.7	50	10.0		se.			4				se.	3 h'r	3 h'r			cloudy.
S. S. Peconic, N. 40° 20′, W. 70° 28′*†	29.96	761.0	46	7.8		w.			3		2		w.	0	0	sm'h	w.	fair.
S. S. Radnorshire, N. 11° 56′, E. 50° 07′*†	29.96	761.0				ne.			3		0			0	0	mod.	ne.	clear.
S. St. Francis, S. 8° 16′ W. 107° 47′†	30.01	762.2	72	22.2		ese.			4		6		ese.	0	0	mod	se.	cloudy.
Schr. S. B. Hubbard, N. 37° 50′, W. 75° 15′†	30.20	767.1	48	8.9		wsw.			1		0			0	0	long	ne.	fine.
Bk. Scud, N. 16° 06′ W. 62° 07′*†	29.97	761.2				ene			5		7		ene.	0	0	sm'h		squally.
Bk. Southern Belle, Antwerp, Belgium*†	29.55	750.6	55	12.8		w.			4		10			3 h'r	3 h'r	sm'h		cloudy.
S. S. Strathleven, Suez Canal, Egypt	29.86	758.4	76.0	24.4	64	calm			0		1		e.					blue sky.
S. S. Sunbeam, N. 47° 52′, W. 9° 14′	29.84	757.9	57	13.9	94	wsw.			6		10		w.	18 h'r	18 h'r	4	w.	misty.
Bk. Truro, N. 44° 20′ W. 47° 45′*†	29.66	753.4				s.			6		8		ssw.	11 h'r	11 h'r	mod.	ssw.	threatening.
U.S. F. C. S. Fish Hawk, Washington, D. C†	30.24	768.1	38	3.3	72	ne.			1		1		calm					clear.
Bk. Usko, N. 41° 34′, W. 54° 57′†	29.32	744.7	66	18.9		wsw.			9		9		w.	8 h'r	8 h'r	hv'y	wsw.	clearing
Bk. Vincenzo Accame, Lisbon, Portugal†	30.41	772.3	60.8	16		calm			0					0	0			clear.
Schr. Viola Reppard. N. 39° 25′ W 73° 14′†	30.09	764.3	50	10.0		nw.			2		2		sw.	0	0	mod.	ne.	
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.10	764.5				ssw.			1		0			0	0			fine.
Bk. Wandering Jew, S. 25° 26′, W. 41° 48′†	30.29	769.4	77	25.0		ene.			3		1		se.	0	0	sm'h		clear.
Bk. Warden Law, Valparaiso, Chili	30.07	763.8				calm			0		10		s.	0	0	sm'h		covered.
Bgt. Willie, S. 34° 30′, E. 24° 20′*†	29.96	761.0	70	21.1		wsw.			6		8		wsw.	2 h'r	2 h'r	r'gh	wsw.	cloudy.
S. Wm. Woodbury, N. 37° 15′ W. 61° 53′*†	30.23	767.8	54	12.2		w.			9		10		w.			high	w.	squally.

International Chart I. November 23, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

076303

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 24, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.15	765.7	64.0	17.8	74	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.10	764.4	65.1	18.4	39	wsw.	.....	.....	2	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.10	764.5	68.0	20.0	76	wsw.	.....	.....	4	.....	2	.....	.....	0.413	10.5	fair	Fonfrède.
Tunis	.....	.....	30.10	764.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.20	767.1	66.6	19.2	53	e.	.....	.....	2	.....	0	.....	.....	0	0	clear	Pérès.
Tebessa	.....	.....	30.24	768.0	59.4	15.2	47	w.	.....	.....	2	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	60.8	16.0	26	nnw.	.....	.....	2	.....	0	.....	.....	0	0	clear	Louchamp.
Laghouat	.....	.....	30.21	767.2	62.6	17.0	18	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.28	769.0	65.1	18.4	44	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	30.08	764.0	30.17	766.3	54.8	12.7	72	se.	5	2.2	.....	.....	5	.....	.....	0.03	0.8	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.30	744.3	29.85	758.3	53.2	11.8	54	sw.	.....	.....	5	.....	7	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.87	733.4	29.64	752.9	47.1	8.4	87	w.	3.8	1.7	.....	.....	9	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.92	734.6	29.83	757.6	37.4	3.0	96	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.50	723.8	29.76	756.0	45.3	7.4	82	s.	.....	.....	1	.....	6	.....	.....	0.028	0.7	.....	Andreas Rospini.
Hermannstadt	28.48	723 5	29.93	760.2	47.5	8.6	71	se.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.33	719.5	29.65	753.2	51.8	11.0	79	calm	.....	.....	0	.....	4	.....	.....	0.004	0.1	fair	The Staff.
Lemberg	28.77	730.7	29.77	756.2	41.5	5.3	78	sw.	.....	.....	1	.....	3	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.81	757.1	29.92	760.0	55.2	12.9	74	wnw.	.....	.....	1	.....	10	.....	.....	0.205	5.2	.....	I. R. Hydrographic Office.
Szathmar	29.42	747.2	29.88	758.9	40.6	4.8	90	se.	.....	.....	3	.....	10	.....	.....	0.031	0.8	.....	Joseph Midlinszky, S. J.
Szegedin	29.61	752.0	29.89	759.2	50.9	10.5	64	s.	.....	.....	1	.....	3	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.86	758.4	29.96	761.0	52.2	11.2	82	s.	.....	.....	1	.....	10	.....	.....	0.051	1.3	.....	Royal Academy.
Vienna	28.98	736.0	29.69	754.1	50.0	10.0	72	se.	.....	.....	1	.....	1	.....	.....	0.035	0.9	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	28.86	733.0	28.96	735.6	43.5	6.4	71	sw.	8	3.6	.....	.....	6	.....	.....	0	0	misty	W. Boswell
Armagh, Observatory	28.96	735.6	29.20	741.7	35.6	2.1	90	wsw.	18	8.0	.....	.....	10	.....	.....	.....	.....	.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.24	742.7	45.2	7.3	75	wsw.	32	14.3	.....	.....	4	.....	.....	.....	.....	d. clouds	John Hartnup.
Bolton, Sharples	28.69	728.7	29.22	742.2	43.9	6.6	80	w.	24	10.7	.....	.....	7	.....	.....	.....	.....	d. clouds	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	46.7	8.2	81	sw.	.....	.....	2	.....	6	.....	.....	0.51	13.0	d. clouds	McLandsborough & Preston.
Bridgetown, Barbadoes	29.93	760 2	29.96	761.0	82.0	27.8	74	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	51.0	10.6	78	w.	.....	.....	2.0	.....	8	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E	29.22	742.2	29.35	745.8	50.5	10.3	82	sw.	.....	.....	1	.....	6	.....	.....	blank	blank	d. clouds	Corpl. F. Milner, A. H. C.
Falmouth, Observatory	29.33	745.0	29.56	750.8	50.2	10.1	77	wnw.	.....	.....	5	.....	8	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.68	703.2	29.89	759.2	63.8	17.7	74	s.	.....	.....	1	.....	10	.....	.....	blank	blank	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.78	756.4	85.0	29.4	58	ne.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.13	765.3	30.18	766.6	64.3	17.9	89	nw.	.....	.....	5	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	28.83	732 3	29.04	737.6	38.8	3.8	83	wsw.	.....	.....	5	.....	10	.....	.....	.....	.....	hailing	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.18	741.2	29.35	745.5	50.9	10.5	76	wsw.	.....	.....	4	.....	8	.....	.....	.....	.....	d. clouds	The Staff.
Guernsey	29.27	743.4	29.57	751.1	51.0	10.6	78	w.	.....	.....	4	.....	6	.....	.....	.....	.....	showery	A. Collenette, F. M. S
Kew, Observatory	29.32	744.7	29.36	745.7	52.1	11.2	69	w.	20	8.9	.....	.....	7	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.01	736.8	29.26	743.2	50.0	10.0	79	w	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.94	760.5	30.01	762.2	62.2	16.8	98	sw.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.12	765.0	30.17	766.3	73.5	23.1	78	ne.	.....	.....	3	.....	6	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.75	730 2	29.27	743.4	47.1	8.4	81	w.	.....	.....	5	.....	6	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.12	739.6	29.35	745.5	50.0	10.0	85	sw.	.....	.....	5	.....	9	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.44	747.8	29.51	749.5	50.6	10.3	84	w.	.....	.....	4	.....	4	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	28.74	730.0	28.84	732.5	40.9	4.9	81	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	blue sky	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.90	759.4	29.96	761.0	53.8	12.1	79	ne.	.....	.....	1	.....	9	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	28.95	735.3	29.24	742.7	47.0	8.3	86	wsw.	.....	.....	4	.....	7	.....	.....	0.07	1.8	overcast	W. F. Cooper.
Silloth Rectory	29.07	738.4	29.10	739.1	44.5	6.9	74	wsw.	.....	.....	6	.....	10	.....	.....	0.090	2.3	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.22	742.2	44.4	6.9	83	wsw.	25	11.2	.....	.....	10	.....	.....	.....	.....	overcast	I. New.
Stratfield Turgiss	29.17	740.9	29.38	746.2	51.3	10.7	75	w.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.51	749.5	29.56	750.8	52	11.1	72	sw.	.....	.....	6	.....	7	.....	.....	.....	.....	gloomy	W. Newcombe.
Valencia, Observatory	29.44	747.8	29.46	748.3	46.6	8.1	83	w.	37	16.5	.....	.....	7	.....	.....	.....	.....	squally	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.00	762 0	30.04	763.0	33	0.6	80	sw.	4	1.8	.....	0	8 s	.....	w.	0.040	1.0	cloudy	H. J. Cundall, C. E
Chatham, N. B*	29.97	761.2	30.03	762.7	25	— 3.9	92	calm	0	0	.....	0	0	.....	.....	0	0	clear	G. A. Blair.
Father Point, Quebec*	29.90	759.4	29.93	760 2	21	— 6.1	87	s.	5	2.2	.....	8 cs	0	sw.	.....	0.02	0.5	fair	J. McWilliams.
Fort Garry, Manitoba*	29.42	747.3	30.37	771.4	— 8	—22.2	58	w.	7	3.1	.....	0	0	.....	.....	0	0	clear	James Stewart.
Halifax, N. S*	29.97	761.2	30.10	764.5	30	— 1.1	92	w.	1	0.4	.....	2 ck	0	w.	.....	0	0	fair	A. Allison.
Kingston, Ontario*	29.33	745 0	29.67	753.6	36	2.2	89	sw.	28	12.5	.....	10 n	10 n	.....	sw.	0.36	9.1	sleeting	A. P. Knight, M. A.
Montreal, Quebec*	29.48	748.8	29.69	754.1	34	1.1	92	sw.	14	6.3	.....	10 n	10 n	.....	.....	0.68	2.0	sleeting	C. H. McLeod, C. E.
Parry Sound, Ontario*	28.86	733.0	29.57	751.1	33	0.6	88	n.	5	2.2	.....	10 n	10 n	.....	se.	0.82	20.8	light snow	Rev. R. Mosley.
Port Dover, Ontario	29.02	737.1	29.74	755.4	30	— 1.1	100	sw.	30	13.4	.....	10 n	10 n	.....	.....	0.34	8.6	light snow	H. Morgan.
Port Stanley, Ontario	29.18	741.2	29.85	758.2	30	— 1.1	88	w.	32	14.3	.....	10 n	10 n	.....	nw.	0.08	2.0	light snow	M. Payne.
Quebec, Quebec*	29.49	749.0	29.82	757.4	30	— 1.1	100	e.	.....	.....	5	10 n	10 n	.....	e.	0.05	1.3	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.11	739.4	29.68	753.9	35	1.7	82	se.	4	1.8	.....	10 s	10 s	.....	se.	0.37	9.4	cloudy	W. H. McIntyre.
Saugeen, Ontario*	28.97	735.8	29.69	754.1	36	2.2	89	nw.	48	21.5	.....	10 s	10 s	.....	.....	0.60	15.2	light rain	
St. Andrews, N. B	29.90	759.4	29.95	760.7	39	3.9	81	se.	7	3.1	.....	10 n	10 n	.....	.....	0	0	cloudy	
Sydney, C. B*	29.96	761.0	30.03	762.7	33	0.6	92	sw.	8	3.6	.....	10 k	0	.....	.....	0.36	9.1	fair	T. C. Hill, C. E
Toronto, Ontario*	29.20	741.7	29.60	751.8	33	0.6	81	w.	10	4.5	.....	.....	10 ks	.....	w.	0.15	3.8	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.93	760.2	30.00	762.0	34	1.1	85	e	4	1.8	.....	8 ck	0	w.	.....	0	0	fair	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.26	717.8	29.73	755.1	32	0.0	100	nw.	.....	.....	8	.....	10	.....	nw.	0.510	13.0	stormy	Wm. Wylie.
St. Johns, Newfoundland	29.49	749.0	29.75	755.6	37.	2.8	100	nw.	5	2.2	.....	5 k	5 s	.....	.....	0	0	stormy	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.12	765.0	30.15	765.8	62.4	16.9	92	sw.	15.4	6.9	.....	.....	8 ks	.....	.....	0.550	14.0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	30.07	763.8	30.11	764.8	74.5	23.6	48	sse.	30	13.4	.....	0	2	.....	.....	0	0	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and Kind. Upper	Clouds. Amount and Kind. Lower.	Clouds. Direction Upper.	Clouds. Direction Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.51	775.0	30.0	— 1.1	87	.....	1.8	0.8	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.37	771.5	30.40	772.2	46.8	8.2	83	n.	13.9	6.2	.....	ck	10 k	w.	var.	0.303	7.7	covered	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.01	736.8	29.06	738.0	41.9	5.5	97	ssw.	.....	.....	2	.....	10	.....	.....	.....	.....	rain & fog	Oversergent Fischer.
Fanöe	29.01	736.8	29.03	737.4	41.0	5.0	100	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy	Overlœrer Lauridsen.
Godthaab, Greenland	30.09	764.2	30.13	765.3	15.8	— 9.0	78	ene.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	30.12	765.1	30.14	765.6	10.0	—12.2	.....	calm	.....	.....	0	.....	4	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.32	744.7	29.36	745.8	32.0	0.0	90	ne.	.....	.....	8	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	28.70	728.9	28.73	729.8	36.3	2.4	94	sw.	16	7	.....	.....	7	.....	.....	.....	.....	.....	Overlœrer Bergh.
Vestervig	28.91	734.2	29.00	736.6	35.4	1.9	100	ese.	.....	.....	2	.....	10	.....	.....	.....	.....	rain & fog	Lœrer Oesterbol.
Jacobshavn	30.11	764.8	30.16	766.0	6.1	—14.4	.....	calm	.....	.....	0	.....	7	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.33	745.0	29.98	761.4	55.4	13	98	w.	.....	.....	1	.....	k	.....	w.	0.299	7.6	.....	M. Labroue, Director.
Alençon, Normal School	29.13	739.8	29.68	753.8	51.4	10.8	90	sw.	.....	.....	1	.....	k	ne.	ne.	0.283	7.2	.....	M. Nicot, Director.
Arras, Engineer School	29.31	744.5	29.56	750 8	50.4	10.2	90	w.	.....	.....	4	.....	10	.....	.....	0.827	21.0	covered	M. Fénéon, Command't.
Avignon, Normal School	29.88	759.0	29.96	761.0	55.0	12.8	81	e.	.....	.....	1	.....	2	.....	ne.	0	0	slightly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.13	739.9	29.68	753.9	53.2	11.8	69	wnw.	.....	.....	3	.....	8	.....	wnw.	0.197	5.0	very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.28	743.8	29.54	750.4	53.1	11.7	71	wsw.	.....	.....	3	.....	8	.....	wsw.	0.181	4.6	very cloudy	M. Frère Eugène Marie.
Besançon, Normal School	28.81	731.7	29.70	754.3	52.5	11.4	95	s.	.....	.....	2	.....	10 n	.....	sw.	0.374	9.5	raining	M. Gobin, Director.
Bordeaux, Observatory	29.63	752.7	29.89	759.3	57.9	14.4	63	w.	.....	.....	2	.....	8	.....	wnw.	0.382	9.7	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.20	741.7	29.75	755.7	52.7	11.5	90	w.	.....	.....	1	.....	10 n	.....	w.	0.04	1.	raining	M. Malet, Director.
Brest, Naval Observatory	29.50	749.2	29.74	755.4	55.4	13.0	86	w.	.....	.....	2	.....	5	.....	w.	0.886	22.5	.....	M. de Kermaree, Dir.
Caen, Normal School	29.50	749.4	29.58	751.4	51.8	11	86	se.	.....	.....	4	.....	5	.....	e.	0.299	7.6	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.30	744.2	29.02	752.3	52.5	11.4	85	sw.	.....	.....	2	.....	10	.....	.....	0.362	9.2	covered	M. Jadot, Director.
Charleville, Normal School	29.01	736.9	29.53	750.1	51.8	11	68	w.	.....	.....	4	.....	10	.....	.....	0.51	13.	light rain	M. Grimard, Director
Clermont-Ferrand Obs'y	28.46	722.9	29.80	756.9	56.3	13.5	65	w.	.....	.....	1	.....	8	.....	w.	0	0	¾ covered	M. Allnard, Director.
Cluny, Normal School	28.96	735.6	29.81	757.2	50.7	10.4	84	ssw.	.....	.....	1	.....	10	.....	.....	0.110	2.8	.....	M. de Villemontée, Dir.
Commercy, Normal School	28 77	730.7	29.63	752.6	51.1	10.6	90	w.	.....	.....	4	.....	8	w.	w.	0.681	17.3	very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.39	695.8	29.98	761.6	39.2	4	83	.....	.....	.....	.....	.....	7	.....	s.	0.020	0.5	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.80	731.4	29.93	760.1	52.3	11.3	90	n.	.....	.....	1	.....	10	.....	sw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.10	739.1	29.88	759.0	48.2	9	92	ne.	.....	.....	1	.....	ksn	.....	w.	0.118	3.0	.....	M. Ablard, Director.
Guéret	28 23	717 0	29.82	757.3	48.2	9	83	w.	.....	.....	2	.....	n	.....	w.	0.472	12.0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.26	743.2	29.53	750.0	51.8	11	85	w.	.....	.....	3	o	5 k	.....	w.	0.16	4.	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.44	747.7	30.00	762.0	55.4	13.0	81	w.	.....	.....	3	o	1 k	.....	.....	0.063	1.6	clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.65	753.0	29.75	755.6	55.0	12.8	88	w.	.....	.....	2	.....	5	w.	calm	0.606	15.4	½ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.79	731.2	29.85	758.1	52.0	11.1	84	s.	.....	.....	2	.....	8	.....	w.	0.008	0.2	sprinkling	M. André, Director.
Mans, Normal School	29.33	745.0	29.63	752.5	51.8	11.0	94	w.	.....	.....	3	.....	.....	.....	w.	0.134	3.4	.....	M. Piboen, Director.
Marseille, Observatory	29.63	752.6	29.90	759.4	57.2	14.0	78	sw.	.....	.....	1	.....	10	.....	sw.	inap	inap.	sprinkling	M. Stephan, Director.
Mt. Louis	24.74	628.4	29.58	751.4	47.8	8.8	57	sw	5.6	2.5	.....	.....	2	nw.	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.76	756.0	29.89	759.3	60.8	16	71	w.	.....	.....	2	.....	2	ne.	.....	0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	28.78	731.0	29.56	750.7	52.9	11.6	67	wsw.	.....	.....	2	.....	.....	.....	nw.	0.067	1.7	.....	M. Hasse, Director
Nantes, Observatory	29.61	752.0	29.77	756.1	56.8	13.8	73	wsw.	.....	.....	1–3	o	8 k; kn	.....	wsw.	0.335	8.5	.....	M. Larocque, Director.
Perpignan, Observatory	29.84	757.8	29.95	760.6	61.3	16.3	58	w.	1.8	0.8	.....	.....	4	.....	sw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.11	536.3	.....	.....	26.2	— 3.2	.....	nw.	.....	.....	2	.....	.....	.....	nw.	0.071	1.8	.....	Gen'l de Nansouty, Dir.
Privas, Normal School	28.74	730.1	29.82	757 4	52.9	11.6	80	n.	.....	.....	1	.....	5	.....	n.	0	0	cloudy	M. Tailleu.
Puy de Dôme Obs'y, Summit	24.87	631.6	.....	.....	35.8	2.1	100	wsw.	.....	.....	1	.....	10	.....	.....	0.386	9.8	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.78	756.5	29.82	757.3	56.3	13.5	84	wsw.	.....	.....	3	.....	8	.....	wsw.	1.34	34.	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.62	752.4	29.84	757.9	55.0	12.8	79	sw.	.....	.....	3	.....	5	.....	sw.	0.610	15.5	cloudy	M. Brotier, Director.
Rodez, Normal School	27.77	705.4	29.94	760.5	46.8	8.2	92	nw.	.....	.....	2	.....	kn	.....	e.	0.181	4.6	.....	M. Seger, Director.
Rouen, Normal School	29.51	749.5	29.56	750.7	54.0	12.2	76	sw.	.....	.....	1	.....	8	sw.	.....	0.256	6.5	very cloudy	M. Moullot.
Saint Lô	.....	.....	.....	.....	51.6	10.9	85	w.	.....	.....	3	.....	10	w.	w.	0.953	24.2	raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.44	747.8	29.61	752.0	55.0	12.8	65	sw.	.....	.....	3	.....	1	.....	w.	0.126	3.2	.....	M. Renou, Director.
Toulouse, Observatory	29.28	743.7	30.00	702.1	56.1	13.4	73	wsw.	.....	.....	3	.....	5	w.	.....	0.165	4.2	cloudy	M. Baillaud, Director.
Tours	29.54	750.3	29.72	754.8	56.1	13.4	73	sw.	.....	.....	2	.....	2	nw.	w.	0.106	2.7	slightly cl'dy	M. de Tastes.
Versailles, Observatory	29.11	739.4	29.00	751.9	52.2	11.2	69	w.	.....	.....	3	.....	.....	.....	.....	0.146	3.7	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28.15	715.1	29.59	751.5	51.8	11.0	74	sw.	.....	.....	2	.....	8	sw.	.....	0.083	2.1	.....	Prof. Jnedt.
Bamberg	28.73	729.7	29.56	750.9	51.8	11.0	63	sw.	.....	.....	2	.....	8	sw	.....	.....	.....	raining	Prof. Dr. Hoh.
Berlin	29.13	739.9	29.30	744.3	54.1	12.3	75	sw.	.....	.....	2	.....	10	.....	.....	0.287	7.3	.....	Prof. Dr. Arndt.
Breslau	29.01	736.9	29.54	750.2	53.4	11.9	76	sw.	.....	.....	3	.....	9	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.13	739.8	29.50	750.7	54.7	12.6	78	sw.	.....	.....	7	.....	9	sw.	.....	0.016	0.4	light rain	Albert Senz.
Cassel	28.63	727.3	29.35	745.4	53.2	11.8	70	sw.	.....	.....	4	.....	8	sw.	.....	0.291	7.4	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.15	740 4	29.51	749.6	52.0	11.1	90	ssw.	.....	.....	1	.....	9	.....	.....	0.276	7.0	.....	Physical Society.
Friedrichshafen	28.29?	718.5?	29.73	755.1	50.0	10.0	87	ssw.	.....	.....	2	.....	10	sw.	.....	0.102	2.6	.....	Wilhelm, Chief Tel.
Hamburg	29.08	738.5	29.17	740.8	50.7	10.4	94	sw.	.....	.....	6	.....	9	.....	.....	0.504	12.8	equally	E. Preller.
Kiel	29.08	738.6	29.10	739.0	45.7	7.6	100	sw.	.....	.....	4	.....	10	.....	.....	0.547	13.9	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.99	736.3	29.41	746.9	54.3	12.4	73	sw.	.....	.....	4	.....	8	sw.	.....	0.079	2.0	.....	H. Leppig, Asst.
Magdeburg	29.11	739.5	29.30	744.2	54.1	12.3	77	sw.	.....	.....	4	.....	10 ks	.....	sw.	0.055	1.4	.....	Weather Observatory.
Memel	29.48	748.9	29.53	750.0	30.0	— 1.1	98	sse.	.....	.....	4	.....	10	.....	.....	.....	.....	snow & fog	Issermann.
Munich	27.89	708.4	29.73	755.2	49.8	9.9	84	sw.	.....	.....	4	.....	10	sw.	.....	0.024	0.6	raining	Central Station.
Neufahrwasser	29.33	744.9	29.34	745.3	35.2	1.8	93	se.	.....	.....	1	.....	10	.....	.....	0.323	8.2	raining	A. Lothes.
Neustadt, Palatinate	28.98	736.2	29.50	749.4	51.4	10.8	95	wsw.	.....	.....	7	.....	9	wsw.	.....	0.205	5.2	.....	Dicknether.
Stuttgart	28.65	727.8	29.53	750.1	54.9	12.7	71	w.	.....	.....	4	.....	9	w.	.....	0.150	3.8	.....	Prof. Dr. Schoder.
Wustrow	29.13	740.0	29.10	740.6	46.9	8.3	99	s.	.....	.....	4	.....	10 s	.....	.....	0.018	15.7	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.65	753.0	30.03	762.8	62.4	16.9	.....	n.	.....	.....	1.0	o	2 k	.....	.....	o	o	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.99	761.8	30.04	763.1	79.7	26.5	66	wsw.	12.0	5.4	.....	.....	0	.....	.....	o	o	blue sky	
Deesa	29.48	748.8	29.96	760.8	80.4	26.9	21	nne.	12.0	5.4	.....	.....	3	s.	.....	o	o	d. clouds	
Bombay	29.80	757.0	29.84	758.0	77.0	25.0	69	nnw.	18.0	8.0	.....	.....	8	sw.	.....	o	o	d. clouds	
Poona, Yarrowda	27.99	710.8	29.85	758.1	76.6	24.8	30	n.	9.0	4.0	.....	.....	9	e.	e.	o	o	d. clouds	
Trichinopoly	29.43	747.4	29.71	754.6	75.3	24.1	81	wnw.	1.0	0.4	.....	.....	10	.....	.....	1.69	42.9	overcast	
Bellary	28.30	718.8	29.78	756.4	73.8	23.2	75	ne.	8.0	3.6	.....	.....	10	.....	.....	o	o	overcast	
Belgaum	27.26	692.5	29.80	756.8	76.4	24.7	46	nne.	10.0	4.5	.....	.....	10	n.	.....	o	o	overcast	
Lahore	29.27	743.4	30.04	762.9	67.7	19.8	42	calm	o	o	.....	.....	o	.....	.....	o	o	blue sky	
Roorkee	29.07	738.5	30.00	762.0	68.2	20.1	38	calm	o	o	.....	.....	o	.....	.....	o	o	.....	
Agra	29.42	747.3	30.00	762.1	71.7	22.1	38	calm	o	o	.....	.....	2	.....	.....	o	o	d. clouds	
Nagpur	28.85	732.8	29.90	759.5	75.9	24.4	47	e.	5.0	2.2	.....	.....	8	.....	ne.	o	o	d. clouds	
Jubbulpore	28.60	726.3	29.98	761.6	69.5	20.8	45	calm	o	o	.....	.....	6	.....	n.	o	o	d. clouds	
Lucknow	29.61	752.0	29.99	761.7	75.2	24.0	39	calm	o	o	.....	.....	2	.....	.....	o	o	d. clouds	
Allahabad	29.68	753.7	30.00	762.0	63.6	17.6	74	calm	o	o	.....	.....	8	sw.	.....	o	o	d. clouds	
Patna	29.80	757.0	30.00	761.9	68.0	20.0	58	n.	1.5	0.7	.....	.....	5	n.	n.	o	o	d. clouds	
Hazaribagh	27.92	709.2	29.99	761.8	63.7	17.6	60	n.	4.2	1.9	.....	.....	10	n.	.....	o	o	overcast	
Cuttack	29.87	758.6	29.95	760.7	72.6	22.6	78	ne.	3.0	1.3	.....	.....	8	.....	.....	o	o	d. clouds	
Calcutta, Alipore	29.92	760.0	29.94	760.5	73.7	23.2	69	nnw.	3.0	1.3	.....	.....	7	.....	.....	o	o	d. clouds	
Dhubri	29.82	757.3	29.94	760.4	71.2	21.8	69	ne.	4.4	2.0	.....	.....	o	.....	.....	o	o	blue sky	
Chittagong	29.82	757.4	29.91	759.7	77.7	25.4	72	nw.	1.6	0.7	.....	.....	2	.....	s.	o	o	blue sky	
Sibsagar	29.65	753.1	30.00	762.0	66.1	18.9	81	ne.	2.0	0.9	.....	.....	2	.....	.....	o	o	blue sky	
Zanzibar, Africa	29.81	757.1	29.83	757.6	84.6	29 2	70	ene.	6.4	2.9	.....	.....	7	.....	ne.	0.03	0.8	d. clouds	
Jeypore	28.55	725.0	30.02	762.4	72.9	22.7	40	ne.	9.0	4.0	.....	.....	3	ne.	.....	o	o	d. clouds	
Italian.																			
Udine	29.53	750.1	29.95	760.7	48.9	9.4	71	se.	0.7	0.3	.....	.....	10	.....	.....	o	o	.....	Prof. Giovanni Clodig.
Milan	29.45	747.9	29.98	761.4	40.6	4.8	87	ne.	3.8	1.7	.....	.....	10	.....	.....	0.028	0.7	.....	Prof. Schiapparelli.
Padua	29.84	757 9	29.95	760.8	43.7	6.5	73	n.	0.7	0.3	.....	.....	10	wsw.	.....	o	o	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.02	737.2	29.95	760.7	43.0	6.1	72	n.	1.3	0.6	.....	.....	10	n.	.....	o	o	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.71	754.6	29.90	759.5	54.0	12.2	82	se.	3.1	1.4	.....	.....	10	s.	.....	0.087	2.2	.....	Prof. G. M. Garibaldi.
Mondovi	28.01	711.4	29.96	761.0	39.6	4.2	63	w.	.....	.....	2	.....	9	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.84	757.9	29.89	759.1	48.9	9.4	83	n.	9.8	4.4	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.67	753.5	29.93	760.1	54.5	12.5	64	w.	.....	.....	2	.....	10	sw.	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	29.79	756.6	29.87	758.8	51.1	10.6	90	ne.	2.5	1.1	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.79	756.7	29.97	761.2	57.6	14.2	91	sw.	7.4	3.3	.....	.....	10	.....	.....	0.020	0.5	.....	Prof. P. Tachini.
Lecce	29.81	757.1	30.06	763.6	61.2	16.2	50	ssw.	4.9	2.2	.....	.....	2	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.16	740.6	30.06	763.4	57.2	14.0	78	sw.	2.5	1.1	.....	.....	9	s.	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.78	756.5	29.98	761.5	63.1	17.3	66	se.	.....	.....	2	.....	3	nw.	.....	0.012	0.3	.....	Prof. A. Pacinotti.
Palermo	29.81	757.1	30.06	763.4	64.6	18.1	45	calm	0	0	.....	.....	10	nw.	.....	0	0	.....	Prof. G. Cacciatore.
Syracuse	29.97	761.3	30.02	762.4	61.3	16.3	67	s.	6.9	3.1	.....	.....	9	sw.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.50	749.3	30.02	762.6	57.2	14.0	95	sse.	0	0	.....	.....	10	s.	.....	0.150	3.8	.....	Prof. F. Brioschi.
Stelvio	21.92	556.8	.....	.....	23.2	— 4.9	97	se.	.....	.....	6	.....	10	.....	.....	0	0	misty	Prof. P. F. Denza.
Valdobbia	21.98	558.2	.....	.....	26.1	— 3.3	71	e.	.....	.....	2	.....	10	.....	.....	0.787	20.0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.69	754.2	29.72	755.0	35.0	1.7	80	calm	.....	.....	0	.....	10 8	.....	nw.	0.394	10.0	cloudy	Hattori.
Awomori	29.72	754.9	29.76	755.9	33.3	0.7	88	w.	4.8	2.1	.....	.....	10 n	.....	.....	0.202	5.1	light snow	K. Ogawa.
Hakodate	29.75	755.7	29.76	756.0	32.1	0.1	86	nnw.	8.4	3.8	.....	.....	10	.....	.....	0.045	1.2	snowing	
Hiroshima	.....	.....	.....	.....	45.3	7.4	98	nne.	6.5	2.9	.....	2 cs	5 ck	.....	ne.	0.412	10.5	cloudy	Y. Miwa.
Kanazawa	29.70	754.5	29.81	757.1	45.0	7.2	91	nw.	2.0	0.9	.....	.....	10	.....	.....	0.472	11.9	raining	S. Endo.
Kioto	29.08	753.9	29.86	758.4	42.0	5.6	97	wnw.	0.1	0.0	.....	.....	10ck;s	.....	.....	0.344	8.7	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.86	758.4	30.06	763.6	49.5	9.7	71	n.	1.8	0.8	.....	0	0	.....	.....	0.200	5.1	clear	S. Takehayashi.
Nemuro	29.80	756.9	29.87	758.7	30.8	— 0.7	96	calm	0	0	.....	10	0	.....	.....	0	0	cloudy	
Niigata	29.67	753.6	29.71	754.6	43.1	6.2	89	se.	6.2	2.8	.....	.....	10 n	.....	w.	0.665	16.9	light rain	M. Morita.
Nobiru	29.74	755.4	29.76	755.8	39.6	4.2	86	nnw.	2.5	1.2	.....	.....	10s;ks	.....	nw.	0.005	0.1	covered	H. Midzushina.
Osaka	29.85	758.1	29.86	758.5	43.9	6.6	94	se.	1.8	0.8	.....	0	0	.....	.....	0.560	14.2	clear	
Sapporo	.....	.....	.....	.....	27.5	— 2.5	79	se.	1.8	0.8	.....	.....	10	.....	.....	0.030	0.8	covered	
Tokei Obs'y, Yeddo	29.69	754.0	29.76	755.9	44.8	7.1	90	calm	0	0	.....	.....	10ck;s	.....	sw.	0.015	0.4	cloudy	The Staff.
Wakayama	29.81	757.2	29.87	758.7	45.8	7.7	89	ene.	0.6	0.3	.....	.....	10	.....	n.	0.521	13.2	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.80	756.9	29.99	761.7	79.8	26.6	56	ene.	14.c	6.3	.....	0	2 k	.....	.....	0	0	clear	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.69	601.7	29.91	759.7	49.6	9.8	92	sse.	inap.	inap.	.....	0	0	.....	.....	0	0	foggy	Prof. Vicente Fernandez.
Leon	24.32	617.7	30.16	766.1	46.8	8.2	84	nnw.	.....	.....	1	2 c	0	sw.	.....	0	0	foggy	Prof. M. Leal.
Mazatlan	29.73	755.2	29.99	761.8	70.0	21.1	68	nne.	0.9	0.4	.....	8 cs	0	sw.	.....	0	0	cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.1	30.27	768.9	43.7	6.5	64	calm	0	0	.....	0	0	.....	.....	0	0	fine	The Staff.
Morelia	24.33	618.0	30.29	769.3	50.9	10.5	72	s.	5.1	2.3	.....	0	0	.....	.....	0	0	fine	M. Tena, M. D.
Orizaba	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Chazaro.
Rabellon, Aguascalientes	23.95	608.3	30.05	763.2	48.7	9.3	63	w.	.....	.....	1	1 c	0	.....	.....	0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.39	594.2	30.29	769.4	42.8	6.0	79	calm	0	0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.58	573.5	30.19	767.0	50.5	10.1	90	sw.	4.0	1.8	.....	3	6	.....	.....	0	0	cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.30	744.2	29.30	744.2	50.0	10.0	.....	wsw.	.....	.....	5	.....	.....	.....	.....	0.307	7.8	.....	
Groningen	29.11	739.3	29.16	740.7	48.2	9.0	.....	sw.	.....	.....	5	.....	.....	.....	.....	0.394	10.0	.....	
Helder	29.16	740.6	29.16	740.6	48.6	9.2	.....	sw.	.....	.....	4	.....	.....	.....	.....	0.224	5.7	.....	
Hellevoetsluis	29.27	743.4	29.27	743.4	47.5	8.6	90	wsw.	.....	.....	4	.....	.....	.....	.....	0.272	6.9	.....	
Utrecht	29.22	742.2	29.27	743.4	50.0	10.0	85	sw.	.....	.....	5	.....	8	.....	.....	0.287	7.3	very cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	28.89	733.7	28.95	735.3	40.3	4.6	71	sse.	9	4	.....	.....	10	.....	.....	0.449	11.4	raining	
Brono	29.36	745.7	29.40	746.7	28.4	— 2.0	52	e.	29	13	.....	.....	2	.....	.....	0	0	.....	
Christiania	29.17	740.8	29.32	744.7	22.8	— 5.1	85	nne.	4	2	.....	.....	10	.....	.....	.....	.....	snowing	
Glæsvær	29.76	756.3	29.80	756.9	17.8	— 7.9	.....	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	
Lodingen	29.56	750.8	29.61	752.0	30.0	— 1.1	53	ese.	.....	.....	4	.....	5	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.15	765.7	30.30	769.6	65.8	18.8	84	w.	3.1	1.4	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.18	741.2	30.19	766.9	56.7	13.7	80	wsw.	4.9	2.2	.....	.....	8	.....	.....	0	0	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	30.17	766.3	30.26	768.5	69.6	20.9	50	e.	10.5	4.7	.....	.....	0	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.91	759.8	30.28	769.0	59.7	15.4	87	wnw.	11.2	5.0	.....	.....	10	.....	.....	0.004	0.1	.....	The Staff.
Ponta Delgada, Azores	30.28	769.2	30.35	771.0	68.0	20.0	78	calm	0	0	.....	.....	4	.....	.....	0.140	3.7	.....	
Saint Paul de Loando	29.83	757.6	30.03	762.8	71.6	22.0	84	wnw.	0.7	0.3	.....	.....	1	s.	.....	0	0	.....	
Serra da Estrella	25.30	642.6	30.11	764.9	41.0	5.0	100	nw.	22.4	10.0	.....	.....	10	.....	.....	1.626	41.3	foggy	
RUSSIAN.																			
Akmolinski	29.30	744.1	30.46	773.7	18.9	— 7.3	50	s.	2	1	.....	5 cs	0	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	29.71	754.5	29.72	755.0	20.8	— 6.2	95	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	30.03	762.8	29.95	760.7	54.0	12.2	80	wnw.	2	1	.....	0	8 s	.....	.....	0	0	light clouds	Capt. Wisganow.
Barnaul	30.28	769.0	30.84	783.3	6.8	—14.0	66	sw.	4	2	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	29.48	748.8	29.74	755.4	19.8	— 6.8	100	se.	2	1	.....	4 c	0	.....	.....	0.244	6.2	light clouds	Observatory.
Ekaterinburg	28.82	732.1	29.81	757.2	34.0	1.1	89	sw.	7	3	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Kasan	29.61	752.1	29.89	759.3	26.1	— 3.3	79	calm	0	0	.....	.....	10	.....	.....	0.079	2.0	.....	Observatory.
Kertch	29.90	759.5	29.92	760.0	47.7	8.7	91	calm	0	0	.....	5 ck	0	.....	.....	0	0	.....	Lagorio & Sastyrex.
Kieff	29.19	741.5	29.85	758.2	35.1	1.7	88	w.	9	4	.....	.....	10ks;n	.....	.....	.....	.....	.....	Observatory.
Lugan	29.72	754.9	29.93	760.2	38.8	3.8	78	w.	9	4	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	29.89	759.2	29.96	761.0	49.1	9.5	80	sw.	9	4	.....	0	0	.....	.....	0	0	.....	Capt. Kurdakow.
Pekin, China	30.46	773.6	30.60	777.2	29.1	— 1.6	35	nw.	16	7	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.74	755.3	29.75	755.7	24.4	— 4.2	93	ssw.	4	2	.....	.....	10	.....	.....	inap.	inap.	.....	Central Physical Obs'y.
Semipalatinsk	30.14	765.6	30.88	784.4	8.6	—13.0	65	e.	9	4	.....	.....	0	.....	.....	0	0	.....	Major Lasarew.
Tashkend, Laboratory	28.72	729.6	30.34	770.6	46.4	8.0	38	calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.63	727.1	30.05	763.2	55.0	12.8	55	nw.	2	1	.....	0	8 ks	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.25	768.4	30.56	776.2	14.5	— 9.7	64	s.	13	6	.....	0	0	.....	.....	.....	.....	.....	
Vladivostock	30.07	763 7	30.13	765 4	17.6	— 8.0	.....	nw.	9	4	.....	0	3 k	.....	.....	0	0	.....	
Warsaw	29.13	740.0	29.57	751.0	37.9	3.4	92	s.	13	6	.....	.....	10	.....	.....	.....	.....	heavy cl'ds	Astronomical Obs'y.
Wilna	29.30	744.1	29.73	755.2	30.9	— 0.6	100	se.	11	5	.....	.....	10	.....	.....	0.067	1.7	heavy cld's	Berg, Assistant.
Yeniseisk	30.13	765.3	30.44	773.2	22.5	— 5.3	59	wsw.	20	9	.....	.....	0	.....	.....	blank	blank	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	28.90	734.0	42	5.6	90	sw.	.....	.....	6	5	5	w.	.....	0.1	3.	sleet sh'wrs	J. Youngclause
North Unst	.....	.....	28.74	730.0	.....	.....	.....	nw.	.....	.....	4	6	2	n.	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.87	758.7	29.98	761.4	58.3	14.6	61	w.	2.7	1.2	.....	0	1	.....	.....	0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.00	761.9	30.06	763.4	57.2	14.0	77	nw.	1.3	0.6	.....	2	7	w.	.....	0.114	2.9	almost cov	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.10	688.3	30.14	765.5	44.4	0.9	95	sw.	10.7	4.8	.....	.....	10	.....	.....	0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.89	708.3	30.15	765.9	50.0	10.0	68	sw.	1.8	0.8	.....	0	8	.....	.....	0	0	almost cov	The Staff.
Murcia, Met. Obs'y	29.88	759.0	30.05	763.2	66.4	19.1	56	sw.	2.9	1.3	.....	1	3	ne.	.....	0	0	clouds	Olayo Diaz, Director.
Oviedo	29.09	738.8	29.97	761.1	58.6	14.8	58	e.	12.8	5.7	.....	.....	10 kn	n.	0	0	0	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.15	740.5	30.06	763.4	54.3	12.4	91	w.	3.1	1.4	.....	.....	10	.....	.....	0.205	5.2	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.87	758.7	29.93	760.2	79.0	26.1	70	nne.	7.7	3.4	.....	0	ks;n	.....	.....	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.14	765.5	30.24	768.1	57.4	14.1	56	nnw.	8.2	3.7	.....	5	5	w.	n.	0	0	.....	Capt. C. Pujazon, R. N
San Juan de Porto Rico, W.I	29.97	761.2	30.06	763.5	78.1	25.6	91	se.	2.2	1.0	.....	4 k	6 kn	se.	se.	0.138	3.5	raining	Manuel Maese.
Tuguegarao, Philippine Id's	29.83	757.6	29.90	760.9	77.2	25.1	91	sw.	2.5	1.1	.....	1 ck	0	se.	.....	0	0	clear	José L. Yrastorza
SWEDISH																			
Haparanda	29.70	754.4	29.74	755.4	13.6	—10.2	93	calm	.....	.....	0	.....	8	.....	.....	0	0	.....	.....
Umea	29.57	751.1	29.62	752.4	20.1	— 6.6	92	nw.	.....	.....	2	.....	10	.....	.....	0	0	.....	.....

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
SWEDISH—Continued.																			
Hernosand	29.43	747.4	29.48	748.7	31.3	— 0.4	92	ne.			4		10			0.059	1.5		
Stockholm	29.24	742.8	29.42	747.3	23.0	— 5.0	95	ene.			2		10			0.079	2.0		
Wisby	29.34	745.1	29.39	746.6	35.2	1.8	90	se.			4		10			0.055	1.4		
Sub-series.																			
Upsala	29.34	745.2	29.43	747.4	24.1	— 4.4	100	se.	6.0	2.7			10			0.039	1.0		S. G. Fineman.
SWISS.																			
Geneva	28.39	721.2	29 82	757.4	54.0	12.2	76	ssw.			5		9			0.157	4.0	covered	The Observatory.
TURKISH.																			
Constantinople			30.01	762.2	53.1	11.7	78	n.	4	2.0			10		n.	0.071	1.8		The Observatory.
Yalona			30.11	764.9	55.0	12.8		nw.			1		0			0	0	clear	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			29.97	761.3	73.9	23.3	66	nw.			1	2 c				0	0		Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.72	754.9	29.80	756.9	43.2	6.2	68	s.	6	2.7			10 s		w.	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.24	742.7	29.94	760.5	29	— 1.7	88	nw.	21	9.4			10 s			1.02	25.9	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.95	633.7	30.05	763.3	32	0.0	74	e.	3	1.3			10 s			0	0	cloudy	W. C. Barnes.
Assinnaboine, Ft., Montana	27.21	691.1	30.19	766.8	10	—12.2	61	sw.	5	2.2		0	0			0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.07	738.4	30.29	769.4	42.5	5.8	69	n.	12	5.4		1 cs	0			0	0	clear	H. C. Smith.
Atlantic City, New Jersey	29.90	759.4	29.91	759.7	41	5.0	82	sw.	7	3.1		0	0			0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.04	763.0	30.24	768.1	41	5.0	82	calm	0	0		2 c	fg.	w.		0	0	clear	John Healy.
Baltimore, Maryland	29.94	760.4	29.99	761.7	41	5.0	57	nw.	9	4.0		0	0			0	0	clear	Geo W Felger.
Barnegat, New Jersey	29.85	758.2	29.87	758.7	42.0	5.6	74	w.	11	4.9		0	0			0	0	clear	G. A. Hill.
Bennett, Fort, Dakota	28.01	726.7	30.30	769.0	14	—10.0	83	se.	6	2.7		0	0			inap.	inap.	clear	A. Pritchard.
Benton, Fort, Montana	27.20	692.4	30.22	767.6	2	—16.7	76	calm	0	0		0	0			0	0	clear	S. Wheaton.
Bismarck, Dakota	28.30	718.8	30.22	767.6	9	—12.8	80	s.	4	1.8		0	0			0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	29.82	757.4	29.85	758.2	52	11.1	72	sw.	13	5.8		7 ck	0	sw.		0	0	fair	J. T. Elker.
Boise City, Idaho	27.28	692.9	30.22	767.6	26	— 3.3	88	n.	1	0.4		0	0			0	0	clear	B. E. Light.
Boston, Massachusetts	29.67	753.6	29.83	757.7	43.0	6.1	93	s.	9	4.0		6 ck	2 s;fg	s.	s.	0	0	cloudy	O. B. Cole.
Brownsville, Texas	30.04	763.0	30.09	764.3	66.8	19.3	90	calm	0	0			10 s			0	0	cloudy	M. McCarty.
Buffalo, New York	28.94	735.1	29.72	754.9	32.5	0.3	100	sw.	37	16.5			10 n			0.69	17.5	heavy snow	W. Finn.
Buford, Fort, Dakota	28.23	717.0	30.21	767.3	13	—10.6	83	e.	1	0.4		0	0			0	0	clear	F. A. Mellen.
Burlington, Vermont	29.43	747.5	29.74	755.4	42.0	5.6	57	s.	9	4.0			10 n		s.	inap.	inap.	light rain	W. B Gates.
Cairo, Illinois	30.05	763.3	30.47	773.9	32.8	0.4	80	n.	6	2.7		0	0			c	0	clear	W. H. Ray.
Cape Henry, Virginia	30.01	762.2	30.03	702.7	44	6.7	76	sw.	11	4.9		0	hz.			0	0	clear	A. K. Alderson.
Cape May, New Jersey	29.99	759.4	29.93	760.2	47.0	8.3	72	sw.	19	8.5		0	0			0	0	clear	W. E. Smith.
Cape Mendocino, California	29.35	745.5	30.03	762.7	45	7.2	93	nw.			4	2 k	3 ks	nw.	nw.	0	0	fair	J. J. McLean.
Cedar Keys, Florida	30.24	768.1	30.20	768.6	53	11.7	93	n.	2	0.9		2 c	0			0	0	clear	F. W. Mixer.
Champaign, Illinois	29.52	749.8	30.38	771.6	20.8	— 6.2	64	nw.	12	5.4		0	0			0	0	clear	L. A. Welsh.
Charleston, S. Carolina	30.13	765.3	30.19	766.8	48.5	9.2	77	w.	8	3.6		0	0			0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.25	742.9	30.13	765.3	39.0	3.9	82	sw.	1	0.4		0	fg.			0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.52	749.8	30.37	771.4	37.0	2.8	67	n.	11	4.9		1 c	0			0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	24.03	610.4	30.24	768.1	19.3	— 7.1	61	nw.	3	1.3			10 s			0	0	cloudy	E. McGovern.
Chicago, Illinois	29.54	750.3	30.28	769.1	21.1	— 6.1	76	w.	13	5.8		0	0			inap.	inap.	clear	J. Mitchell.
Chincoteague, Virginia	29.94	760.5	29.90	761.0	41.5	5.3	94	sw.	3	1.3		hz.	0			0	0	clear	C. F. Dickens.
Cincinnati, Ohio	29.64	752.8	30.33	770.4	31	— 0.6	68	nw.	10	4.5		1 k	0	nw.		0	0	clear	R. B. Watkins.
Cleveland, Ohio	29.30	744.2	30.07	763.8	29.5	— 1.4	79	w.	26	11.6			10 s		nw.	inap.	inap.	cloudy	J. B. Newlin.
Coleman City, Texas	28.42	721.9	30.31	769.9	41	5.0	82	ne	9	4.0			10 s		ne.	0	0	cloudy	L. Dorman.
Columbus, Ohio	29.32	744.7	30.21	767.3	29	— 1.7	77	w.	24	10.7			10 s		w.	0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.30	718.8	30.30	769.0	41.3	5.2	82	ne.	11	4.9			10 s			0	0	cloudy	J. McGlone.
Custer, Fort, Montana	26.88	682.7	30.20	767.1	13	—10.6	83	calm	0	0		0	0			0	0	clear	W. B. Lamar.
Davenport, Iowa	29.73	755.1	30.42	772.7	22	— 5.6	73	nw.	8	3.6		0	0			0	0	clear	R. R. Martin.
Davis, Fort, Texas	25.28	642.1	30.18	766.6	38	3.3	82	n.	4	1.8			10 s		n.	0	0	threatening	J. Williams.
Dayton, Washington T'y	26.40	721.3	30.18	766.6	30.6	— 0.8	94	s.	1	0.4			10 s			0	0	cloudy	H. Clifford.
Deadwood, Dakota	25.30	644.1	30.19	766.8	24	— 4.4	88	e.	5	2.2		0	0			0	0	clear	G. W. Scott.
Delaware Breakwater, Del.	29.92	760.0	29.94	760.5	41	5.0	92	sw.	14	6.3		0	0			0	0	clear	T. S. Townsend.
Denison, Texas	29.51	749.5	30.35	770.9	38.0	3.3	61	ne.	6	2.7			10 s			0	0	cloudy	J. W. Byram.
Denver, Colorado	24.75	628.0	30.25	768.3	29.0	— 1.7	70	s.	2	0.9		4 ck	0	sw.		0	0	fair	F. M. Neal.
Des Moines, Iowa	29.52	749.8	30.47	773.9	18	— 7.8	67	n.	3	1.3		0	0			0	0	clear	F. W. Conrad.
Detroit, Michigan	29.28	743.7	30.02	762.5	32.8	0.4	67	w.	22	9.8			10 k		w.	0.04	1.0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.64	702.0	30.38	771.0	25	— 3.9	76	s.	2	0.9		0	5 s			0	0	fair	V. P. Temple.
Dubuque, Iowa	29.04	752.8	30.38	771.6	17.5	— 8.1	51	w.	4	1.8		0	1 s		n.	inap.	inap.	clear	J. Harvey Smith.
Duluth, Minnesota	29.54	750.3	30.33	770.4	12	—11.1	80	sw.	4	1.8		0	1 s		w.	0.04	1.0	clear	N. B. Conger.
Eagle Pass, Texas	29.42	747.3	30.24	768.1	53.1	11.7	80	e.	2	0.9			10 s			0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25 37	644.4	30.23	767.8	2	—16.7	76	calm	0	0		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	29.87	758.7	29.94	760.5	40.0	4.4	82	se.	20	8.9			10 s		se.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas																			W. J. Cundall.
El Paso, Texas	26.29	667.8	30.14	765.5	46	7.8	76	w.	4	1.8			10 s		w.	0	0	cloudy	J. O'Dowd.
Erie, Pennsylvania	29.15	740.4	29.91	759.7	29	— 1.7	67	sw.	20	8.9			10 n		sw.	0.09	2.3	light snow	Peter Wood.
Escanaba, Michigan	29.44	747.8	30.14	765.5	25.0	— 3.9	88	nw.	12	5.4		1 ck	3 s	nw.	nw.	0.12	3.0	fair	George Heathcote.
Fredericksburg, Texas	28.45	722.6	30.27	768.8	47	8.3	77	n.	6	2.7		10 cs	0			0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.10	764.5	30.15	765.8	62	16.7	100	e.	8	3.6			fg.			0	0	dense fog	E. O'C. MacInerney.
Grand Haven, Michigan	29.44	747.8	30.14	765.5	35.0	1.7	64	nw.	28	12.5		0	9 ks		nw.	0.19	4.8	clearing	J. Mueller.
Grant, Fort, Arizona	25.14	638.5	29.58	761.5	47	8.3	89	se.	6	2.7			10 n		se.	0.03	0.8	light rain	Robert C. Lord.
Hatteras, North Carolina	30.05	763.3	30.07	763.8	48	8.9	80	sw.	12	5.4		hz.	3 k			0	0	clear	R. M. Crawford.
Helena, Montana	25.81	655.0	30.19	766.8	21	— 6.1	73	calm	0	0		2 c	0			0	0	clear	N. C. Smith.
Henrietta, Texas	29.30	744.2	30.34	770.6	37	2.8	89	ne.	5	2.2			10 s			0	0	cloudy	J. P. Sherry.
Huron, Dakota	28.90	734.0	30.38	771.6	7	—13.9	66	se.	6	2.7		0	0			0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.50	749.3	30.34	770.6	24	— 4.4	73	nw.	9	4.0		0	0			0	0	clear	O. Schutze
Indianola, Texas	30.11	764.8	30.14	765.5	56.0	13.3	80	n.	28	12.5		10 k	0	sw.		0	0	cloudy	I. A. Reed.
Jacksboro, Texas	29.11	739.4	30.33	770.4	40	4.4	57	ne.	6	2.7		0	6 s		ne.	0	0	fair	D. J. Carr.
Jacksonville, Florida	30.21	767.3	30.26	768.6	52	11.1	80	w.	1	0.4		0	fg.			0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.55	699.8	30.22	767.6	18	— 7.8	70	sw.	1	0.4		0	0			0	0	clear	A. Schneider.
Keokuk, Iowa	29.70	754.4	30.39	771.9	21.0	— 6.1	76	nw.	2	0.9		0	0			0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.14	765.5	30.16	766.1	69.0	20.6	84	ne.	11	4.9			9 ks		ne.	0	0	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	30.04	763.0	30.06	763.5	44	6.7	93	w.	9	4.0		2 ck	0	w.		0	0	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	29.29	744.0	30.36	771.1	34	1.1	74	n.	2	0.9		0	sk.			0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.54	750.3	30.36	771.1	19	— 7.2	84	w.	6	2.7			10 s			inap.	inap.	cloudy	S. C. Emery.
Leavenworth, Kansas	29.54	750.3	30.48	774.2	25	— 3.9	88	n.	1	0.4		0	1 s			0	0	clear	A. W. Browne.
Lewiston, Idaho	29.36	745.7	30.23	767.8	34.0	1.1	94	e.	1	0.4			10 s			0	0	cloudy	W. Bell.
Little Rock, Arkansas	30.08	764.0	30.41	772.4	38	3.3	61	ne.	8	3.6		0	7 ks			0	0	fair	W. U. Simons.
Los Angeles, California	29.54	750.3	29.94	760.5	48	8.9	71	n.	2	0.9		5 c	0	nw.		0	0	fair	T. S. Collins.
Louisville, Kentucky	29.75	755.0	30.34	770.6	32	0.0	60	w.	12	5.4		0	0			0	0	clear	L. M. Dey.
Lynchburg, Virginia	29.35	745.5	30.07	763.8	45	7.2	41	sw.	4	1.8		0	0			0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.35	745.5	30.04	763.0	31.0	— 0.6	88	nw.	18	8.0			10 k		nw.	0.13	3.3	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.07	763.8	30.08	764.0	46	7.8	83	w.	8	3.6		1 cs	0			0	0	clear	F. P. Chaffee.
Madison, Wisconsin	29.24	742.7	30.31	769.9	20	— 6.7	84	nw.	16	7.2		0	9 s		nw.	0.01	0.3	cloudy	C. A. Shaw.
Maginnis, Fort, Montana	25.58	649.7	30.09	764.3	20	— 6.7	58	w.	5	2.2		0	0			0	0	clear	F. Burke.
McKavett, Fort, Texas																			J. E. Thatcher.
Marquette, Michigan	29.38	746.2	30.15	765.8	25	— 3.9	88	nw.	18	8.0		10 k	0	nw.		0.21	5.3	cloudy	J. Gilligan.
Memphis, Tennessee	30.10	764.5	30.45	773.4	38	3.3	62	n.	4	1.8		4 cs	0			0	0	fair	D. T. Flannery.
Milwaukee, Wisconsin	29.47	748.5	30.26	768.6	22	— 5.6	73	w.	22	9.8		0	0			0.02	0.5	clear	W. Line.
Missoula, Fort, Montana	26.81	681.0	30.22	767.6	26	— 3.3	76	calm	0	0			9 s			0	0	cloudy	I. H. Young.
Mobile, Alabama	30.21	767.3	30.25	768.3	57.3	14.1	93	n.	5	2.2			10 s		nw.	0	0	cloudy	C. A. Read.
Montgomery, Alabama	30.04	763.0	30.28	769.1	53.3	11.8	85	n.	5	2.2		0	9 s		nw.	0	0	cloudy	J. B. McLaughlin.

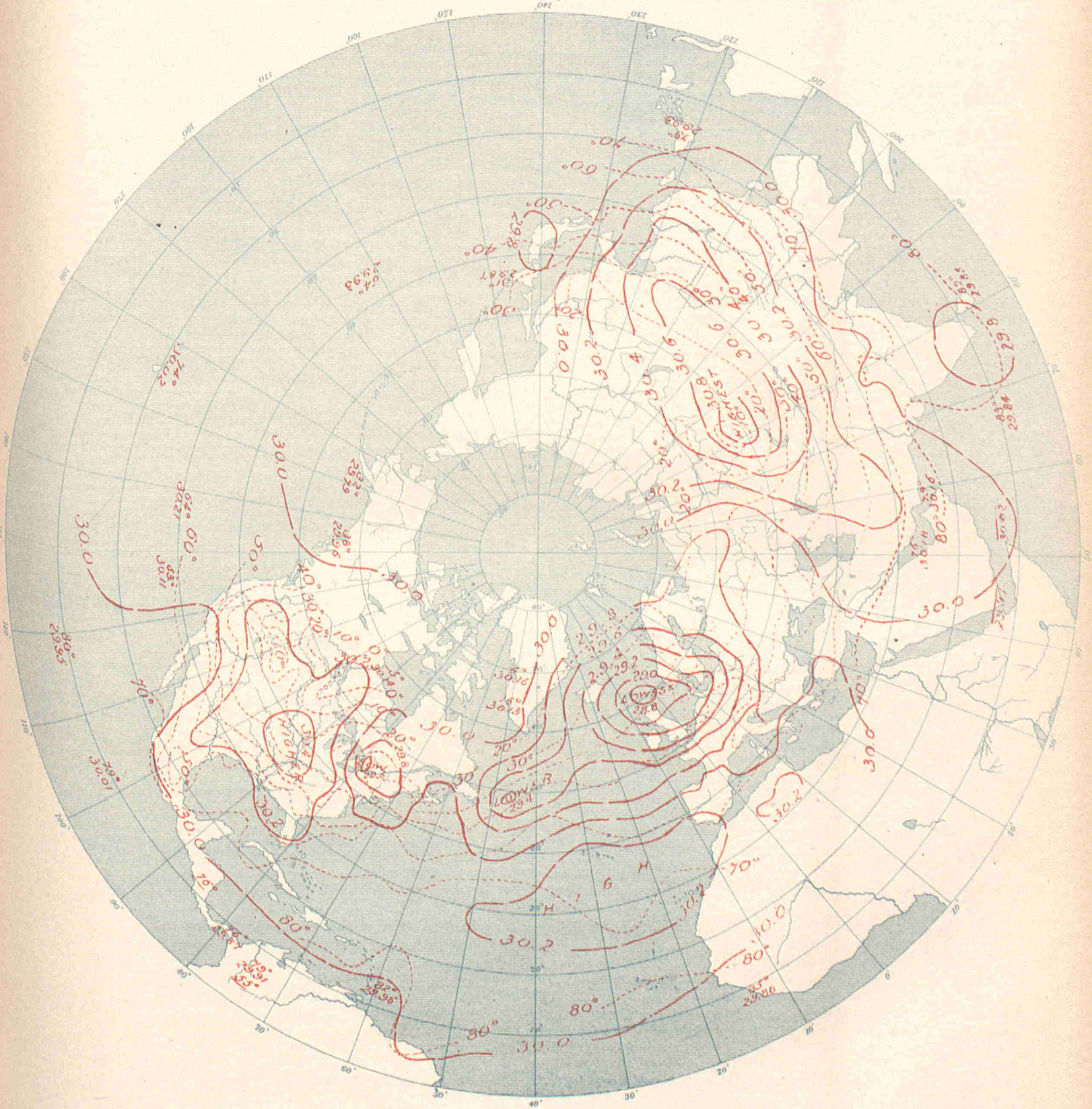
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.29	744.0	30.35	770.9	— 2	—18.9	65	se.	5	2.2		0	0			0	0	clear	H. Bessant.
Morgantown, W. Virginia	29.12	739.6	30.18	766.6	39.5	4.2	87	nw.	20	8.9			10 s		w.	0	0	cloudy	J. C. Sprigg, jr
Mt. Washington, N. H.	23.44	595.4	30.00	762.0	21.0	— 6.1	76	sw.	57	25.5			10n;fg		sw.	0.05	1.3	light snow	J. G. Linsley.
Nashville, Tennessee	29.80	756.9	30.40	772.1	35.0	1.7	69	nw.	6	2.7		0	0			0	0	clear	L. N. Jesunofsky.
New Haven, Connecticut	29.72	754.9	29.84	757.9	38.5	3.6	84	sw.	6	2.7		0	fg.			0	0	clear	J. H. Sherman.
New London, Connecticut	29.80	756 9	29.85	758.2	46	7.8	76	sw.	4	1.8		6 ck	0	sw.		0	0	fair	J. G. Lynch.
New Orleans, Louisiana	30.16	766.1	30.22	767.6	62.5	16.9	83	ne.	4	1.8			10 s		e.	trap	trap.	cloudy	L. Dunne.
Newport, Rhode Island	29.79	756.7	29.84	757.9	49.3	9.6	82	sw.	10	4.5		6 k	1 s	sw.		0	0	fair	W. McGillivray.
New York, New York	29.70	754.4	29.88	758.0	38	3.3	89	sw.	8	3.6		0	fg.			0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.01	762.2	30.04	763.0	45	7.2	68	w.	8	3.6		0	hz.			0	0	clear	Wm. Davis.
North Platte, Nebraska	27.23	691.6	30.31	769.9	21.6	— 5.8	74	se.	8	3.6		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y.	30.06	763.5	30.10	764.5	41.0	5.0	96	s.	4	1.8			10 n			0.09	2.3	light rain	J. Dascomb.
Omaha, Nebraska	29.23	742.4	30.47	773.9	19.3	— 7.1	72	n.	1	0.4		0	0			0	0	clear	A. Pollak.
Oswego, New York	29.41	747.0	29.75	755.6	41.0	5.0	43	sw.	12	5.4			10 s		w.	0.01	0.3	cloudy	S. W. Beall.
Palestine, Texas	29.71	754 6	30.28	769.1	51.0	10.6	59	ne.	12	5.4			10 ks		e	0.02	0.5	cloudy	L. M. Pindell.
Pensacola, Florida	30.22	767.6	30.25	768.3	55.2	12.9	90	s.	4	1.8		0	9 s		w.	0	0	cloudy	M. McGauran.
Philadelphia, Pa	29.82	757.4	29.92	760 0	40.5	4.7	73	sw.	5	2.2		0	0			0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.74	450.6	30.40	772.1	10	—12.2	73	calm	0	0		1 cs	0			0	0	clear	H. Hall.
Ploche, Nevada	23.98	609.1	30.12	765.0	30	— 1.1	70	nw.	6	2.7		3 k	6 ks	sw.	sw.	0	0	cloudy	C. N. Kitchel.
Pittsburg, Pennsylvania	29.26	743.2	30.10	764.5	32.0	0.0	65	w.	17	7.6			10 s		w.	trap.	trap.	cloudy	W. Daly.
Poplar River, Montana	27.90	708.6	30.18	766.6				w.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.21	767.6	30.23	767.8	60.5	15.8	92	e.	6	2.7		0	3 s			0	0	clear	M. Herman.
Port Huron, Michigan	29.23	742.4	29.95	760.7	30.8	— 0.7	92	w.	22	9.8			10 ks		nw.	0.16	4.1	cloudy	W. O. Bailey.
Portland, Maine	29.75	755.6	29.80	756.9	52.0	11.1	72	s.	9	4.0			10 s			0.01	0.3	cloudy	W. W. Eichelberger.
Portland, Oregon	30.07	763.8	30.14	765.5	39.0	3.9	89	se.	2	0.9			10 s		s.	0	0	cloudy	M. L. Hearne.
Portsmouth, N. C.					48	8.9	86	sw.	9	4.0		hz	hz.			0	0	light haze	F. S Coburn.
Prescott, Arizona	24.65	626.1	29.99	761.7	38.7	3.7	92	ne.	4	1.8			10 n			0.22	5.6	light rain	W. H. Clendenon.
Provincetown, Mass	29.82	757.4	29.85	758 2	46.5	8.1	93	s.	12	5.4		0	2s;hz			0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	30.20	767.1	30.21	767.3	57	13.9	64	n.	7	3.1		0	1 s			0	0	clear	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.03	737.3	29.73	755.1	33	0.6	78	sw.	30	13.4			10 s		sw.	0.01	0.3	cloudy	E. W. McGann
Roseburg, Oregon	29.60	751.8	30.17	766.3	38	3.3	89	e.	4	1.8			10 s			0	0	cloudy	J. J. Naury.
Sacramento, California	29.91	759.7	29.99	761.7	38.8	3.8	82	sw.	4	1.8		3 c	0	w.		0	0	clear	J. A. Barwick
St. Louis, Missouri	29.82	757.4	30.45	773.4	25.7	— 3.5	96	nw.	7	3.1		0	fg.			0	0	clear	J. H. Weber.
St. Paul, Minnesota	29.44	747.8	30.36	771.1	14.0	—10.0	80	nw.	3	1.3		1 cs	0			0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.34	745.2	30.27	768.8	— 3	—19.4	81	se.	6	2.7		0	0			0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.69	652.5	30.20	768.6	28	— 2.2	57	calm	0	0		10 k	0	sw.		0	0	cloudy	J. Craig.
San Antonio, Texas	29.47	748.5	30.19	766.8	52.0	11.1	80	n.	8	3.6			10 s		n.	0	0	cloudy	T. J. Kenan.
San Diego, California	29.80	756.9	29.88	758.9	52.2	11.2	86	nw.	5	2.2			10 s			0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.39	746.5	30.11	764.8	31	— 0.6	78	w.	28	12.5		0	8 s		nw.	0.03	0.8	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.85	758.2	29.88	758.9	40.0	4.4	82	s.	12	5.4		0	0			0	0	clear	B. A. Blundon.
San Francisco, California	29.96	761.0	30.03	762.7	51	10.6	93	s.	5	2.2			fg.		sw.	0.09	2.3	dense fog	N. Gorom.
Santa Fé, New Mexico	23.21	589.5	30.25	768.3	29	— 1.7	70	ne.	9	4.0		10 k	0	sw.		0	0	cloudy	H. U. Jones.
Savannah, Georgia	30.14	765.5	30.23	767.8	50.5	10.3	68	w.	6	2.7		0	hz.			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.36	669.5	30.18	766.6	25	— 3.9	76	w.	2	0.9		3 cs	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	30.06	763.5	30.31	769.9	49	9.4	56	ne.	15	6.7			10 s		ne.	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	29.07	738.4	30.38	771.6	33	0.6	85	i.	9	4.0		3 ck	5 s	sw.		0	0	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.21	614.9	30.05	763.3	43.0	6.1	96	se.	5	2.2			10 s			0.18	4.6	cloudy	N. D. Lane.
Sitka, Alaska	29.89	759.2	29.96	761.0	38.1	3.3	82	ne.	8	3.6			7 ks		ne.	0.48	12.2	fair	F. W. Fickett.
Smith, Fort, Arkansas	29.94	760.5	30.43	772.9	34.0	1.1	78	ne.	4	1.8		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.09	764.3	30.13	765.3	47	8.3	77	w.	6	2.7		0	hz.			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.10	713.7	30.18	766.6	31	— 0.6	81	s.	2	0.9			10 s			0	0	cloudy	D. Moore.
Springfield, Illinois	29.71	754.6	30.43	772.9	25.5	— 3.6	64	nw.	10	4.5		0	0			0	0	clear	T. B. Jennings.
Springfield, Massachusetts	29.68	753.9	29.82	757.4	32	0.0	96	calm			0	3 c	1 n	sw.	sw.	0	0	clear	Charles Mayr.
Springfield, Mo	28.95	735.3	30.46	773.7	28	— 2.2	88	n.	2	0.9		5 c	0	nw.		0	0	fair	J. B. Marbury.
Starkville, Miss	29.89	759.2	30.39	771.9	40	4.4	73	n.	13	5.8		4 c	0	nw.		0	0	fair	C. Dill.
Stevenson, Fort, Dakota	28.21	716.5	30.18	766.6	14	—10.0	83	sw.	5	2.2		0	0			0	0	cloudy	W. Burrows
Stockton, Fort, Texas	27.13	689.1	30.25	768.3	39.0	3.9	92	e.	2	0.9			10 s		e.	0.20	5.1	cloudy	J. F. Marshall.
Thatcher's Island, Mass	29.84	757.9	29.89	759.2	44.5	6.9	76	sw.	19	8.5		5 k	0	w.		0	0	fair	G. Liebmann.
Thomas, Camp, Arizona	27.12	688.8	29.96	761.0	54	12.2	80	e.			2		10 n			0.02	0.5	light rain	J. T. Fitzgerald.
Toledo, Ohio	29.38	746.2	30.11	764.8	31	— 0.6	68	sw.	22	9.8		0	6 k		nw.	trap.	trap.	fair	A. Buell.
Tucson, Arizona	27.44	697.0	29.90	759.4	53	11.7	93	e.	2	0.9		0	8 ks		sw.	0.23	5.8	cloudy	J. L. Whiteside.
Umatilla, Oregon	29.83	757.7	30.21	767.3	38	3.3	89	e.	6	2.7			10 s			0	0	cloudy	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					45.9	7.7	86	se.			1		10 n		se.	0.55	14.0	heavy rain	D. Brooks.
Vicksburg, Mississippi	30.08	764.0	30.34	770.6	48.5	9.2	77	n.	6	2.7			10 s			0.02	0.5	cloudy	James Kenealy.
Visalia, California	29.64	752.8	30.02	762.5	36.0	2.2	92	calm	0	0		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.48	621.8	30.22	768.6	— 0.9	—18.3	75	w.	3	1.3		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	29.89	759.2	30.01	762.2	40.3	4.6	59	nw.	14	6.3		0	0			0	0	clear	B. M. Purssell.
West Las Animas, Colorado	26.12	663.4	30.24	768.1	13.5	—10.3	91	nw.	5	2.2		7 c	2 s	sw.		0	0	cloudy	F. H. Brandenburg.
Williamsport, Pa	29.30	744.2	29.93	760.2	37.5	3.1	48	nw.	20	8.9			10 ks		w.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.08	764.0	30.14	765.5	46	7.8	76	sw.	3	1.3		0	sk			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.69	652 5	30.22	767.6	19	— 7.2	87	calm	0	0		0	0			0	0	clear	J. Grover.
Yankton, Dakota	29.01	736.8	30.39	771.9	12	—11.1	80	ne.	8	3.6		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.68	753.9	29.83	757.7	53.1	11.7	86	e.	2	0.9			10 s		s.	0.03	0.8	cloudy	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.03	559.6			55.0	12.8	77	w.	1	0.4			8ks;s		w.	0	0	cloudy	Joaquin Gomez.
Havana, Cuba, W. I.	30.04	763.0	30.10	764.5	63.7	17.6	91	e.	2	0.9		0	0			0	0	clear	Chas. Husselbrink.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	72	22.2	89	calm	0	0		0	0			0	0	fine	Robert Johnston.
Navassa, W. I.	29.90	759.4	29.98	761.5	80	26.7	78	ne.	10	4.5		3 k	1 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	79	26.1	82	e.			1	4 c	5 k	e.	e.	0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	79	26.1	89	calm			0	8 c	1 s	calm	calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					76	24.4	92	ne.			2	9 ck	1 ks		ne.	0	0	cloudy	Earl Flint.
Santiago de Cuba, W. I.	30.05	763.3	30.08	764.0	76	24.4	81	n.	4.8	2.1		0	1 n		n.	0	0	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.73	755.1	29.79	756.7	32	0.0	78	calm			0		10 n			0.43	10.9	snowing	W. J. Fisher.
St. Thomas, W. I.	29.96	761.0	30.08	764.0	77	25.0	85	e.				3 k	5 k	e.	e.	0.15	3.8	cloudy	Aug. Walloe.
York Factory, B. A	30.07	763.8	30.14	765.5	— 4.5	—20.3	82	ne.	13	5.8		2 c	2 s	ne.	ne.	0	0	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill	Character.	Direction from	
British Naval.																		
H. M. S. Albatross, Ning-Po, China	30.39	771.9	52	11.1	.....	wnw.	.....	.....	2	.....	8	w.	.....	.....	.....	.....	.....	raining.
H. M. S. Amethyst, Colonia, Uruguay†	29.99	761.7	72	22.2	83	nne.	.....	.....	1	.....	3	w.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Audacious, N. 8° 44′, E. 67° 17′	29.74	755.4	83	28.3	74	n.	.....	.....	2	.....	2	ne.	.....	.....	.....	1	ne.	d. clouds.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	29.96	761.0	78	25.6	84	nne.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	30.00	762.0	73.5	23.1	72	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Cleopatra, N. 31° 14′, E. 121° 28′	30.39	771.9	56	13.3	93	nne.	.....	.....	3	.....	4	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	.....	.....	45	7.2	88	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	overcast.
H. M. S. Curacoa, Kobe, Japan	29.78	756.4	52.5	11.4	79	var.	.....	.....	1	.....	4	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.97	761.2	67	19.4	74	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. Dock-Yard, Bermuda, W. I	30.18	766.6	65	18.3	83	sse.	.....	.....	1–2	.....	6	sse.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.74	755.4	78	25.6	97	w.	.....	.....	3	.....	6	nne.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flamingo, N. 11° 50′, W. 60° 40′	29.94	760.5	82	27.8	95	ene.	.....	.....	3–4	.....	2	e.	.....	.....	.....	4	e.	d. clouds.
H. M. S. Flying Fish, N. 32° 03′ E. 129° 40′	30.00	762.0	58	14.4	76	nw.	.....	....	5–6	.....	6	nw.	.....	.....	.....	4	n.	squally.
H. M. S. Gannet, S. 33° 01′, W. 71° 37′	29.94	760.5	59	15.0	79	ssw.	.....	.....	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.01	762.2	71	21.7	90	e.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	overcast.
H. M. S. Kingfisher, N. 10° 04′ W. 103° 52′	30.01	762.2	79	26.1	.....	ese.	.....	.....	2	.....	4	se.	.....	.....	.....	4	se.	d. clouds.
H. M. S. Lark. S. 16° 50′, E. 158° 40′	29.94	760.5	76.3	24.6	74	se.	.....	.....	5	.....	6	.....	.....	.....	.....	3	se.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.90	759.4	60	15.6	.....	n.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Magpie, N. 34° 44′, E. 128° 04′	30.12	765.0	44.1	6.7	48	nw.	.....	.....	3–5	.....	10	w	.....	.....	.....	2	nw.	misty.
H. M. S. Northampton, N. 38° 46′ W. 63° 12′	30.14	765.5	57	13.9	72	ese.	.....	.....	2	.....	8	ese.	.....	.....	.....	cross	.....	d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.92	760.0	63	17.2	83	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.77	756.1	80	26.7	80	n.	.....	.....	1	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Rocket, S. 10° 35′, W. 78° 20′	30.04	763.0	67	19.4	74	e.	.....	.....	1	.....	2	.....	.....	.....	.....	3	sw.	d. clouds.
H. M. S. Sappho, S. 44° 08′, W. 108° 00′	30.13	765.3	51.2	10.7	100	w.	.....	.....	1	.....	10	.....	.....	.....	.....	2	sw.	foggy.
H. M. S. Superb N. 36° 45′, E. 15° 47′*	30.12	765.0	66	18.9	68	sw.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sylvia, Sandy Point, Patagonia	29.08	738.6	42.7	5.9	72	wnw.	.....	.....	3–4	.....	8	calm	.....	.....	.....	.....	.....	showery.
H. M. S. Tourmaline, Aden, Arabia	29.97	761.2	.....	.....	.....	ese.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, N. 26° 23′ E 50° 37′	30.08	764.0	75.5	24.2	90	wnw.	.....	.....	3	.....	0	.....	.....	.....	.....	2	wnw.	blue sky.
H. M. S. Zephyr, N. 37° 33′, E. 121° 25′	30.43	772.9	35	1.7	90	w.	.....	.....	1	.....	2	n.	.....	.....	.....	2	ne.	d. clouds.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.08	764.0	82.0	27.8	77	ne.	.....	.....	1	.....	1	.....	ne.	.....	.....	1	se.	blue sky.
Tamega, Macao, China	30.11	764.7	71.6	22.0	91	n.	.....	.....	5	.....	10	.....	n.	23 h'r	23 h'r	.....	.....	drizzling.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.06	763.5	56	13.3	93	n.	2	0.9	.....	.....	5	.....	n.	0	0	.....	.....	fair.
Navy Yard, Portsmouth, N. H	29.82	757.4	44	6.7	92	sse.	12	5.4	.....	.....	10	.....	sw.	0	0	.....	.....	cloudy.
Naval Hospital, Yokohama, Japan*	29.70	754.4	46.5	8.1	76	calm	.....	.....	0	.....	8	.....	w.	0.03	0.8	.....	.....	clearing.
Adams, Sitka, Alaska *†	30.03	762.7	35	1.7	90	ene.	.....	.....	1	.....	10	.....	w.	.....	.....	.....	.....	cloudy.
Alaska, Honolulu, Sandwich Islands	30.02	762.5	74	23.3	76	ne.	.....	.....	1	.....	2	.....	.....	0	0	sm'h	.....	fair.
Alliance, Hampton Roads, Va	29.97	761.2	49	9.4	100	ssw.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear.
Ashuelot, N. 33° 20′, E. 129° 20′	30.09	764.3	56	13.3	74	nnw	.....	.....	4	.....	5	.....	n.	.....	.....	mod	nnw.	fair.
Brooklyn, Keel Point, Patagonia	29.22	742.2	53	11.7	86	wsw.	28	12.5	.....	.....	10	.....	wsw.	0	0	sm'h	.....	cloudy
Colorado, New York, N. Y	30.00	762.0	39	3.9	81	sw.	5	2.2	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Enterprise, Norfolk, Va	30.03	762.7	47	8.3	77	sw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear.
Essex, Callao, Peru	29.96	761.0	66	18.9	90	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	sm'h	sse.	cloudy.
Franklin, Norfolk, Va	30.01	762.2	43	6.1	75	wsw.	5.5	2.5	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Galena, Montevideo, Uruguay	29.86	758.4	72	22.2	95	calm	.....	.....	0	.....	8	.....	.....	.....	.....	sm'h	.....	fair.
Hartford, Possession Bay, Patagonia*	29.07	738.4	44	6.7	92	s.	.....	.....	5–6	.....	8?	.....	s;w.	light	light	sm'h	.....	clear.?
Independence, Mare Island, Cal	30.04	763.0	48	8.9	92	calm	.....	.....	0	.....	5	.....	.....	.....	.....	.....	.....	fair.
Iroquois, Callao, Peru	30.03	762.7	65	18.3	94	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	overcast
Jamestown, N. 40° 59′, W. 69° 25′	29.89	759.2	48	8.9	77	sse.	.....	.....	3	.....	2	.....	sse.	.....	.....	sm'h	.....	fair.
Kearsarge, Norfolk, Va	30.01	762.2	48	8.9	77	wsw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear.
Lackawanna, Valparaiso, Chili*	29.96	761.0	60	15.6	82	ese.	.....	.....	1	.....	2	.....	s.	.....	.....	.....	.....	clear.
Lancaster, Palermo, Sicily*	29.97	761.2	68	20.0	64	sw.	.....	.....	1	.....	8	.....	wsw.	.....	.....	sm'h	.....	fair.
Michigan, Erie, Pa	30.15	765.8	38	3.3	90	nw.	.....	.....	6	.....	10	.....	e.	.....	.....	.....	.....	cloudy.
Minnesota, New York, N. Y	29.90	759.4	39	3.9	81	sw.	7	3.1	.....	.....	0	.....	.....	.....	.....	.....	.....	foggy.
Monocacy, Yokohama, Japan	29.58	751.3	50	10.0	93	nw.	.....	.....	1	.....	5	.....	sw.	.....	.....	.....	.....	fair.
New Hampshire, Newport, R. I	29.85	758.2	54	12.2	79	sw.	.....	.....	3	.....	8	.....	sw.	.....	.....	sm'h	.....	fair.
Nipsic, N. 38° 09′, E. 7° 38′ *	30.02	762.5	66	18.9	59	wsw.	.....	.....	3	.....	2	.....	.....	.....	.....	mod.	wnw.	clear.
Onward, Callao, Peru†	30.11	764.8	65	18.3	94	calm	.....	.....	0	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos, Tientsin, China*	30.50	774.7	31	0.6	100	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear.
Pensacola, Callao, Peru*	29.94	760.5	64	17.8	94	sse.	2	0.9	.....	.....	10	.....	.....	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass	29.85	758 2	41	5.0	100	ssw.	.....	.....	2	.....	5	.....	.....	.....	.....	.....	.....	hazy.
Quinnebaug, Villafranca, France*	29.89	759.2	60	15.6	76	ssw.	.....	.....	1	.....	10	.....	sw.	.....	.....	sm'h	.....	overcast.
Ranger, Salina Cruz, Mexico	30.02	762.5	72	22.2	63	nnw.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	.....	clear.
Richmond, Yokohama, Japan*	29.71	754.6	50	10.0	86	n.	.....	.....	1	.....	2	.....	.....	0	0	.....	.....	clear.
Saratoga, N. 33° 19′, W. 75° 43′	30.00	762.0	66	18.9	73	wnw.	.....	.....	5–6	.....	5	.....	nw.	0	0	sm'h	.....	fair.
St. Louis, League Island, Pa	30.15	765.8	37	2.8	90	wnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	hazy.
Swatara, N. 22° 56′ W. 57° 09′*	29.97	761.2	77	25.0	77	ene.	.....	.....	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Tennessee, Hampton Roads, Va	29.99	761.7	52	11.1	88	w.	8	3.6	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Vandalia, Hampton Roads, Va*	29.99	761.7	50	10.0	78	sw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Wabash, Boston, Mass	29.84	757.9	43	6.1	83	s.	7	3.1	.....	.....	8	.....	sw.	0	0	.....	.....	cloudy.
Wachusetts, Mare Island, Cal†	30.04	763.0	47	8.3	100	sw.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear.
Wyandotte, Washington, D. C	30.28	769.1	48	8.9	77	nw.	.....	.....	5	.....	0	.....	.....	.....	.....	.....	.....	clear.
Yantic, Norfolk, Va	30.04	763.0	45	7.2	84	wsw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	fair.
Merchant Marine.																		
S. S. Grecian, Buenos Ayres, Argentine Rep.*	29.84	757.9	75	23.9	86	e.	.....	.....	1	.....	2	.....	e.	2 h'r	2 h'r	sm'h	.....	hazy.
S. S. Nova Scotian, N. 49° 40′, W. 35° 12′	29.56	749.3	55	12.8	.....	s.	.....	.....	2	.....	10	.....	sw.	.....	.....	mod	wsw.	raining.
S. S. Polynesian, N. 48° 39′, W. 47° 41′*	29.39	746.5	44	6.7	.....	sw.	.....	.....	5	.....	10	.....	.....	0	0	r'gh	sw.	overcast.
S. S. British Crown, Liverpool, Eng	.....	.....	48	8.9	.....	sw.	.....	.....	4	.....	10	.....	sw.	6 h'r	6 h'r	sm'h	.....	raining.
S. S. Indiana, N. 50° 31′, W. 22° 36′	.....	.....	47	8.3	92	wnw.	.....	.....	5	.....	2	.....	nnw.	.....	.....	mod.	nw.	fine.
S. S. Lord Clive, N. 50° 17′, W. 31° 22′*†	29.70	754.4	.....	.....	.....	ene.	.....	.....	6	.....	10	.....	.....	6 h'r	6 h'r	st'g	nnw.	misty.
S. S. Lord Gough, N. 45° 22′ W. 49° 45′	29.69	754.1	42	5.6	.....	wsw.	.....	.....	6	.....	10	.....	wsw.	0	0	long	wsw.	cloudy.
S. S. Ohio, N. 51° 20′, W. 12° 28′	29.51	749.5	51	10.6	100	w.	.....	.....	6	.....	7	.....	nnw.	.....	.....	h'vy	w.	squally.
S. S. Pennsylvania, N. 43° 33′, W. 56° 00′ †	30.03	762.7	43	6.1	.....	w.	.....	.....	5	.....	4	.....	w.	.....	.....	h'vy	wnw.	fair.
S. S. Castor, N. 44° 47′ W. 22° 15′*	29.80	756.9	53.6	12	.....	w.	.....	.....	4	.....	2	.....	w.	.....	.....	4	w.	hazy.
S. S. Jason, N. 50° 08′, W. 11° 07′	.....	.....	.....	.....	.....	w.	.....	.....	3	5 ck	0	.....	.....	.....	.....	6	nw.	gloomy.
S. S. Anchoria, N. 49° 07′, W. 40° 14′†	29.67	753.6	.....	.....	.....	sw.	.....	.....	5	.....	10	.....	sw.	sh's	sh's	long	sw.	overcast.
S. S. Devonia, N. 41° 03′, W. 60° 23′†	30.10	766.1	57	13.9	.....	nw.	.....	.....	2	.....	10	.....	nw.	.....	.....	sli't	wnw.	fair.
S. S. Dorian, Boston, Mass*	29.68	753.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
S. S. Ethiopia, N. 50° 05′, W. 39° 00′	29.49	749.0	52	11.1	93	w.	.....	.....	5	.....	7	.....	w.	4 h'r	4 h'r	h'vy	sw.	cloudy.
S. S. Galatia, N. 6° 35′, E. 82° 11′†	29.85	758.2	82.3	27.9	.....	sw.	.....	.....	8	.....	1	.....	sw.	14 h'r	14h'r	r'gh	se.	fair.
S. S. Alpin, N. 19° 25′ W. 75° —′	.....	.....	.....	.....	.....	ne.	.....	.....	4	.....	.....	.....	ne.	0	0	.....	ene.	fine.
S. S. Alvo, Kingston, Jamaica, W. I	29.99	761.7	73	22.8	.....	ese.	.....	.....	1–2	.....	9 ks	.....	.....	4 h'r	4 h'r	.....	.....	rainy.
S. S. Ambrose, N. 37° 08′, W. 72° 58′†	30.04	763 0	.....	.....	.....	w.	.....	.....	4	.....	.....	.....	.....	1 h'r	1 h'r	3	w.	fine.
British Merchant, N. 28° 05′, W. 127° 31′	30.11	764.8	63.2	17.3	87	nnw.	.....	.....	5	.....	0	.....	.....	.....	.....	.....	.....	d. clouds.
Bk. Coppename, N. 26° 30′, W. 26° 27′	30.24	768.1	68	20.0	80	se.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	.....	drizzling.
May Hulse, S. 21° 54, W. 35° 42′	30.08	764 0	77.2	25.1	86	ne.	.....	.....	2	.....	5	.....	.....	.....	.....	.....	.....	d. clouds
S. S. Olympus, N. 30° 37′, E. 32° 18′	30.03	762.7	.....	.....	35	nne.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Inchkeith, S. 38° 04′, E. 10° 57′	30.28	769.1	55.6	13.1	79	ssw.	.....	.....	3	.....	8	.....	.....	.....	.....	.....	.....	overcast.
S. S. Mexico, N. 29° 26′, W. 115° 44′†	29.88	758.9	69.6	20.9	79	wnw.	.....	.....	3	.....	10	.....	nw.	.....	.....	mod.	wnw.	raining.
S. S. Bothnia, N. 40° 49′, W. 62° 39′	30.11	764.8	62	16.7	83	se.	.....	.....	2	.....	5	.....	w.	0	0	sm'h	.....	d. clouds.
S. S. Gallia, N. 45° 49′, W. 41° 25′	29.70	754.4	5"	13.9	94	wsw.	.....	.....	7–8	.....	5	.....	w.	.....	.....	high	w.	squally.
S. S. Marathon, Constantinople, Turkey	30.00	762.0	56	13.3	.....	wnw.	.....	.....	3	.....	7	.....	wnw.	12 h'r	12 h'r	.....	.....	raining.
S. S. Pavonia, N. 51° 23′, W. 13° 17′*	29.54	750.3	50	10.0	79	w.	.....	.....	6	.....	8	.....	w.	12 h'r	12 h'r	h'vy	w.	squally.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.	Character.	Direction from.	
MERCHANT MARINE.—Continued.																		
S. S. Scythia, N. 51° 02′, W. 13° 00′	29.53	750.0	52	11.1	93	W.			6		5?		W.	sh'rs	sh'rs	r'gh	w.	clear.
S. S. Labradore, N. 43° 00′, W. 65° 40′			55.4	13		sse.			3		4		s.	0	0	sm'h	ne.	clear.
S. S. Arizona, N. 47° 35′ W. 45° 16′	29.42	747.3	41	5.0		sw.			7		10		w.	6 h'r	6 h'r	high	wsw.	raining.
S. S. Bohemia, Hamburg, Germany†	29.16	740.7				sw.			6		8		sw.	rain	rain		wsw.	clearing.
S. S. Cimbria, N. 49° 43′, W. 33° 50′	29.58	751.3	50.0	10.0		e			6		8		sw.	18 h'r	18 h'r	r'gh	s.	covered.
S. S. Gellert N. 47° 56′, W. 40° 02′	29.61	752.1	55	12.8		wnw.			5		9		wsw.	6 h'r	6 h'r	r'gh	sw.	squally.
S. S. Silesia, N. 40° 28′, W. 69° 53′ †	29.97	761.2	51.1	10.6		ssw.					4		wsw.	0	0	2	sw.	fair.
S. S. Vandalia, Hamburg, Germany	29.21	741.9	51.4	10.8		w.			3		10		w.	20 h'r	20 h'r			raining.
S. S. Wieland, N. 49° 31′, W. 18° 51′	29.60	751.8				ene.			6		8		nw.	10 h'r	10 h'r	cross	nw.	hazy.
S. S. Nessmore, N. 46° 55′, W. 42° 27′	29.63	752.6	54.3	12.4	98	w.			10		8		w.	0	0	long	w.	hazy.
S. S. Hevelius, S. 6° —′ W. 32° —′ *†	30.15	765.8	80	26.7		ese.			6		7?		ese.	2 h'r	2 h'r			clear?
S. S. Ptolemy, N. 29° —′, W. 66° 30′	30.18	766.6	72.5	22.5	76	nnw.			2		6			0	0	3	n.	d clouds.
S. S. Bulgarian, N. 46° 08′, W. 49° 17′ *	29.69	754.1				w.			7		10		wnw.	4 h'r	4 h'r	high	wnw.	
S. S. City of San Antonio, New York, N. Y †	29.90	759.4	46	7.8		wnw.			4		0			0	0			hazy.
S. S. Colorado, N. 26° 50′, W. 88° 12′ †	30.19	766.8	68	20.0		e.			1		2		ne.	0	0	small	ne.	clear.
S. S. Rio Grande, N. 38° 23′, W. 74° 20′ †	29.96	761.0	55	12.8		wsw.			3		5		wsw.	0	0	sli't	se.	fair.
S. S. San Marcos, N. 38° 49′, W. 74° 16′	30.21	767.3	62	16.7		wsw.			4		0					mod.		fine.
S. S. Archimede, Gibraltar, Mediterranean *†	30.14	765.5	64	17.8	73	wnw.			3		0			0	0	sm'h	nnw.	clear.
S. S. Glenapp, Santos, Brazil †	29.96	761.0	78	25.6		var.			1		hz.			0	0	sm'h		hazy.
S. S. Glenfyne, N. 19° 27′, W. 57° 08′						ene.			3		2		e.	0	0	sm'h	e.	fair.
S. S. Chalmette, N. 28° 50′, W. 88° 40′ †	30.21	767.3	71	21.7		ese.			2		3			0	0	sm'h		clear.
S. S. Lone Star, N. 34° 20′, W. 75° 30′ †	30.11	764.8	62	16.7		wnw.			4		2		nw.	0	0	mod.	ene.	fair.
S. S. Egypt, N. 42° 59′ W. 56° 10′ *†	30.05	763.3				wnw.			5		10		wnw.	0	0	long	wnw.	cloudy.
S. S. Erin, Liverpool, Eng	29.15	740.4	44	6.7		nw.			9		6		nw.	4 h'r	4 h'r			squally.
S. S. Helvetia, New York, N. Y	29.83	757.7	37	2.8		sw.			4		2		w.	0	0			hazy.
S. S. Holland, N. 46° 18′, W. 40° 06′	29.63	752.6	60	15.6		wsw.			8		3		sw.	2 h'r	2 h'r	h'vy	wsw.	cloudy.
S. S. The Queen, N. 48° 44′, W. 22° 07′ *†	29.60	751.8	51	10.6		sse.			5		10		sse.	shr's	shr's	sm'h		foggy.
S. S. Santiago, N. 20° 20′, W. 74° 02′			82	27.8	91	ne.			3		3		e.	0	0	small	e.	fine.
S. S. City of Alexandria, Progresso Roads, U. A. †	30.24	768.1	74	23.3		e.			3		2		ne.	0	0	mod	ne.	clear.
S. S. City of Merida, N. 40° 44′, W. 74° 01′ *†	29.50	749.3	75.2	24		nw.			3		1		nw.	0	0	light	sw.	fine.
S. S. Leerdam, N. 45° 17′ W. 51° 02′ *	29.74	755.4	51.5	10.8		wnw.			6							h'vy		stormy.
S. S. America, N. 49° 00′ W. 30° 17′ *	29.05	753.1	53.0	11.7	93	ene.			4		10			10 h'r	10 h'r	long	wsw.	foggy.
S. S. Donau, N. 41° 21′. W. 66° 09′	30.03	762.7				se.			3		8		s.	4 h'r	4 h'r	sm'h	w.	cloudy.
S. S. Elbe, off Dungeness, Eng	29.30	744.2	51.8	11.0	100	wsw.			6		10		wsw.	3 h'r	3 h'r	cross	wsw.	covered.
S. S. Hohenstaufen, N. 50° 12′, W. 2° 12′	29.45	748.0	55.4	13.0		w.			6–7		9		w.	12 h'r	12 h'r	cross	w.	cloudy.
S. S. Oder, N. 41° 48′, W. 63° 08′	30.11	764.8	49.1	9.5		calm			0		3		ene.	0	0	long	ne.	fair.
S. S. Ohio, Galveston, Texas	30.22	767.6				ne.			2		10		ne.	0	0	sm'h	ne.	misty.
S. S. Sailer, Bremerhaven, Germany	29.15	740.4				w.			5		10		w.	10 h'r	10 h'r			cloudy.
S. S. Strassburg, N. 35° 31′ W. 15° 22′	30.32	770.1	64	17.8	89	var.					5		w.	0	0	sm. h		fair.
S. S. Belgic, N. 26° 09′, E. 122° 12′ †	30.18	766.6	68	20.0	84	n.			6		8		n.	0	0	h'vy	ne.	cloudy.
S. S. Coptic, N. 38° 30′, W. 124° 45′	30.06	763.5	51.5	10.8	76	nw.			5		10		w.	0	0	r'gh	w.	cloudy.
S. S. Oceanic, N. 35° 38′ E. 171° 18′ *	29.93	760.2	64	17.8	38	w.			6		4		wnw.			mod.	w.	fine.
S. S. City of Augusta, N. 37° 20′, W. 74° 56 †	30.01	762.2				sw.			7		4		ssw.	0	0	sm'h		clear.
S. S. Mississippi, Portland, Oregon †	30.22	767.6	43	6.1	83	ene.			1		10		e.					cloudy.
S. S. Columbia, N. 46° 00′ W. 124° 10′ †	30.11	764.8	51	10.6	86	sw.			2		10		ssw			mod.	wsw.	cloudy.
S. S. Oregon, San Francisco, Cal †	29.97	761.2	50	10.0	86	calm			0									misty.
S. S. Ancon, San Francisco, Cal †	29.96	761.0	50	10.0	93	w.			1		10		w.					cloudy.
S. S. Dakota, San Francisco, Cal †	29.93	760.2	57	13.9	94	calm			0		8		w.	0	0	sm'h		foggy
S. S. Orizaba, N. 33° 43′, W. 118° 15′ †	29.94	760.5	59	15.0	82	nw.			1		8		nw.			long	ew	cloudy.
S. S. State of California, Portland, Oregon *†	30.08	764.0	39	3.9	91	se.			2		10		se.					cloudy.
S. S. Australia, Sydney, N. S. W	30.06	763.5	72	22.2	95	ne.			2		5?		ne.	0	0			clear.
S. S. City of New York, Sydney, N. S. W †	30.13	765.3	70	21.1	75	calm			0		0			0	0			clear.
S. S. City of Pekin, Hong Kong, China †	30.24	768.1	70	21.1	90	n.			2		10		n.	0	0			overcast.
S. S. City of Rio de Janeiro, Mazatlan, Mexico †	29.98	761.5	70	21.1	75	calm			0		3		ne.	0	0	sm'h		fair.
S. S. City of Sydney, N. 27° 55′, W. 145° 06′ †	30.10	764.5	68	20.0	79	ene.			4		5?		ene.	0	0	h'vy	e.	cloudy.?
S. S. Grenada, Panama, Panama †	29.87	758.7	76	24.4	91	wnw.			1		5?		nw.	4 h'r	4 h'r	sm'h	nw.	clear?
S. S. San José, N. 23° 11′, W. 106° 22′ *†	30.27	768.8				w.			2	5 c	0	nw.		0	0	light	sw.	
S. S. Zealandia, N. 30° 14′, W. 139° 21′	30.31	769.9	64	17.8	89	ne.			6		9		ne.			h'vy	ne.	gloomy.
S. S. Bermuda, N. 30° 07′, W. 68° 12′ †	30.17	766.3	69	20.6		n.			1		1		n.	½h'r	½h'r	h'vy	n.	fine.
S. S. Muriel, N. 32° 30′, W. 69° 00′	30.10	764.5	67	19.4		sse.			3		10			0	0	mod.	e.	fair.
S. S. Claudius, N. 22° 50′, W. 74° 22′ †	30.22	767.6				ne.			3		2		e.	0	0	sm'h	e.	fair.
S. S. Valencia, La Guayra, Venezuela †	30.01	762.2	82	27.8	83	e.			1		4		ese	2 h'r	2 h'r	mod.	ne.	fine.
S. S. Belgenland, Antwerp, Belgium †	29.35	745.5	55	12.8	87	ssw.			6		10		sw.	20 h'r	20 h'r			cloudy.
S. S. Nederland, N. 41° 01, W. 69° 42′			48	8.9		s.			3		2		s.	0	0	sm'h	sw.	fair.
S. S. Penniland, Antwerp, Belgium	29.42	747.3	53	11.7	83	s.			6		10		s.	14 h'r	14 h'r			cloudy.
S. S. Rhyniand, Jersey City, N. J.	29.92	760.0	38	3.3	63	wsw.			2		0							fair.
S. S. Waesland, N. 48° 03′, W. 39° 11′	29.68	753.9	54	12.2	87	wsw.			5		8		wsw.	sh'rs	sh'rs	long	wsw.	cloudy.
S. S. Maas, N. 48° 50′, W. 24° 30′	29.67	753.5	56.8	13.8	93	ene.			3		8		e.	13 h'r	13 h'r	5	ene.	overcast.
S. S. P. Caland, Rotterdam, Holland	29.27	743.4	50.4	10.2	93	wsw.			7		10		w.					cloudy.
S. S. W. A. Scholten, N. 41° 10′, W. 64° 25′	30.11	764.8	58.0	14.4	91	wsw.			6		9		sw.	0	0			
S. S. Zaandam, N. 49° 52′, W. 16° 50′ *	29.62	752.3	61.5	16.4	87	w.			5		6 k		w.	5 h'r	5 h'r	5	w.	squally.
S. S. State of Indiana, N. 51° 52′, W. 35° 46′ †	29.54	750.3	40	4.4		e.			5		7		e.	16 h'r	16 h'r	r'gh	e.	drizzling.
S. S. State of Nevada, N. 40° 35′, W. 70° 59′ †	29.90	759.4	46	7.8		ssw.			1		10		wsw.	0	0	sm'h		fine.
S. S. Hekla, N. 58° 46′, E. 5° 00′ *†	29.13	740.0				sse.			1		2		wsw.	0	0	sm'h		fine.
S. S. Thingvalla, N. 55° 51′, W. 29° 02′ †	29.08	753.9	40.1	4.5		nw.			9		10		sse.	12 h'r	12 h'r	h'vy	sse.	squally
S. S. Iowa, N. 46° 54′, W. 44° 08′ *†	29.70	754.4	44	6.7		sw.			6		3		nw.	5 h'r	5 h'r	cross	nw.	covered.
S. S. Plantyn, N. 48° 07′, W. 22° 19′	29.68	753 9							9		8		sw.	6 h'r	6 h'r	h'vy	sw.	cloudy.
S. S. Baltic, N. 40° 28′, W. 69° 45′	29.92	760.0	50	10.0	93	sw.			5		6		w.	0	0	r'gh	wnw.	squally.
S. S. Britannic, N. 43° 29′, W. 56° 29′ †	30.08	764.0	48	8.9		nnw.			3		2		sw.	0	0	sli't	sw.	d. clouds.
S. S. Celtic, N. 50° 50′, W. 16° 00′ †	29.64	752.8	52	11.1	79	w.			4		5		nnw.	0	0	mod.	nw.	cloudy.
S. S. Lepanto, N. 47° 42′, W. 24° 50′ *	29.75	755.6	59	15.0		wsw.			6		8		w.	sh'rs	sh'rs	long	wnw.	showery.
S. S. Marengo, N. 49° 45′, W. 20° 20′ *†	29.51	749.5				w.			6		10		w.	24 h'r	24 h'r	h'vy	w.	rainy.
S. S. Salerno, N. 35° 56′, E. 20° 17′			65	18.3		nnw.			6		10		w.	20 h'r	20 h'r	r'gh	sw.	overcast.
S. S. Catherine Whiting, Providence, R. I. †	29.96	761.0				calm			3		0			0	0	sm'h	nnw.	clear.
S. S. Norman, N. 39° 56′, W. 75° 08′	29.86	758 4				wnw.			0		8		w.	0	0			
S. S. Saxon, Boston, Mass *†	29.90	759.4	49	9.4		wsw.			5		0			0	0			clear.
MISCELLANEOUS.									5		1							
Bk. Adelaid, N. 24° 11′ W. 69° 21′ *†	30.18	766.6	79	26.1		nne.			4				ne.	0	0	long	nnw.	clear.
Bg. Alcira, Maracaybo, Venezuela	29.94	760.5	84	28.9		ene.			3		2		e.	0	0			clear.
Bk. Annie M Law, Kobe, Japan *†	29.70	754.4	47	8.3		nw.			4		5		w.	8 h'r	8 h'r			threatening.
S. S. Antonio Lopez, N. 19° 35′, W. 69° 12′ *	29.93	760.2	75.2	24.0	70	ese.			5	c	6 k	w.	se.	0	0	mod.	ese.	fair.
Bk. Aquidneck, S. 17° 05′, W. 36° 58′ *†	30.08	764 0	78	25.6	91	ne.			3		10			12 h'r	12 h'r	sm'h		cloudy.
Bk. Aureola, Bristol, Eng *†	30.20	767.1				var.			2				ne.			light	ne.	cloudy.
Bgt. Arthur, N. 38° 46′, W. 74° 02′ *†	29.60	751.8	52	11.1		wnw.			7		5		wnw.	16 h'r	16 h'r			fair.
Bk. Bayonnaise, N. 16° 20′, W. 60° 24′ *†	29.93	760.2				ne.			4				nw.	0	0		ssw.	fair.
Schr. B. J. Baker, N. 33° 40′, W. 78° —′ *†	30.12	765.0				e.			4		5?		e.	0	0	r'gh	se.	clear.?
Sch. Bonny Doon, N. 42° 12′ W. 33° 15′	30.09	764.3				sw.			6		1		w.			sm'h	sw.	clear.
S. S. Burswell, N. 30° 07′ W. 50° 17′ *†						wnw.			6		2		wnw.	0	0	long	wnw.	
Bk. Champion, N. 38° 33′, W. 120° 59′	30.22	767.6	82	27.8		ene.			1		4		wsw.	0	0	str'g	nw.	clear.
Schr. Chas. F. Heyer, Apalachicola, Fla	30.00	763.5	65.0	18.3		w.			2		2		wsw.	0	0	long	nnw.	clear.
Schr. C. R. Flint, Cedar Keys, Fla †	30.24	768.1	58	14.4	94	calm			0	0	0			0	0			clear.
S. Cornelius, N. 43° 13′, W. 43° 10′	30.24	768.1	54	12.2		calm			0		0			0	0			clear.
S. S. D. J. Foley, N. 32° 37′, W. 75° 18′			61.2	16.2		wsw.			6		9		wsw.	0	0	long	w.	cloudy.
			71	21.7		wsw.			6		3		wnw.	0	0	mod.	wsw.	fine.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bkt. David Preston, New Orleans, La*†	30.00	762.0	61	16.1	.....	ne.	.....	.....	.....	.....	2	.....	ne.	0	0	.....	.....	
Bk. Don Quixote, Pasoeroen Roads, Java*	29.89	759.2	91	32.8	.....	sse.	.....	.....	5	.....	6?	.....	sse.	0	0	sm'h	.....	clear?
Bk. E. D. Bigelow, N. 45° 42′, W. 9° 30′*†	29.90	759.4	.....	.....	.....	w.	.....	.....	7	.....	2	.....	w.	0	0	long	w.	fair.
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†	30.02	762.5	45	7.2	.....	wsw.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear.
S. E. J. Spicer, New York, N. Y	29.89	759.2	40	4.4	100	nw.	.....	.....	5	.....	3	.....	nw.	0	0	.....	.....	clear.
Bk. Eliza Barss, Bermuda, W. I†	30.18	766.6	.....	.....	.....	calm	.....	.....	0	.....	2	.....	se.	0	0	.....	.....	clear.
Bk. Essex, Muscat, Arabia*†	30.06	763.5	79	26.1	.....	nw.	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	fine.
Schr. F. E. McDonald, N. 43° 19′, W. 69° 43′†	29.91	759.7	.....	.....	.....	s.	.....	.....	5	.....	5	.....	.....	.....	.....	.....	.....	
S. S. Foscolia, N. 6° 59′, W. 44° 33′	.....	.....	.....	.....	.....	e.	.....	.....	5	.....	10	.....	e;sw.	5 h'r	5 h'r	mod.	e.	cloudy.
Bk. Freya, N. 19° 11′, W. 40° 30′	.....	.....	78	25.6	.....	e.	.....	.....	5	.....	5	.....	se.	7 h'r	7 h'r	mod.	ese	squally.
Bg. George, N. 43° 15′, W. 60° 03′*†	30.20	767.1	.....	.....	.....	w.	.....	.....	5	.....	8	.....	.....	0	0	r'gh	wnw.	fair
S. Grecian, N. 24° 15′, W. 64° 55′†	30.16	766.1	79	26.1	74	se.	.....	.....	1	.....	3	.....	se.	0	0	long	nnw.	fair.
Bk. Grey Eagle, N. 31° 49′, W. 44° 50′*†	30.20	767.1	78	25.6	.....	ssw	.....	.....	3	.....	2	.....	sw.	0	0	mod.	e.	fair.
Bk. Hattie G. McFarland, New York, N. Y†	30.21	767.3	41	5.0	.....	w.	.....	.....	5	.....	2	.....	nw.	0	0	.....	.....	clear.
Schr Hattie Weston, Icaque, Trinidad W. I*†	30.03	762.7	81	27.2	.....	e.	.....	.....	1	.....	2	.....	e.	1 h'r	1 h'r	sm'h	e.	fair.
S. Hedwig, N. 35° 36′, W. 74° 07′	30.05	763.3	58.6	14.8	79	w.	.....	.....	5	.....	2	.....	w.	3 h'r	3 h'r	3	ne.	fine.
Bk. Heinrich & Tonio, N. 43° 25′, W. 40° 00′*†	29.94	760.5	63	17.2	.....	w.	.....	.....	5	.....	8	.....	w.	5 h'r	5 h'r	long	w.	light rain.
Schr. Isabel Alberto, Cedar Keys, Florida†	30.26	768.6	.....	.....	.....	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear.
S. Ivy, Cork, Ireland	.....	.....	48	8.9	.....	wsw.	.....	.....	5	.....	7	.....	w.	0	0	.....	.....	cloudy.
Schr. James Slater, N. 18° 00′, W. 59° 32′†	30.05	763.3	84	28.9	.....	ne.	.....	.....	2	.....	2	.....	ene.	1 h'r	1 h'r	mod	ene.	
Schr. Jennie N. Huddell, Savannah, Ga†	30.21	767.3	49	9.4	85	nw.	.....	.....	1	.....	2	.....	wnw.	0	0	.....	.....	fair.
S. S. John Hopkins, N. 38° —′, W. 75° 40′	.....	.....	50	10.0	.....	wsw.	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	clear.
Schr. John L. Thomas, Vivorilla Cays, C. A *†	30.10	764.5	.....	.....	.....	ne.	.....	.....	4	.....	8	.....	e.	2 h'r	2 h'r	mod.	n.	rainy.
Bg. John Wesley, Cardenas, Cuba, W. I†	30.12	765.0	.....	.....	.....	ene.	.....	.....	1	.....	10	.....	.....	5 h'r	5 h'r	.....	.....	light rain.
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.10	764.5	82	27.8	79	nnw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear.
Light House Tender, Laurel, Key West, Fla†	30.12	765.0	68	20.0	.....	ne.	.....	.....	2	.....	8	.....	ne.	0	0	.....	.....	cloudy.
Bk. Liberia, N. 8° 44′, W. 19° 50′.*..	29.91	759.7	84	28.9	79	ne.	.....	.....	2	.....	5	.....	n.	0	0	.....	.....	
Bg. Lilian, N. 19° 08′, W. 64° 08′†	30.10	764.5	84	28.9	.....	ene.	.....	.....	4	.....	2	.....	ne.	2 h'r	2 h'r	mod.	ene.	clear.
Bg. L. & W. Armstrong, New Haven, Conn*†	30.00	762 0	.....	.....	.....	sw.	.....	.....	2	.....	1	.....	nw.	0	0	.....	.....	light haze.
S. S. Madrid, N. 34° 48′, W. 68° 37′*†	30.22	767.6	68	20.0	79	sw.	.....	.....	5	.....	6	.....	wnw.	0	0	mod.	.....	fair.
S. S. Malabar, N. 27° 53′, E. 33° 37′	.....	.....	.....	.....	.....	nnw.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bg. Mary Gibbs, N. 34° 20′, W. 76° 10′*†	30.04	763.0	59	15.0	.....	w.	.....	.....	5	.....	0	.....	.....	0	0	3	ene.	clear.
Bk. Matilda C. Smith, N. 32° 46′, W. 25° 50′*†	30.42	772.7	.....	.....	.....	ene.	.....	.....	3	.....	5	.....	ene.	0	0	mod.	nw.	fine.
Bg. Mattie B. Russell, N. 34° 20′ W. 75° 30′*†	30.28	769.1	.....	.....	.....	wnw.	.....	.....	6	.....	1	.....	n.	0	0	light	nne.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	30.03	762.7	.....	.....	.....	nne.	.....	.....	.....	.....	.....	.....	ne.	0	0	long	ne.	cloudy
S. M. P. Grace, N. 9° 44′, W. 119° 41′*	29.95	760.7	80	26.7	.....	var.	.....	.....	2	.....	2	.....	ese.	0	0	r'gh	sse.	
Bg. Myrtle, N. 40° 36′, W. 70° 16′†	29.95	760.7	.....	.....	.....	sw.	.....	.....	1	.....	10	.....	sw.	0	0	sm'h	.....	hazy.
Bk. Northern Queen, N. 36° 20′, W. 70° 44′*†	30.05	763.3	66	18.9	100	ssw.	.....	.....	6	.....	2	.....	sse.	.....	.....	mod.	.....	
Bg. O. C. Clary, N. 22° 13′, W. 58° 00′*†	30.10	764.5	79	26.1	95	e.	.....	.....	3	.....	1	.....	e.	.....	.....	sm'h	e.	clear.
Bk. Orpheus, N. 44° 30′, W. 31° 35′	30.09	764.3	60	15.6	.....	w.	.....	.....	6	.....	9 k	.....	w.	0	0	mod.	wnw.	fair.
S Paramita, San Francisco, Cal†	29.95	760.7	52	11.1	.....	se.	.....	.....	2	.....	.....	.....	se.	0	0	.....	.....	clear.
S. S. Radnorshire, N. 11° 32′, E. 54° 16′*†	29.92	760.0	.....	.....	.....	nne.	.....	.....	4	.....	0	.....	.....	0	0	mod.	ne.	clear.
S. St. Francis, S. 6° 12′, W. 109° 15′†	29.99	761.7	71	21.7	.....	ese.	.....	.....	5	.....	5	.....	ese.	0	0	sm'h	ese.	clearing
Schr. S. B. Hubbard, N. 40° 16′, W. 73° 11′†	30.02	762.5	48	8.9	.....	sw.	.....	.....	5	.....	0	.....	.....	0	0	long	sw.	fine.
Bk. Scud, off Antigua, W. I*†	29.99	761.7	.....	.....	.....	e.	.....	.....	6	.....	3	.....	e.	0	0	short	e.	clear.
Bk. Southern Belle, Antwerp, Belgium*†	29.30	744.2	55	12.8	.....	wsw.	.....	.....	6	.....	5	.....	.....	0	0	.....	.....	fair.
S. S. Strathleven, near Suez, Egypt	29.98	761.5	84.8	29.3	75	nw.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	blue sky.
S. S. Sunbeam, N. 45° 51′, W. 10° 23′	29.89	759.2	58	14.4	82	w.	.....	.....	6	.....	3	.....	w.	13 h'r	13 h'r	6	w.	d. clouds.
Bk. Truro, N. 45° 07′, W. 50° 00′*†	29.81	757.2	.....	.....	.....	wsw.	.....	.....	6–7	.....	10	.....	w.	0	0	r'gh	sw.	cloudy.
U. S. F. C. S. S. FishHawk, Washington, D. C†..	30.12	765.0	40	4.4	82	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear.
Bk. Usko, N. 42° 25′. W. 51° 04′*	30.00	762 0	55	12.8	.....	wnw.	.....	.....	5	.....	2	.....	w.	0	0	h'vy	v	clear.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.29	769.3	62.6	17	.....	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	.....	covered.
Schr. Viola Reppard, New York. N. Y†	29.95	760.7	50	10.0	.....	wsw.	.....	.....	3	.....	3	.....	sw.	0	0	.....	.....	
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.00	762,0	.....	.....	.....	ssw.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	fine.
Bk. Wandering Jew, S. 27° 15′, W. 43° 35′†	30.09	764.3	76	24.4	.....	ne.	.....	.....	6	.....	7	.....	e.	0	0	mod.	ene.	
Bk. Warden Law S. 31° 40′, W. 72° 46′	30.23	767.8	.....	.....	.....	s.	.....	.....	3	.....	8	.....	s.	0	0	sm'h	s.	covered.
Bgt. Willie, S. 33° 20′, E. 27° 30′*†	30.17	766.3	69	20.6	.....	sw.	.....	.....	2	.....	2	.....	sw.	0	0	mod.	s.	clear.
S. Wm. Woodbury, N. 37° 15′, W. 61° 05′*†..	30.22	767.6	56	13.3	.....	w.	.....	.....	6	.....	5	.....	nw.	.....	.....	light	w.	squally.

International Chart I. November 24, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 25, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ALGERIAN.																			
Nemours	.....	.....	30.15	765.9	62.6	17.0	84	e.	.....	.....	3	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.13	765.2	64.0	17.8	65	w.	.....	.....	3	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.13	765.3	69.4	20.8	67	sw.	.....	.....	4	.....	2	.....	.....	0	0	fair	Fonfréde.
Tunis	.....	.....	30.12	765.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.22	767.7	67.3	19.6	52	ne.	.....	.....	1	.....	2	.....	.....	0	0	fair	Pérès.
Tebessa	.....	.....	30.27	768.8	57.6	14.2	55	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	61.2	16.2	12	nnw.	.....	.....	2	.....	0	.....	.....	0	0	clear	Lonchamp.
Laghouat	.....	.....	30.21	767.2	51.8	11.0	56	ne.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.30	769.5	65.8	18.8	46	.....	.....	.....	.....	.....	0	.....	.....	0	0	clear	Malau.
AUSTRALIAN.																			
Melbourne, Victoria	29.96	761.0	30.05	763.3	57.0	13.9	86	s.	3	1.3	.....	.....	1	.....	.....	0	0	very fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN.																			
Agram	29.32	744.8	29.87	758.6	57.2	14.0	66	sw.	.....	.....	3	.....	3	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.96	735.6	29.72	755.0	51.1	10.6	65	sw.	7.4	3.3	.....	.....	1	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.95	735 2	29.84	757.9	43.2	6.2	88	s.	.....	.....	2	.....	108;fg	.....	n.	0	0	.....	Julius Mikolik.
Gratz	28.59	726.1	29.84	758.0	47.3	8.5	85	s.	.....	.....	2	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.51	724.1	29.95	760 8	48.2	9.0	76	se.	.....	.....	1	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.39	721.1	29.72	755.0	49.6	9.8	69	se.	.....	.....	1	4 c	0	.....	.....	0	0	fair	The Staff.
Lemberg	28.80	731.6	29.80	756.9	44.8	7.1	78	sw.	.....	.....	1	.....	1	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.84	757.8	29.95	760.7	53.8	12.1	88	w.	.....	.....	1	.....	10	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	29.43	747.4	29.89	759.1	45.7	7.6	80	se.	.....	.....	2	.....	10	.....	.....	0.579	2.0	.....	Joseph Midlinszky, S J.
Szegedin	29.63	752.7	29.92	759.9	50.0	10.0	87	s.	.....	.....	1	.....	6	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.87	758.7	29.97	761.3	49.8	9.9	94	w.	.....	.....	1	.....	10	.....	.....	0.039	1.0	.....	Royal Academy.
Vienna	29.07	738.4	29.79	756.7	50.0	10.0	76	calm	.....	.....	0	.....	9	.....	.....	0.016	0.4	.....	I. R. Central Met. Obs'y.
BRITISH.																			
Aberdeen	28.79	731.3	28.89	733.8	37.4	3.0	71	s.	14	6.3	.....	.....	6	.....	.....	0.720	18.3	misty	W. Boswell
Armagh, Observatory	28.82	732.0	29.06	738.1	40.9	4.9	77	ssw.	26	11.6	.....	.....	3	.....	.....	.....	.....	squally	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.17	740 9	44.4	6.9	64	wsw.	34	15.2	.....	.....	1	.....	.....	.....	.....	blue sky	John Hartnup.
Bolton, Sharples	28.63	727.2	29.16	740.7	42.0	5.6	77	sw.	24	10.7	.....	.....	4	.....	.....	.....	.....	d. clouds	Thomas Mackereth.
Bradford, Yorkshire	28.74	730.0	29.14	740.1	40.1	4.5	89	sw.	.....	.....	3	.....	10	.....	.....	0.50	12.7	overcast	McLandsborough&Preston.
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	80.0	26.7	82	ne.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Corpl.J.Surgenor, A.H.C.
Cardington	.....	.....	.....	.....	46.0	7.8	80	w.	.....	.....	2.0	.....	3	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E	29.19	741.4	29.32	744.7	47.5	8.6	78	sw.	.....	.....	1	.....	6	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.20	741.7	29.43	747.5	49.9	9.9	62	w.	.....	.....	4	.....	7	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.70	703 6	29.91	759.7	70.0	21.1	65	e.	.....	.....	1	.....	9	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	86.0	30.0	65	e.	.....	.....	1	.....	5	.....	.....	.....	.....	d. clouds	Sergt. John Robinson
Gibraltar, Mediterranean	30.12	765.0	30.17	766.3	66.0	18.9	92	w.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	28.76	730.5	28.97	735.8	38.6	3.7	89	wsw.	.....	.....	4	c	3 k	.....	.....	.....	.....	blue sky	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.16	740 7	29.33	745.0	47.4	8.6	72	wsw.	.....	.....	3	.....	9	.....	.....	.....	.....	d. clouds	The Staff.
Guernsey	29.16	740 7	29.40	748.3	50.0	10.0	93	w.	.....	.....	1	.....	9	.....	.....	.....	.....	raining	A. Collenette, F. M. S
Kew, Observatory	29.30	744.2	29.34	745.2	46.5	8.1	66	wsw.	15	6.7	.....	.....	9	.....	.....	.....	.....	threatening	The Staff.
Leicester, Museum	28.99	736.3	29.24	742.7	45.0	7.2	67	nw.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	J. C. Smith.
Malta, Mediterranean	30.03	762 7	30.10	764.5	65.2	18.4	95	nw.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.15	765.8	30.20	767.1	73.5	23.1	65	ne.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.71	729.2	29.24	742.7	45.1	7.3	69	sw.	.....	.....	5	.....	4	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.09	738.9	29.32	744.7	45.4	7.4	76	sw.	.....	.....	5	.....	5	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.34	745.2	29.42	747.3	48.0	8.9	82	w.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	John Merrifield.
Sandwick Manse, Orkneys	28.71	729.2	28.81	731.8	40	4.4	90	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	blue sky	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	30.01	762.2	30.08	764.0	56.8	13.8	79	sw.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	28.91	734.3	29.19	741.4	43.1	6.2	82	s.	.....	.....	1	.....	1	.....	.....	0.24	6.1	blue sky	W. F. Cooper.
Silloth Rectory	29.01	736.8	29.04	737.6	42.8	6.0	77	w.	.....	.....	4	.....	5	.....	.....	0.150	3.8	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.16	740.7	40.0	4.4	81	wnw.	19	8.5	.....	.....	10	.....	.....	.....	.....	rain & hail	I. New.
Stratfield Turgiss	29.14	740.1	29.35	745.5	47.3	8.5	69	sw.	.....	.....	2	.....	9	.....	.....	.....	.....	showery	Rev.C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.36	745 7	29.41	747 0	50.0	10.0	71	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.29	744.0	29.32	744 7	46.6	8.1	60	sw.	32	14.3	.....	.....	7	.....	.....	blank	blank	squally	The Met'g'l Office.
CANADIAN.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29 35	745.5	29.39	746.5	37	2.8	87	sw.	11	4.9	.....	0	2 s	.....	sw.	0.186	4.7	fair	H. J. Cundall, C. E
Chatham, N. B*	29.34	745.2	29.40	746.7	33	0.6	100	ne.	5	2.2	.....	.....	10 n	.....	ne.	0.35	8.9	light snow	G. A. Blair.
Father Point, Quebec*	29.67	753.6	29.69	754.1	28	— 2.2	96	nne.	50	22.4	.....	.....	10 n	.....	calm	1.20	30.5	heavy snow	J. McWilliams.
Fort Garry, Manitoba*	29.36	745.7	30.27	768.8	11	—11.7	80	se.	5	2.2	.....	.....	10 s	.....	se.	0	0	cloudy	James Stewart.
Halifax, N. S*	29.38	746.2	29.52	749.8	35	1.7	89	sw.	8	3.6	.....	0	0	.....	.....	0.183	4.7	clear	A. Allison.
Kingston, Ontario*	29.84	757.9	30.20	767.1	28	— 2.2	77	w.	8	3.6	.....	2 ck	2 k	nw.	calm	0.07	1.8	fair	A. P. Knight, M. A.
Montreal, Quebec*	29.76	755.9	29.98	761.5	26	— 3.3	92	w.	28	12.5	.....	.....	10 n	.....	.....	0.12	3.0	light snow	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.57	751.1	30.32	770.1	19	— 7.2	84	nw.	7	3.1	.....	0	0	.....	.....	0.13	3.3	clear	Rev. R. Mosley.
Port Dover, Ontario	29.63	752.6	30.36	771.1	28	— 2.2	100	w.	5	2.2	.....	2 c	0	sw.	.....	0.02	0.5	cloudy	H. Morgan.
Port Stanley, Ontario	29.71	754.6	30.40	772.1	29	— 1.7	88	w.	10	4.5	.....	.....	10 n	.....	nw.	inap.	inap.	cloudy	M. Payne.
Quebec, Quebec*	29.47	748.5	29.81	757.2	29	— 1.7	88	n.	.....	.....	3	.....	10 n	.....	n.	0.20	5.1	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.72	754.9	30.21	767.3	23	— 5.0	88	nw.	5	2.2	.....	.....	8 s	.....	nw.	inap.	inap.	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.55	750.6	30.30	769.6	32	0.0	81	n.	17	7.6	.....	.....	10 s	.....	.....	0.22	5.6	cloudy	
St. Andrews, N. B	29.41	747.0	29.46	748.3	34	1.1	94	wnw.	16	7.2	.....	.....	10 n	.....	.....	0.20	5.1	light snow	
Sydney, C. B*	29.36	745.7	29.42	747.3	40.0	4.4	92	sw.	22	9.8	.....	0	0	.....	.....	0.48	12.2	clear	T. C. Hill, C. E
Toronto, Ontario*	29.91	759.7	30.31	769.9	31	— 0.6	81	w.	20	8.9	.....	.....	10 ks	.....	nw.	0.01	0.3	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.48	748.8	29.55	750.6	38	3.3	79	w.	24	10.7	.....	.....	10 k	.....	w.	0.22	5.6	cloudy	Lt. F. E. Wilmot, R N.
Sub-arctic.																			
Mount Forest	28.84	732.5	30.32	770.1	25.0	— 3.9	75	wnw.	.....	.....	3	.....	10kn	.....	.....	0	0	.....	Wm. Wylie.
St. Johns, Newfoundland	29.80	756.9	30.06	763.5	36	2.2	90	e.	4	1.8	.....	.....	10	.....	.....	0	0	stormy	John Delany.
CAPE COLONY.																			
Cape St. Francis Lt. House	29.99	761.7	30.03	762.7	70.0	21.1	73	e.	6.7	3.0	.....	0	0	.....	.....	0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.91	759.7	29.95	760.7	76.4	24.7	57	s.	30	13.4	.....	0	1	.....	.....	0	0	.....	The Staff, for D.Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.18	766.5	37.4	3.0	53	W.	16.6	7.4	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.41	772.4	30.43	773.0	32.2	0.1	89	wnw.	2.9	1.3	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.11	739.5	29.16	740.7	41.7	5.4	82	sw.	.....	.....	4	.....	8	.....	.....	.....	.....	hazy	Oversergent Fischer.
Fanöe	29.10	739.0	29.12	739.6	41.2	5.1	88	wsw.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	30.17	766.2	30.21	767.3	19.9	— 6.7	92	ne.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	30.15	765.9	30.17	766.4	12.0	—11.1	.....	calm	.....	.....	0	.....	6	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.61	752.0	29.65	753.1	32.4	0.2	90	ne.	.....	.....	7	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	28.90	734.0	28.93	734.9	38.8	3.8	82	ne.	22	10	.....	.....	10	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	28.93	734.8	29.02	737.2	38.8	3.8	92	sw.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	Loerarer Oesterbol.
Jacobshavn	30.11	764.7	30.15	765.9	13.3	—10.4	.....	e.	.....	.....	2	.....	8	.....	.....	.....	.....	snowing	
FRENCH.																			
Agen, Normal School	29.34	745.3	29.99	761.7	57.2	14	91	sw.	.....	.....	1	.....	ku	.....	w.	0.031	0.8	.....	M. Labroue, Director.
Alençon, Normal School	28.97	735.9	29.52	749.9	54.7	12.6	95	w.	.....	.....	1	.....	n	.....	e.	0.236	6.0	.....	M. Nicot, Director.
Arras, Engineer School	29.25	743.0	29.50	749.4	46.2	7.9	94	w.	.....	.....	1	.....	ku	.....	.....	0.150	3.8	.....	M. Fénéon, Command't.
Avignon, Normal School	29.93	760.3	30.01	762.3	56.1	13.4	80	se.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Giraud, Director.
Bar-sur-Seine	29.00	736.7	29.56	750.7	52.0	11.1	90	s.	.....	.....	3	.....	10 k	.....	w.	0.169	4.3	raining	M. Saillard, Director.
Beauvais, Normal School	29.15	740.4	29.41	747.1	54.9	12.7	83	w.	.....	.....	2	.....	8	.....	w.	0.102	2.0	very cloudy	M. Frère Eugène Marie.
Besançon, Normal School	28.78	731.0	29.67	753.6	52.5	11.4	76	s.	.....	.....	4	.....	10 n	.....	sw.	0.47	12.	showery	M. Gobin, Director.
Bordeaux, Observatory	29.59	751.6	29.85	758.2	59.5	15.3	61	sw.	.....	.....	3	.....	10	.....	.....	0.059	1.5	covered	M. Rayet, Director.
Bourges, Normal School	29.11	739.3	29.65	753.2	54.5	12.5	93	sw.	.....	.....	2	.....	n	.....	sw.	0.295	7.5	.....	M. Malet, Director.
Brest, Naval Observatory	29.34	745.2	29.58	751.4	53.6	12.0	92	w.	.....	.....	2	.....	8	.....	w.	0.945	24.0	.....	M. de Kermaree, Dir.
Caen, Normal School	29.39	740.5	29.47	748.4	54.0	12.2	85	w.	.....	.....	1	.....	10	.....	.....	0.256	6.5	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.15	740.3	29.46	748.3	54.3	12.4	98	sw.	.....	.....	1	.....	10	.....	.....	0.161	4.1	covered	M. Jadot, Director.
Charleville, Normal School	28.85	732.8	29.37	746.0	52.2	11.2	80	sw.	.....	.....	2	.....	10	.....	.....	0.35	9.	covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.43	722.2	29.76	756.0	59.0	15.0	53	s.	.....	.....	2	.....	8	.....	.....	0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	28.93	734.8	29.78	756.4	53.6	12.0	74	ssw.	.....	.....	2	.....	8	.....	.....	0.343	8.7	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.65	727.8	29.52	749.8	49.5	9.7	95	sw.	.....	.....	6	.....	10	sw.	sw.	0.970	24.8	covered	Dr. Coulet, Director.
Gap, Normal School	27.50	698.6	30.07	763.7	44.6	7	74	.....	.....	.....	.....	.....	9	.....	.....	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.88	733.5	30.00	762.1	55.9	13.3	79	s.	.....	.....	1	.....	9	.....	sw.	0	0	.....	M. Kina, Director.
Grenoble. Normal School	29.19	741.4	29.97	761.3	47.5	8.6	83	e.	.....	.....	1	.....	10 kn	.....	nw.	.....	.....	raining	M. Ablard, Director.
Guéret	28.21	716.4	29.78	756.5	50.9	10.5	93	w.	.....	.....	2	.....	10	.....	w.	0.276	7.0	covered	M. Delorme, Dir.
Lamballe, Normal School	29.24	742.7	29.51	749.5	55.0	12.8	79	w.	.....	.....	3	0	5 k	.....	w.	0.24	6.	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.38	746.2	29.93	760.3	64.0	17.8	60	sw.	.....	.....	5	0	5 k	.....	.....	0.031	0.8	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.49	749.0	29.59	751.6	55.4	13.0	86	wsw.	.....	.....	2	.....	10	.....	w.	0.287	7.3	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.80	731.4	29.86	758.4	51.4	10.8	73	sse.	.....	.....	6	.....	8	.....	wsw.	0	0	very cloudy	M. André, Director.
Mans, Normal School	29.22	742.2	29.51	749.5	56.1	13.4	95	w.	.....	.....	4	.....	.....	.....	.....	0.295	7.5	.....	M. Piboen, Director.
Marseille, Observatory	29.76	755.8	30.03	762.7	59.0	15.0	79	sw.	.....	.....	1	.....	10	.....	sw.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.82	630.3	29.66	753.3	48.2	9.0	60	wsw.	3.8	1.7	.....	.....	2	w.	.....	0	0	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29.84	757.8	29.97	761.1	63.3	17.4	72	sw.	.....	.....	2	.....	2	.....	w.	0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	28.67	728.2	29.45	747.9	48.6	9.2	89	s.	.....	.....	2	.....	n	.....	s.	0.094	2.4	.....	M. Hasse, Director
Nantes, Observatory	29.48	748.8	29.64	752.9	57.9	14.4	93	wsw.	.....	.....	2-3	.....	10 n	.....	sw.	0.457	11.0	rainy	M. Lætocque, Director.
Perpignan, Observatory	29.89	759.2	30.00	762.0	64.2	17.9	49	sw.	5.6	2.5	.....	.....	10	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.20	538.4	.....	.....	30.2	— 1.0	.....	nw.	.....	.....	2	.....	.....	.....	nw.	0.039	1.0	.....	Gen'l de Nansouty, Dir.
Privas, Normal School	28.93	734.7	30.01	762.2	48.9	9.4	86	s.	.....	.....	1	.....	5	s.	sw.	0.047	1.2	cloudy	M. Taillieu.
Puy de Dôme Obs'y, Summit	24.83	630.6	.....	.....	37.6	3.1	100	wsw.	.....	.....	9	.....	10	.....	.....	0.291	7.4	foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.71	754.6	29.74	755.4	56.3	13.5	100	sw.	.....	.....	6	.....	10	.....	sw.	0.79	20.	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.54	750.4	29.76	755.9	56.8	13.8	98	sw.	.....	.....	6	.....	10	.....	sw.	0.55	14.	light rain	M. Brotier, Director.
Rodez, Normal School	27.82	706.5	29.97	761.2	49.3	9.6	97	w	.....	.....	1	.....	en	.....	e.	0.12	3.	.....	M. Seger, Director.
Rouen, Normal School	29.32	744.8	29.37	746.0	54.3	12.4	87	nnw.	.....	.....	1	.....	8	nw.	.....	0.094	2.4	very cloudy	M. Moullot.
Saint Lô	.....	.....	.....	.....	52.0	11.1	97	w.	.....	.....	1	.....	10	w.	w.	0.417	10.0	raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.28	743.8	29.45	748.0	57.0	13.9	90	ssw.	.....	.....	2	.....	10	.....	wsw.	0.213	5.4	.....	M. Renou, Director.
Toulouse, Observatory	29.29	744.0	30.02	762.4	57.6	14.2	71	se.	.....	.....	2	.....	8	w.	.....	0	0	very cloudy	M. Baillaud, Director.
Tours	29.41	747.1	29.59	751.6	57.9	14.4	91	ssw.	.....	.....	4	.....	10	.....	wsw.	0.335	8.5	raining	M. de Tastes.
Versailles, Observatory	28.94	735.1	29.43	747.6	56.5	13.6	91	w.	.....	.....	4	.....	.....	.....	.....	0.319	8.1	.....	Dr. A. Bérigny, Director.
GERMAN.																			
Ansbach	28.15	715.1	29.60	751.8	48.6	9.2	73	sw.	.....	.....	4	.....	10	sw.	.....	0.039	1.0	.....	Prof. Jnedt.
Bamberg	28.72	729.5	29.55	750.6	49.1	9.5	75	sw.	.....	.....	1	.....	9	sw.	.....	0.122	3.1	raining	Prof. Dr. Hoh.
Berlin	29.20	741.6	29.37	746.1	50.7	10.4	65	se.	.....	.....	3	.....	9	.....	.....	0.157	4.0	.....	Prof. Dr. Arndt.
Breslau	29.10	739.0	29.62	752.3	49.8	9.9	65	ssw.	.....	.....	2	.....	6	w.	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.08	738.7	29.51	749.6	51.8	11.0	76	sw.	.....	.....	10	.....	10	sw.	.....	1.898	48.2	.....	Albert Senz.
Cassel	28.58	725.9	29.29	744.0	47.7	8.7	94	s.	.....	.....	6	.....	10	sw.	.....	0.354	9.0	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.13	740.0	29.49	749 0	48.9	9.4	88	ssw.	.....	.....	2	.....	10	.....	.....	0.031	0,8	raining	Physical Society.
Friedrichshafen	28.287	718.47	29.72	755.0	50.4	10.2	68	sw.	.....	.....	5	.....	10	w.	.....	0.043	1.1	light rain	Wilhelm, Chief Tel.
Hamburg	29.17	741.0	29.26	743.3	44.2	6.8	87	sw.	.....	.....	4	.....	10	.....	.....	0.067	1.7	.....	E. Preller.
Kiel	29.20	741.6	29.21	742.0	41.2	5.1	93	sw.	.....	.....	3	.....	6	.....	.....	0.031	0.8	rainy	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.06	738.0	29.47	748.6	49.3	9.6	76	ssw	.....	.....	5	.....	9	wsw.	.....	0.028	0.7	.....	H. Leppig, Asst.
Magdeburg	29.19	741.4	29.37	746.1	50.2	10.1	71	ssw.	.....	.....	3	.....	10 k8	.....	sw.	.....	.....	.....	Weather Observatory.
Memel	29.35	745.4	29.39	746.5	40.3	4.6	92	sw.	.....	.....	5	0	4 k8	.....	.....	0.008	0.2	.....	Issermann.
Munich	27.89	708.4	29.73	755.2	52.7	11.5	50	sw.	.....	.....	1	.....	6	s.	.....	0.016	0.4	.....	Central Station.
Neufahrwasser	29.39	746.5	29 41	746.9	43.5	6.4	83	sw.	.....	.....	3	.....	6	.....	.....	0.433	11.0	.....	A. Lothes.
Neustadt, Palatinate	28.98	736.0	29.49	749.1	50.2	10.1	99	ssw.	.....	.....	4	.....	10	ssw.	.....	0.091	2.3	.....	Dicknether.
Stuttgart	28.66	726.4	29.48	748.9	50.9	10.5	74	sw.	.....	.....	5	.....	10	.....	.....	0.110	2.8	.....	Prof. Dr. Schoder.
Wustrow	29.26	743.2	29.29	743.9	41.9	5.5	94	ssw.	.....	.....	4	.....	10 8	.....	.....	.....	.....	.....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.74	755.4	30.13	765.2	63.3	17.4	.....	n.	.....	.....	1.0	0	0	.....	.....	0	0	clear	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	29.97	761.2	30.02	762.5	79.6	26.4	58	wsw.	12.0	5.4	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.44	747.7	29.92	759.8	79.3	26.3	26	nne.	11.0	4.9	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.74	755 5	29.78	756.4	77.1	25.1	71	nnw.	19.0	8.5	.....	.....	7	wsw.	.....	0	0	d. clouds	
Poona, Yarrowda	27.94	709.6	29.80	756.9	75.5	24.2	30	ene.	10.0	4.5	.....	.....	10	.....	ene.	0	0	overcast	
Trichinopoly	29.49	749.0	29.77	756.1	82.5	28.1	73	ese.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast	
Bellary	28.23	716.9	29.71	754.7	70.6	21.4	100	ne.	8.0	3.6	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.22	691.4	29.78	756.4	69.8	21.0	77	nne.	13.0	5.8	.....	.....	10	.....	n.	0	0	overcast	
Lahore	29.23	742.4	30.00	762.0	63.6	17.6	57	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.04	737.6	29.97	761.1	67.8	19.9	48	calm	0	0	.....	.....	1	.....	.....	0	0	.....	
Agra	29.39	746.6	29.97	761.3	71.2	21.8	38	n.	2.0	0.9	.....	.....	5	.....	n.	0	0	d. clouds	
Nagpur	28.86	732.9	29.93	760 2	66.7	19.3	93	e.	8.0	3.6	.....	.....	10	.....	e.	0.47	11.9	overcast	
Jubbulpore	28.60	726.3	30.01	762.1	61.3	16.3	80	ne.	6.0	2.7	.....	.....	10	.....	ne.	0.19	4.8	drizzling	
Lucknow	29.61	752.0	29.99	761.8	73.2	22.9	49	calm	0	0	.....	.....	3	.....	.....	0	0	d. clouds	
Allahabad	29.67	753.6	29.99	761.8	65.8	18.8	79	calm	0	0	.....	.....	10	.....	.....	0	0	overcast	
Patna	29.83	757.8	30.03	762.6	69.1	20.6	62	calm	1.4	0.6	.....	.....	10	.....	.....	0	0	overcast	
Hazaribagh	27.94	710.0	30.03	762.7	60.7	15.9	81	n.	3.7	1.6	.....	.....	10	.....	.....	0	0	overcast	
Cuttack	29.88	758.9	29.96	761.7	74.5	23.6	71	wsw.	4.0	1.8	.....	.....	9	.....	.....	0	0	d. clouds	
Calcutta, Alipore	29.92	760.0	29.95	760.6	73.5	23.1	68	n.	3.0	1.3	.....	.....	5	.....	.....	0	0	d. clouds	
Dhubri	29.85	758.1	29.97	761.2	71.4	21.9	75	calm	0.2	0.1	.....	.....	4	wsw.	.....	0	0	d. clouds	
Chittagong	29.83	757.6	29.92	760.0	76.5	24.7	98	nw.	1.1	0.5	.....	.....	6	.....	.....	0	0	d. clouds	
Sibsagar	29.65	753.0	30.00	761.9	66.5	19.2	78	ne.	2.0	0.9	.....	.....	6	w.	w.	0	0	d. clouds	
Zanzibar, Africa	29.81	757.2	29.84	757.8	84.3	29.1	66	ene.	7.3	3.3	.....	.....	4	.....	ene.	0.08	2.0	d. clouds	
Jeypore	28.50	724.0	29.97	761.3	72.7	22.6	44	ne.	5.0	2.2	.....	.....	2	ne.	.....	0	0	d. clouds	
ITALIAN.																			
Udine	29.56	750.7	29.97	761.3	47.5	8.6	78	calm	0	0	.....	.....	10	.....	.....	0.051	1.3	.....	Prof. Giovanni Clodig.
Milan	29.45	748.0	29 98	761.5	45.0	7.2	84	nw.	3.1	1.4	.....	.....	7	sw.	.....	0.071	1.8	.....	Prof. Schiapparelli.
Padua	29.85	758.3	29.97	761.2	48.4	9.1	85	ssw.	1.8	0.8	.....	.....	5	w.	.....	0.016	0.4	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.06	738.2	29.99	761.7	39.2	4.0	93	e.	3.8	1.7	.....	.....	0	.....	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.76	755.9	29.91	759.8	55.0	12.8	71	e.	1.8	0.8			10	s.		0.130	3.3		Prof. G. M. Garibaldi.
Mondovi	28.02	711.7	29.97	761.3	41.9	5.5	72	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.97	761.2	30.02	762.4	47.8	8.8	76	n.	8.7	3.9			6	wsw.		0	0		Prof. Luigi Guidi.
Florence	29.73	755.2	29.99	761.8	57.6	14.2	78	w.			2		9	w.		0.248	6.3		Prof. Costantino Pittei.
Leghorn	29.85	758.1	29.93	760.3	60.8	16.0	67	sw.	13.0	5.8			5			0.862	21.9		Prof. P. Monte.
Rome	29.86	758.4	30.04	762.9	61.2	16.2	66	sw.	13.0	6.1			5			0.008	0.2		Prof. P. Tachini.
Lecce	29.83	757.7	30.09	764.2	62.6	17.0	61	wsw.	9.4	4.2			2			0	0		Prof. C. de Giorgi.
Cosenza	29.21	741.8	30.10	764.6	57.9	14.4	78	se.	2.5	1.1			9	s.		0.051	1.3		Prof. D. Conti.
Cagliari	29.85	758.2	30.05	763.2	63.0	17.2	65	sse.			2		5	sw.		0	0		Prof. A. Pacinotti.
Palermo	29.86	758.4	30.11	764.7	65.8	18.8	47	ne.	1.8	0.8			5			0	0		Prof. G. Cacciatore.
Syracuse	30.02	762.6	30.07	763.7	63.5	17.5	60	wsw.	8.7	3.9			8	wsw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.55	750.5	30.07	763.8	59.0	15.0	91	nw.	0	0			8	nw.		0.579	14.7		Prof. F. Brioschi.
Stelvio	21.97	558.0			22.3	— 5.4	100	sw.			6		10			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.01	559.0			37.8	3.2	70	e.			0		10			0.787	20.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.69	754.2	29.72	755.0	27.8	— 2.3	83	nw.			4		10ck; 1n	w.		0.177	4.5		Hattori.
Awomori	29.64	752.8	29.68	753.9	23.8	— 4.6	71	w.	12.2	5.4			8 ks;1n	w.		0.114	2.9	cloudy	K. Ogawa.
Hakodate	29.64	752.8	29.65	753.0	21.0	— 6.1	75	nw.	24.0	10.7		4	0	nw.		0.020	0.5	fair	
Hiroshima					35.1	1.7	90	wnw.	7.6	3.4			10 n			0.042	1.1	snowing	Y. Miwa.
Kanazawa	29.77	756.1	29.88	758.8	32.6	0.3	97	se.	1.7	0.7			10			2.062	52.3	snowing	S. Endo.
Kioto	29.69	754.1	29.87	758.7	38.2	3.4	78	w.	2.3	1.0		0	7 ck	nw.		0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.90	759.3	30.11	764.7	37.4	3.0	86	n.	2.4	1.1			10 n			0.180	4.6	raining	S. Takehayashi.
Nemuro	29.50	749.3	29.57	751.1	25.0	— 3.9	96	wsw.	12.0	5.4		0	0			0	0	clear	
Niigata	29.73	755.1	29.76	755.9	36.5	2.5	67	w.	18.7	8.3			10 ck	w.		0.080	2.0	covered	M. Morita.
Nobiru	29.71	754.7	29.73	755.1	30.4	— 0.9	84	nw.	3.1	1.4			10 n			0.040	1.0	snowing	H. Midzushima.
Osaka	29.85	758.1	29.86	758.6	40.0	4.4	78	nw.	7.9	3.5		1ck;cs	8ck;ks	w.	w.	0.053	1.3	cloudy	
Sapporo					20.0	— 6.7	67	w.	13.2	5.9		0	1			0	0	clear	
Tokei Obs'y, Yeddo	29.68	753.9	29.76	755.8	39.9	4.4	55	nnw.	6.8	3.0			10 ks		w.	0	0	overcast	The Staff.
Wakayama	29.83	757.6	29.89	759.1	42.9	6.1	68	nw.	21.0	9.4			4		nnw.	0.057	1.4	fair	Y. Kuwamnea.
MAURITIUS.																			
Mauritius Observatory	29.77	756.1	29.96	761.0	80.0	26.7	54	ene.	13.5	6.0		0	2 k;ks			0	0	clear	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.70	600.9	29.88	758.9	50.9	10.5	92	ssw.	lmap.	lmap.		0	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.35	618.5	30.16	766.1	48.2	9.0	84	nnw.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.76	755.9	30.02	762.5	71.0	21.7	85	e.	1.6	0.8		0	8 n		sw.	0	0	cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.13	587.4	30.29	769.3	43.7	6.5	71	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.32	617.8	30.25	768.3	49.0	9.8	75	se.	1.8	0.8		1 k	0	s.		0	0	clear	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascalientes	23.97	608.8	30.07	763.8	49.5	9.7	78	calm				0	0	1 s		0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.4	30.25	768.3	47.7	8.7	94	calm	0	0			10		s.	0	0	covered	Prof. P. Spina.
Zacatecas	22.54	572.0	30.19	766.8	49.0?	9.6?	97	sw.	6.9	3.1		0	9		sw.	0	0	cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.31	744.5	29.31	744.5	47.5	8.6		wsw.			3					0.189	4.8		
Groningen	29.18	741.1	29.23	742.5	43.9	6.6		wsw.			2					0.039	1.0		
Helder	29.22	742.3	29.22	742.3	45.7	7.6		wsw.			4					0.146	3.7		
Hellevoetsluis	29.29	744.0	29.29	744.0	45.5	7.5	89	wsw.			3					0.075	1.9		
Utrecht	29.23	742.5	29.28	743.7	46.8	8.2	87	w.			2		2			0.319	8.1	lightly cl'dy	H. van der Brink.
NORWEGIAN.																			
Bergen	28.81	731.7	28.87	733.3	39.2	4.0	73	s.	9	4			10			0	0		
Brono	29.10	739.0	29.13	740.0	33.4	0.8	37	se.	9	4			10			0	0		
Christiania	28.80	731.4	28.95	735.2	32.9	0.5	94	n.	9	4			10			0.118	3.0	snowing	
Gjesvær	29.72	754.8	29.74	755.4	17.8	— 7.9		sse.			2		3						
Lodingen	29.37	746.1	29.42	747.3	28.8	— 1.8	52	ese.			4		9			0	0		
PORTUGUESE.																			
Angra, Azores	30.17	766.3	30.32	770.2	66.2	19.0	87	w.	6.3	2.8			2			0	0		Dr. J. A. Sampaio.
Campo Major	29.19	741.3	30.20	767.1	54.7	12.6	86	sw.	1.8	0.8			10			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.15	765.8	30.24	768.0	68.0	20.0	57	ese.	6.9	3.1			1	ene.		0	0		Capt. D. A. da Cunha.
Lisbon, Observatory	29.89	759.2	30.25	768.4	57.7	14.3	99	ssw.	4.3	1.9			10			0.016	0.4	foggy	The Staff.
Ponta Delgada, Azores	30.17?	766.3?	30.24?	768.1?	66.2	19.0	84	sw.	13.6	6.1			3	w.		0.087	2.2		
Saint Paul de Loando	29.78	756.3	29.98	761.4	73.8	23.2	87	wnw.	0.7	0.3			1	sse.		0	0		
Serra da Estrella	25.37	644.5	30.15	765.8	45.9	7.7	76	wnw.	6.9	3.1			1			0.697	17.7		
RUSSIAN.																			
Akmolinski	28.76	730.5	29.89	759.1	28.2	— 2.1	47	sw.	20	9			10 n			0	0		Major K. Lasarew.
Archangel	29.80	756.9	29.82	757.4	10.0	—12.2	89	s.	2	1			10			0	0		Capt. Ssellwerstow.
Astrakhan	30.28	769.0	30.19	766.9	46.4	8.0	73	nne.	4	2		0	1 s			0	0		Capt. Wisganow.
Barnaul	29.67	753.7	30.21	767.4	15.6	— 9.1	63	sw.	4	2			5			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.00	736.6	29.24	742.8	37.4	3.0	100	ssw.	16	7			9 ks			0.370	9.4		Observatory.
Ekaterinburg	28.85	732.7	29.87	758.6	19.9	— 6.7	84	wnw.	9	4			10			0	0		Meteorological Obs'y.
Kasan	29.80	756.9	30.09	764.2	22.8	— 5.1	91	sse.	2	1			10			0.039	1.0		Observatory.
Kertch	30.02	762.5	30.04	763.0	48.7	9.3	91	calm	0	0		3 c	0			0	0		Lagorio & Sastyrez.
Kieff	29.18	741.2	29.84	758.0	33.3	0.7	98	s.	11	5			10 n						Observatory.
Lugan	29.84	757.9	30.05	763.2	42.6	5.9	72	sse.	9	4			5			0	0		Meteorological Obs'y.
Nikoluiev	29.95	760.7	30.02	762.5	47.7	8.7	95	sw.	9	4		0	0			0.008	0.2		Capt. Kurdakow.
Pekin, China	30.02	762.6	30.17	766.2	43.2	6.2	17	nw.	20	9		0	0			0	0		Physical Observatory.
St. Petersburg	29.29	744.0	29.31	744.4	25.9	— 3.4	91	se.	10	7			10			0.079	2.6		Central Physical Obs'y.
Semipalatinsk	29.03	752.6	30.34	770.7	19.0	— 7.2	61	ese.	13	6			2			0	0		Major Lasarew.
Tashkend, Laboratory	28.69	728.6	30.30	769.7	45.0	7.2	38	calm	0	0			1						Teich, A. M.
Tiflis	28.67	728.2	30.08	763.9	62.8	17.1	37	n.	2	1		0	5 k			0	0		Physical Observatory.
Tomsk	29.61	752.2	29.91	759.6	22.1	— 5.5	57	se.	18	8			10					light clouds	
Vladivostock	29.85	758.2	29.92	759.9	10.4	—12.0		ne.	2	1		0	5 k			0	0		
Warsaw	29.20	741.6	29.62	752.4	44.8	7.1	78	sw.	13	6		ck	5 s						Astronomical Obs'y.
Wilna	29.14	740.1	29.56	750.9	42.6	5.9	93	ssw.	22	10			5			0.323	8.2	light clouds	Berg, Assistant.
Yeniseisk	29.66	753.4	29.96	761.0	29.3	— 1.5	48	sw.	22	10			10			0	0		M. O. Marks.
SCOTTISH.																			
Monach Lt			28.81	731.8	43	6.1	91	n.			4		10			0.1	3.	showery	J. Youngclause.
North Unst			28.80	731.5				w.			3	4	3	nw.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.93	760.2	30.03	762.8	60.4	15.8	67	sw.	2.5	1.1		1 c	0			0	0	clear	Antonio Reve, Director.
Bilbao, Met. Obs'y	29.93	760.1	29.98	761.6	62.1	16.7	61	nw.	2.0	0.9		2	0	se.		0	0	almost cov.	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.14	689.4	30.18	766.6	45.5	7.5	93	sw.	7.6	3.4			10			0	0	foggy	Domingo Martin.
Madrid, Royal Obs'y	27.94	709.7	30.24	768.0	45.3	7.4	86	calm	0.7	0.3			10			0	0	foggy	The Staff.
Murcia, Met. Obs'y	29.97	761.3	30.11	764.9	67.8	19.9	59	sw.	3.6	1.6		3	2	sw.		0	0	clouds	Olayo Diaz, Director.
Oviedo	29.04	737.7	29.92	760.0	59.0	15.0	64	e.	8.3	3.7			10 n		e.	0.409	10.4	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.10	739.0	29.99	761.8	56.1	13.4	96	sw.	21.7	9.7			10			0.154	3.9	misty	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.90	759.4	29.95	760.8	79.5	26.4	86	s.	0	0		4 ck	4 ku	n.	e.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.12	765.0	30.22	767.5	63.5	17.5	64	nnw.	5.2	2.3		0	0			0	0		Capt. C. Pujazon, R. N
San Juan de Porto Rico, W.I	29.95	760.7	30.04	763.0	77.0	25.0	98	sw.	0	0		6 s	2 k	sw.	sw.	0.020	0.5	d. clouds	Manuel Maese.
Tuguegirao, Philippine Id's	29.91	759.6	30.04	763.0	74.9	23.8	93	nnw.	8.0	3.6			10 kn		nne.	lmap.	lmap.	covered	José L. Yrastorza
SWEDISH																			
Haparanda	29.52	749.8	29.56	750.8	19.4	— 7.0	100	ne.			4		1			0	0		
Umea	29.28	743.6	29.33	744.9	27.3	— 2.6	83	se.			2		10			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
SWEDISH—Continued.																			
Hernosand	29.11	739.5	29.17	740.8	29.5	— 1.4	84	ene.	.....	.....	6	.....	10	.....	.....	0.209	5.3	.....	
Stockholm	28.72	729.5	28.90	734.0	34.9	1.6	98	ese.	.....	.....	4	.....	10	.....	.....	0.102	2.6	.....	
Wisby	29.00	736.7	29.06	738.2	41.0	5.0	78	wsw.	.....	.....	7	.....	5	.....	.....	0.311	7.9	.....	
Sub-series.																			
Upsala	28.78	731.0	28.87	733.2	30.9	— 0.6	98	wnw.	4.3	1.9	.....	.....	10	.....	.....	0.102	2.6	snowing	S. G. Fineman.
SWISS.																			
Geneva	28.46	722.8	29.90	759.5	48.4	9.1	78	nw.	.....	.....	4	.....	10	.....	.....	0.394	10.0	raining	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.15	765.8	55.2	12.9	81	sw.	8	3.5	.....	.....	5	.....	sw.	0	0	.....	The Observatory.
Yalona	.....	.....	30.13	765.3	59.2	15.1	.....	s.	.....	.....	1	.....	10	.....	.....	0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.07	763.7	70.9	21.6	73	n.	.....	.....	1	.....	3 k	.....	n.	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.05	763.3	30.13	765.3	36	2.2	53	n.	10	4.5	.....	0	0	.....	.....	trap.	trap.	clear	J. C. Barnes.
Alpena, Michigan	29.66	753.4	30.36	771.1	26	— 3.3	88	w.	8	3.6	.....	.....	10 s	.....	nw	0.03	0.8	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.04	636.0	30.14	765.5	40	4.4	92	s.	1	0.4	.....	.....	10 s	.....	.....	0.49	12.4	cloudy	W. C. Barnes.
Assinnaboine, Ft., Montana	27.28	692.9	30.26	768.6	14	—10.0	66	calm	0	0	.....	0	0	.....	.....	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.21	741.9	30.43	772.9	36.5	2.5	52	ne.	4	1.8	.....	7 ck	3 s	.....	.....	0	0	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.24	768.1	30.25	768.3	32	0.0	68	w.	7	3.1	.....	2 c	0	.....	.....	0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.25	768.3	30.45	773.4	40	4.4	68	calm	0	0	.....	1 ck	8 s	w.	.....	0	0	cloudy	John Healy.
Baltimore, Maryland	30.30	769.6	30.35	770.9	36	2.2	61	w.	8	3.6	.....	4 cs	0	nw.	.....	0	0	fair	Geo W Felger.
Barnegat, New Jersey	30.20	767.1	30.22	767.6	36.0	2.2	61	w.	10	4.5	.....	1 k	0	.....	.....	0	0	clear	G. A. Hill.
Bennett, Fort, Dakota	28.57	725.7	30.26	768.6	20	— 6.7	87	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	A. Pritchard.
Benton, Fort, Montana	27.31	693.7	30.27	768.8	15	— 9.4	51	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.34	719.8	30.26	768.6	12	—11.1	83	sw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	Cyrus Cramer.
Block Island, Rhode Island	29.97	761.2	30.00	762.0	38.5	3.6	62	nw.	25	11.2	.....	0	3 ks	.....	nw.	0	0	clear	J. T. Elker.
Boise City, Idaho	27.33	694.2	30.27	768.8	25	— 3.9	92	nw.	2	0.9	.....	.....	10 s	.....	calm	0	0	cloudy	B. E. Light.
Boston, Massachusetts	29.73	755.1	29.89	759.2	36.0	2.2	61	w.	16	7.2	.....	0	0	.....	.....	0	0	clear	O. B. Cole.
Brownsville, Texas	30.00	762.0	30.05	763.3	66.3	19.1	93	calm	0	0	.....	.....	10 s	.....	s.	0.18	4.6	threatening	M. McCarty.
Buffalo, New York	29.54	750.3	30.32	770.1	31	— 0.6	70	sw.	10	4.5	.....	.....	10 s	.....	w.	0.02	0.5	cloudy	T. Finn.
Buford, Fort, Dakota	28.32	719.3	30.30	769.6	16	— 8.9	83	ne.	1	0.4	.....	.....	10 s	.....	w.	0	0	cloudy	F. A. Mellen.
Burlington, Vermont	29.73	755.1	30.04	763.0	30.0	— 1.1	77	nw.	15	6.7	.....	0	7 s	.....	nw.	0.20	5.1	fair	W. B Gates.
Cairo, Illinois	30.04	763.0	30.46	773.7	33.8	1.0	70	se.	7	3.1	.....	.....	10 s	.....	.....	0	0	threatening	W. H. Ray.
Cape Henry, Virginia	30.38	771.6	30.40	772.1	39	3.9	54	nw.	26	11.6	.....	c	0	.....	.....	0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.26	768 6	30.29	769.4	38.0	3.3	62	w.	32	14.3	.....	0	0	.....	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	29.32	744.7	30.00	762.0	44	6.7	100	n.	.....	.....	2	.....	10ks	.....	n.	0	0	cloudy	J. J. McLean.
Cedar Keys, Florida	30.29	769.4	30.31	769.9	53	11.7	61	ne.	12	5.4	.....	4 c	0	.....	.....	0	0	fair	F. W. Mixer.
Champaign, Illinois	29.57	751.1	30.43	772.9	24.5	— 4.2	65	s.	12	5.4	.....	0	0	.....	.....	0	0	clear	L. A. Welsh.
Charleston, S. Carolina	30.34	770.6	30.40	772.1	44	6.7	45	ne.	12	5.4	.....	3 ck	3 s	nw.	ne.	0	0	fair	J. H. Smith.
Charlotte, N. Carolina	29.54	750.3	30.42	772.7	33.0	0.6	60	ne.	3	1.3	.....	6 cs	fg.	.....	.....	0	0	fair	D. O'Donoghue.
Chattanooga, Tennessee	29.00	751.8	30.45	773.4	37.0	2.8	46	ne.	4	1.8	.....	8 ck	0	w.	.....	0	0	cloudy	B. L. Goulding.
Cheyenne, Wyoming	24.00	609.6	30.20	767.1	30.7	— 0.7	45	nw.	8	3.6	.....	1 c	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.66	753.4	30.40	772.1	29.0	— 1.7	67	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. Mitchell.
Chincoteague, Virginia	30.32	770.1	30.34	770.6	34	1.1	72	nw.	10	4.5	.....	3 c	0	.....	.....	0	0	clear	C. F. Dickens.
Cincinnati, Ohio	29.83	757.7	30.52	775.2	26	— 3.3	76	s.	2	0.9	.....	5 ck	5 s	sw.	sw.	0	0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.60	753.4	30.43	772.9	29.3	— 1.5	86	w.	12	5.4	.....	.....	10 k	.....	w.	0.01	0.3	cloudy	J. B. Newlin.
Coleman City, Texas	28 32	719.3	30.21	767.3	42	5.6	93	ne.	4	1.8	.....	.....	10 n	.....	ne.	0.12	3.0	light rain	L. Dorman.
Columbus, Ohio	29.58	751 3	30.46	773.7	23	— 5.0	80	w.	1	0.4	.....	.....	10 s	.....	w.	0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.14	714.7	30.15	765.8	43.0	6.1	100	ne.	9	4.0	.....	.....	10 n	.....	.....	0.30	7.6	light rain	J. McGlone.
Custer, Fort, Montana	26.92	683.8	30.24	768.1	25	— 3.9	76	e.	3	1.3	.....	0	3 k	.....	calm	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.66	753.4	30.35	770.9	32	0.0	68	s.	5	2.2	.....	7 ck	0	sw.	.....	0	0	fair	R. R. Martin.
Davis, Fort, Texas	25.20	640.1	30.10	764.5	37	2.8	100	ne.	4	1.8	.....	.....	10 n	.....	ne.	0.01	0.3	light rain	J. Williams.
Dayton, Washington T'y	28.32	719.3	30.10	764.5	33.8	1.0	93	n.	1	0.4	.....	7 cs	0	.....	.....	0.07	1.8	fair	H. Clifford.
Deadwood, Dakota	25.37	644.4	30.20	767.1	29	— 1.7	70	calm	0	0	.....	10 cs	0	w	.....	0	0	cloudy	G. W. Scott.
Delaware Breakwater, Del	30.29	769.4	30.31	769.9	35	1.7	53	w.	18	8.0	.....	2 k	0	w.	.....	0	0	clear	T. S. Townsend.
Denison, Texas	29.40	746.7	30.24	768.1	40.0	4.4	100	e.	6	2.7	.....	.....	10 n	.....	.....	0.07	1.8	light rain	J. W. Byram.
Denver, Colorado	24.71	627.6	30.21	767.3	30.0	— 1.1	61	s.	2	0.9	.....	1 c	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.32	744 7	30.27	768.8	32	0.0	68	s.	2	0.9	.....	.....	10 s	.....	s	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.69	754.1	30.43	772.9	36.0	2.2	79	w.	4	1.8	.....	.....	10 k	.....	.....	trap.	trap.	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.45	697.2	30.19	766.8	36	2.2	92	s.	8	3.6	.....	10 cs	0	s.	.....	0	0	cloudy	V. P. Temple.
Dubuque, Iowa	29.60	751.8	30.35	770.9	27.7	— 2.3	64	s.	1	0.4	.....	0	2 s	.....	e.	0	0	clear	J. Harvey Smith.
Duluth, Minnesota	29.43	747.5	30.22	767.6	26	— 3.3	88	s.	1	0.4	.....	.....	10 s	.....	.....	trap.	trap.	cloudy	N. B. Conger.
Eagle Pass, Texas	29.29	744 0	30.12	765.0	52.7	11.5	93	calm	0	0	.....	.....	10 n	.....	.....	0.04	1.0	light rain	F. Belford.
Eagle Rock, Idaho	25.38	644.6	30.24	768.1	12	—11.1	70	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	29.42	747.3	29.48	748.8	34.0	1.1	83	w.	14	6.3	.....	.....	10 n	.....	w.	0.25	6.3	light snow	D. O. Murphy.
Elliott, Fort, Texas	27.32	693.9	30.26	768.6	33	0.6	81	se.	4	1.8	.....	.....	10 s	.....	se.	0	0	cloudy	W. J. Oundall.
El Paso, Texas	26.22	666.0	30.07	763.8	44	6.7	100	w.	1	0.4	.....	.....	10 n	.....	.....	0.35	8.9	light rain	J. O'Dowd.
Erie, Pennsylvania	29.62	752.3	30.38	771.6	34	1.1	79	nw.	10	4.5	.....	.....	10 s	.....	nw.	0.02	0.5	cloudy	Peter Wood.
Escanaba, Michigan	29.66	753.4	30.36	771.1	19.5	— 6.9	90	w.	1	0.4	.....	0	8 s	.....	.....	0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.33	719.6	30.15	765.8	48	8.9	100	e.	3	1.3	.....	.....	10 s	.....	.....	0.08	2.0	cloudy	Frank Halwegler.
Galveston, Texas	30.07	763.8	30.12	765.0	64	17.8	93	e.	8	3.6	.....	8 cs	fg.	.....	.....	0.03	0.8	cloudy	E. O'C. Machenney.
Grand Haven, Michigan	29.69	754.1	30.39	771.9	30.0	— 1.1	78	s.	2	0.9	.....	0	1 s	.....	.....	trap.	trap.	clear	J. Mueller.
Grant, Fort, Arizona	25.19	639.8	30.03	762.7	36	2.2	82	ne.	4	1.8	.....	0	3 s	.....	.....	0.60	15.2	clear	Robert O. Lord.
Hatteras, North Carolina	30.35	770.9	30.37	771.4	40	4.4	65	n.	24	10.7	.....	3 c	hz.	w.	.....	0	0	clear	R. M. Crawford.
Helena, Montana	25.86	656.8	30.24	768.1	25	— 3.9	76	calm	0	0	.....	2 ck	0	calm	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	29.18	741.2	30.22	767.6	40	4.4	100	e.	5	2.2	.....	.....	10 n	.....	.....	0.11	2.8	light rain	J. P. Sherry.
Huron, Dakota	28.72	729.5	30.20	767.1	18	— 7.8	73	nw.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.63	752.6	30.47	773.9	25	— 3.9	73	w.	1	0.4	.....	0	sk.	.....	.....	0	0	clear	O. Schutze
Indianola, Texas	30.04	763.0	30.07	763.8	62.7	17.1	99	e.	7	3.1	.....	10 k	0	w.	.....	0.11	2.8	cloudy	L. A. Reed.
Jacksboro, Texas	28.96	735.6	30.18	766.6	45	7.2	76	ne.	1	0.4	.....	.....	10 s	.....	ne.	trap.	trap.	cloudy	D. J. Carr.
Jacksonville, Florida	29.29	744.0	30.34	770.6	47	8.3	68	nw.	3	1.3	.....	0	fg.	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.57	700.3	30.24	768.1	31	— 0.6	81	sw.	2	0.9	.....	.....	10 s	.....	sw.	0	0	cloudy	A. Schneider.
Keokuk, Iowa	29.66	753.4	30.35	770.9	28.5	— 1.9	88	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.14	765.5	30.16	766.1	69.0	20.6	81	ne.	15	6.7	.....	0	0	.....	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.39	771.9	30.41	772.4	36	2.2	53	nw.	12	5.4	.....	hz.	2 k;s	.....	.....	0	0	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	29.40	746.7	30.47	773.9	29	— 1.7	78	ne.	4	1.8	.....	0	sk.	.....	.....	0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.45	748.0	30.27	768.8	32	0.0	78	s.	14	6.3	.....	.....	10 s	.....	.....	0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.35	745.5	30.29	769.4	40	4.4	65	s.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	A. W. Browne.
Lewiston, Idaho	29.31	744.5	30.18	766.6	35.0	1.7	89	e.	1	0.4	.....	4 k	5 s	sw.	.....	0.06	1.5	cloudy	W. Bell.
Little Rock, Arkansas	30.02	762.5	30.35	770.9	41	5.0	92	calm	0	0	.....	.....	10 n	.....	.....	0.02	0.5	light rain	W. U. Simons.
Los Angeles, California	29.66	753.4	30.06	763.5	44	6.7	76	e.	6	2.7	.....	10 k	0	se.	.....	0	0	cloudy	T. S. Collins.
Louisville, Kentucky	29.86	758.4	30.45	773.4	31	— 0.6	78	nw.	1	0.4	.....	0	sk.	.....	.....	0	0	dense smoke	L. M. Dey.
Lynchburg, Virginia	29.71	754.6	30.43	772.9	33	0.6	50	nw.	3	1.3	.....	3 cs	0	w.	.....	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.65	753.1	30.34	770.6	30.0	— 1.1	88	nw.	7	3.1	.....	8 k	0	nw.	.....	0.01	0.3	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.37	771.4	30.38	771.6	38	3.3	72	n.	16	7.2	.....	6 cs	0	.....	.....	0	0	fair	F. P. Chaffee.
Madison, Wisconsin	29.26	743.2	30.34	770.6	29	— 1.7	88	s.	6	2.7	.....	4 cs	0	w.	.....	0	0	fair	C. A. Shaw.
Maginnis, Fort, Montana	25.60	650.2	30.10	764.5	30	— 1.1	71	nw.	8	3.6	.....	.....	10 k	.....	nw.	0.05	1.3	cloudy	F. Burke.
McKavett, Fort, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. E. Thatcher.
Marquette, Michigan	29.54	750.3	30.31	769.9	23	— 5.0	73	w.	2	0.9	.....	10 k	0	w.	.....	trap.	trap.	cloudy	J. Gilligan.
Memphis, Tennessee	30.04	763.0	30.39	771.9	40	4.4	65	ne.	4	1.8	.....	.....	fg.	.....	.....	0	0	dense fog	D. T. Flannery.
Milwaukee, Wisconsin	29.60	751.8	30.39	771.9	31	— 0.6	78	sw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	W. Line.
Missoula, Fort, Montana	26.82	681.2	30.23	767.8	28	— 2.2	67	calm	0	0	.....	.....	9 s	.....	.....	0.05	1.3	cloudy	J. H. Young.
Mobile, Alabama	30.28	769.1	30.32	770.1	50	10.0	81	n.	4	1.8	.....	3ck;cs	0	w.	.....	0	0	clear	C. A. Read.
Montgomery, Alabama	30.13	765.3	30.37	771.4	43.5	6.4	70	calm	0	0	.....	.....	10 s	.....	w.	0	0	cloudy	J. B. McLaughlin.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.13	739.9	30.19	766.8	5	—15.0	76	w.	3	1.3			10 s			0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.44	747.8	30.50	774.7	28.0	— 2.2	80	calm	0	0		0	fg.			inap.	inap.	clear	J. C. Sprigg, jr
Mt. Washington, N. H	23.12	587.2	29.68	753.9	5.0	—15.0	79	nw.	98	43.8			ton; fg		nw.	0.21	5.3	light snow.	J. G. Linsley.
Nashville, Tennessee	29.84	757.9	30.44	773.2	33.0	0.6	68	ne.	4	1.8		7 cs	0	w.		0	0	fair	L. N. Jesunofsky.
New Haven, Connecticut	29.97	761.2	30.09	764.3	36	2.2	53	w.	10	4.5		0	0			0	0	clear	J. H. Sherman.
New London, Connecticut	30.01	762.2	30.06	763.5	37	2.8	61	nw.	12	5.4		0	0			0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.19	766.8	30.25	768.3	56.0	13.3	77	e.	10	4.5		6 cs	0	nw.		0	0	fair	L. Dunne.
Newport, Rhode Island	29.93	760.2	29.98	761.5	39.3	4.1	56	w.	20	8.9		0	0			0	0	clear	W. McGillivray.
New York, New York	30.01	762.2	30.19	766.8	37	2.8	66	w.	12	5.4		0	0		w.	0	0	fair	J. B. Merrill.
Norfolk, Virginia	30.38	771.6	30.41	772.4	36	2.2	61	w.	4	1.8		0	0			0	0	clear	Wm. Davis.
North Platte, Nebraska	27.11	688.6	30.19	766.8	19.6	— 6.9	74	calm	0	0		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	29.82	757.4	29.86	758.4	44.0	6.7	93	s.	2	0.9			10 s			0.26	6.6	cloudy	J. Dascomb.
Omaha, Nebraska	28.99	736.3	30.23	767.8	36.8	2.7	72	se.	4	1.8			10 s			0	0	cloudy	A. Pollak.
Oswego, New York	29.86	758.4	30.20	767.1	33.5	0.8	70	nw.	17	7.6		0	4 k		nw.	0.04	1.0	fair	S. W. Beall.
Palestine, Texas	29.64	752 8	30.21	767.3	45.0	7 2	100	ne.	8	3.6			10s; fg			0.55	14.0	threatening.	L. M. Pindell.
Pensacola, Florida	30.30	769.6	30.32	770.1	52.3	11.3	66	ne.	5	2.2		4 cs	3 s	w.	sw.	0	0	fair	M. McGauran,
Philadelphia, Pa	30.18	766.6	30.28	769.1	39	3.9	35	sw.	2	0.9		0	0			0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.71	449.8	30.37	771.4	12	—11.1	76	sw.	13	5.8		0	8 s		sw.	0	0	cloudy	H. Hall.
Pioche, Nevada	24.03	610.4	30.17	766.3	31.8	— 0.1	47	nw.	9	4.0		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.59	751.6	30.44	773.2	32.0	0.0	78	w.	4	1.8			9 s		w.	inap.	inap.	cloudy	W. Daly.
Poplar River, Montana	27.99	710.9	30.28	769.1				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.22	767.6	30.22	767.6	66.0	18.9	84	se.	12	5.4		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.68	753.9	30.40	772.1	27.0	— 2.8	92	calm	0	0			10 s		w.	0.08	2.0	cloudy	W. O. Bailey.
Portland, Maine	29.70	754.4	29.75	755.6	37.5	3.1	52	nw.	20	8.9		1 c	2 s	nw.	nw.	inap.	inap.	clear	W. W. Eichelberger.
Portland, Oregon	29.91	759.7	29.98	761.5	40.0	4.4	89	s.	2	0.9			10 s		s.	0.01	0.3	cloudy	M. L. Hearne.
Portsmouth, N. C					42	5.6	65	ne.	30	13.4		6 c	hz.			0	0	fair	F. S Coburn.
Prescott, Arizona	24.69	627.1	30.03	762.7	36.5	2.5	92	ne.	1	0.4			10 n			0.62	15.7	light rain	W. H. Clendenon.
Provincetown, Mass	29.86	758.4	29.90	759.4	38	3.3	62	w.	13	5.8		0	2 s		nw.	0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	30.23	767.8	30.24	768.1	60	15.6	78	ne.	12	5.4		0	0			0	0	clear	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.56	750.8	30.26	768.6	30.5	— 0.8	81	w.	13	5.8			10 k		w.	0.11	2.8	cloudy	E. W. McGann
Roseburg, Oregon	29.43	747.5	30.00	762.0	37	2.8	89	e.	4	1.8		6 ck	0	sw.		0	0	fair	J. J. Nanry.
Sacramento, California	29.98	761.5	30.06	763.5	41.0	5.0	92	w.	4	1.8		0	0			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.80	756.9	30.43	772.9	29.7	— 1.3	100	se.	7	3.1			9 s; fg			0	0	cloudy	J. H. Weber.
St. Paul, Minnesota	29.23	742.4	30.15	765.8	30.0	— 1.1	88	se.	10	4.5		4 k	0	w.		0	0	fair	P. F. Lyons.
St. Vincent, Minnesota	29.30	744.2	30.24	768.1	17	— 8.3	91	n.	6	2.7			10 s			inap.	inap.	cloudy	C. B Dilley.
Salt Lake City, Utah	25.72	653.3	30.30	769.6	30	— 1.1	57	e.	3	1.3		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.38	746 2	30.10	764.5	52.0	11.1	100	ne.	4	1.8			10 s			0.20	5.1	threatening.	T. J. Kenan.
San Diego, California	29.96	761.0	30.03	762.7	51.6	10.9	84	calm	0	0		0	0			inap.	inap.	clear	A. C. Dobbins.
Sandusky, Ohio	29.74	755.4	30.40	773.7	27	— 2.8	77	w.	10	4.5		0	5 s		w.	0	0	fair	M. H. Perry.
Sandy Hook, New Jersey	30.17	766.3	30.20	767.1	38.0	3.3	54	nw.	25	11.2		5 k	0	nw.		0	0	fair	B. A. Blundon.
San Francisco, California	29.98	761.5	30.05	763.3	50	10.0	89	se	4	1.8			fg.		s.	0	0	dense fog	N. Gorom.
Santa Fé, New Mexico	23.14	587.7	30.18	766.6	35	1.7	85	ne.	5	2.2			10 n			0.08	2.0	light rain	H. U. Jones.
Savannah, Georgia	30.29	769.4	30.38	771.6	44	6.7	58	n.	6	2.7		6 ck	0	w.		0	0	fair	H. W. Ford.
Shaw, Fort, Montana	26.43	671.3	30.25	768.3	17	— 8.3	70	w.	3	1.3		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.98	761.5	30.23	767.8	43	6.1	100	e.	5	2.2			10 s		e.	0.09	2.3	cloudy	E. N. Meekins.
Sill, Fort; Indian Territory	28.94	735.1	30.25	768.3	42	5.6	89	se.	4	1.8			10 n			0.16	4.1	light rain	W. M. Mattingly.
Silver City, New Mexico	24.24	615.7	30.08	764.0	34.5	1.4	98	nw.	2	0.9		0	1 s			0.66	16.8	clear	N. D. Lane.
Sitka, Alaska	29.46	748.3	29.52	749.8	30.5	— 0.8	62	ne.	6	2.7		0	0			0	0	clear	F. W. Fickett.
Smith, Fort, Arkansas	29.79	756.7	30.28	769.1	43.0	6.1	60	e.	7	3.1			10 s			0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.38	771.6	30.42	772.7	34	1.1	60	n.	8	3.6		6 c	0			0	0	fair	O. Parker.
Spokane Falls, Wash. Ter.	28.07	713.0	30.15	765.8	33	0.6	85	ne.	1	0.4			10 s			0.09	2.3	cloudy	D. Moore.
Springfield, Illinois	29.70	754.4	30.42	772.7	30	— 1.1	78	s.	7	3.1		0	0			0	0	clear	T. B. Jennings.
Springfield, Massachusetts	29.92	760.0	30.06	763.5	33	0.6	60	w.			7	0	0			inap.	inap.	clear	Charles Mayr.
Springfield, Mo	28.84	732.5	30.34	770.6	37	2.8	89	se.	8	3.6			10 n			0.16	4.1	sleeting	J. B. Marbury.
Starkville, Miss	29.89	759.2	30.39	771.9	41	5.0	82	ne.	4	1.8			10 s			inap.	inap.	cloudy	C. Dill.
Stevenson, Fort, Dakota	28.28	718.3	30.25	768.3	17	— 8.3	83	nw.	3	1.3			10 s			0	0	cloudy	W. Burrows
Stockton, Fort, Texas	27 93	686.5	30.15	765.8	41.0	5.0	92	nw.	6	2.7			10 s		nw.	0.07	1.8	cloudy	J. F. Marshall.
Thatcher's Island, Mass	29.85	758.2	29.90	759.4	35.5	1.9	58	w.	25	11.2		3 k	0	w.		0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.21	691.1	30.05	763.3	44	6.7	96	w.			1		9 ks		sw.	0.53	13.5	cloudy	J. T. Fitzgerald.
Toledo, Ohio	29.71	754.6	30.44	773.2	27	— 2.8	64	sw.	6	2.7		2 cs	1 s	w.		inap.	inap.	clear	A. Buell.
Tucson, Arizona	27.55	699.8	30.01	762.2	45	7.2	93	calm	0	0		0	8 ks		w.	0.79	20.1	cloudy	J. L. Whiteside.
Umatilla, Oregon	29.77	756.1	30.15	765.8	34.5	1.4	83	calm	0	0		8 cs	1 s			inap.	inap.	cloudy	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					45	7.2	86	sw.			1		10 s		sw.	0.75	19.0	cloudy	D. Brooks.
Vicksburg, Mississippi	30.05	763.3	30.32	770.1	44.5	6.9	88	e.	8	3.6			10 s		s.	0.12	3.0	cloudy	James Kenealy.
Visalia, California	29.68	753.9	30.06	763.5	40.6	4.8	87	e.	2	0.9		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.49	622.0	30.23	767.8	8.0	—13.3	80	sw.	5	2.2		0	1 k			0	0	clear	T. M. Ambler.
Washington, D. C	30.27	768.8	30.39	771.9	32.5	0.3	60	w.	4	1.8		5 c; k	0	nw.		0	0	fair	B. M. Purssell.
West Las Animas, Colorado	26.02	660.9	30.14	765.5	20	— 6.7	80	nw.	4	1.8			10 s		nw.	0	0	cloudy	F. H. Brandenburg.
Williamsport, Pa	29.66	753.4	30.29	769.4	36	2.2	69	nw.	12	5.4			10 s			0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.38	771.6	30.44	773.2	38	3.3	58	n.	5	2.2			hz.	0		0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.70	652.8	30.22	767.6	19	— 7.2	70	ne.	7	3.1		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.80	731.5	30.18	766.6	26	— 3.3	76	calm	0	0		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.83	757.7	29.98	761.5	48.8	9.3	93	n.	2	0.9		0	9 n		n.	0.04	1.0	light rain	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.03	559.6			53.0	11.7	71	n.	1	0.4		2 cs	7 s	nw.	w.	0	0	cloudy	Joaquin Gomez.
Havana, Cuba, W. I	30.05	763.3	30.11	764.8	70.0	21.1	84	e.	7	3.1			9s; fs		ne.	inap.	inap.	light rain	Chas. Hasselbrink.
Kingston, Jamaica, W. I	30.03	762.7	30.04	763.0	73	22.8	85	n	2	0.9		0	0			0	0	fine	Robert Johnston.
Navassa, W. I	29.90	759.4	29.98	761.5	80	26.7	78	ne.	22	9.8		2 k	4 s	e.	ne.	0	0		F. M. Everett.
Paramaribo, S. A	30.00	762.0	30.00	762.0	79	26.1	87	e.			2	4 c	4 k	e.	e.	0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.36	745.7	29.92	760.0	79	26.1	89	calm			0		10 ks		calm	1.04	26.4	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A					75	23.9	96	ne.			4		10 ks	se.	ne.	0.25	6.3	cloudy	Earl Flint.
Santiago de Cuba, W. I	30.04	763.0	30.06	763.5	74	23.3	81	n.	6	2.7		1 c	1 n			0	0	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.96	761.0	30.02	762.5	32	0.0	100	n.			4	0	5 k		e.	0.16	4.1	fair	W. J. Fisher.
St. Thomas, W. I	29.95	760.7	30.07	763.8	80	26.7	79	e.				0	2 k			0	0	fine	Aug. Walloe.
York Factory, B. A	30.14	765.5	30.21	767.3	— 8.5	—22.5	78	ne.	10	4.5		0	0			0	0	clear	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Chusan Island, China	30.44	773.2	41	5.0	.....	n.	.....	.....	4–6	.....	4	n.	.....	.....	.....	.....	.....	squally.
H. M. S. Amethyst, Colonia, Uruguay†	29.87	758.7	70.8	21.6	88	n.	.....	.....	5	.....	5	w.	.....	.....	.....	.....	.....	squally.
H. M. S. Audacious, N. 8° 18′, E. 69° 38′	29.72	754.9	83	28.3	74	n.	.....	.....	2	.....	1	n.	.....	.....	.....	1	ne.	blue sky
H. M. S. Beacon, N. 30° 34′ E. 32° 16′	29.94	760.5	74	23.3	59	nnw.	.....	.....	1–2	.....	3	ssw.	.....	.....	.....	1	nnw.	d. clouds.
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	30.07	763.8	73.5	23.1	72	nnw.	.....	.....	3	.....	2	nnw.	.....	.....	.....	.....	.....	d clouds.
H. M. S. Cleopatra, N. 31° 14′ E. 121° 28′	30.40	772.1	43	6.1	91	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island	29.86	758.4	42	5.6	83	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
H. M. S. Curacoa, Kobe, Japan	29.85	758.2	46.5	8.1	92	calm	.....	.....	0	.....	1	.....	.....	.....	...	.....	.....	blue sky.
H. M. S. Diamond, Sydney, N. S. W*†	29.94	760 5	68	20.0	79	calm	.....	.....	0	.....	3	.....	.....	.....	.....	.....	.....	d clouds.
H. M. Dock Yard, Bermuda, W. I.	30.06	763.5	67	19.4	74	wnw.	.....	.....	3–4	.....	3	wnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.84	757.9	77.5	25.3	90	wsw.	.....	.....	2	.....	4	wsw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flying Fish, N. 31° 35′, E. 131° 26′	30.07	763.8	44	6.7	67	nw.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Gannet, S. 32° 50′, W. 71° 40′	30.00	762.0	58.5	14.7	?	ssw.	.....	.....	3	.....	5	.....	.....	.....	.....	3	s.	d. clouds.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.27	768.8	60	15.6	100	ne.	.....	.....	1–2	.....	10	.....	.....	.....	.....	.....	.....	overcast.
H. M. S. Kingfisher, N. 8° 46′, W. 102° 19′	29.96	761.0	79	26.1	.....	ene.	.....	.....	4	.....	4	e.	.....	.....	.....	4	ese.	d. clouds.
H. M. S. Lark, S. 19° 10′, E. 157° 50′	30.09	764 3	74.3	23.5	70	se.	.....	.....	5	.....	8	.....	.....	.....	.....	2	se.	squally.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.90	759.4	64	17.8	.....	n.	.....	.....	1	.....	10	.....	.....	.....	.....	1	n.	d. clouds.
H. M. S. Magpie, N. 34° 44′, E. 128° 04′	30.10	764.5	37.7	3.2	54	nw.	.....	.....	2–6	.....	0	.....	.....	.....	.....	2	nne.	squally.
H. M. S. Northampton, N. 36° 50′ W. 62° 01′	29.80	756.9	63	17.2	69	wsw.	.....	.....	5–7	.....	7	wsw.	.....	.....	.....	5	w.	d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.82	757.4	63	17.2	83	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.81	757.2	76	24.4	92	n.	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sappho, S. 44° 08′, W. 106° 50′	30.20	767.1	53.2	11.8	100	nnw.	.....	.....	4–5	.....	7	n.	.....	.....	.....	2	nw.	d. clouds.
H. M. S. Sylvia, Peckett Harbor, Patagonia	29.37	746.0	44.5	6.9	76	wsw.	.....	.....	4–0	.....	7	ene.	.....	.....	.....	.....	.....	squally.
H. M. S. Tourmaline, Aden, Arabia	29.97	761.2	.....	.....	.....	e.	.....	.....	2	.....	1	ene.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, Bahrein, Arabia	30.10	764.5	76.5	24.7	82	nnw.	.....	.....	3	.....	1	.....	.....	.....	.....	2	nnw.	blue sky.
H. M. S. Zephyr, N. 37° 33′, E. 121° 25′	30.18	766.6	36	2.2	70	wnw.	.....	.....	2	.....	2	w.	.....	.....	.....	4	ne.	d. clouds.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.03	762.7	82.8	28.2	76	ne.	.....	.....	1	.....	2	.....	ne.	.....	.....	2	se.	d. clouds.
Tamega, Macao, China	30.31	769.8	63.5	17.5	75	n.	.....	.....	7	.....	10	.....	n.	6 h'r	6 h'r	.....	.....	overcast.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.18	766.6	57	13.9	62	ne.	10	4.5	.....	.....	5	.....	ne.	0	0	.....	.....	fair.
Navy Yard, Portsmouth, N. H.	29.80	756.9	37	2.8	54	nw.	24	10.7	.....	.....	5	.....	nw.	0	0	.....	.....	fair.
Naval Hospital, Yokohama, Japan*	29.59	751.6	41.5	5.3	42	n.	.....	.....	3	.....	8	.....	w.	0.03	0.8	.....	.....	clearing.
Adams, Sitka, Alaska*†	29.65	753.1	31	— 0.6	100	nne.	.....	.....	1	.....	8	.....	nne.	.....	.....	.....	.....	fair.
Alaska, Honolulu, Sandwich Island	30.01	762.2	73	22.8	81	ne.	.....	.....	2	.....	2	.....	n.	0	0	.....	.....	fair.
Alliance, Hampton Roads, Va.	30.38	771.6	38	3.3	90	wnw.	.....	.....	1	.....	2	.....	.....	0	0	.....	.....	clear.
Ashuelot, Nagasaki, Japan	30.10	764.5	44	6.7	92	n.	.....	.....	1	.....	10	.....	nnw.	.....	.....	.....	.....	rainy.
Brooklyn, Keel Point, Patagonia	29.44	747.8	51	10.6	72	w.	19	8.5	.....	.....	2	.....	sw.	0	0	.....	.....	fair.
Colorado, New York, N. Y.	30.30	769.6	39	3.9	38	wnw.	5	2.2	.....	.....	5	.....	wnw.	0	0	.....	.....	fair.
Enterprise, Norfolk, Va.	30.40	772.1	35	1.7	80	w.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Essex, Callao, Peru	30.00	762.0	65	18.3	89	se.	.....	.....	1	.....	10	.....	se.	.....	.....	sm'h	sse.	cloudy.
Franklin, Norfolk, Va.	30.41	772.4	34	1.1	61	nw.	4	1.8	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Galena, Montevideo, Uruguay	29.77	756.1	70	21.1	100	nne.	.....	.....	3	.....	2	.....	.....	.....	.....	sm'h	.....	clearing.
Hartford, Possession Bay, Patagonia*	29.25	742 9	44	6.7	92	s.	.....	.....	5	.....	8	.....	s;w.	hail	hail	sm'h	w.	fair.
Independence, Mare Island, Cal.	30.07	763.8	48	8.9	92	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Iroquois, Callao, Peru	30.02	762.5	65	18.3	94	se.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, N. 42° 05′, W. 69° 22′	29.79	756.7	41	5.0	33	w.	.....	.....	7	.....	10	.....	w.	.....	.....	r'gh	wnw.	squally.
Kearsarge, Norfolk, Va.	30.38	771.6	36	2.2	80	wnw.	.....	.....	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Lackawanna, Valparaiso, Chili*.	29.91	759 7	58	14.4	76	calm	.....	.....	0	.....	8	.....	s.	.....	.....	.....	.....	cloudy.
Lancaster, Palermo, Sicily*	30.03	762.7	68	20.0	64	nne.	.....	.....	3	.....	5	.....	wsw.	0	0	sm'h	.....	fair.
Michigan, Erie, Pennsylvania	30.29	769.4	54	12.2	61	w.	.....	.....	3	.....	8	.....	w.	.....	.....	.....	.....	cloudy.
Minnesota, New York, N. Y.	30.22	767.6	38	3.3	54	nw.	15	6.7	.....	.....	8	.....	nne.	.....	.....	.....	.....	cloudy.
Monocacy, Yokohama, Japan	29.51	749.5	44	6.7	92	nnw.	.....	.....	3	.....	10	.....	n.	.....	.....	.....	.....	cloudy.
New Hampshire, Newport, R. I.	30.02	762.5	41	5.0	56	wnw.	.....	.....	5–6	.....	2	.....	nnw.	.....	.....	mod.	wnw.	clear.
Nipsic, N. 37° 29′, E. 4° 06′*	30.08	764.0	67	19.4	68	wnw.	.....	.....	3	.....	5	.....	nw.	.....	.....	long	wnw.	fair.
Onward. Callao, Peru†	30.11	764.8	64	17.8	94	se.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos; Tientsin, China*	30.20	767.1	42	5.6	?	sw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Pensacola, Callao, Peru*	29.94	760.5	65	18.3	89	se.	4	1.8	.....	.....	10	.....	.....	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass	29.89	759.2	36	2.2	80	w.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	clear.
Quinnebaug, Villafranche, France*	29.92	760.0	60	15.6	70	sse.	.....	.....	1	.....	5	.....	sse.	.....	.....	sm'h	s.	fair.
Ranger, Salina Orez, Mexico	29.99	761.7	72	22.2	67	ene.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	.....	clear.
Richmond, Yokohama, Japan*	29.67	753.6	46	7.8	54	n.	.....	.....	2	.....	10	.....	n.	.....	.....	.....	.....	cloudy.
Saratoga, N. 35° 02′, W. 73° 28′	30.19	766.8	52	11.1	72	nnw.	.....	.....	4	.....	2	.....	nnw.	0	0	mod.	nnw.	fair.
St. Louis, League Island, Pa.	30.45	773 4	36	2.2	52	wnw.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	clear.
Swatara, N. 24° 36′, W. 59° 19 *	29.94	760.5	76	24.4	81	ne.	.....	.....	1	.....	2	.....	ne.	.....	.....	sm'h	.....	fair.
Tennessee, Hampton Roads, Va.	30.39	771.9	43	6.1	58	nw.	6	2.7	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Vandalia, Hampton Roads, Va*	30.36	771.1	38	3.3	80	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear.
Wabash, Boston, Mass.	29.89	759.2	37	2.8	62	w.	5	2.2	.....	.....	2	.....	w.	0	0	.....	.....	clear.
Wachusetts, Mare Island, Cal†	30.09	764.3	47	8.3	100	calm	.....	.....	0	.....	10	.....	calm	0	0	sm'h	.....	cloudy.
Wyandotte, Washington, D. C	30.53	775.4	46	7.8	85	nw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear.
Yantic, Norfolk, Va.	30.37	771.4	34	1.1	100	nw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear.
Merchant Marine.																		
S. S. Grecian, Buenos Ayres, Argentine Rep*	29.75	755.6	75	23.9	81	nw.	.....	.....	1	.....	9	.....	nw.	2 h'r	2 h'r	sm'h	.....	cloudy.
S. S. Nova Scotian, N. 48° 10′ W. 39° 53′	29.73	755.1	49	9.4	.....	wnw.	.....	.....	4	.....	10	.....	nw.	.....	.....	h'vy	wsw.	squally.
S. S. Polynesian, N. 47° 12, W. 51° 31′*	30.02	762.5	42	5.6	.....	ese.	.....	.....	3	.....	7	.....	sw.	4 h'r	4 h'r	cross	var.	cloudy.
S. S. British Crown, Liverpool, Eng.	.....	.....	46	7.8	.....	ssw.	.....	.....	4	.....	10	.....	sw.	20 h'r	20 h'r	sm'h	.....	raining.
S. S. Indiana, N. 51° 14′, W. 16° 12′	.....	.....	42	5.6	91	wnw.	.....	.....	5	.....	8	.....	.....	.....	.....	r'hg	nw.	fine.
S. S. Lord Clive, N. 49° 25′, W. 37° 20′*†	29.88	758.9	.....	.....	.....	ne.	.....	.....	6	.....	7	.....	ne.	4 h'r	4 h'r	high	sw.	cloudy.
S. S. Lord Gough, N. 47° 05′, W 43° 00′	29.98	761.5	41	5.0	.....	wnw	.....	.....	5	.....	8	.....	nw.	0	0	long	nw.	cloudy.
S. S. Ohio, N. 51° 11′, W. 18° 29′	29.56	750.8	49	9.4	93	nw.	.....	.....	6	.....	4?	.....	nw.	.....	.....	r'gh	wnw.	cloudy.
S. S. Pennsylvania, N. 42° 16′, W 61° 00′†	29.64	752.8	49	9.4	.....	wsw.	.....	.....	4	.....	8	.....	w.	.....	.....	m'd.	w.	cloudy.
S. S. Castor, N. 44° 25′, W. 25° 15′	.....	.....	55.4	13	.....	w.	.....	.....	4	.....	6	.....	.....	.....	.....	5	w.	squally.
S. S. Anchoria, N. 50° 56′ W. 33° 48′†	29.81	757.2	.....	.....	.....	ene.	.....	.....	5	.....	10	.....	ene.	6 h'r	6 h'r	long	var.	gloomy.
S. S. Devonia, N. 41° 40′, W. 59° 30′†	29.67	753.6	60	15.6	.....	w.	.....	.....	4	.....	9	.....	w.	.....	.....	short	wsw.	cloudy.
S. S. Dorian, N. 42° 18′, W. 60° 50′*	29.60	751.8	.....	.....	.....	w.	.....	.....	7	.....	10	.....	w.	0	0	r'gh	w.	cloudy.
S. S. Ethiopia, N. 48° 13′, W. 44° 05′	29.98	761.5	41	5.0	100	nw.	.....	.....	4	.....	8	.....	w	0	0	r'gh	wsw.	cloudy.
S. S. Galatia, Colombo, Ceylon†	29.89	759.2	82	27.8	.....	ssw.	.....	.....	3	.....	2	.....	sw.	4 h'r	4 h'r	long	sw.	fair.
S. S. Alvo, off Kingston, Jamaica, W. I.	30.01	762.2	80	26.7	.....	e.	.....	.....	5–6	5 ck	6	ese.	.....	0	0	long	ene.	fine.
S. S. Ambrose, N. 38° 42′ W. 73° 30′†	30.16	766.1	.....	.....	.....	wnw.	.....	.....	6	.....	.....	.....	.....	0	0	7	nw.	fine.
British Merchant, N. 29° 29′ W. 128° 32′	30.14	765.5	62.2	16.8	74	ne.	.....	.....	1	.....	9	.....	.....	.....	.....	.....	.....	d. clouds.
Bk. Coppename, N. 24° 56′ W. 26° 54′	30.19	766.8	77.7	25.4	60	ne.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	blue sky.
May Hulse, S. 23° 23′, W. 36° 45′	30.06	763.5	75.5	24.2	90	nne.	.....	.....	3	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Olympus. N. 30° 37′, E. 32° 18′	30.04	763.0	.....	.....	30	nne.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Inchkeith, S. 39° 07′ E. 15° 19′	30.04	763.0	57	13.9	69	sw.	.....	.....	5	.....	4	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Mexico, N. 32° 55′, W. 117° 49′†	30.04	763 0	61.6	16.4	68	nw.	.....	.....	1	.....	5	.....	nw.	.....	.....	mod.	wnw.	fair.
S. S. Bothnia, N. 41° 50′, W. 55° 52′	29.66	753.4	61	16.1	100	sw.	.....	.....	6	.....	10	.....	w.	8 h'r	8 h'r	mod.	sw.	heavy rain.
S. S. Gallia, N. 44° 38′, W. 45° 29′	30.10	764.5	49	9.4	71	wsw.	.....	.....	5	.....	5	.....	sw.	.....	.....	r'gh	w.	fair.
S. S. Marathon, Constantinople, Turkey	30.09	764.3	59	15.0	.....	sw.	.....	.....	3	.....	3	.....	sw.	0	0	.....	.....	clear.
S. S. Pavonia, N. 51° 15′ W. 19° 33′*	29.54	750.3	50	10.0	72	wnw.	.....	.....	6	.....	2	.....	wnw.	0	0	hv'y	w.	clear.
S. S. Colina, Glasgow, Scotland	.....	.....	.....	.....	.....	nnw.	.....	.....	5	.....	7?	.....	wnw.	0	0	.....	.....	clear.?
S. S. Labradore, N. 45° 02′ W. 56° 05′*†	29.76	756.0	57.2	14	.....	n.	.....	.....	3	.....	5	.....	sw.	rain	rain	sm'h	.....	clear
S. S. Abyssinia, Mersey River, Eng*	29.09	738.9	.....	.....	.....	wsw.	.....	.....	7	.....	8	.....	wsw	1 h'r	1 h'r	r'gh	wsw.	squally.
S. S. Arizona N. 45° 19′, W. 51° 12′	29.96	761.0	40	4.4	.....	sse.	.....	.....	5	.....	8	.....	w.	0	0	mod.	wsw.	cloudy.
S. S. Bohemia, Hamburg, Germany †	29.16	740 7	.....	.....	.....	sw.	.....	.....	3	.....	10	.....	sw.	rain	rain	.....	sw.	clearing.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
									Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																	
S. S. Cimbria, N. 50° 10′ W. 26° 28′	29.70	754.4	42.8	6.0		ne.			6		5		n.		12 h'r	12 h'r	long	nw.	fair.
S. S. Gellert, N. 45° 48′, W. 47° 37′	29.94	760.5	43	6.1		wsw.			6		4		nw.		4 h'r	4 h'r	h'vy	w.	squally.
S. S. Silesia, N. 41° 00′, W. 63° 20′†	29.78	756.4	51.2	10.7		wsw.			9		5?		wsw.		1 h'r	1 h'r	o	w.	overcast?
S. S. Vandalia, Hamburg, Germany			40.3	4.6		sw.			4		10		sw.		o	o			cloudy.
S. S. Wieland, N. 47° 14′, W. 25° 06′	29.75	755.6				w.			6		10		ne.		12 h'r	12 h'r	high	var.	misty.
S. S. Nessmore, N. 46° 03′, W. 44° 58′	30.11	764.8	48	8.9	92	wnw.			6		10				o	o	h'vy	w.	hazy.
S. S. Hevelius, S. 2° —′, W. 31° —′*†	30.09	764.3	84	28.9		se.			4		6?		se.		o	o			clear?
S. S. Ptolemy, N. 31° 45′, W. 68° 30′	30.18	766.6	69.5	20.8	75	nnw.			5		6				o	o	4	n.	d. clouds.
S. S. Sirius, N. 49° 20, W. 8° 30′ *	29.39	746.5				w.			5		8		w.		o	o	r'gh	wnw.	cloudy.
S. S. Bulgarian, N. 44° 44′ W. 54° 13′ *	29.82	757.4				sse.			6		10		var.		2 h'r	2 h'r			squally.
S. S. Colorado, N. 29° 06′, W. 93° 21′†	30.15	765.8	70	21.1		nw.			3		8		se.		o	o	small	se.	fair.
S. S. Rio Grande, N. 34° 16′, W. 76° 28′			58	14.4		nne.			2		4		n.		o	o	sl't	ne.	fair.
S. S. San Marcos, New York, N. Y.			53	11.7		w.			6		1		wnw.				h'vy		
S. S. Archimede, N. 35° 38′, W. 9° 20′*†	30.25	768.3	70	21.1	66	nw.			3		4		nw.		o	o	sm'h	nw.	hazy.
S. S. Glenapp, Santos, Brazil †	29.96	761.0	78	25.6		var.			1		0				o	o			clear.
S. S. Glenfyne, N. 16° 45′, W 55° 03′			49	9.4		e.			4		5		e.		o	o	sm'h	e.	cloudy.
S. S. Chalmette, Algiers, La †	30.21	767.3	62	16.7		ene.			3		5		e.		o	o			fair
S. S. Lone Star, N. 37° 48′ W. 74° 57′†	30.25	768.3	40	4.4		nw.			5		0				o	o	mod.	nw.	smoky.
S. S. Egypt, N. 41° 37′, W. 61° 28′ *†	29.70	754.4				wsw.			6		10		wnw.		5 h'r	5 h'r	long	wsw.	squally.
S. S. Erin, Liverpool, Eng	29.25	742.9	47	8.3		wnw.			7		7		wnw.		20 h'r	20 h'r			squally.
S. S. Helvetia, New York, N. Y	30.25	768.3	38	3.3		w.			5		5		w.		o	o			fine.
S. S. Holland, N. 45° 50′, W. 42° 12′			49	9.4		wnw.			8		8		wnw.		2 h'r	2 h'r	h'vy	w.	cloudy.
S. S. The Queen, N. 49° 16′, W. 15° 19′*†	29.56	750.8	44	6.7		n.			5		10		n.		sh'rs	sh'rs	sm'h		overcast.
S. S. Santiago, N. 24° 55′, W. 74° 10′	30.30	769.6	75	23.9	81	nne.			3		2		ne.		o	o	sm'h		fine.
S. S. City of Alexandria, N. 20° 10′ W. 91° 53′†	30.16	766.1	77	25.0		ne.			2				ne.		o	o	mod.	ene.	fine.
S. S. Leerdam, N. 43° 26′, W. 54° 34′*	29.84	757.9	50	10.0		sse.			6								r'gh		threatening.
S. S. America, N. 48° 15′, W. 36° 47′ *	29.74	755.4	52.0	11.1	90	nw.			5		6		wnw.		2 h'r	2 h'r	long	wnw.	squally.
S. S. Donau, N. 40° 23′, W. 71° 20′	30.10	764.5				w.			6–7		8		w.		o	o	h'vy	w.	cloudy.
S. S. Elbe, N. 49° 36′, W. 7° 22′	29.44	747.7	50.9	10.5	100	wnw.			6		10		wnw.		o	o	r'gh	wnw.	covered.
S. S. Hohenstaufen, N. 47° 38′, W. 5° 27′	29.61	752.1	55.4	13.0		wsw.			5		8		wsw.		shr's	sh'rs	cross	wsw.	foggy.
S. S. Neckar, N. 49° 40′, W. 7° 33′	29.43	747.5	52.0	11.1	79	wnw.			4		6		wnw.		4 h'r	4 h'r	mod.	wnw.	fair.
S. S. Oder, N. 43° 21′, W. 56° 36′	29.66	753.4	50.9	10.5		s.			3		10		w.		7 h'r	7 h'r	r'gh	s.	covered.
S. S. Ohio, Galveston, Texas	30.16	766.1				ne.			4		8		e.		5 h'r	5 h'r	r'gh	ne.	misty.
S. S. Saller, Bremerhaven, Germany	29.25	742.9				sw.			4		10		sw.		8 h'r	8 h'r			cloudy.
S. S. Strassburg, N. 31° 47′. W. 17° 04′	30.23	767.8	67	19.4	84	ne.			2		5		ne.		o	o	mod.	ne.	fair.
S. S. Werra, New York, N. Y *	30.20	767.1	42.8	6.0		nw.			6		1		nw.		o	o	high	nw.	fair.
S. S. Belgic, N. 27° 28′, E. 125° 26′†	30.23	767.8	57	13.9	75	nnw.			6		5		nne.		o	o	h'vy	ne.	fair.
S. S. Captic, N. 39° 54′, W. 129° 24′	29.93	760.2	56.5	13.6	75	sw.			3		3		w.		o	o	high	w.	fair.
S. S. Oceanic, N. 35° 20′, E. 166° 15′*	30.07	763.8	67	19.4	74	sse.			6		7		se.				mod.	s.	cloudy.
S. S. City of Augusta, N. 33° 21′, W 78° 09′†	30.26	768.6				nnw.			6		1		nnw.		o	o	sm'h		clear.
S. S. Mississippi, near Astoria, Oregon†	29.92	760.0	48	8.9	78	e.			3		7		s.						fair.
S. S. Oregon, San Francisco, Cal †	30.03	762.7	47	8.3	92	calm			0		0								hazy.
S. S. Ancon, San Francisco, Cal†	29.98	761.5	49	9.4	93	se.			2		10		se.						cloudy.
S. S. Orizaba, N. 34° 35′ W. 120° 40′†	30.02	762.5	55	12.8	80	ne.			5		fg.		w.				ong	sw.	foggy.
S. S. State of California, Portland, Oregon *†	29.90	759.4	44	6.7	68	sw.			1		8		s.						cloudy.
S. S. Australia, Sydney, N. S. W	30.08	764.0	72	22.2	90	nne.			4		8?		ne.		o	o			clear.
S. S. City of New York, Sydney, N. S. W†	30.17	766 3	69	20.6	80	ne.			1		0				o	o			clear.
S. S. City of Pekin, Hong Kong, China †	30.47	773.9	59	15.0	54	ne.			4		8		nw.		o	o			cloudy.
S. S. City of Rio de Janeiro, San B'as, Mexico†	30.03	762.7	74	23.3	81	se.			1		1				o	o	sm'h		fine.
S. S. City of Sydney, N. 30° 06′ W. 140° 07′ †	30.18	766.6	66	18.9	74	ene.			4		2		ene.		o	o	h'vy	e.	fair.
S. S. Grenada, Panama, Panama †	29.87	758.7	76	24.4	95	nw.			1		8?		nw.		2 h'r	2 h'r			clear?
S. S. San Jose, N. 22° 36′ W. 108° 56′						wsw.			4		5 k		sw.		o	o	mod.	nw	
S. S. Zealandia, N. 27° 48′, W. 143° 50′	30.11	764.8	69	20.6	85	ne.			6		9		ne.				mod.	ne.	fine
S. S. Bermuda, N. 32° 55′, W. 69° 47′†	30.17	766.3	64	17.8		n.			4		6		n.		o	o	h'vy	n.	cloudy.
S. S. Muriel, N. 29° 06′, W. 67° 18′	30.12	765.0	71	21.7		wnw.			3		10				o	o	mod.	nw.	overcast.
S. S. Claudius, N. 19° 50′, W. 75° 10′ †	30.14	765.5				ne.			4		6		ene.		o	o	short	ene.	fair.
S. S. Valencia, La Guayra, Venezuela †	30.00	762.0	82	27.8	83	ene.			3		3		ese.		o	o	mod.	ne.	fine.
S. S. Belgenland, Antwerp, Belgium†	29.44	747.8	50	10.0	100	ssw.			5				ssw.		o	o			cloudy.
S. S. Rhyuland, Jersey City, N. J	30.14	765.5	40	4.4	64	nw.			6		0								hazy.
S. S. Waesland, N. 49° 23′, W. 31° 56′	29.74	755.4	49	9.4	93	ne.			6		10		ene.		8 h'r	8 h'r	high	ne.	light rain.
S. S. Maas, N. 49° 42′, W. 19° 15′			51.8	11.0	95	nnw.			4		2		n.		2 h'r	2 h'r	8	nnw.	clear.
S. S. P. Caland, Rotterdam, Holland	29.28	743.7	47.3	8.5	91	w.			6		5		w.						fair.
S. S. W. A. Scholten, N. 42° 51′, W. 59° 03′	29.83	757.7	50.9	10.5	68	w.			6		8		wsw.		7 h'r	7 h'r			
S. S. Zaandam, N. 49° 46′, W. 21° 30′*	29.61	752.1	60.4	15.8	93	w.			5		4 k		w.		o	o	4	w.	squally
S. S. State of Florida, Larne, Ireland	28.98	736.1	47	8.3		ssw.			6		8		sw.		8 h'r	8 h'r			raining.
S. S. State of Indiana, N. 53° 21′, W. 31° 15′			43	6.1		ne.			4		2		ne.		4 h'r	4 h'r	high	ne.	clear.
S. S. State of Nevada, N. 41° 58′ W. 64° 45′†	29.75	755.6	47	8.3		wnw.			7		5		wnw.		hail	hail	high	w.	squally.
S. S. Thingvalla, N. 54° 20′, W. 35° 21′†	29.68	753.9	41.0	5.0		nw.			9		4		nw.		4 h'r	4 h'r	h'vy	nw.	clear.
S. S. Iowa, N. 45° 33′, W. 47° 59′ *†	30.19	766.8	41	5.0		sw.			4		8		sw.		3 h'r	3 h'r	h'vy	w.	cloudy.
S. S. Plantyn, N. 48° 34′, W. 16° 03′	29.59	751.6							4		3		ssw.		12 h'r	12 h'r	mod.	sw.	fair.
S. S. Baltic, N. 40° 48′, W. 61° 58′	29.79	756.7	53	11.7	67	w.			6		8		w.		o	o	r'gh	w.	d. clouds.
S. S. Britanic, N. 41° 38′, W. 63° 21′†	29.71	754.6	46	7.8	84	w.			6		7		w.		2 h'r	2 h'r	cross	sw.	cloudy.
S. S. Celtic, off Mine Head, Ireland †	29.33	745.0	52	11.1	73	wsw.			5		5		w.		o	o	sm'h		fair.
S. S. Lepanto, N. 48° 22′, W. 19° 26′ *	29.69	754.1	58	14.4		wnw.			6		8		nnw.		rain	rain	h'vy	nnw.	showery.
S. S. Marengo, N. 49° 30′, W. 26° 00′†	29.64	752.8				n.			5		10		n.		10 h'r	10 h'r	mod.	nw.	rainy.
S. S. Romano, Boston, Mass	29.90	759.4	38	3.3		nw.			6		1		nw.		o	o			fine.
S. S. Salerno, N. 35° 51′, E. 160° 11′			66	18.9		wnw.			2		3		w.		o	o	sm'h	w.	clear.
S. S. Aries, N. 40° 00′, W. 73° 35′*†	30.12	765.0				wnw.			7		2		nw.		o	o	high	nw.	
S. S. Catherine Whiting, Providence, R. I.†	29.94	760.5				nw.			5		0				o	o			
S. S. Norman, N. 40° 38′, W. 73° 13′	30.13	765.3				wnw.			5						o	o	sm'h		clear.
S. S. Saxon, Boston, Mass*†	29.92	760.0	46	7.8		w.			4		3								
MISCELLANEOUS.																			
Bk. Adelaid, N. 25° 42′, W. 71° 41′ *†	30.24	768.1	74	23.3		nne.			5		2		n.		o	o	short	n.	fair.
Bg. Alcira, Maracaibo, Brazil	29.94	760.5	82	27.8		e.			3		2		ene.		o	o			clear.
S. Annie M. Law, Kobe, Japan *†	29.82	757.4	46	7.8		nnw.			3		o				2 h'r	2 h'r			
S. S. Antonio Lopez, N. 21° 00′, W. 74° 30′ *	29.91	759.7	75.7	24.3	69	ese.			5		1 k		se.		o	o	r'gh	ese.	clear.
Bk. Aquidneck, S. 18° 37′ W. 38° 07′*†	30.10	764.5	76	24.4	86	ne.			4		2				4 h'r	4 h'r	mod.	e.	clear.
Bk. Aureola, Bristol, Eng*†	30.20	767.1				ne.			1				n.				light	ne.	clear.
Bgt. Arthur, N. 38° 12′, W. 70° 12′ *†	29.48	748.8	50	10.0		wsw.			5		10		wsw.		10 h'r	10 h'r			cloudy
Bk. Bayonnaise, N. 10° 15′, W. 61° 00′*†	30.10	764.5				wnw.			7				wnw.		o	o		wnw.	
Sch. B. J. Baker, Smithville, N. C.	30.16	766.0				e.			4		5?		e.		o	o	sm'h		clear.?
Sch. Bonny Doon, N. 41° 54′, W. 30° 00′						ene.			6		2		e.						clear.
S. S. Burswell, N. 29° 11′, W. 54° 30′*†	30.13	765.3	82	27.8		nnw.			4		2		nnw.		o	o	long	nw.	
Bk. Champion, N. 37° 02′, W. 13° 33′			65.0	18.3		ssw.			1		5		w.		o	o	str'ng	nnw.	fine.
Schr. Chas. F. Heyer, N. 28° 40′, W. 84° 59′	30.31	769.9	67	19.4	69	wsw.			1		2		sw.		o	o	long	nnw.	clear.
Schr. C. R. Flint, Cedar Keys, Fla†	30.31	769.9	54	12.2		e.			1	1 cs	0				o	o	short	ne.	clear.
S. S. Cornelius, N. 44° 18′, W. 38° 51′			57.9	14.4		ne.			3		3		ne.		o	o			clear.
S. S. D. J. Foley, N. 35° 18′, W. 75° 05′			49	9.4		wnw.			5		5		nw.		o	o	long	wnw.	fair.
Bkt. David Preston, New Orleans, La*†	30.00	762.0	72	22.2		n.			6		3		n.		o	o	r'gh	n	fine.
Bk. Don Quixote, Pasoeroean Roads, Java*	29.85	758.2	88	31.1		sse.					2		s.		o	o			
Bk. E. D. Bigelow, N. 45° 45′ W. 6° 00′*†	29.67	753.6				nw.			2		2		nw.		o	o	sm'h		clear.
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†	30.40	772.1	38	3.3		sw.			9		10		wsw.		driz.	driz.	long	wsw.	gloomy.
S. S. E. J. Spicer, New York, N. Y	30.18	766.6	42	5.6	100	nw.			2		1		nw.		o	o			clear.
						wnw			7		6		nw.		o	o			fair.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Eliza Barss, Bermuda, W. I†	30.08	764.0				nw.			5		5?		nw.	o	o			cloudy?
Bk. Essex, Muscat, Arabia*†	30.08	764.0	79	26.1		nw.			3									fine.
Schr. F. E. McDonald, Belfast, Maine†	29.71	754.6				nw.			5		5							
S. S. Foscolia, N. 9° 01′ W. 47° 07′						var.			3		10		e.	9 h'r	9 h'r	mod.	e.	cloudy.
Bk. Freya, N. 19° 10′ W. 43° 00′			77	25.0		sw.			2		1		s.	9 h'r	9 h'r	mod.	se.	clear.
Bg. George, Off Gut of Canso, N. S*†	29.60	751.8				wsw.			7		2		w.	4 h'r	4 h'r	r'gh	ese.	fair.
S. Grecian, N. 24° 40′, W. 65° 20′†	30.14	765.5	79	26.1	74	ne.			1		3		e.	o	o	long	n.	clear.
Bk. Grey Eagle, N. 32° 16′, W. 44° 10′			75	23.9		ssw.			3		5		ssw.	2 h'r	2 h'r	long	nw.	misty.
Bk. Gronsvaer, S. 40° 24′ E. 172° 40′†	29.79	756.7	63.4	17.4	99	s.			4		5		w.	o	o	2	nw.	fair.
Bk. Hattie G. McFarland, New York, N. Y†	30.31	769.9	42	5.6		wnw.			5		2		nw.	o	o			clear.
Schr. Hattie Weston, Icaque, Trinidad, W. I.*†	30.00	762.0	82	27.8		ene.			2		2		ene.	3 h'r	3 h'r	sm'h	ene.	fair.
S. Hedwig, N. 37° 12′, W. 73° 01′	30.26	768.6	45.5	7.5	78	nw.			6		9		nw.	o	o	3	nw.	
Bk. Heinrich & Tonio, N. 44° 27′, W. 35° 50′*†	30.05	763.3	57.5	14.2		w.			6		10		w.	o	o	long	w.	cloudy.
Schr. Isabel Alberto, Cedar Keys, Fla†	30.31	769.9				ne.			2		0			o	o			clear.
Schr. James Slater, N. 19° 48′, W. 61° 23′†	30.09	764.3	83	28.3		ne.			3		2		ene.	2 h'r	2 h'r	mod.	ene.	
Schr. Jennie N. Huddell, Savanah, Ga†	30.35	770.9	43	6.1	83	nw.			1		0			o	o			clear.
S. S. John Hopkins, Chesapeake Bay			38	3.3		nw.			5		0			o	o			clear.
Schr. John L. Thomas, N. 17° 06′, W. 83° 37′*†	30.12	765.0				ne.			4		2		e.	o	o	con.		clear.
Bg. John Wesley, Cardenas, Cuba, W. I†	30.07	763.8				ese.			1		5			3½ h'r	3½ h'r			fair.
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.09	764.3	82	27.8	63	nw.			3		0							clear.
Light House Tender, Laurel, Key West, Florida†	30.15	765.8	69	20.6		ne.			3		4		ne.	o	o			fair.
Bk. Liberia, N. 8° 43′, W. 18° 50′*	29.91	759.7	84	28.9	79	nw.			3		5		n.	o	o			
Bg. Lilian, N. 21° 04′, W. 65° 53′†	30.12	765.0	82	27.8		ne.			3		1		ne.	o	o	mod.		clear.
S. S. Madrid, N. 35° 19′, W. 71° 27′*†	30.28	769.1	56	13.3	75	wnw.			6		8?		wnw.	o	o	r'gh	nw.	clear?
S. S. Malabar, Gulf of Suez*†	30.00	762.0				nnw.			1		0			o	o	sm'h		clear.
Bg. Mary Gibbs, N. 35° 55′, W. 73° 50′*†	30.20	767.1	58	14.4		n.			6		10		nnw.	o	o	4	nnw.	cloudy.
Bk. Matilda C. Smith, N. 32° 06′ W. 27° 50′*†	30.36	771.1				ene.			3		3		ene.	o	o	mod.	nw.	fine.
Bg. Mattie B. Russell, N. 35° 50′, W. 74° 20′*†	30.42	772.7				nw.			7		7		n.	o	o	high	nnw.	cloudy.
Schr. Moravian, N. 12° 33′, W. 81° 43††	30.13	765.3				nne.							ne.	4 h'r	4 h'r	long	ne.	cloudy.
S. M. P. Grace. N. 9° 13′, W. 119° 50′*	29.86	758.4	80	26.7		var.			2		9		ese.	o	o	mod.	sse.	
Bk. Northern Queen, N. 36° 39′, W. 64° 52′*†	30.00	762.0	69	20.6	70	nw.			7		2		nw.			r'gh	w.	clear.
Bg. O. C. Clary, N. 19° 53′, W. 57° 45′*†	30.00	762.0	79	26.1	95	ene.			2		1		e.			sm'h		clear.
Bk. Orpheus, N. 44° 46′, W. 28° 27′	30.24	768.1	58	14.4		e.			5		8 k		nnw.	o	o	mod.	nnw.	squally.
S. Paramita, San Francisco, Cal†	30.04	763.0	52	11.1		ese.			1				se.	o	o			clear
S. S. Radnorshire, N. 10° 56′, E. 57° 33′*†	29.90	759.4				nne.			4				nne.	o	o	mod.	ne.	clear.
S. St. Francis, S. 4° 22′, W. 110° 30′†	29.99	761.7	72	22.2		ese.			4		4		ese.	o	o	mod.	ese.	fair.
Schr. S. B. Hubbard, Dutch Id, R. I†	29.91	759.7	45	7.2		w.			7		5		wnw.	o	o			fine.
Bk. Southern Belle, Antwerp, Belgium*†	29.30	744.2	57	13.9		w.			5		10							drizzling.
S. S. Strathleven, N. 26° 50′, E. 34° 29′	29.93	760.2	78.8	26.0	79	nnw.			2		1		nw.			2	nnw.	blue sky.
S. S. Sunbeam, N. 44° 42′ W. 12° 03′	29.84	757.9	60	15.6	94	sw.			6		10		w.	8 h'r	8 h'r	6	sw.	drizzling.
Bk. Truro, N. 44° 13′, W. 48° 35′†*	30.12	765.0				se.			2–3		2		sw.	o	o	mod.	wnw.	clear.
U.S.F.C.S.S. Fish Hawk, Washington, D. C†	30.42	772.7	37	2.8	71	w.			3		3		calm					clear.
Bk. Usko, N. 43° 10′ W. 49° 22′*	30.03	762.7	43	6.1		ese.			4		0			o	o	cross	var.	clear.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.25	768.3	64.4	18		calm			0					o	o			covered.
Schr Viola Reppard, New York, N. Y†	30.13	765.3	60	15.6		w.			2		2		nnw.	o	o			
Schr. Walter L. Plummer, Miragone, Hayti, W. I*†	30.10	764.5				ssw.			1		0			o	o			fine.
Bk. Wandering Jew, S. 28° 24′, W. 45° 00′†	29.99	761.7	77	25.0		nw.			3		2		nne.	o	o	mod.	ne.	clear.
Bk. Warden Law, S. 39° 40′, W. 72° 56′	30.24	768.1				s.			3		10		s.	o	o	sm'h	s.	covered.
Bgt. Willie, S. 33° 10′, E. 27° 45′*†	30.08	764.0	70	21.1		e.			4		4		e.	o	o	long	ssw.	fair.
S. Wm. Woodbury, N. 37° 27′, W. 58° 05′*†	29.94	760.5	56	13.3		w.			7		6		nw.			high	w.	squally.

International Chart I. November 25, 1882. Isobars and Isotherms.

UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 26, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.16	766.0	61.9	16.6	75	s.	.....	.....	3	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.11	764.9	68.0	20.0	51	sw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.09	764.3	71.2	21.8	72	sw.	.....	.....	5	.....	2	.....	.....	0	0	clear	Fonfréde.
Tunis	.....	.....	30.16	766.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.19	766.8	72.3	22.4	42	w.	.....	.....	2	.....	0	.....	.....	0	0	clear	Pérès.
Tebessa	.....	.....	30.22	767.6	60.8	16.0	59	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	67.6	19.8	20	w.	.....	.....	2	.....	0	.....	.....	0	0	clear	Louchamp.
Laghouat	.....	.....	30.21	767.4	59.7	15.4	6	sw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.25	768.4	65.8	18.8	45	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	29.75	775.6	29.84	757.9	69.7	20.9	85	wsw.	2	0.9	.....	.....	7	.....	.....	0	0	.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.21	742.0	29.75	755.7	59.0	15.0	64	w.	.....	.....	6	.....	8	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.72	729.4	29.47	748.5	55.8	13.2	53	w.	17.4	7.8	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.72	729.5	29.60	751.8	47.5	8.6	89	s.	.....	.....	3	.....	10s;fg	.....	n.	0	0	.....	Julius Mikolik.
Gratz	28.44	722.4	29.69	754.0	49.6	9.8	77	sw.	.....	.....	2	.....	3	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.41	721.7	29.82	757.4	59.5	15.3	47	se.	.....	.....	1	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.23	717.1	29.54	750.4	56.1	13.4	62	wsw.	.....	.....	1	.....	5 k	.....	.....	0	0	fair	The Staff.
Lemberg	28.54	724.8	29.51	749.6	49.8	9.9	70	sw.	.....	.....	4	.....	1	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.74	755.5	29.85	758.3	59.7	15.4	75	sw.	.....	.....	3	.....	10	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	29.25	743.0	29.71	754.6	55.9	13.3	67	sw.	.....	.....	5	.....	10	.....	.....	0.075	1.9	.....	Joseph Midlinszky, S. J.
Szegedin	29.48	748.7	29.75	755.7	59.0	15.0	71	s.	.....	.....	2	.....	3	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.78	756.5	29.89	759.1	52.5	11.4	96	calm	.....	.....	0	.....	10	.....	.....	0.209	5.3	raining	Royal Academy.
Vienna	28.87	733.4	29.57	751.1	01.2	16.2	47	w.	.....	.....	3	.....	7	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	28.99	736.3	29.09	738.9	36.2	2.3	88	wnw.	10	4.5	.....	.....	10	.....	.....	0.300	7.6	raining	W. Boswell
Armagh, Observatory	29.19	741.4	29.43	747.5	43.3	6.3	79	wnw.	15	6.7	.....	.....	.....	.....	.....	.....	.....	.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.25	742.9	44.8	7.1	88	w.	34	15.2	.....	.....	9	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	28.67	728.2	29.20	741.7	45.9	7.7	84	w.	30	13.4	.....	.....	10	.....	.....	.....	.....	gloomy	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.10	2.5	.....	McLandsborough&Preston.
Bridgetown, Barbadoes	29.90	761.0	29.98	761.5	82.0	27.8	67	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	d. clouds	Corpl.J.Surgenor, A. H C.
Cardington	.....	.....	.....	.....	46.4	8.0	81	w.	.....	.....	4.0	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E	29.23	742.4	29.36	745.7	47.7	8.7	65	sw.	.....	.....	2	.....	5	.....	.....	blank	blank	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.37	746.0	29.60	751.8	47.8	8.8	.....	wnw.	.....	.....	5	.....	5	.....	.....	.....	.....	showery	The Staff.
Fort Napier, Natal	27.57	700.3	29.79	756.7	79.0	26.1	53	e.	.....	.....	1	.....	7	.....	.....	.....	.....	.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.86	758.4	85.0	29.4	71	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.08	764.0	30.13	765.3	68.2	20.1	92	w.	.....	.....	3	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H C.
Glasgow, Observatory	28.90	734.0	29.11	739.4	42.8	6.0	71	wnw.	.....	.....	5	.....	9 k	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.20	741.7	29 37	746.0	46.7	8.7	69	wsw.	.....	.....	5	.....	9	.....	.....	.....	.....	d. clouds	The Staff.
Guernsey	29.28	743.7	29.58	751.3	50.0	10.0	64	w.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds	A. Collenette, F. M. S
Kew, Observatory	29.34	745.2	29.37	746 0	46.9	8.3	63	wsw.	20	8.9	.....	.....	6	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.03	737.3	29.29	744.0	43.0	6.1	83	sw.	.....	.....	1	.....	8	.....	.....	.....	.....	raining	J. C. Smith.
Malta, Mediterranean	30 07	763.8	30.15	765.8	63.6	17.6	96	w.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.10	764 5	30.14	765.5	75.0	23.9	69	ne.	.....	.....	2	7 c	0	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.76	730.5	29.28	743.7	45.2	7.3	83	w.	.....	.....	4	.....	4	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.12	739.6	29.35	745.5	46.3	7.9	74	wsw.	.....	.....	5	.....	7	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.48	748.8	29.55	750.6	49.0	9.4	77	nw.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	29.02	737.1	29.12	739.6	39.2	4.0	93	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	blue sky	Rev. C. Clouston, L L D.
Scutari Cemetery, Turkey	29.97	761.2	30.03	762.7	58.8	14.9	67	sw.	.....	.....	3	.....	0	.....	.....	.....	.....	blue sky	W. H. Lyne.
Sheffield	28.96	735.6	29.24	742.7	44.1	6.7	88	sw.	.....	.....	1	.....	4	.....	.....	0.03	0.8	d. clouds	W. F. Cooper.
Silloth Rectory	29.15	740.4	29.18	741.2	44.5	6.9	78	nw	.....	.....	6	.....	8	.....	.....	0	0	squally	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.22	742.2	42.9	6.1	84	wsw.	25	11.2	.....	.....	10	.....	.....	.....	.....	raining	I. New.
Straifield Turgiss	29.19	741.4	29.41	747.0	46.6	8.1	73	w.	.....	.....	3–4	.....	9	.....	.....	.....	.....	squally	Rev.C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.57	751.1	29.62	752.3	51	10.6	72	nw.	.....	.....	7	.....	6	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	29.69	754 1	29.72	754.9	46.0	7.8	03	nw.	38	17.0	.....	.....	6	.....	.....	blank	blank	d. clouds	The Met'g'l Office
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.55	750.6	29.59	751.6	28.	— 2.2	71	w.	24	10.7	.....	.....	10 n	.....	w.	0.075	1.9	snowy	H. J. Cundall, C. E
Chatham, N. B*	29.55	750.6	29.61	752.1	25	— 3.9	88	w.	7	3.1	.....	5 ck	5 ks	w.	sw.	0.17	4.3	fair	G. A. Blair.
Father Point, Quebec*	29.71	754 6	29.73	755.1	25	— 3.9	80	nw.	35	15.6	.....	0	8 s	.....	n.	0.20	5.1	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.49	749.0	30.40	772.1	12	—11.1	83	n.	5	2.2	.....	.....	10 s	.....	n.	0	0	cloudy	James Stewart.
Halifax, N. S*	29.63	752.6	29.76	755.9	28	— 2.2	77	w.	15	6.7	.....	.....	10 k	.....	nw.	inap.	inap.	cloudy	A. Allison.
Kingston, Ontario*	29.87	758.7	30.23	767.8	18	— 7.8	91	ne.	3	1.3	.....	8 cs	2 s	calm	ne.	0	0	fair	A. P. Knight, M. A
Montreal, Quebec*	29.95	760.7	30.17	766.3	18	— 7.8	83	w.	24	10.7	.....	0	0	.....	.....	0.03	0.8	clear	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.39	746.5	30.13	765.3	23	— 5.0	88	e.	5	2.2	.....	.....	10 n	.....	e.	0.02	0.5	light snow	Rev. R. Mosley.
Fort Dover, Ontario	29.37	746.0	30.09	764.3	36	2.2	80	s.	6	2.7	.....	.....	10 n	.....	s.	inap.	inap.	threatening	H. Morgan.
Fort Stanley, Ontario	29.40	746.7	30.06	763.5	36	2.2	69	se.	12	5.4	.....	.....	10 n	.....	s.	inap.	inap.	light snow	M. Payne.
Quebec, Quebec*	29.66	753.4	30.00	762.0	20	— 6.7	84	w.	.....	.....	5	0	2	.....	nw.	0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.72	754.9	30.21	767.3	16	— 8.9	83	ne.	2	0.9	.....	.....	10 s	.....	ne.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.30	744.2	30.05	763.3	28	— 2.2	88	se.	16	7.2	.....	.....	10 ks	.....	.....	0	0	cloudy	
St. Andrews, N. B	29.79	756.7	29.84	757.9	29	— 1.7	73	nw.	16	7.2	.....	0	0	.....	.....	0	0	clear	
Sydney, C. B*	29.49	749.0	29.56	750.8	29	— 1.7	92	w.	18	8.0	.....	2c;k	10 ks	.....	w.	0.09	2.3	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.75	755.6	30.15	765.8	30	— 1.1	92	nw.	5	2.2	.....	.....	10 ks	.....	se.	inap.	inap.	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.81	757.2	29.88	758.9	29	— 1.7	84	nw.	30	13.4	.....	.....	10 k	.....	nw.	0.04	1.0	cloudy	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.58	725.9	30.06	763.5	25.0	— 3.9	100	sssw.	.....	.....	5	.....	10 s	.....	.....	0.224	5.7	stormy	Wm. Wylie.
St. Johns, Newfoundland	29.27	743.4	29.52	749.8	40	4.4	100	se.	2	0.9	.....	2 k	2 s	.....	.....	1.10	27.9	fair	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.03	762.7	30.06	763.5	68.8	20.4	90	e.	12.6	5.6	.....	9 ck	0	.....	.....	0	0	light haze	John Duthie.
Cape Town, C. G. H. Obs'y	29.89	759.2	29.93	760.2	77.0	25.0	61	s.	30	13.4	.....	0	1	.....	.....	0	0	.....	The Staff, for D.Gil.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction Upper. From.	Clouds. Direction Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	OBSERVERS
Chinese (Sub-series).																			
Tchang-kia-tchouang	.....	.....	30.12	765.0	39.4	4.1	52	sw.	4.3	1.9	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.31	769.9	30.34	770.5	36.1	2.3	91	w.	1.1	0.5	.....	0	0	.....	.....	0	•0	clear	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.13	739.9	29.18	741.1	40.1	4.5	84	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	29.03	737.3	29.05	737.9	37.0	2.8	96	s.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	Overloerer Lauridsen.
Godthaab, Greenland	30.02	762.4	30.06	763.5	18.9	— 7.3	92	ne.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.98	761.4	30.00	761.9	19.0	— 7.2	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....
Stykkisholm, Iceland	29.71	754.7	29.76	755.8	22.6	— 5.2	88	ne.	.....	.....	8	.....	10	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.31	744.4	29.34	745.3	38.1	3.4	75	nne.	18	8	.....	.....	10	.....	.....	.....	... ..	raining	Overloerer Bergh.
Vestervig	28.96	735.5	29.05	737.9	37.2	2.9	96	e.	.....	.....	2	.....	7	.....	.....	.....	.....	.....	Loerer Oesterbol.
Jacobshavn	29.99	761.8	30.04	763.0	— 0.6	—18.1	.....	e.	.....	.....	4	.....	2	.....	.....	.....	.....	snowing	.....
French.																			
Agen, Normal School	29.28	743.7	29.93	760.1	55.4	13	98	s.	.....	.....	1	.....	8	.....	w.	0.110	2.8	raining	M. Labroue, Director.
Alençon, Normal School	29.10	739.1	29.65	753.1	48.6	9.2	84	se.	.....	.....	1	.....	ks	.....	ne.	0.394	10.0	.....	M. Nicot, Director.
Arras, Engineer School	29.26	743.2	29.52	749.7	46.8	8.2	90	w.	.....	.....	2	.....	ku	.....	.....	c.476	12.1	.....	M. Fénéon, Command't.
Avignon, Normal School	29.84	757.9	29.92	759.9	60.1	15.6	79	e.	.....	.....	1	.....	hz	.....	.....	0	0	hazy	M. Giraud, Director.
Bar-sur-Seine	29.05	737.9	29.61	752.0	50.2	10.1	92	wnw.	.....	.....	2	.....	10	.....	w.	0.528	13.4	covered	M. Saillard, Director.
Beauvais, Normal School	29.28	743.7	29.54	750.4	50.0	10	72	wsw.	.....	.....	2	.....	5	.....	wsw.	0.177	4.5	cloudy	M. Frère Eugène Marie.
Besançon, Normal School	28.70	729.0	29.58	751.4	55.4	13	88	ssw.	.....	.....	2	.....	10 n	.....	sw.	1.06	27.	raining	M. Gobin, Director.
Bordeaux, Observatory	29.52	749.9	29.78	756.5	56.5	13.6	83	w.	.....	.....	2	.....	10	.....	w	0.465	11.8	covered	M. Rayet, Director.
Bourges, Normal School	29.11	739.5	29.66	753.4	51.8	11	95	w.	.....	.....	1	.....	ku	.....	w.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.49	749.1	29.74	755.3	49.3	9.6	89	w.	.....	.....	2	.....	3	.....	w.	0.906	23.0	.....	M. de Kermaree, Dir.
Caen, Normal School	29.47	748.5	29.54	750.4	48.9	9.4	73	sw.	.....	.....	.....	.....	.....	.....	.....	0	0	.....	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.22	742.3	29.54	750.3	50.4	10.2	89	sw.	.....	.....	2	.....	2	.....	w.	1.642	41.7	slightly cl'dy	M. Judot, Director.
Charleville, Normal School	28.99	736.3	29.51	749.5	48.9	9.4	92	w.	.....	.....	1	.....	8	.....	.....	0.67	17.	¾ covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.29	718.6	29.61	752.1	60.4	15.8	62	sw.	.....	.....	6	.....	8	.....	.....	0.059	1.5	¾ covered	M. Allnard, Director.
Cluny, Normal School	28 81	731.8	29.70	754.4	57.2	14	76	w.	.....	.....	2	.....	10	.....	wsw.	0.106	2.7	heavy rain	M. de Villemontée, Dir.
Commercy, Normal School	28.73	729.8	29.57	751.1	47.8	8.8	84	w.	.....	.....	3	.....	8	w.	w.	2.01	51.	very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.25	692.1	29.80	756.8	45.0	7.2	97	.....	.....	.....	.....	.....	10	.....	.....	0.835	21.2	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.71	729.3	30.61	777.6	59.0	15.0	72	s.	.....	.....	1	.....	7	.....	s.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.04	737.7	29.82	757.3	55.4	13	79	se.	.....	.....	1	.....	10 kn	.....	sw.	0.283	7.2	raining	M. Ablard, Director.
Guéret	28.14	714.7	29.71	754.7	53.6	12	76	sw.	.....	.....	4	.....	5	.....	sw.	0.650	16.5	cloudy	M. Delorme, Dir.
Lamballe, Normal School	29.35	745.6	29.63	752.6	48.2	9	81	w.	.....	.....	2	o	5 k	.....	w.	0.12	3.	cloudy	M. Ollivault, Director.
Lescar, Normal School	29.24	742.6	29.80	756.8	64.8	18.2	52	w.	.....	.....	1	o	5 k	.....	.....	0	0	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.61	752.1	29.71	754.7	54.3	12.4	81	wnw.	.....	.....	1	.....	8	w.	nw.	0.039	1.0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.68	728.5	29.73	755.1	54.3	12.4	81	s.	.....	.....	6	c	n	.....	wsw.	0	0	.....	M. André, Director.
Mans, Normal School	29.32	744.8	29.62	752.3	52.2	11.2	68	w.	.....	.....	3	.....	.....	.....	w.	0.366	9.3	.....	M. Piboen, Director.
Marseille, Observatory	29.60	751.7	29.86	758.5	64.6	18.1	61	se.	.....	.....	0.1	.....	10	.....	se.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.73	628.2	29.58	751.2	44.6	7.0	80	sw.	9.4	4.2	.....	.....	6	nw.	.....	0	0	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29.72	754.9	29.85	758.2	59.0	15	87	ne.	.....	.....	2	.....	5	nne.	nne.	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	28.76	730.4	29.54	750.2	49.6	9.8	74	wsw.	.....	.....	1	.....	ku	.....	w.	1.039	26.4	.....	M. Hasse, Director
Nantes, Observatory	29.57	751.1	29.73	755.2	52.7	11.5	75	w.	.....	.....	1-2	o	8 n; kn	.....	wsw.	0.776	19.7	.....	M. Larocque, Director.
Perpignan, Observatory	29.76	755.9	29.87	758.8	58.1	14.5	78	se.	5.6	2.5	.....	.....	7	wnw.	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.12	536.4	.....	.....	29.7	— 1.3	.....	nw.	.....	.....	1	.....	.....	.....	nw.	0.039	1.0	.....	Gen'l de Nansouty, Dir.
Privas, Normal School	28.84	732.5	29.91	759.8	52.2	11.2	90	s.	.....	.....	1	.....	5	s.	s.	0	0	cloudy	M. Taillieu.
Puy de Dôme Obs'y, Summit	24.78	629.5	.....	.....	41.0	5.0	100	wsw.	.....	.....	9	.....	10	.....	.....	0.228	5.8	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.67	753.6	29.70	754.4	53.6	12.0	98	wsw.	.....	.....	2	.....	10	.....	.....	1.14	29.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.54	750.4	29.76	755.9	53.6	12	83	sw.	.....	.....	1	.....	8	sw.	sw.	0.224	5.7	very cloudy	M. Brotier, Director.
Rodez, Normal School	27.70	703.5	29.84	757.8	52.9	11.6	78	w.	.....	.....	1	.....	cn	.....	e.	0.331	8.4	.. ...	M. Seger, Director.
Rouen, Normal School	29.52	749.8	29.57	751.0	49.3	9.6	76	wnw.	.....	.....	1	.....	5	.....	wnw	0.24	6.	cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	47.3	8.5	93	w.	.....	.....	1	.....	10	w.	w.	0.539	13.7	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.41	747.0	29.58	751.2	50.7	10.4	66	wsw.	.....	.....	1	.....	7	w.	w.	0.504	12.8	.....	M. Renou, Director.
Toulouse, Observatory	29.21	741.8	29.93	760.1	51.1	10.6	85	se.	.....	.....	1	.....	8	.....	.....	0	0	very cloudy	M. Baillaud, Director.
Tours	29.47	748.5	29.65	753.0	52.9	11.6	77	wsw.	.....	.....	1	.....	1	... .	nw.	0.453	11.5	clear	M. de Tastes.
Versailles, Observatory	29.08	738.6	29.57	751.1	50.4	10.2	70	w.	.....	.....	3	.....	.. ..	.....	.....	0.248	6.3	.....	Dr. A. Bérigny, Director.
German.																			
Ansbach	28 10	713.8	29.56	750.7	45.0	7.2	85	sw.	.....	.....	6	.....	10	sw.	.....	1.055	26.8	.....	Prof. Jnedt.
Bamberg	28.66	727.9	29.48	748.9	46.4	8.0	84	w.	.....	.....	2	.....	8 n	.....	w.	0.827	21.0	raining	Prof. Dr. Hoh.
Berlin	29.15	740.4	29.33	744.9	45.9	7.7	79	sw.	.....	.....	2	.....	0	.....	.....	0.024	0.6	.....	Prof. Dr. Arndt.
Breslau	28.93	734.9	29.45	748.1	47.1	8.4	79	wsw.	.....	.....	2	.....	10	.....	.....	0.118	3.0	.....	Royal University Obs'y.
Carlsruhe	29.11	739.3	29.54	750.3	50.2	10.1	86	sw.	.....	.....	3	.....	10	sw.	.....	0.256	6.5	raining	Albert Senz.
Cassel	28.67	728.2	29.38	746.3	45.9	7.7	83	s.	.....	.....	4	.....	8	s.	.....	0.343	8.7	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.14	740.2	29.50	749 2	48.9	9.4	86	sw.	.....	.....	1	.....	10	.....	.....	0.759	19.2	.....	Physical Society.
Friedrichshafen	28.227	716.7?	29.65	753.2	50.9	10.5	92	wsw.	.....	.....	2	.....	10	w.	.....	0.740	18.8	.....	Wilhelm, Chief Tel.
Hamburg	29.16	740.6	29.25	742.9	43.5	6.4	84	s.	.....	.....	3	.....	5	.....	.....	0.083	2.1	.....	E. Preller.
Kiel	29.17	740.8	29.18	741.2	42.1	5.6	88	sw.	.....	.....	2	.....	4	.....	.....	0.008	0.2	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.00	736.6	29.42	747.3	46.0	7.8	78	sw.	.....	.....	4	.....	8	w.	.....	0.370	9.4	rainy	H. Leppig, Asst.
Magdeburg	29.17	740.8	29.35	745 5	46.8	8.2	81	sw.	.....	.....	2	c	9 ks	sw.	sw.	0.035	0.9	.....	Weather Observatory.
Memel	29.24	742.7	29.28	743.8	39.9	4.4	84	wsw.	.....	.....	5	.....	10 ks	.....	.....	.....	.....	raining	Issermann.
Munich	27.80	706.2	29.64	752.9	51.3	10.7	73	nw.	.....	.....	5	.....	8	w.	.....	0.114	2.9	raining	Central Station.
Neufahrwasser	29.31	744.4	29.32	744.8	41.4	5.2	84	sw.	.....	.....	1	.....	10	.....	.....	0.008	0.2	.....	A. Lothes.
Neustadt, Palatinate	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.772	45.0	.....	Dicknether.
Stuttgart	28.61	726.7	29.50	749.2	50.4	10.2	81	w.	.....	.....	2	.....	10	.....	.....	0.101	4.1	.....	Prof. Dr. Schoder.
Wustrow	29.25	742.9	29.27	743.5	41.9	5.5	91	sw.	.....	.....	4	.....	10 s	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.70	754.4	30.08	764.1	64.6	18.1	.....	w	.....	.....	0.5	o	0	.....	.....	0	0	clear	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.01	762.2	30.06	763.5	81.2	27.3	37	ene.	27.0	12.1	.....	.....	0	.....	.....	0	0	blue sky	.....
Deesa	29.46	748.2	29.93	760.3	77.2	25.1	28	nne.	17.0	7.6	.....	.....	0	.....	.....	0	0	blue sky	.....
Bombay	29.73	755.1	29.77	756.0	77.7	25.4	79	nnw.	12.0	5 4	.....	.....	1	nnw.	.....	0	0	d. clouds	.....
Poona, Yarrowda	27.94	709.7	29.83	757.8	67.2	19.6	90	nne.	11.0	4.9	.....	.....	10	.....	.....	0.07	1.8	overcast	.....
Trichinopoly	29.49	749.1	29.77	756.2	85.7	29.8	66	ene.	2.0	0.9	.....	.....	0	.....	.....	0	0	d. clouds	.....
Bellary	28.23	717.1	29.70	754.2	79.0	26.1	76	n.	2.0	0.9	.....	.....	8	.....	.....	0	0	d. clouds	.....
Belgaum	27.19	690.7	29.75	755.6	69.9	21.1	93	n.	7.0	3.1	.....	.....	10	.....	n.	0.128	3.0	d. clouds	...
Lahore	29.28	743.6	30.05	763.2	65.6	18.7	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	.....
Roorkee	29.07	738.4	30.00	761.9	68.8	20.4	49	calm	0	0	.....	.....	5	.....	.....	0	0	hailing	.....
Agra	29.42	747.3	30.00	762.1	68.2	20.1	52	e.	4.0	1.8	.....	.....	7	.....	ne.	0	0	d. clouds	...
Nagpur	28.84	732.5	29.91	759.7	65.4	18.6	95	e.	6.0	2.7	.....	.....	10	.....	e.	2.73	69.3	overcast	.....
Jubbulpore	28.58	725.8	29.98	761.5	62.5	16.9	97	calm	0	0	.....	.....	10	.....	n.	0.53	13.5	overcast	.....
Lucknow	29.63	752.6	30.02	762.5	68.3	20.2	72	calm	0	0	.....	.....	5	nw.	.....	0	0	d. clouds	.....
Allahabad	29.70	754.3	30.02	762.6	63.8	17.7	97	calm	0	0	.....	.....	10	.....	e.	0.36	9.1	raining	.....
Patna	29.87	758.8	30.07	763.7	61.4	16.3	92	w.	2.3	1.0	.....	.....	10	w.	w.	0.37	9.4	drizzling	.....
Hazaribagh	27.94	709.6	30.03	762.8	58.7	14.8	96	nne.	4.9	2.2	.....	.....	10	.....	.....	0.14	3.6	drizzling	.....
Cuttack	29.85	758.1	29.93	760.2	69.2	20.7	73	calm	0	0	.....	.....	10	.....	.....	.....	.....	drizzling	.....
Calcutta, Alipore	29.92	759.9	29.94	760.5	74.5	23.6	73	n.	1.0	0.4	.....	.....	9	.....	.....	0	0	d. clouds	.....
Dhubri	29.87	758.7	29.99	761.8	70.0	21.1	85	calm	1.5	0.7	.....	.....	10	.....	.....	0	0	overcast	.....
Chittagong	29.84	758.0	29.93	760.3	77.7	25.4	88	calm	0.9	0.4	.....	.....	3	.....	.....	0	0	blue sky	.....
Sibsagar	29.66	753.4	30.01	762.2	66.8	19.3	84	sw.	2.0	0.9	.....	.....	10	w.	w.	c	0	d. clouds	.....
Zanzibar, Africa	29.78	756.5	29.81	757.1	86.1	30.1	64	ene.	6.7	3.0	.....	.....	3	.....	ne.	0	0	d. clouds	.....
Jeypore	28.53	724.7	30.01	762.2	70.9	21.6	41	ene.	7.5	3.4	.....	.....	0	.....	.....	0	0	blue sky	.....
Italian.																			
Udine	29.48	748.8	29.90	759.4	46.9	8.3	93	calm	0	0	.....	.....	10	.....	.....	0.098	2.5	.....	Prof. Giovanni Clodig.
Milan	29.37	746.0	29.90	759.5	45.1	7.3	96	nw.	1.3	0.6	.....	.....	10	.....	.....	0.031	0.8	.....	Prof. Schiapparelli.
Padua	29.78	756.3	29.89	759.2	46.0	7.8	97	n.	0.7	0.3	.....	.....	10	.....	.....	0.035	0.9	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.94	735.4	29.88	758.9	44.8	7.1	87	e.	0.7	0.3	.....	.....	10	.....	.....	0	c	.....	Prof. F. F. Denza.

STATIONS.	Barometer: Corrected for instrumental error and for temperature. Inch.	Barometer: Corrected for instrumental error and for temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.69	754.0	29.88	758.9	57.2	14.0	91	sw.	11.2	5.0			10	s.		0.051	1.3		Prof. G. M. Garibaldi.
Mondovi	27.94	709.7	29.89	759.3	46.4	8.0	70	w.			2		1	w.		0	0		Prof. D. C. Bruno.
Pesaro	29.84	757.8	29.88	759.0	60.8	16.0	59	sw.	6.3	2.8			9	ssw.		0	0		Prof. Luigi Guidi.
Florence	29.69	754.2	29.95	760.8	58.5	14.7	70	sw.			2		10	sw.		0.055	1.4		Prof. Costantino Pittei.
Leghorn	29.81	757.1	29.89	759.3	59.7	15.4	87	s.	9.4	4.2			10			0.118	3.0		Prof. P. Monte.
Rome	29.84	758.0	30.02	762.5	61.2	16.2	77	ssw.	4.3	1.9			7			0	0		Prof. P. Tachini.
Lecce	29.81	757.1	30.06	763.6	63.7	17.6	63	w.	6.3	2.8			4			0	0		Prof. C. de Giorgi.
Cosenza	29.20	741.7	30.10	764.5	56.8	13.8	78	sse.	3.1	1.4			9	se.		0.010	0.4		Prof. D. Conti.
Cagliari	29.83	757.7	30.03	762.7	63.5	17.5	64	calm			0		0			0	0		Prof. A. Pacinotti.
Palermo	29.86	758.4	30.11	764.7	66.0	18.9	55	ne.	3.1	1.4			5			0	0		Prof. G. Cacciatore.
Syracuse	30.04	763.1	30.09	764.2	62.6	17.0	75	calm	0	0			0			0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.53	750.0	30.05	763.3	58.3	14.6	97	n.	0	0			10	ssw.		0.161	4.1		Prof. F. Brioschi.
Stelvio	21.92	556.8			27.9	— 2.3	100	sw.			6		10			0	0	covered	Prof. P. F. Denza.
Valdobbia	21.95	557.4			29.7	— 1.3	75	n.			8		10			1.969	50.0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.85	758.1	29.88	758.9	35.0	1.7	73	nw.			4		10 n		w.	0.268	6.8	snowing	Hattori.
Awomori	29.79	756.6	29.83	757.7	29.0	— 1.7	82	sw.	13.4	6.0			10 n			0.275	7.0	light snow	K. Ogawa.
Hakodate	29.79	756.7	29.81	757.1	23.8	— 4.6	100	n.	5.4	2.4			10			0.140	3.6	snowing	
Hiroshima					39.3	4.1	89	nne.	0.0	2.7		2 cs	8 ck			0.005	0.1	covered	Y. Miwa.
Kanazawa	29.91	759.7	30.02	762.4	37.6	3.1	90	se.	3.1	1.3			10			0.945	24.0	cloudy	S. Endo.
Kioto	29.89	759.2	30.08	764.0	39.3	4.1	70	wsw.	1.7	0.7		0	rocks		nw.	0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.95	760.7	30.16	766.0	44.1	6.7	91	e.	0.6	0.3		4 c	5 s	w.	w.	0.100	2.5	cloudy	S. Takehayashi.
Nemuro	29.71	754.6	29.78	756.4	27.5	— 2.5	70	wsw.	12.0	5.4		0	4			0	0	fair	
Niigata	29.89	759.2	29.92	759.9	40.0	4.4	85	nnw.	9.2	4.1			10 ck		wnw.	0.558	14.2	covered	M. Morita.
Nobiru	29.83	757.6	29.84	758.0	32.3	0.2	91	nnw.	8.4	3.8		4 ck	5 ks		nnw.	0	0	cloudy	H. Midzushima.
Osaka	30.05	763.2	30.06	763.6	40.6	4.8	79	w.	0.8	3.0		0	0			0	0	clear	
Sapporo					20.5	— 6.4	92	s.	2.4	1.1			10			0	0	covered	
Tokei Obs'y, Yeddo	29.82	757.4	29.90	759.5	35.3	1.8	86	wsw.	3.5	1.5		0	0			0	0	clear	The Staff.
Wakayama	30.03	762.8	29.09	764.3	44.6	7.0	65	nw.	11.2	5.0		5		nw.		0	0	fair	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.74	755.4	29.93	760.2	80.0	26.7	56	ene.	12.5	5.6		0	4 k;ks		ene.	0.01	0.3	fair	Oliver & Figon.
MEXICAN.																			
Gunnajuato	23.67	601.3	29.89	759.3	48.6	9.2	97	sse.	inap.	inap.		2 c	0	w.		0	0	clear	Prof. Vicente Fernandez.
Leon	24.30	617.2	30.11	764.8	47.5	8.6	83	nnw.			1	5 c	0	sw.		0	0	½ cloudy	Prof. M. Leal.
Mazatlan	29.75	755.5	30.01	762.2	68.0	20.0	84	nnw.	5.3	2.3		0	6 n		sw.	inap.	inap.	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23.08	586.2	30.21	767.2	46.4	8.0	70	calm	0	0		2 ck	0			0?	1.6?	very fine	The Staff.
Morelia	24.31	617.5	30.21	767.4	49.1	9.5	73	s.	5.1	2.3		4 c	4 k	s.	s.	0	0	cloudy	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascalientes	23.92	607.4	29.94	760.5	54.1	12.3	69	calm	0	0		0	2 ks		sw.	0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.4	30.17	766.2	52.9	11.6	65	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.49	571.2	30.17	766.3	45.0?	8.6?	95	wsw.	2.9	1.3		0	0			0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.36	745.7	29.36	745.7	47.8	8.8		wsw.			5					0.161	4.1		
Groningen	29.15	740.4	29.21	741.8	42.6	5.9		wsw.			5					0.035	0.9		
Helder	29.20	741.6	29.20	741.6	45.7	7.6		sw.			6					0.007	1.7		
Hellevoetsluis	29.31	744.5	29.31	744.5	46.6	8.1	75	w.			4					0.010	0.4		
Utrecht	29.26	743 3	29.31	744.5	47.8	8.8	72	sw.			4		5			0.126	3.2	cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	28.99	736.4	29.06	738.0	37.8	3.2	93	calm	0	0			10			0.087	2.2		
Brono	29.23	742.5	29.27	743.5	24.8	— 4.0	80	e.	9	4			3			0	0		
Christiania	29.02	737.0	29.17	740.8	26.8	— 2.9	81	nw.	2	1			6			0.063	1.6		
Gjesvær	29.03	752.7	29.66	753.3	20.8	— 6.2		e.			4		10						
Lodingen	29.33	744.9	29.37	740.1	26.4	— 3.1	57	ese.			6		10			0	0		
PORTUGUESE.																			
Angra, Azores	30.06	763.5	30.21	767.4	63.5	17.5	78	nne.	6.9	3.1			4			0.142	3.6		Dr. J. A. Sampaio.
Campo Major	29.10	739.2	30.11	764.8	57.4	14.1	95	sw.	3.1	1.4			10			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.10	764.6	30.19	766.9	68.0	20.0	47	se.	3.1	1.4			3	n.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.78	756.5	30.14	765.6	61.2	16.2	84	wsw.	18.1	8.1			0	wsw.		0.106	2.7		The Staff.
Ponta Delgada, Azores	30.17	766.2	30.24	768.0	64.0	17.8	74	nne.	0.3	2.8			3			0.075	1.9		
Saint Paul de Loando	29.78	756.5	29.98	761.6	75.9	24.4	79	w.	1.3	0.6			8			0	0		
Serra da Estrella	25.24	641.1	29.97	761.3	47.5	8.6	100	wnw.	28.6	12.5			10			3.150	80.0	rain & fog	
RUSSIAN.																			
Akmolinski	29.18	741.2	30.33	770.4	21.7	— 5.7	77	calm	0	0			10 n			0	0		Major K. Lasarew.
Archangel	29.34	745.1	29.35	745.6	17.2	— 8.2	94	e.	9	4			10			0.157	4.0		Capt. Sselliwerstow.
Astrakhan	30.23	767.8	30.15	765.7	45.1	7.3	93	se.	2	1			10 s			0.008	0.2		Capt. Wisganow.
Barnaul	29.09	754.1	30.23	767.8	18.5	— 7.5	78	sw.	9	4			8			0.287	7.3		Meteorological Obs'y.
Dorpat	28.90	734.0	29.14	740.2	34.5	1.4	100	sw.	9	4			10 ks			0.070	2.0		Observatory.
Ekaterinburg	29.00	736.5	30.01	762.3	23.2	— 4.9	86	s.	7	3			10			0.024	0.6		Meteorological Obs'y.
Kasan	29.56	750.7	29.84	757.8	34.0	1.1	88	s.	20	9			10			0.091	2.3		Observatory.
Kertch	29.96	761.0	29.98	761.5	55.8	13.2	93	s.	7	3		0	5 k			0	0		Lagorio & Sastyrez.
Kieff	29.00	736.6	29.05	753.1	37.2	2.9	88	s.	7	3		c;cs	3 ks					light clouds	Observatory.
Lugan	29.78	756.5	29.99	761.8	45.0	7.2	83	ssw.	22	10			0			0	0		Meteorological Obs'y.
Nikolatiev	29.82	757.5	29.89	759.3	54.5	12.5	79	sw.	13	6		0	0			0	0		Capt. Kurdakow.
Pekin, China	29.98	761.6	30.13	765 2	39.9	4.4	48	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	28.96	735.5	28.97	735.9	35.2	1.8	91	sw.	11	5			10			0.287	7.3		Central Physical Obs'y.
Semipalatinsk	29.76	755.8	30.47	773.9	19.0	— 7.2	84	w.	9	4			10			0.020	0.5		Major Lasarew.
Tashkend, Laboratory	28.65	727.8	30.27	768.9	43.7	6.5	44	calm	0	0			0						Teich, A. M.
Tiflis	28.69	728.6	30.11	764.7	55.6	13.1	65	n.	4	2		0	8 s			0	0		Physical Observatory.
Tomsk	29.05	753.1	29.95	760.6	18.9	— 7.3	80	nw.	22	10			10					light snow	
Vladivostock	29.85	758.2	29.92	759.9	21.2	— 6.0		e.	2	1		0	8 k			0	0		
Warsaw	28.97	735.7	29.39	746.5	41.2	5.1	97	n.	11	5			10 n					heavy cl'ds	Astronomical Obs'y.
Wilna	28.95	735.2	29.37	746.0	38.5	3.6	95	ssw.	16	7			10			0.039	1.0	heavy cl'ds	Berg, Assistant.
Yeniseisk	29.37	740.1	29.68	753.8	23.0	— 5.0	95	w.	18	8			8			0.004	0.1		M. C. Marks.
SCOTTISH.																			
Monach Lt			29.34	745.2	44	6.7	92	n.			6	5	5	n.		0.3	8.	cloudy	J. Youngclause.
North Unst			29.08	738.6				w.			3		7						Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.76	755 9	29.86	758.5	64.4	18	56	w.	4.3	1.9		1 c	0			0	0	almost clear	Antonio Reve, Director.
Bilbao, Met. Obs'y	29.84	757.9	29.90	759.4	55.4	13.0	91	nw.	6.0	2.7			10			0.185	4.7	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.98	685.2	29.95	760.7	52.9	11.6	80	sw.	15.2	6.8			10			0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.83	706.8	30.10	764.4	49.5	9.7	95	calm	0.2	0.1			10			0.010	0.4	foggy	The Staff.
Murcia, Met. Obs'y	29.89	759.2	30.04	763.1	68.0	20.0	64	sw.	2.9	1.3		0	0			0	0	clear	Olayo Diaz, Director.
Oviedo	29.01	736.9	29.89	759.2	48.2	9.0	88	se.	9.2	4.1			10 n		nw.	0.886	22.5	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.96	735.6	29.86	758.4	55.6	13.1	98	sw.	8.1	3.6			10			0.965	24.5	raining	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.92	760.0	29.98	761.4	78.0	25.6	82	nne.	4.4	2.0		0	1 k		e.	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.07	763.6	30.17	766.2	61.2	16.2	68	w.	1.4	0.6		0	1		w.	c	0		Capt. C. Pujazon, R. N
San Juan de Porto Rico, W.I	29.96	760.9	30.05	763.2	75.2	24.0	92	se.	4.9	2.2		3 k	4 kn	se.	se.	0.157	4.0	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.95	760.7	30.08	764.1	71.9	22.2	85	nw.	11.4	5.1		0	7 ks		ene.	inap.	inap.	cloudy	José L. Yrastorza
SWEDISH																			
Haparanda	29.29	744.0	29.33	745.0	17.6	—8.0	88	ne.			4		10			0	0		
Umea	29.12	739.7	29.17	741.0	22.3	— 5.4	90	n.			6		10			0.020	0.5		

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill	Weather.	Observers.
Swedish—Continued.																			
Hernosand	29.07	738.4	29.12	739.7	26.2	— 3.2	82	ne.			6		10			0.228	5.8		
Stockholm	28.88	733.5	29.06	738.0	28.0	— 2.2	96	sw.			4		10			0.059	1.5		
Wisby	29.02	737.2	29.08	738.7	40.3	4.6	81	w.			4		7			0	0		
Sub-series.																			
Upsala	28.94	735.0	29.02	737.2	28.0	— 2.2	94	w.	6.3	2.8			10			0.016	c.4	snowing	S. G. Fineman.
Swiss.																			
Geneva	28.32	719.2	29.74	755.3	55.8	13.2	74	ssw.			3		10			0.213	5.4	covered	The Observatory.
Turkish.																			
Constantinople			30.08	764.0	57.6	14.2	69	sw.	13	6.0			1		sw.	0	0		The Observatory.
Valona			30.08	764.1	60.1	15.6		se.			1		10			0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.06	763.4	69.3	20.7	65	nw.			1	c	3 ks		nw.	0	0		Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.15	765.8	30.23	767.8	30	— 1.1	67	nw.	3	1.3		6 cs	0			inap.	inap.	fair	J. O. Barnes.
Alpena, Michigan	29.28	743.7	29.98	761.5	32	0.0	88	s.	12	5.4			10 n			inap.	inap.	light snow	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.10	637.5	30.20	767.1	29	— 1.7	70	ne.	2	0.9		0	0			0	0	clear	W. U. Barnes.
Assinnaboine, Ft., Montana	26.96	684.8	29.94	760.5	23	— 5.0	64	sw.	3	1.3		1 c	6 s	w.	w.	0	0	fair	B. O. Lenoir.
Atlanta, Georgia	29.03	737.3	30.25	768.3	42.0	5.6	61	e.	9	4.0			10 s			0	0	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.29	769.4	30.30	769.6	28	— 2.2	70	w.	5	2.2		6 c	0	w.		0	0	fair	Jas. M. Watson.
Augusta, Georgia	30.10	764.5	30.30	769.6	44	6.7	60	ne.	2	0.9			10 s		sw.	0	0	cloudy	John Healy.
Baltimore, Maryland	30.29	769.4	30.34	770.6	32	0.0	68	nw.	2	0.9			10s;fg		nw.	0	0	cloudy	Geo W Felger.
Barnegat, New Jersey	30.25	768.3	30.27	768.8	31.0	— 0.6	68	nw.	12	5.4		7 c	0			0	0	fair	G. A. Hill.
Bennett, Fort, Dakota	28.64	727.4	30.33	770.4	24	— 4.4	76	ne.	5	2.2			10 s			inap.	inap.	cloudy	A. Pritchard.
Benton, Fort, Montana	26.96	684.8	29.92	760.0	25	— 3.9	64	calm	0	0			10 s		sw.	0	0	cloudy	S. Wheaton.
Bismarck, Dakota	28.41	721.6	30.33	770.4	9	—12.8	80	e.	12	5.4			10 s			inap.	inap.	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.18	766.6	30.21	767.3	32	0.0	68	nw.	20	8.9		0	0			0	0	clear	J. T. Elker.
Boise City, Idaho	27.26	692.4	30.20	767.1	29	— 1.7	92	nw.	2	0.9			10 s		calm	0	0	cloudy	B. E. Light.
Boston, Massachusetts	30.02	762.5	30.18	766.6	25.0	— 3.9	48	nw.	10	4.5		0	0			0	0	clear	O. B. Cole.
Brownsville, Texas	29.84	757.9	29.89	759.2	69.0	20.6	100	sw.	6	2.7			10 s		s.	0	0	threatening	M. McCarty.
Buffalo, New York	29.37	746.0	30.15	765.8	31.7	— 0.2	88	e.	4	1.8			10 s			0	0	cloudy	W. Finn.
Buford, Fort, Dakota	28 27	718.0	30.25	768.3	17	— 8.3	83	se.	12	5.4			10 s			0	0	cloudy	F. A. Mellen.
Burlington, Vermont	29.91	759.7	30.22	767.6	25.2	— 3.8	66	nw.	4	1.8		0	5 s		nw.	0	0	fair	W. B Gates.
Cairo, Illinois	29.70	754.4	30.12	765.0	43.8	6.6	94	w.	8	3.6			10 s		w.	0.50	12.7	threatening	W. H. Ray.
Cape Henry, Virginia	30.32	770.1	30.34	770.6	39	3.9	73	s.	4	1.8			10 s			0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.29	769.4	30.32	770.1	37.5	3.1	82	ne.	5	2.2			9 s			0	0	cloudy	W. E. Smith.
Cape Mendocino, California	29.48	748.8	30.16	766.1	45	7.2	83	se.			2	0	0			0.35	8.9	clear	J. J. McLean.
Cedar Keys, Florida	30.18	766.6	30.20	767.1	55	12.8	86	ne.	10	4.5		0	sk.			0	0	clear	F. W. Mixer.
Champaign, Illinois	29.15	740.4	30.01	762.2	33.5	0.8	76	nw.	6	2.7			10 n		nw.	0.11	2.8	light snow	L. A. Welsh.
Charleston, S. Carolina	30.21	767.3	30.27	768.8	48	8.9	77	ne.	6	2.7		5 ck	4 s	w.	ne.	0	0	cloudy	J. H. Smith.
Charlotte, N. Carolina	29.42	747.3	30.30	769.6	39.0	3.9	65	se.	1	0.4			10 s		e.	0	0	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.35	745.5	30.20	767.1	44.5	6.9	73	s.	10	4.5			10 n		s.	0.05	1.3	light rain	B. L. Goulding.
Cheyenne, Wyoming	24.04	610.6	30.25	768.3	26.3	— 3.2	48	sw.	6	2.7		0	0			0	0	clear	E. McGovern.
Chicago, Illinois	29.24	742.7	29.98	761.5	32.8	0.4	75	sw.	2	0.9			10 n			0.05	1.3	light snow	J. Mitchell.
Chincoteague, Virginia	30.30	769.0	30.32	770.1	32	0.0	78	calm	0	0			9 ks		nw.	0	0	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.32	744.7	30.01	762.2	37	2.8	82	e.	4	1.8			10 n			0.18	4.6	sleeting	R. B. Watkins.
Cleveland, Ohio	29.26	743.2	30.04	763.0	29.3	— 1.5	100	se.	11	4.9			10 n			0.09	2.3	light snow	J. B. Newlin.
Coleman City, Texas	28.26	717.8	30.16	766.1	44	6.7	100	n.	16	7.2			10 n		n.	0.43	10.9	light rain	L. Dorman.
Columbus, Ohio	29.07	738.4	29.96	761.0	34	1.1	100	se.	4	1.8			10 n			inap.	inap.	light snow	D. Cuthbertson.
Concho, Fort, Texas	28.15	715.0	30.16	766.1	45.0	7.2	100	n.	6	2.7			10 n			0.34	8.6	light rain	J. McGlone.
Custer, Fort, Montana	26.73	678.9	30.05	763.3	20	— 6.7	87	e.	1	0.4		0	6 k		calm	0	0	fair	W. B. Lamar.
Davenport, Iowa	29.40	746.7	30.09	764.3	30	— 1.1	78	nw.	7	3.1		0	3 ks		nw.	0.13	3.3	clear	R. R. Martin.
Davis, Fort, Texas	25.19	639.8	30.09	764.3	37	2.8	100	ne.	4	1.8			10 n			0.11	2.8	light rain	J. Williams.
Dayton, Washington T'y	28.15	715.0	29.93	760.2	42.8	6.0	61	sw.	8	3.6			10 s		sw.	0	0	cloudy	H. Clifford.
Deadwood, Dakota	25.33	643.4	30.16	766.1	27	— 2.8	88	calm	0	0		0	0			0	0	clear	G. W. Scott.
Delaware Breakwater, Del.	30.31	769.9	30.33	770.4	32	0.0	78	sw.	18	8.0			7 s		w.	0	0	fair	T. S. Townsend.
Denison, Texas	29.32	744.7	30.16	766.1	45.0	7.2	100	n.	6	2.7			10 s			1.09	27.7	cloudy	J. W. Byram.
Denver, Colorado	24.78	629.4	30.28	769.1	25.5	— 3.6	82	s.	3	1.3		0	0			0	0	clear	F. M. Neal.
Des Moines, Iowa	29.28	743.7	30.23	767.8	21	— 6.1	58	n.	6	2.7		0	0			0.02	0.5	clear	F. W. Conrad.
Detroit, Michigan	29.25	742.9	29.99	761.7	38.0	3.3	72	se.	8	3.6			10 n			inap.	inap.	light snow	C. F. R. Wappenhans.
Dodge City, Kansas	27.60	701.0	30.34	770.6	20	— 6.7	73	w.	7	3.1		0	0			0.05	1.3	clear	V. P. Temple.
Dubuque, Iowa	29.33	745.0	30.08	764.0	27.5	— 2.5	84	nw.	6	2.7			10 s		nw.	0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.37	746.0	30.16	766.1	22	— 5.6	88	nw.	28	12.5			10 s		nw.	0.04	1.0	cloudy	N. B. Conger.
Eagle Pass, Texas	29.18	741.2	30.01	762.2	53.0	11.7	100	nw.	6	2.7			10 n		nw.	0.40	10.2	light rain	F. Belford.
Eagle Rock, Idaho	25.26	641.6	30.12	765.0	18	— 7.8	73	n.	5	2.2		3 cs	0	n.		0	0	clear	J. M. Clifford.
Eastport, Maine	29.79	756.7	29.86	758.4	24.0	— 4.4	73	w.	12	5.4		0	0			0.02	0.5	clear	D. C. Murphy.
Elliott, Fort, Texas	27.35	694.7	30.28	769.1	31	— 0.6	62	n.	16	7.2		9 k	0	n.		inap.	inap.	cloudy	W. J. Cundall.
El Paso, Texas	26.30	668.0	30.14	765.5	45.0	7.2	100	e.	3	1.3			10 n		e.	0.40	10.2	light rain	J. O'Dowd.
Erie, Pennsylvania	29.34	745.2	30.10	764.5	33	0.6	60	s.	12	5.4			10 s		s.	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.24	742.7	29.94	760.5	27.0	— 2.8	92	w.	3	1.3			10 s			0.17	4.3	threatening	George Heathcote.
Fredericksburg, Texas	28.27	718.0	30.09	764.3	49	9.4	100	n.	7	3.1			10 n			0.90	22.9	light rain	Frank Halwegler.
Galveston, Texas	29.92	760.0	29.97	761.2	68	20.0	90	se.	8	3.6		3 ck	7 ks	s.		0.17	4.3	cloudy	E. O'C. Macinerney.
Grand Haven, Michigan	29.24	742.7	29.94	760.5	36.0	2.2	89	se.	6	2.7			10 n			0.50	12.7	light snow	J. Mueller.
Grant, Fort, Arizona	25.29	642.4	30.13	765.3	33.5	0.8	74	n.	4	1.8		0	0			0.09	2.3	clear	Robert C. Lord.
Hatteras, North Carolina	30.34	770.6	30.36	771.1	41	5.0	73	ne.	4	1.8		3 c	3 k	e.		0	0	fair	R. M. Crawford.
Helena, Montana	25.61	650.5	29.99	761.7	35	1.7	72	sw.	2	0.9			10 s		calm	0	0	cloudy	N. C. Smith.
Henrietta, Texas	29.15	740.4	30.19	766.8	43	6.1	83	ne.	4	1.8			10 s		ne.	inap.	inap.	cloudy	J. P. Sherry.
Huron, Dakota	28.85	732.8	30.33	770.4	19.3	— 7.1	61	n.	10	4.5			10 s			inap.	inap.	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.15	740.4	29.99	761.7	34	1.1	85	sw.	2	0.9			10 s		sw.	0.11	2.8	cloudy	O. Schutze
Indianola, Texas	29.87	758.7	29.90	759.4	66.7	19.8	90	sw.	10	4.5			10 n		s.	1.09	27.7	light rain	I. A. Reed.
Jacksboro, Texas	28.88	733.5	30.10	764.5	41	5.0	100	n.	7	3.1			10 n		n.	0.35	8.9	light rain	D. J. Carr.
Jacksonville, Florida	30.17	766.3	30.22	767.6	56	13.3	86	calm	0	0		0	fg.			0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.44	697.0	30.11	764.8	22	— 5.6	88	ne.	6	2.7		5 c	0	w.		0	0	fair	A. Schneider.
Keokuk, Iowa	29.43	747.5	30.12	765.0	32.5	0.3	88	nw.	4	1.8			10 s		nw.	0.37	9.4	cloudy	F. Z. Gosewisch.
Key West, Florida	30.07	763.8	30.09	764.3	72.0	22.2	76	e.	12	5.4		3 c	0	w.		0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.34	770.6	30.36	771.1	39	3.9	73	e.	4	1.8		7 ck	0	nw.		0	0	fair	H. Mc P. Baldwin.
Knoxville, Tennessee	29.12	739.6	30.19	766.8	36	2.2	98	e.	2	0.9			10 n		w.	0.20	5.1	light rain	J. A. Cody.
La Crosse, Wisconsin	29.26	743.2	30.08	764.0	27	— 2.8	76	nw.	8	3.6			10 s			0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.31	744.5	30.25	768.3	33	0.6	88	nw.	12	5.4		5 ks	0	nw.		0.26	6.6	fair	A. W. Browne.
Lewiston, Idaho	29.09	738.9	29.96	761.0	44.0	6.7	68	ne.	6	2.7			10 s			0	0	cloudy	W. Bell.
Little Rock, Arkansas	29.80	756.9	30.13	765.3	46	7.8	93	calm	0	0			10 n			1.16	29.5	light rain	W. U. Simons.
Los Angeles, California	29.74	755.4	30.14	765.5	47	8.3	93	ne.	4	1.8		10 c	0	sw.		0	0	cloudy	T. S. Collins.
Louisville, Kentucky	29.40	746.7	29.99	761.7	43	6.1	83	se.	5	2.2			10 n		sw.	0.30	7.6	heavy rain	L. M. Dey.
Lynchburg, Virginia	29.58	751.3	30.30	769.6	32	0.0	78	calm	0	0			10 s			0	0	cloudy	Lewis Dunne.
Mackinaw City, Michigan	29.27	743.4	29.96	761.0	32.0	0.0	88	s.	10	4.5			10 n			0.31	7.9	light snow	F. K. Day.
Macon, Fort, North Carolina	30.31	769 9	30.32	770.1	41	5.0	65	n.	11	4.9		8cs;ck	0	sw.		0	0	cloudy	F. P. Chaffee.
Madison, Wisconsin	28.93	734.8	30.00	762.0	32	0.0	88	nw.	14	6.3			10 s		nw.	inap.	inap.	cloudy	C. A. Shaw.
Maginnis, Fort, Montana	25.38	644.6	29.89	759.2	37	2.8	51	ne.	8	3.6		10 ck	0			0	0	cloudy	F. Burke.
McKavett, Fort, Texas	27.93	709.4	30.31	769.9	42	5.6	93	ne.	4	1.8			10 s			0.44	11.2	cloudy	J. E. Thatcher.
Marquette, Michigan	29.17	740.9	29.94	760.5	28	— 2.2	77	w.	5	2.2			10 s			0.10	2.5	light snow	J. Gilligan.
Memphis, Tennessee	29.76	755.9	30.11	764.8	46	7.8	100	calm	0	0			10 n			1.93	23.0	light rain	D. T. Flannery.
Milwaukee, Wisconsin	29.17	740.9	29.96	761.0	34	1.1	78	sw.	6	2.7			10 s		sw.	0.05	1.3	cloudy	W. Line.
Missoula, Fort, Montana	26.50	673.1	29.91	759.7	26	— 3.3	77	w.	1	0.4			9 s			0	0	cloudy	J. H. Young.
Mobile, Alabama	30.09	764.3	30.13	765.3	53	11.7	66	ne.	4	1.8		5 ck	3 ks	sw.		0	0	cloudy	C. A. Read.
Montgomery, Alabama	29.97	761.2	30.21	767.3	46.9	8.3	74	e.	3	1.3		5 ck;hz	0	w.		0	0	fair	J. B. McLaughlin.

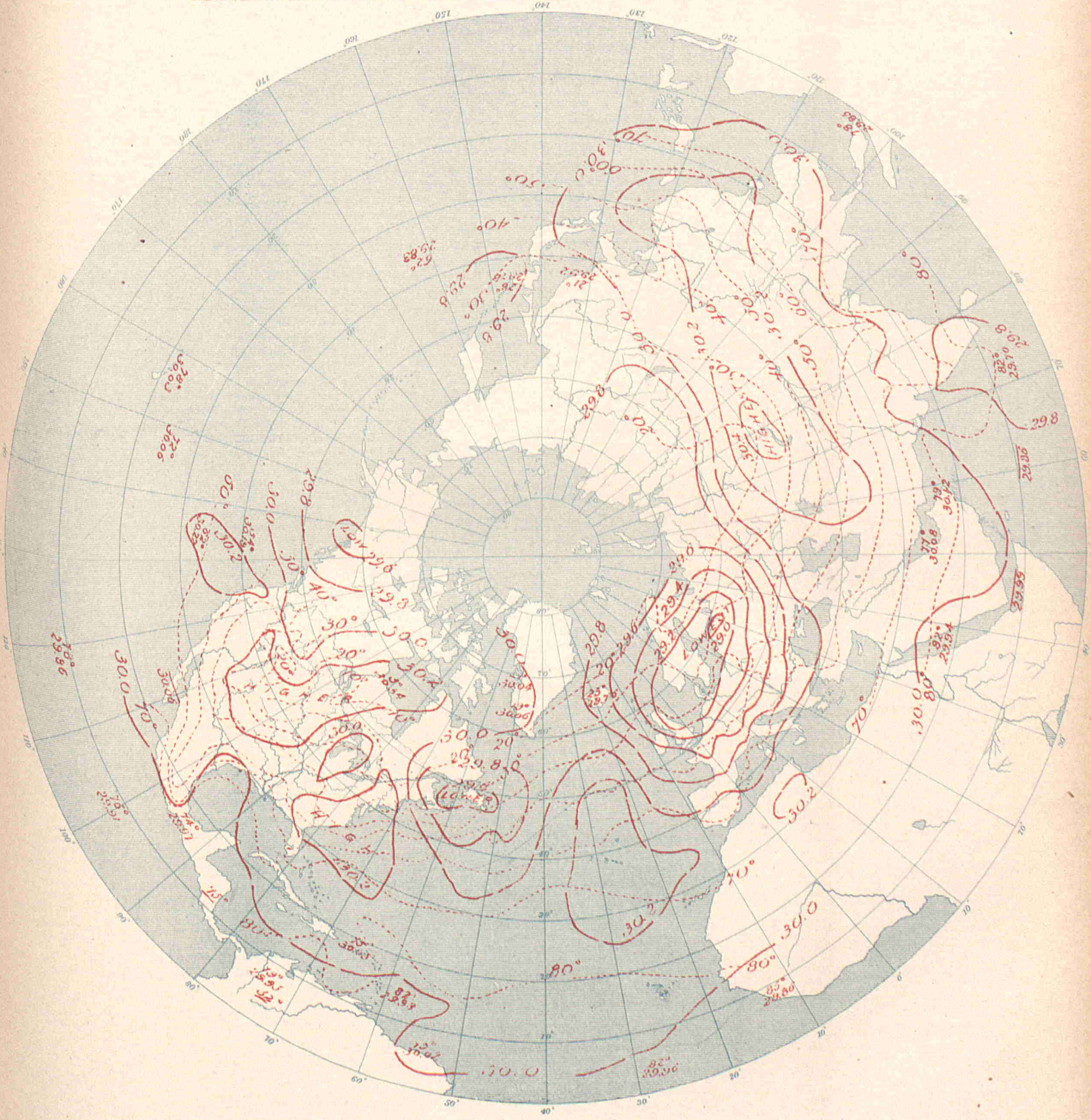
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.26	743.2	30.32	770.1	10	—12.2	80	n.	8	3.6			10 s		n.	inap.	inap.	cloudy	H. Bessant.
Morgantown, W. Virginia	29.00	736.6	30.06	763.5	— 34.5	1.4	79	calm	0	0			10 s			0	0	cloudy	J. C. Sprigg, jr
Mt. Washington, N. H	23.33	592.6	29.89	759.2	— 3.0	—19.4	100	nw.	78	34.9			fg.		nw.	0.21	5.3	dense fog	J. G. Linsley.
Nashville, Tennessee	29.50	749.3	30.10	764.5	45.0	7.2	93	nw.	5	2.2			10 n		w.	0.53	13.5	light rain	L. N. Jesunofsky.
New Haven, Connecticut	30.12	765.0	30.24	768.1	24	— 4.4	88	calm	0	0		0	fg.			0	0	clear	J. H. Sherman.
New London, Connecticut	30.18	766.6	30.22	767.6	28	— 2.2	77	sw.	7	3.1		hz.	hz.			0	0	dense haze	J. G. Lynch.
New Orleans, Louisiana	30.00	762.0	30.06	763.5	65.0	18.3	90	s.	7	3.1			10 ks		s.	inap.	inap.	cloudy	L. Dunne.
Newport, Rhode Island	30.16	766.1	30.21	767.3	30.0	— 1.1	77	w.	14	6.3		2 c	0	w.		0	0	clear	W. McGillivray.
New York, New York	30.10	764.5	30.28	769.1	29.5	— 1.4	77	sw.	6	2.7		1 cs	0			0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.30	769.6	30.33	770.4	37	2.8	72	nw.	2	0.9		7 k	0	nw.		0	0	fair	Wm. Davis.
North Platte, Nebraska	27.21	691.1	30.29	769.4	18.6	— 7.4	72	calm	0	0		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	29.91	759.7	29.95	760.7	44.0	6.7	76	w.	15	6.7		8 ck	0	w.		0.84	21.3	cloudy	J. Dascomb.
Omaha, Nebraska	29.07	738.4	30.31	769.9	22.7	— 5.2	68	n.	5	2.2		0	0			0	0	clear	A. Pollak.
Oswego, New York	29.86	758.4	30.20	767.1	31.0	— 0.6	62	se.	5	2.2			10 s			0	0	cloudy	S. W. Beall.
Palestine, Texas	29.51	749.5	30.08	764.0	48.5	9.2	96	n.	16	7.2			10 n		ne.	1.30	33.0	light rain	L. M. Pindell.
Pensacola, Florida	30.12	765.0	30.16	766.1	53.8	12.1	86	ne.	6	2.7			10 n		e.	0.09	2.3	light rain	M. McGauran.
Philadelphia, Pa	30.21	767.3	30.31	769.9	35	1.7	64	calm	0	0		3 cs	0	w.		0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.81	452.4	30.47	773.9	16	— 8.9	67	nw.	13	5.8		0	0			0	0	clear	H. Hall.
Ploche, Nevada	24.05	610.9	30.19	766.8	32.8	0.4	54	s.	1	0.4		10 cs	0	w.		0	0	cloudy	C. N. Kitchel.
Pittsburg, Pennsylvania	29.24	742.7	30.09	764.3	32.0	0.0	68	ne.	4	1.8		0	5 s		ne.	c	0	fair	W. Daly.
Poplar River, Montana	27.91	708.9	30.20	767.1				ne.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.07	763.8	30.08	764.8	68.2	20.1	87	se.	13	5.8		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.88	743.7	30.00	762.0	30.4	— 0.9	96	se.	7	3.1			10 n			0.07	1.8	light snow	W. O. Bailey.
Portland, Maine	29.99	761.7	30.04	763.0	29.0	— 1.7	67	w.	8	3.6		0	0			0	0	clear	W. W. Eichelberger.
Portland, Oregon	30.00	762.0	30.07	763.8	43.0	6.1	83	s.	6	2.7			10 s		sw.	0.90	22.9	cloudy	M. L. Hearne.
Portsmouth, N. C					44	6.7	68	ne.	11	4.9		2 c	2 ks	sw.		0	0	fair	F. S Coburn.
Prescott, Arizona	24.83	630.7	30.17	766.3	32.8	0.4	81	sw.	3	1.3		4 c	0	sw.		0.01	0.3	fair	W. H. Clendenon.
Provincetown, Mass	30.11	764.8	30.14	765.5	28	— 2.2	64	nw.	22	9.8		2 c	0	nw.		0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	30.13	765.3	30.14	765.5	59	15.0	93	ne.	8	3.6		9 c	0	w.		0	0	cloudy	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.49	749.0	30.19	766.8	29	— 1.7	77	s.	4	1.8		10 k	hz.			0.05	1.3	cloudy	E. W. McGann
Roseburg, Oregon	29.64	752.8	30.21	767.3	41.5	5.3	77	e.	3	1.3		0	8 s		w.	0.09	2.3	cloudy	J. J. Nanry.
Sacramento, California	30.10	764.5	30.18	766 6	47.0	8.3	93	se.	6	2.7			10 s			0	0	cloudy	J. A. Barwick
St. Louis, Missouri	29.50	749.3	30.13	765.3	37.0	2.8	100	nw.	13	5.8			10 s		nw.	0.52	13.2	cloudy	J. H. Weber.
St. Paul, Minnesota	29.23	742.4	30.15	765.8	25.0	— 3.9	88	nw.	11	4.9			10 s		nw.	0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.45	748.0	30.38	771.6	10	—12.2	89	nw.	5	2.2			9 ks		nw.	0.02	0.5	cloudy	C. B Dilley.
Salt Lake City, Utah	25.66	651.8	30.23	767.8	37	2.8	56	sw.	3	1.3			10 s			0	0	cloudy	J. Craig.
San Antonio, Texas	29.26	743.2	29.98	761.5	54.5	12.5	100	n.	6	2.7			10 n			0.58	14.7	light rain	T. J. Kenan.
San Diego, California	30.06	763.5	30.13	765.3	51.3	10.7	88	ne.	3	1.3			10 s		w.	0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.30	744.2	30.02	762.5	32	0.0	88	sw.	6	2.7			10 n			0.02	0.5	light snow	M. H. Perry.
Sandy Hook, New Jersey	30.26	768.6	30.29	769.4	32.0	0.0	68	w.	15	6.7		2 ck	0	w.		0	0	clear	B. A. Blundon.
San Francisco, California	30.12	765.0	30.18	766.6	50.5	10.3	90	se.	8	3.6			10 s		se.	0.01	0.3	cloudy	N. Gorom.
Santa Fé, New Mexico	23.29	591.6	30.33	770.4	31	— 0.6	81	ne.	6	2.7		0	0			0.05	1.3	clear	H. U. Jones.
Savannah, Georgia	30.18	766.6	30.27	768.8	49	9.4	63	n.	3	1.3		1 c	0			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.09	662.7	29.91	759.7	46	7.8	43	sw.	22	9.8		8 k	0	w.		0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	29.81	757.2	30.06	763.5	49	9.4	100	n.	4	1.8			10 n		n.	1.29	32.8	light rain	E. N. Meekins.
Sill, Fort, Indian Territory	28.89	733.8	30.20	767.1	44	6.7	86	ne.	20	8.9			10 ks		ne.	0.25	6.3	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.32	617.7	30.16	766.1	31.5	— 0.3	87	w.	7	3.1		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.47	748.5	29.54	750.3	36.1	2.3	73	e.	16	7.2			8 ks		e.	inap.	inap.	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.66	753.4	30.15	765.8	43.5	6.4	93	sw.	4	1.8			10 s			0.16	4.1	cloudy	J. B. Campbell.
Smithville, North Carolina	30.27	768.8	30.31	769.9	41	5.0	73	e.	5	2.2		7 cs	0	w.		0	0	fair	O. Parker.
Spokane Falls, Wash. Ter.	27.81	706.4	29.89	759.2	37	2.8	82	s.	7	3.1		9 k	0	s.		0.05	1.3	cloudy	D. Moore.
Springfield, Illinois	29.34	745.2	30.06	763.5	36.5	2.5	80	nw.	8	3.6			10 s		w.	0.66	16.8	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.18	766.6	30.32	770.1	29.5	— 1.4	58	w.			1	hs; 3cs	0	w.		0	0	fair	Charles Mayr.
Springfield, Mo	28.68	728.5	30.19	766.8	39	3.9	94	nw.	14	6.3			10 s			0.12	3.0	cloudy	J. B. Marbury.
Starkville, Miss	29.62	752.3	30.12	765.0	50	10.0	86	se.	11	4.9			10 n		se.	0.81	20.6	light rain	C. Dill.
Stevenson, Fort, Dakota	28.34	719.8	30.31	769.9	16	— 8.9	100	e.	6	2.7			10 s			0.01	0.3	cloudy	W. Burrows
Stockton, Fort, Texas	27.02	686.3	30.14	765.5	44.0	6.7	93	calm	0	0			10 s		nw.	0.18	4.6	cloudy	J. F. Marshall.
Thatcher's Island, Mass	30.06	763.5	30.11	764.8	28.0	— 2.2	77	w.	20	8.9		5 cs	0	w.		0	0	fair	G. Liebmann.
Thomas, Camp, Arizona	27.34	694.4	30.18	766.6	34.5	1.4	94	e.			1	0	0			0.04	1.0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.28	743.7	30.01	762.2	33	0.6	88	e.	2	0.9			10 n			0.03	0.8	light snow	A. Buell.
Tucson, Arizona	27.66	702.6	30.12	765.0	39	3.9	92	se.	2	0.9		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.59	751.6	29.97	761.2	47	8.3	48	w.	20	8.9		5 ck	4 s	sw.	w.	inap.	inap.	cloudy	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					35.8	2.1	92	nw.			1	2 cs	3 k	sw.	w.	0	0	fair	D. Brooks.
Vicksburg, Mississippi	29.84	757.9	30.11	764.8	55.3	12.9	93	se.	6	2.7			10 n		s.	0.22	5.6	light rain	James Kenealy.
Visalia, California	29.76	755.6	30.14	765.5	41.0	5.0	92	nw.	1	0.4		1 cs	9 k			0	0	cloudy	O. D. Stewart
Washakie, Fort, Wyoming	24.44	620.8	30.18	766.6	15.1	— 9.4	91	nw.	1	0.4			10 s			0	0	cloudy	T. M. Ambler.
Washington, D. C	30.21	767.3	30.33	770.4	29.3	— 1.5	79	calm	0	0			10 s			0	0	cloudy	B. M. Purssell.
West Las Animas, Colorado	26.20	665.5	30.32	770.1	12.5	—10.8	83	w.	8	3.6		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.62	752.3	30.25	768.3	26.5	— 3.1	90	calm	0	0			10 s		w.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.25	768.3	30.31	769.9	40	4.4	57	e.	6	2.7			10 s		ne.	0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.59	650.0	30.12	765.0	32	0.0	71	sw.	10	4.5		6 c	0	sw.		0	0	fair	J. Grover.
Yankton, Dakota	28.91	734.3	30.29	769.4	24	— 4.4	73	calm	0	0		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.95	760.7	30.10	764.5	47.4	8.6	93	ne.	4	1.8		9 cs	0			0.01	0.3	cloudy	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3			52.0	11.1	74	nw.	1	0.4		2 cs; k	0	w		0	0	fair	Joaquin Gomez.
Havana, Cuba, W. I	30.01	762.2	30.08	764.0	68.8	20.4	85	e.	5	2.2		1 c	2k; s	w.	se.	0.10	2.5	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I	30.03	762.7	30.04	763.0	75	23.9	81	n.	1	0.4		7 cs	3 s	e.	e.	0.08	2.0	fair	Robert Johnston.
Navassa, W. I	29.90	759.4	29.98	761.5	79	26.1	78	ne.	20	8.9		4 c	3 k	e.,	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A	30.02	762.5	30.02	762.5	79	26.1	87	e.			2	6 ck	4 s	e.		0.320	8.1		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	79	26.1	85	calm			0		10 ks		calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A					74.8	23.8	97	ne.			1	1 cs	2 ks		ne.	1.88	47.8	fair	Earl Flint.
Santiago de Cuba, W. I	30.02	762.5	30.04	763.0	75	23.9	72	calm	0	0		2 c	0			0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.66	753.4	29.72	754.9	29	— 1.7	100	n.				0	4 k			0	0	fair	W. J. Fisher.
St. Thomas, W. I	29.96	761.0	30.08	764.0	78	25.6	82	e.			4	2 k	4 k	e.	e.	0.08	2.0	fair	Aug. Walloe.
York Factory, B. A	30.27	768.8	30.34	770.6	2.5	—16.4	86	n.	10	4.5		0	0			0	0	clear	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Chusan Island, China	30.35	770.9	46	7.8	.....	nw.	.....	.....	1	.....	3	n.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Amethyst, Colonia, Uruguay †	29.95	760.7	69.8	21.0	80	ese.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
H. M. S. Audacious, N. 7° 58′, E. 72° 23′	29.70	754.4	82	27.8	83	ne.	.....	.....	3	.....	3	ene.	.....	.....	.....	.....	.....	drizzling.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	30.04	763.0	71	21.7	67	n.	.....	.....	2–3	.....	6	ene.	.....	.....	.....	2	n.	d. clouds.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	30.06	763.5	72.5	22.5	76	nnw.	.....	.....	2	.....	4	nnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Cleopatra, N. 31° 14′, E. 121° 28′	30.32	770.1	50	10.0	90	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C.	29.93	760.2	43	6.1	75	sw.	.....	.....	2–4	.....	6	.....	.....	.....	.....	.....	.....	squally.
H. M. S. Condor, N 31° 45′ E. 31° 30′	30.11	764.8	71	21.7	71	nne.	.....	.....	2–3	.....	4	.....	.....	.....	.....	2	.....	d. clouds.
H. M. S. Crocodile, N. 17° 48′, E. 67° 30′	29.94	760.5	78	25.6	65	nne.	.....	.....	4–5	.....	3	.....	.....	.....	.....	2–3	ne.	d. clouds.
H. M. S. Curacoa, Kobe, Japan	29.95	760.7	43.5	6.4	?	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.81	757.2	67	19.4	74	ene.	.....	.....	3–5	.....	2	.....	.....	.....	.....	.....	.....	squally.
H. M. Dock-Yard, Bermuda, W. I.	30.16	766.1	64	17.8	67	wnw.	.....	.....	2–3	.....	6	wnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.69	754.1	76.5	24.7	88	s.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flying Fish, N. 31° 35′, E. 131° 26′	30.12	765.0	48.5	9.2	85	n.	.....	.....	1	.....	3	.....	.....	.....	.....	1	.....	misty.
H. M. S. Gannet, S. 30° 25′, W. 71° 40′	29.97	761.2	61	16.1	?	ne.	.....	.....	3	.....	8	.....	.....	.....	.....	2	var.	misty.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.23	767.8	60	15.6	100	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Kingfisher, N. 8° 18′ W. 101° 52′	29.91	759.7	76	24.4	.....	e.	.....	.....	1	.....	4	e.	.....	.....	.....	2	ese.	d. clouds.
H. M. S. Lark, S. 20° 35′, E. 157° 00′	30.10	764.5	73.3	22.9	79	ese.	.....	.....	5	.....	4	.....	.....	.....	.....	3	se.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.95	760.7	65	18.3	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Magpie, N. 34° 44′ E. 128° 04′	30.13	765.3	44.7	7.1	67	wnw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Northampton, N. 34° 34′, W. 61° 24′	30.05	763.3	63.5	17.5	76	w.	.....	.....	6	.....	5	w.	.....	.....	.....	4	sw.	d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.60	751.8	78	25.6	82	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.85	758.2	78	25.6	93	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Sappho, S. 44° 13′, W. 102° 00′	30.31	769.9	51.2	10.7	100	nnw.	.....	.....	5–6	.....	10	.....	.....	.....	.....	2	nw.	foggy.
H. M. S. Sylvia, Sandy Point, Patagonia	29.90	759.4	42.5	5.8	61	sw.	.....	.....	4–6	.....	5	calm	.....	.....	.....	.....	.....	squally.
H. M. S. Tourmaline, Aden, Arabia	29.99	761.7	.....	.....	.....	ese.	.....	.....	2	.....	2	e.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Woodlark, N. 26° 50′, E. 50° 43′	30.08	764.0	76.5	24.7	52	n.	.....	.....	3–4	.....	2	n.	.....	.....	.....	2	n.	d. clouds.
H. M. S. Zephyr, N. 37° 33′, E. 121° 25′	30.11	764.8	44	6.7	67	sw.	.....	.....	2	.....	0	.....	.....	.....	.....	4	ne.	blue sky.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.10	764.5	80.6	27.0	77	ne.	.....	.....	3	.....	3	.....	ne.	.....	.....	1	se.	d. clouds.
Tamega, Macao, China	30.26	768.6	60.8	16.0	50	n.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Swedish Naval.																		
Vanadis, N. 37° 43′, E. 2° 38′	30.06	763.5	66.9	19.4	76	sw.	.....	.....	3	.....	1	.....	.....	.....	.....	.....	.....	d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.08	764.0	58	14.4	81	ene.	5	2.2	.....	.....	10	.....	se.	0.88	22.4	.....	.....	cloudy.
Navy Yard, Portsmouth, N. H.	30.08	764.0	26	— 3.3	?	nw.	11	4.9	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Naval Hospital, Yokohama, Japan*	29.75	755.6	41	5.0	56	calm	.....	.....	0	.....	0	.....	.....	sli't	sli't	.....	.....	clear.
Adams, Sitka, Alaska*†	29.58	751.3	36	2.2	80	e.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	light hail.
Alaska, Honolulu, Sandwich Islands	30.03	762.7	78	25.6	69	ne.	.....	.....	2	.....	5	.....	n.	0.15	3.8	sm'h	.....	fair.
Alliance, Hampton Roads, Va	30.32	770.1	45	7.2	92	ene.	.....	.....	1	.....	8	.....	.....	.....	.....	.....	.....	fair.
Ashuelot, Nagasaki, Japan	30.15	765.8	51	10.6	93	calm	.....	.....	0	.....	10	.....	w.	.....	.....	.....	.....	rainy.
Brooklyn, Keel Point, Patagonia	29.92	760.0	47	8.3	77	ssw.	40	17.9	.....	.....	5	.....	sw.	0	0	mod.	sw.	fair.
Colorado, New York, N. Y.	30.39	771.9	31	— 0.6	68	w.	7	3.1	.....	.....	2	.....	calm	0	0	.....	.....	fair.
Enterprise, Norfolk, Va	30.36	771.1	36	2.2	100	calm	.....	.....	0	.....	10	.....	calm	.....	.....	.....	.....	cloudy.
Essex, Callao, Peru	29.95	760.7	68	20.0	79	sse.	.....	.....	1	.....	10	.....	se.	.....	.....	sm'h	.....	cloudy.
Franklin, Norfolk, Va	30.35	770.9	36	2.2	90	ssw.	2.4	1.1	.....	.....	5	.....	.....	0.06	1.5	.....	.....	fair.
Galena, Montevideo, Uruguay	29.77	756.1	67	19.4	100	e.	.....	.....	4	.....	10	.....	.....	.....	.....	mod.	ese.	cloudy.
Hartford, Possession Bay, Patagonia*	29.81	757.2	43	6.1	?	ssw.	.....	.....	6–7	.....	8	.....	s;w	light	light	r'gh	w.	cloudy.
Independence, Mare Island, Cal.	30.18	766.6	51	10.6	93	sw.	.....	.....	1	.....	8	.....	sw.	.....	.....	.....	.....	cloudy.
Iroquois, Callao, Peru	30.00	762.0	66	18.9	90	se.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, N. 42° 24′, W. 67° 44′	29.93	760.2	35	1.7	61	w.	.....	.....	6	.....	10	.....	w.	.....	.....	r'gh	wnw.	squally.
Kearsarge, Norfolk, Va	30.33	770.4	40	4.4	91	sw.	.....	.....	1	.....	8	.....	sw.	.....	.....	.....	.....	fair.
Lackawanna, S. 31° 11′, W. 72° 07′*	29.90	759.4	62	16.7	83	nne.	.....	.....	3	.....	10	.....	ne.	.....	.....	mod.	ne	cloudy.
Lancaster, Palermo, Sicily*	30.00	762.0	71	21.7	62	e.	.....	.....	2	.....	2	.....	e.	.....	.....	sm'h	.....	fair.
Michigan, Erie, Pa	29.98	761.5	55	12.8	55	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	snowing.
Minnesota, New York, N. Y.	30.31	760.9	32	0.0	69	wnw.	12	5.4	.....	.....	2	.....	.....	.....	.....	.....	.....	fair.
Monocacy, Yokohama, Japan	29.66	753.4	46	7.8	85	w.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear.
New Hampshire, Newport, R. I.	30.23	767.8	32	0.0	69	wnw.	.....	.....	4	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Nipsic, N. 36° 47′, E. 0° 27′*	30.07	763.8	66	18.9	73	wsw.	.....	.....	4	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Onward, Callao, Peru†	30.09	764.3	63	17.2	94	sse	.....	.....	1	.....	10	.....	n.	.....	.....	long	w.	misty.
Palos, Tien-Tsin, China*	30.08	764.0	47	8.3	54	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear.
Pensacola, Callao, Peru*	29.91	759.7	65	18.3	89	ese.	4	1.8	.....	.....	10	.....	.....	0	0	.....	.....	misty.
Powhatan, Boston, Mass.	30.17	766.3	26	— 3.3	100	nw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear.
Quinnebaug, Villefranche, France*	29.87	758.7	64	17.8	73	sw.	.....	.....	1	.....	8	.....	sw.	.....	.....	sm'h	.....	cloudy.
Ranger, Salina Cruz, Mexico	29.97	761.2	74	23.3	72	n.	.....	.....	1	.....	2	.....	.....	0	0	gr'd	s.	clear.
Richmond, Yokohama, Japan*	29.86	758.4	46	7.8	69	w.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear.
Saratoga, N. 35° 51′, W. 72° 12′	30.21	767.3	52	11.1	72	nw.	.....	.....	4	.....	8?	.....	nw.	0	0	long	nw.	clear. ?
St. Louis, League Island, Pa.	30.57	776.5	36	2.2	90	wnw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear.
Swatara, N. 26° 12′, W. 61° 35 *	29.98	761.5	73	22.8	67	nne.	.....	.....	3	.....	0	.....	.....	.....	.....	long	ne.	clear.
Tennessee, Hampton Roads, Va	30.31	769.9	44	6.7	89	ssw.	3	1.3	.....	.....	10	.....	.....	0	0	.....	.....	cloudy.
Vandalia, Hampton Roads, Va*	30.31	769.9	42	5.6	83	sw.	.....	.....	1	.....	10	.....	calm	.....	.....	.....	.....	cloudy
Wabash, Boston, Mass.	30.19	766.8	25	— 3.9	63	wnw.	6	2.7	.....	.....	2	.....	nw.	0	0	.....	.....	fair.
Wachusetts, Mare Island, Cal†	30.17	766.3	50	10.0	100	sw.	.....	.....	2	.....	10	.....	calm	0	0	sm'h	.....	cloudy.
Wyandotte, Washington, D. C	30.15	765.8	46	7.8	92	sw.	.....	.....	7	.....	10	.....	.....	.....	.....	.....	.....	snowing.
Yantic, Norfolk, Va*†	30.44	773.2	37	2.8	90	s.	.....	.....	1	.....	8	.....	.....	.....	.....	.....	.....	cloudy.
Merchant Marine.																		
S. S. Grecian, Buenos Ayres, Argentine, Rep*	29.79	756.7	70	21.1	85	ese.	.....	.....	3	.....	10	.....	ese.	1 h'r	1 h'r	sm'h	.....	cloudy.
S. S. Nova Scotian, N. 40° 20′ W. 45° 39′	29.67	753.6	41	5.0	.....	w.	.....	.....	4	.....	8	.....	sw.	.....	.....	cross	var.	cloudy.
S. S. Polynesian, N. 45° 42′, W. 57° 33′*	29.69	754.1	37	2.8	.....	w.	.....	.....	7	.....	8	.....	w.	8 h'r	8 h'r	r'gh	w.	cloudy.
S. S. Scandinavian, N. 55° 4′ W. 8° 37′	29.51	749.5	50	10.0	.....	n.	.....	.....	7	.....	7	.....	n.	sh'rs	sh'rs	high	n	rain & hail.
S. S. British Crown, Liverpool, Eng	.....	.....	44	6.7	.....	w.	.....	.....	6	.....	7	.....	wnw.	o	o	sm'h	.....	cloudy.
S. S. Indiana, Liverpool, Eng	.....	.....	45	7.2	84	wnw.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	squally.
S. S. Lord Clive, N. 48° 25′, W. 44° 00′*†	29.70	754.4	.....	.....	.....	sse.	.....	.....	6	.....	6	.....	s;w	5 h'r	5 h'r	mod.	var.	raining.
S. S. Lord Gough, N. 48° 57′, W. 37° 08′	30.12	765 0	50	10.0	.....	sse.	.....	.....	4	.....	8	.....	se.	1 h'r	1 h'r	cross	.....	cloudy.
S. S. Ohio, N. 50° 40′, W. 20° 03′	29.93	760.2	57	13.9	100	n.	.....	.....	5	.....	3	.....	nnw.	.....	.....	long	nw.	clear.
S. S. Pennsylvania, N. 41° 30′, W. 63° 37′†	29.89	759.2	43	6.1	.....	nw.	.....	.....	5	.....	10	.....	nw.	.....	.....	long	w.	overcast.
S. S. Castor, N. 43° 58′, W. 29° 00′	.....	.....	53.6	12	.....	nw.	.....	.....	5	.....	6	.....	nne.	.....	.....	3	nw.	fair.
S. S. Anchoria, N. 52° 43′, W. 28° 14′†	30.29	769.4	.....	.....	.....	var.	.....	.....	1	.....	1	.....	ene.	shr's	sh'rs	long	ne.	clear.
S. S. Devonia, N. 42° 12′, W. 59° 15′†	29.69	754.1	47	8.3	.....	wnw.	.....	.....	4	.....	8	.....	nw.	.....	.....	hy'y	wnw.	squally.
S. S. Dorian, N. 42° 10′, W. 01° 50′ *	29.72	754 9	42	5.6	.....	wnw.	.....	.....	6	.....	10	.....	wnw.	snow	snow	r'gh	wnw.	cloudy.
S. S. Ethiopia, N. 45° 58′ W. 50° 02′	29.71	754.6	45	7.2	100	wsw.	.....	.....	3	.....	6	.....	w.	2 h'r	2 h'r	sli't	sw.	cloudy.
S. S. Galatia, Colombo, Ceylon†	29.97	761.2	86	30.0	.....	sw.	.....	.....	3	.....	2	.....	sw.	o	o	sm'h	sw.	fair.
S. S. Alpin, N. 23° 15′, W. 74° 33′	29.98	761.5	.....	.....	.....	ne.	.....	.....	5	.....	.....	.....	ne.	.....	.....	sm'h	ne.	fine.
S. S. Alvo, N. 14° 00′, W. 75° 00	30.00	762.0	80	26.7	.....	e.	.....	.....	6	1 ck	0	ene.	.....	o	o	cf'd	ese.	fine.
S. S. Ambrose, New York, N. Y†	30.17	766.3	.....	.....	.....	nw.	.....	.....	2	.....	.....	.....	.....	o	o	.....	.....	fine.
British Merchant, N. 29° 29′, W. 129° 07′	30.15	765.8	63	17.2	78	ene.	.....	.....	1	.....	8	.....	.....	.....	.....	.....	.....	d. clouds.
Bk. Coppename, N. 23° 12′, W. 27° 52′	30.15	765.8	78.5	25.8	62	ene.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
May Hulse, S. 24° 39′, W. 37° 47′	30.06	763.5	74.2	23.4	90	nne.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	blue sky.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.92	760.0	.....	.....	26	nne.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
S. S. Inchkeith, S. 39° 42′, E. 18° 47′	30.05	763.3	63.3	17.4	78	n.	.....	.....	2	.....	6	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Mexico, N. 35° 54′, W. 121° 46′ †	30.16	766.1	56.6	13.7	72	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	mod	wnw.	clear.
S. S. Bothnia, N. 43° 29′, W. 48° 19′	29.79	756.7	61	16.1	82	se.	.....	.....	2	.....	7	.....	sw	o	o	.....	sw.	fine.
S. S. Gallia, N. 43° 11′, W. 52° 48′	29.71	754.6	53	11.7	86	s.	.....	.....	3	.....	8	.....	w.	sh'rs	sh'rs	high	w.	fair.
S. S. Marathon, Constantinople, Turkey	30.00	762.0	63	17.2	.....	wsw.	.....	.....	3	.....	4?	.....	sw.	o	o	.....	.....	cloudy.?

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE —Continued.																		
S. S. Parthia, N. 42° 11′, W. 63° 45′*†	29.89	759.2	40	4.4		wnw.			6		5		wnw.	0	0	mod.	wnw.	cloudy.
S. S. Pavonia, N. 50° 38′, W 27° 40′*	30.32	770.1	51	10.6	72	ne.			2		2		n.	0	0	mod.	nne.	clear.
S. S. Colina, Glasgow, Scotland†	29.60	751.8				nw.			6		8?		nw.	0	0			clear.?
S. S. Canada, N. 49° 44′ W. 7° 20′	29.67	753.6	48.2	9		nw.			5		3		nw.	hail	hail	h'vy	nw.	clear.
S. S. Labradore, N. 46° 43′, W. 50° 49′			46.4	8		s.			3		0			0	0	sm'h		clear.
S. S. Abyssinia, N. 51° 32′, W. 8° 33′ *	29.61	752.1	55	12.8	73	wnw.			6		1			0	0	sm'h		clear.
S. S. Arizona, N. 43° 17′, W 58° 30′	29.71	754.6	39	3.9		w.			4		10		wnw.	4 h'r	4 h'r	high	w.	overcast.
S. S. Bohemia, Elbe River, Germany†	29.15	740.4				sw.			6		8		sw.	snow	snow	long	sw.	cloudy.
S. S. Cimbria, N. 50° 04′. W. 18° 57′	30.04	763.0	46.4	8.0		n.			7		3		nnw	0	0	long	nw.	fair.
S. S. Gellert, N. 44° 08′, W. 53° 31′	29.78	756.4	42	5.6		sw.			3		9		wsw.	1 h'r	1 h'r	long	ssw.	covered.
S. S. Silesia, N. 42° 10′, W. 50° 50′†	29.80	756.9	50.0	10.0		nnw.			6		8?		nw.	0	0	5–6	nnw.	overcast?
S. S. Vandalia, Hamburg, Germany			42.1	5.6		w.			3		10		w.	0	0			squally.
S. S. Wieland, N. 47° 56′, W. 31° 56′	30.35	770.9				wsw.			5		8		wsw.	4 h'r	4 h'r	mod.	ese.	fine.
S. S. City of Berlin, N. 51° 00′, W. 22° 15′	30.20	767.1	50	10.0	86	nw.			6		4		nw.	0	0	r'gh	nnw.	fair.
S. S. Nessmore, N. 44° 46′ W. 50° 50′	29.76	755.9	43	6.1	?	sw.			4		8		wsw.	0	0	cross		foggy.
S. S. Hevelius, N. 3° —′, W. 29° —′*†	29.96	761.0	82	27.8		sse.			4		5?		se.	0	0			clear.?
S. S. Ptolemy, N. 34° 30′, W. 70° 15′	30.31	769.9	59.7	15.4	70	nw.			4		5		w.	0	0	4	n.	d. clouds.
S. S. Sirius, N. 45° 50′, W. 9° 30′*†	29.82	757.4				w.			4		9		w.	4 h'r	4 h'r	mod.	nw.	overcast.
S. S. Bulgarian, N. 43° 13′, W. 58° 02′ *	29.84	757.9				wnw.			5		8		wnw.	7 h'r	7 h'r	mod.	w.	
S. S. Colorado, Galveston, Texas†	29.95	760.7	65	18.3		e.			7		10		e.	light	light			cloudy.
S. S. Rio Grande, N. 30° 25′, W. 80° 23′ †	30.24	768.1	68	20.0		ese.			1		3		ese.	0	0		ese.	fair.
S. S. San Marcos, New York, N. Y			48	8.9		wsw.			2									
S. S. Archimede, N. 35° 09′, E. 14° 50′*†	30.22	767.6	70	21.1	70	w.			5									
S. S. Glenapp, Santos, Brazil †	29.96	761.0	78	25.6		var.			3		4		wsw.	0	0	sm'h	nw.	fair.
S. S. Glenfyne, N. 13° 59′, W. 53° 02′						ene.			1		0			0	0			
S. S. Chalmette, Algiers, La†	30.06	763.5	68	20.0		e.			3		2		e.	0	0	sm'h	e.	fair.
S. S. Egypt, N. 40° 56′, W. 65° 07′*†	30.00	762.0				e.			1		7		se.	0	0			cloudy.
S. S. Erin, Liverpool, Eng	29.17	740.9	44	6.7		w.			6		10		w.	5 h'r	5 h'r	r'gh	w.	squally.
S. S. Helvetia, N. 40° 26′ W. 71° 00′	30.16	766.1	39	3.9		w.			6		8		w.	6 h'r	6 h'r			
S. S. Holland, N. 44° 56′, W. 47° 47′	29.69	754.1	48	8.9		wnw.			6		2		nw.	0	0	short	nw.	clear.
S. S. The Queen, N. 49° 38′ W. 7° 43′ *†	29.70	754.4	46	7.8		wnw.			2		8		sw.	2½h'r	2½h'r	sm'h	sw.	fair.
S. S. Santiago, N. 29° 31′ W. 74° 01′	30.39	771.9	73	22.8	76	nne.			5		2		nnw.	shr's	shr's	sm'h		clear.
S. S. City of Alexandria, Vera Cruz Rouds, Mexico†	30.00	762.0	78	25.6		n.			3		3		se.	0	0	small	ne.	fine.
S. S. Knickerbocker, N. 38° 05′, W. 74° 26′ *†	30.19	766.8	40	4.4		sw.			5		2		s.	0	0	h'vy	se.	clear.
S. S. Leerdam, N. 41° 47′, W. 55° 20′ *	29.67	753.6	55	12.8		w.			7							sm'h		
S. S. America, N. 46° 58′, W. 43° 21′*	29.86	758.4	56.0	13.3	90	s.			6							r'gh		squally.
S. S. Elbe, N. 49° 36′, W. 16° 10′	29.83	757.7	52.7	11.5	93	nnw.			6		10		s.	0	0	long	sw.	overcast.
S. S. Neckar, N. 50° 03′, W. 14° 10′	30.00	762.0	49.0	9.4	93	nnw.			5		7		nnw.	2 h'r	2 h'r	r'gh	nw.	cloudy.
S. S. Oder, N. 45° 24′, W. 49° 43′	29.73	755.1	42.4	5.8		sse.			5		6		nnw.	sqll's	sqll's	cross	nw.	fair.
S. S. Ohio, Galveston, Texas	30.00	762.0				e.			2		7		wsw.	0	0	long	s.	covered.
S. S. Salier, Bremerhaven, Germany	29.22	742.2				sw.			2		9		e.	4 h'r	4 h'r	sm'h	e.	misty.
S. S. Strassburg, N. 28° 02′ W. 19° 03′	30.15	765.8	71	21.7	90	ne.			5		10		sw.	0	0			cloudy.
S. S. Werra, N. 41° 12′, W. 65° 67′ *	30.04	763.0	39.2	4.0		wnw.			4		5		ne.	0	0	mod	ne.	fair.
S. S. Belgic, N. 29° 22′, E. 129° 33′ †	30.18	766.6	64	17.8	68	n.			6		10		w.	0	0	high	wnw.	cloudy.
S. S. Coptic, N. 40° 30′ W. 134° 00′	30.19	766.8	53.5	11.9	48	w.			3		5		nne.	0	0	mod.	ne.	fair.
S. S. Oceanic N. 35° 20′, E. 161° 00′ *	29.83	757.7	62	16.7	94	sw.			3		2		w.	0	0	high	w.	clear.
S. S. City of Augusta, Savannah, Ga†	30.27	768.8				sw.			4		10		sw.			mod.	sw.	raining.
S. S. Mississippi, N. 48° 13′, W. 124° 43′ †	29.97	761.2	47	8.3	85	w.			1		0			0	0			clear.
S. S. Oregon, N. 40° 47′, W. 124° 31′†	30.23	767.8	51.5	10.8	68	n.			4		0							fair.
S. S. Ancon, N. 35° 30′, W. 121° 11′†	30.13	765.3	53	11.7	86	ne.			1		0					high	nw.	clear.
S. S. Orizaba, N. 36° 38′, W. 122° 08′ †	30.14	765.5	55	12.8	87	calm			2		10		ene.			sm'h		cloudy.
S. S. State of California, N 43° 10′ W. 124° 30′*†	30.10	764.5	48	8.9	63	sw.			0		fg.		nw.			long	sw.	foggy.
S. S. Australia, Sydney, N. S. W	30.12	765.0	72	22.2	90	ne.			5		5		sw.			short	s.	
S. S. City of New York, Sydney, N. S. W †	30.12	765.0	71	21.7	71	ne.			5		10		ne.	3 h'r	3 h'r			cloudy.
S. S. City of Pekin, Hong Kong, China †	30.39	771.0	58	14.4	48	ne.			5		0			0	0			clear.
S. S. City of Rio de Janeiro N. 19° 03′ W. 104° 35′ †	29.81	757.2	76	24.4	77	calm			2		2		nw.	0	0			clear.
S. S. City of Sydney, N. 32° 14′, W. 135° 50′†	30.22	767.6	62	16.7	83	nne.			2		2			0	0	sm'h		clear.
S. S. Grenada, Panama, Panama†	29.91	759.7	76	24.4	91	nw.			2		2		ne.	0	0	h'vy	ne.	clear.
S. S. San José, N. 24° 45′, W. 112° 12′						nw.			2		5?		nw.	1 h'r	1 h'r	sm'h	e.	clear.?
S. S. Zealandia, N. 25° 13′, W. 148° 50′	30.16	766.1	72	22.2	90	ne.			4		5 k		nw.	0	0	mod.	nw.	
S. S. Bermuda, N. 35° 37′, W. 71° 23′ †	30.23	767.8	56	13.3		nnw.			5		7		ne.			mod.	ne.	fine.
S. S. Muriel, N. 25° 52′, W. 66° 00′	30.13	765.3	75	23.9		ne.			4		8		nnw.	0	0	h'vy	nnw.	cloudy.
S. S. Claudius, N. 39° 00′, W. 78° 20′†	30.13	765.3				ene.			4		10			0	0	mod.	ne.	overcast.
S. S. Valencia, LaGuayra, Venezuela†	30.01	762.2	80	26.7	74	calm			4		3		ene.	0	0	short	ene.	fair.
S. S. Belgenland, Antwerp, Belgium			50	10.0	93	s.			0		4		ese.	0	0	mod.	ne.	hazy.
S. S. Pennland, N. 50° 44′, W. 0° 08′	29.53	750.0	51.5	10.8	86	w.			4		5?		ssw.	8 h'r	8 h'r			cloudy.
S. S. Rhyland, N. 40° 45′, W. 68° 00′			42	5.6	83	nw.			6				w.	1 h'r	2 h'r	sm'h	nw.	clear.
S. S. Waesland, N. 50° 01′, W. 25° 17′	30.37	771.4	49	9.4	64	ne.			7		6		nw.			high	nw.	squally.
S. S. Maas, N. 49° 47′, W. 13° 15′	30.26	768.5	51.6	10.9	72	nw.			5		10		ne.	3 h'r	3 h'r	long	nne.	cloudy.
S. S. P. Caland, N. 50° 38′, W. 0° 40′	29.44	747.8	52.3	11.3	82	wsw.			7		4?		n.	2 h'r	2 h'r	5	nne.	overcast.
S. S. W. A. Scholten, N. 44° 26′, W. 53° 06′			49.6	9.8	71	wnw.			2		1		w.			3	w.	clear.
S. S. Zaandam, N. 49° 14′, W. 27° 35′ *	30.16	766.1	62.2	16.8	81	n.			2		6		nw.	sq'lls	sq'lls			
S. S. State of Florida, N. 55° 10′, W. 8° 32′	29.35	745.5	52	11.1		nw.			2		2 k		w.	0	0	2	nw.	fine.
S. S. State of Indiana, N. 54° 16′, W. 24° 40′			42	5.6		n.			8		8		nw.	hail	hail	h'vy	nw.	raining.
S. S. State of Nevada, N. 43° 22′, W. 58° 17′†	29.75	755.6	43	6.1		nw.			4		2		ne.	2 h'r	2 h'r	high	ne.	clear.
S. S. Thingvalla, N. 52° 20′, W. 40° 53′ †	29.95	760.7	49.1	9.5		s.			6		8		nw.	hail	hail	cross	var.	squally.
S. S. Iowa, N. 44° 12′ W. 54° 12′*†	29.74	755.4	48	8.9		wsw.			6		8		s.	0	0	r'gh	s.	covered.
S. S. Piantyn, N. 49° 01′, W. 10° 20′	29.71	754.6							3		2		wsw.	2 h'r	2 h'r	mod.	sw.	clear.
S. S. Baltic, N. 41° 34′ W. 54° 25′	29.78	756.4	53	11.7	80	wnw.			6		5		n.	0	0	rg'h	n.	squally.
S. S. Britannic, N. 40° 42′, W. 08° 05′ †	30.10	764.5	45	7.2	92	w.			6		9		w.	7 h'r	7 h'r	con.	var.	squally.
S. S. Celtic, Liverpool, Eng			46	7.8	77	nw.			7–8		8		nw.	h'vy	h'vy			squally.
S. S. Lepanto, N. 48° 40′. W. 14° 56′*	29.97	761.2	50	10.0		nnw.			7		8		n.	12 h'r	12 h'r	h'vy	n.	squally.
S. S. Marengo, N. 48° 40′, W. 31° 18′ *†	30.16	766.1				n.			4		4?		n.	0	0	mod	ne.	cloudy.?
S. S. Romano, N. 41° 10′, W. 70° 25′	30.02	762.5	38	3.3		w.			5		4		w.	0	0	r'gh		fine.
S. S. Salerno, Malta, Mediterranean			68	20.0		wnw.			2		4		w.	2 h'r	2 h'r	sm'h	w.	clear.
S. S. Catherine Whiting, Fire Island, N. Y†	30.14	765.5				nw.			5		0			0	0	short	wnw.	
S. S. Norman, N. 42° 04′, W. 70° 15′	30.15	765.8				wnw.			0					0	0	rg'h	nw.	clear.
S. S. Saxon, N. 41° 00′, W. 71° 10′ *†	30.21	767.3	41	5.0		nw.			9									
MISCELLANEOUS.																		
Bk. Adelaid, N. 28° 30′, W. 73° 34′ *†	30.31	769.9	73	22.8		ne.			5		2		ne.	0	0	short	ne.	fair.
Bg. Alcira, Maracaybo, Venezuela	29.92	760 0	82	27.8		ene.			1		2		ene.	0	0			clear.
S. Annie M. Law, Kobe, Japan*†	30.05	763.3	44	6.7		wnw.			1		0			0	0			fine.
Bk. Anna Thormann, S. 18° 46′, E. 78° 30′*	29.93	760.3	74.3	23.5	76	ese.			5		9 k		se.	0	0	r'gh	ese.	cloudy.
Bk. Antonio Lopez, N. 23° 17′, W. 79° 51′ *	30.11	764.8	73	22.8	85	e.			3		3			0	0	mod.	e.	fair.
Bk. Aquidneck, S. 20° 33′, W. 39° 29′*†	30.20	767.1				ne.			1				ne.			light	ne.	clear.
Bk. Aureola, Bristol, Eng*†	29.65	753.1	52	11.1		wnw.			5		3		wnw.					clear.
Bgt. Arthur, N. 37° 19′, W. 66° 00′ *†	30.13	765.3				nw.			7				nw.	0	0	high	nw.	
Schr. B. J. Baker, Smithville, N. C*†	30.18	766.6				e.			6		4		se.					hazy.
Bkt. Bonny Doon, N. 41° 12′, W. 28° 57′*†	30.28	769.1				se.			4		2		se.	0	0	long	ne.	hazy
S. S. Burswell, N. 28° 19′, W. 59° 00′*†	30.12	765.0	81	27.2		nnw.			2		4		nnw.	1 h'r	1 h'r	sli't	n.	clear.
Bk. Champion, N. 37° 11′, W. 14° 25′			66.0	18.9		w.			1		2		sw.	0	0	long	nnw.	clear.
Schr. Chas. F. Heyer, N. 27° 19′, W. 84° 29′	30.19	766.8	72	22.2	71	ese.			2	0	4 k		se.	0	0	r'gh	e.	fair.
Schr. C. R. Flint, Cedar Keys, Fla†	30.26	768.6	56	13.3		ene.			1		3		ene.	0	0			clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.	Character.	Direction from.	
MISCELLANEOUS.—Continued.																		
S. Cornelius, N. 44° 43′, W. 36° 38′	.....	.....	55.6	13.1	.....	se.	.....	.....	3	.....	4	.....	sse.	0	0	long	nw.	fair.
S. S. D. J. Foley, N. 38° 10′, W. 75° 02′	.....	.....	42	5.6	.....	nw.	.....	.....	3	.....	4	.....	.....	0	0	sm'h	n.	fair.
Bkt. David Preston, New Orleans, La*†	30.20	767.1	69	20.6	.....	e.	.....	.....	.....	.....	10	.....	e.	4 h'r	4 h'r	.....	.....	
Bk. Don Quixote, Pasoeroen Roads, Java*	29.82	757.4	90	32.2	.....	wnw.	.....	.....	4	.....	2	.....	wnw.	0	0	sm'h	.....	clear.
Bk. E. D. Bigelow, N. 46° 25′ W. 3° 50′*†	29.70	754.4	.....	.....	.....	w.	.....	.....	4	.....	8	.....	wnw.	0	0	long	nw.	squally.
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†	30.32	770.1	44	6.7	.....	s.	.....	.....	1	.....	8	.....	calm	0	0	.....	.....	cloudy.
S. E. J. Spicer, New York, N. Y.	30.29	769.4	40	4.4	100	nw.	.....	.....	5	.....	10	.....	nw.	.....	.....	.....	.....	overcast.
Bk. Eliza Barss, Bermuda, W. I†	30.14	765.5	.....	.....	.....	nnw.	.....	.....	3	.....	2	.....	nnw.	0	0	.....	.....	clear.
S. Enoch Train, St. Thomas, W. I*†	30.15	765.8	.....	.....	.....	e.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear.
Bk. Essex, Muscat, Arabia*†	30.02	762.5	79	26.1	.....	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	fine.
Schr. F. E. McDonald, Belfast, Maine†	30.01	762.2	.....	.....	.....	nw.	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	
S. S. Foscolia, N. 11° 27′, W. 49° 16′	.....	.....	.....	.....	.....	var.	.....	.....	3	.....	10	.....	ne.	3 h'r	3 h'r	sm'h	.....	cloudy.
Bk. Freya, N. 19° 26′, W. 43° 24′	.....	.....	80	26.7	.....	wsw.	.....	.....	2	.....	1	.....	w.	0	0	sm'h	.....	clear.
Bg. George, Point Caledonia, N. S*†	29.65	753.1	.....	.....	.....	w.	.....	.....	7	.....	8	.....	w.	snow	snow	mod.	ese.	fair.
S. Grecian, N. 26° 29′, W. 67° 20′†	30.20	767.1	75	23.9	68	nne.	.....	.....	5	.....	4	.....	n.	0	0	long	n.	fair.
Bk. Grey Eagle, N. 32° 48′ W. 41° 10′*†	30.50	774.7	76	24.4	.....	sse.	.....	.....	4	.....	1	.....	ssw.	0	0	mod.	nne	fair.
Bk. Gronsvaer, S. 40° 35′ E. 173° 40′†	29.89	759 3	63.2	17.3	.....	var.	.....	.....	3–5	.....	0	.....	.....	0	0	2	nw.	fair.
Bk. Hattie G. McFarland, New York City, N. Y†	30.21	767.3	38	3.3	.....	ene.	.....	.....	5	.....	10	.....	ene.	10 h'r	10 h'r	.....	.....	stormy.
Schr. Hattie Weston, N. 10° 10′ W. 61° 40′*†	30.03	762.7	81	27.2	.....	ne.	.....	.....	1	.....	2	.....	ene.	1 h'r	1 h'r	sm'h	ne.	fair.
S. Hedwig, N. 38° 06′, W. 72° 10′	30.30	769.5	46.0	7.8	65	nnw.	.....	.....	4	.....	4	.....	nnw.	0	0	2	nw.	fine.
Bk. Heinrich & Tonio, N. 44° 58′, W. 32° 05′*†	30.23	767.8	56	13.3	.....	e.	.....	.....	0–2	.....	1	.....	e.	0	0	mod	w.	clear.
Schr. Isabel Alberto, Cedar Keys, Fla†	30.21	767 3	.....	.....	.....	ne.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear.
S. Ivy, Cork, Ireland	.....	.....	45	7.2	.....	wsw.	.....	.....	6	.....	5	.....	w.	0	0	.....	.....	squally.
Schr. James Slater, N. 21° 36′, W. 63° 16′†	30.09	764.3	82	27.8	.....	ne.	.....	.....	4	.....	0	.....	.....	0	0	mod.	ne.	
Schr. Jennie N. Huddell, Savannah, Ga†	30.25	768.3	46	7.8	69	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear.
S. S. John Hopkins, Baltimore, Md	.....	.....	35	1.7	.....	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	.....	overcast.
Schr. John L. Thomas, N. 19° 34′, W. 84° 26′*†	30.10	764.5	.....	.....	.....	ne.	.....	.....	4	.....	2	.....	se.	0	0	hv'y	e.	clear.
Bg. John Wesley, Cardenas, Cuba, W. I†	29.98	761.5	.....	.....	.....	s.	.....	.....	1	.....	4	.....	s.	0	0	.....	.....	
Bk. Joseph A. Ropes, Muscat, Arabia*†	30.08	764.0	79	26.1	74	ese.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear.
Light House Tender, Laurel, Key West, Fla†	30.09	764.3	72	22.2	.....	e.	.....	.....	3	.....	5	.....	e.	0	0	.....	.....	fair.
Bk. Liberia, N. 8° 38′, W. 180 40′*	29.88	758.9	85	29.4	79	nw.	.....	.....	1	.....	6	.....	calm	0	0	.....	.....	
Bg. Lilian, N. 22° 45′, W. 67° 17′†	30.04	763.0	81	27.2	.....	e.	.....	.....	2	.....	4	.....	ne.	½ h'r	½ h'r	mod	n; ne	raining.
S. S. Madrid, N. 36° 34′, W. 74° 10′*†	30.42	772.7	48	8.9	78	wnw.	.....	.....	3	.....	3	.....	wsw.	0	0	sm'h	.....	fair.
S. S. Malabar, Suez Bay, Egypt*†	29.95	760.7	.....	.....	.....	nnw.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bg. Mary Gibbs, N. 37° 04′, W. 71° 50′*†	30.18	766.6	53	11.7	.....	nnw.	.....	.....	3	.....	5	.....	nnw.	0	0	2	nnw.	fair.
Bk. Matilda C. Smith, N. 31° 38′, W. 30° 00′*†	30.40	772.1	.....	.....	.....	ene.	.....	.....	4	.....	2	.....	ene.	0	0	mod.	wnw.	fine.
Bg. Mattie B. Russell, N. 36° 50′, W. 72° 40′*†	30.43	772.9	.....	.....	.....	nnw.	.....	.....	6	.....	2	.....	n.	0	0	high	nnw.	
Schr. Moravian, N. 12° 33′, W. 81° 43′†	30.13	765.3	.....	.....	.....	nne.	.....	.....	.....	.....	.....	.....	se.	0	0	long	ne.	fair.
S. M. P. Grace, N. 8° 54′, W. 119° 32′*	29.86	758.4	78	25.6	.....	var.	.....	.....	2	.....	9	.....	ese.	1 h'r	1 h'r	mod.	sse	
Bk. Northern Queen, N. 36° 34′, W. 60° 57′ *†	30.20	767.1	74	23.3	68	nnw.	.....	.....	7	.....	5	.....	n.	.....	.....	rg'h	nw.	squally.
Bg. O. C. Clary, N. 18° 04′ W. 57° 16′*†	30.02	762.5	80	26.7	96	ene	.....	.....	2	.....	1	.....	e.	.....	.....	sm'h	.....	clear.
Bk. Orpheus, N. 44° 52′ W. 26° 55′	30.54	775.7	60	15.6	.....	sse.	.....	.....	4	.....	6 k	.....	sse.	0	0	mod.	nne.	fair.
S. Paramita, San Francisco, Cal†	30.04	703.0	53	11.7	.....	sse.	.....	.....	3	.....	.....	.....	sse.	0	0	.....	.....	foggy.
S. S. Radnorshire, N. 10° 10′, E. 61° 00′*†	29.86	758.4	.....	.....	.....	nne.	.....	.....	5	.....	0	.....	.....	0	0	mod	ne.	clear.
S. St. Francis, S. 2° 25′ W. 113° 00′†	29.96	761.0	70	21.1	.....	ese.	.....	.....	3	.....	2	.....	se.	0	0	mod.	se.	fine.
Schr. S. B. Hubbard, Dutch Id, R. I†	30.24	768.1	44	6.7	.....	wnw.	.....	.....	5	.....	0	.....	.....	0	0	.....	.....	fine.
Bk. Scud, N. 15° 32′ W. 59° 56′*†	29.98	761.5	.....	.....	.....	ene.	.....	.....	6	.....	2	.....	ene.	0	0	long	ne.	
Bk. Southern Belle, Antwerp, Belgium*†	29.35	745.5	.....	.....	.....	w.	.....	.....	6	.....	2	.....	.....	0	0	.....	.....	clear.
S. S. Strathleven, N. 23° 28′ E. 36° 48′	29.94	760.5	82.0	27.8	83	nnw.	.....	.....	3	.....	2	.....	nw.	.....	.....	2	nw.	d. clouds.
S. S. Sunbeam, N. 42° 11′, W. 14° 42′	29.99	761.7	64	17.8	78	wnw.	.....	.....	5	.....	6	.....	nw.	2 h'r	2 h'r	4	wnw.	d. clouds.
Bk. Truro, N. 43° 33′ W. 50° 55′*†	29.86	758.4	.....	.....	.....	sse.	.....	.....	2–3	.....	2	.....	ssw.	6 h'r	6 h'r	mod	sw.	clear.
U. S. F. C. S. S. Fish Hawk, Washington, D. C†	30.40	772.1	35	1.7	70	e.	.....	.....	1	.....	10	.....	calm	.....	.....	.....	.....	cloudy.
Bk. Usko, N. 44° 25′, W. 47° 18′*	29.71	754.6	52	11.1	.....	nne.	.....	.....	1	.....	1	.....	wsw.	5 h'r	5 h'r	mod.	nw.	fair.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.21	767.3	64.4	18	.....	sw.	.....	.....	3	.....	4	.....	sw.	1½ h'r	1½ h'r	.....	.....	
Schr. Walter L. Plummer, N. 18° 54′, W. 73° 23′*†	30.10	764.5	.....	.....	.....	ne.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	.....	fine.
Bk. Wandering Jew, S. 30° 16′, W. 46° 53′†	29.87	758.7	75	23.9	.....	n.	.....	.....	6	.....	6	.....	nnw.	0	0	mod.	nne.	
Bk. Warden Law, S. 28° 04′, W. 73° 09′	30.07	763.8	.....	.....	.....	s.	.....	.....	4	.....	6	.....	s.	0	0	sm'h	s.	covered.
Bgt. Willie, S. 33° 10′, E. 27° 45′*†	30.06	763.5	74	23.3	.....	se.	.....	.....	6	.....	4	.....	se.	1 h'r	1 h'r	r'gh	se.	fair.
S. Wm. Woodbury, N. 37° 48′ W. 55° 15′*†	30.00	762.0	58	14.4	.....	w.	.....	.....	6	.....	4	.....	nw.	.....	.....	high	wnw.	clear.

International Chart I. November 26, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 27, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ALGERIAN.																			
Nemours	.....	.....	30.06	763.6	63.0	17.2	80	s.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair...	Malaterre.
Algiers	.....	.....	30.02	762.5	65.8	18.8	57	w.	.....	.....	5	.....	0	.....	.....	0	0	clear.....	Thève.
La Calle	.....	.....	30.00	762.0	71.6	22.0	58	wnw.	.....	.....	3	.....	2	.....	.....	0	0	fair	Fonfrède.
Tunis	.....	.....	30.00	762.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.10	764.5	73.4	23.0	50	sw.	.....	.....	3	.....	3	.....	.....	0.150	3.8	pretty fair..	Pérès.
Tebessa	.....	.....	30.08	763.9	62.6	17.0	45	n.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	Dognon.
Geriville	.....	.....	.....	.....	67.3	19.6	14	w.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair...	Lonchamp.
Laghouat	.....	.....	30.08	763.9	66.2	19.0	26	ssw.	.....	.....	1	.....	1	.....	.....	0	0	very fair.....	Abraham.
Biskra	.....	.....	30.11	764.9	67.3	19.6	38	nw.	.....	.....	1	.....	3	.....	.....	0	0	pretty fair...	Malau.
AUSTRALIAN.																			
Melbourne, Victoria	29.74	755.4	29.83	757.7	74.0	23.3	69	sw.	10	4.5	.....	.....	10	.....	.....	0.06	1.5	dull.....	R. L. J. Ellery.
AUSTRO-HUNGARIAN.																			
Agram	29.06	738.0	29.60	751.7	56.8	13.8	71	w.	.....	.....	5	.....	10	.....	.....	0.583	14.8	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.85	732.9	29.62	752.4	47.1	8.4	73	w.	6.3	2.8	.....	.....	10	.....	.....	0.142	3.6	.....	Dr. Wierzbicki.
Eperies	28.74	729.9	29.62	753.3	46.8	8.2	92	calm	.....	.....	0	.....	10	.....	.....	0.520	13.2	.....	Julius Mikolik.
Gratz	28.46	722.8	29.73	755.1	42.1	5.6	97	sw.	.....	.....	3	.....	10	.....	.....	0.185	4.7	.....	Andreas Rospini.
Hermannstadt	28.28	718.3	29.68	753.8	59.4	15.2	65	se.	.....	.....	2	.....	4	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.44	722.4	29.82	757.3	38.8	3.8	90	wsw.	.....	.....	2	.....	10	.....	.....	0.819	20.8	raining.....	The Staff.
Lemberg	28.63	727.1	29.61	752.2	46.0	7.8	93	se.	.....	.....	1	.....	10	.....	.....	0.654	16.6	.....	Dr. T. Stanecki.
Pola	29.55	750.6	29.67	753.7	60.8	16.0	82	ssw.	.....	.....	4	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.14	740.1	29.60	751.7	51.8	11.0	92	s.	.....	.....	3	.....	10	.....	.....	0.177	4.5	.....	Joseph Midlinszky, S. J.
Szegedin	29.33	745.0	29.61	752.0	55.0	12.8	80	s.	.....	.....	2	.....	10	.....	.....	0.102	2.6	.....	Karl Stancel.
Trieste	29.56	750.7	29.66	753.3	53.6	12.1	97	nw.	.....	.....	1	.....	10	.....	.....	0.921	23.4	raining.....	Royal Academy.
Vienna	29.02	737.2	29.75	755.6	42.8	6.0	85	nw.	.....	.....	3	.....	10	.....	.....	0.264	6.7	raining.....	I. R. Central Met. Obs'y.
BRITISH.																			
Aberdeen	29.42	747.3	29.52	749.8	36.2	2.3	65	w.	19	8.5	.....	.....	6	.....	.....	0.350	8.9	squally.....	W. Boswell
Armagh, Observatory	29.61	752.1	29.86	758.4	39.1	3.9	87	w.	15	6.7	.....	.....	7	.....	.....	.....	.....	d. clouds.....	S. Oall.
Bidston, Liverpool Obs'y	.....	.....	29.72	754.9	42.2	5.7	81	w.	42	18.8	.....	.....	8	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	29.16	740.7	29.70	754.4	39.8	4.3	87	wsw.	24	10.7	.....	.....	10	.....	.....	.....	.....	overcast.....	Thomas Mackereth.
Bradford, Yorkshire	29.26	743.2	29.66	753.4	40.9	4.9	83	nw.	.....	.....	2	.....	5	.....	.....	0.08	2.0	d. clouds.....	McLandsborough&Preston.
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	81.0	27.2	70	ne.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds.....	Corpl. J. Surgenor, A. H.C.
Cardington	.....	.....	.....	.....	43.0	6.1	75	nw.	.....	.....	1.0	.....	1	.....	.....	.....	.....	blue sky.....	John McLaren.
Chatham, School M. E	29.68	753.9	29.81	757.2	42.8	6.0	72	w.	.....	.....	1	.....	0	.....	.....	.....	.....	misty.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.85	758.2	30.08	764.0	46.5	8.1	73	wnw.	.....	.....	4	.....	4	.....	.....	.....	.....	d. clouds.....	The Staff.
Fort Napier, Natal	27.61	701.3	29.83	757.7	76.0	24.4	64	e.	.....	.....	2	.....	6	.....	.....	.....	.....	.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	86.0	30.0	65	n.	.....	.....	1	.....	2	.....	.....	.....	.....	blue sky.....	Sergt. John Robinson.
Gibraltar, Mediterranean	30.08	764.0	30.14	765.5	60.0	15.6	89	nw.	.....	.....	3	.....	8	.....	.....	.....	.....	d. clouds.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.41	747.0	29.62	752.3	35.9	2.2	88	w.	.....	.....	3	.....	5 k	.....	.....	.....	.....	d. clouds.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.67	753.6	29.85	758.2	42.2	5.7	69	wnw.	.....	.....	4	.....	2	.....	.....	.....	.....	blue sky.....	The Staff.
Guernsey	29.74	755.4	30.05	763.3	46.0	7.8	63	nw.	.....	.....	2	.....	4	.....	.....	blank	blank	d. clouds.....	A. Collenette, F. M. S.
Kew, Observatory	29.82	757.4	29.86	758.4	42.3	5.7	65	w.	20	8.9	.....	.....	2	.....	.....	.....	.....	blue sky.....	The Staff.
Leicester, Museum	29.53	750.0	29.79	756.7	41.8	5.4	77	w.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds.....	J. C. Smith.
Malta, Mediterranean	29.92	760.0	30.00	762.0	69.6	20.9	98	w.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.00	762.0	30.05	763.3	76.0	24.4	83	se.	.....	.....	1	.....	7	.....	.....	.....	.....	d. clouds.....	C. S. Duncombe.
Oscott, St. Mary's College	29.26	743.2	29.80	756.9	40.0	4.4	73	sw.	.....	.....	5	.....	6	.....	.....	.....	.....	threatening	Warren Middleton.
Oxford, Radcliffe Obs'y	29.64	752.8	29.86	758.4	43.7	6.5	71	w.	.....	.....	5	.....	1	.....	.....	.....	.....	squally.....	The Staff.
Plymouth	29.95	760.7	30.03	762.7	45.8	7.7	75	nnw.	.....	.....	2	.....	8	.....	.....	.....	.....	d. clouds.....	John Merrifield.
Sandwick Manse, Orkneys	29.13	739.9	29.23	742.4	40.2	4.6	90	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty.....	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.88	758.9	29.94	760.5	60.8	16.0	62	sw.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky.....	W. H. Lyne.
Sheffield	29.41	747.0	29.70	754.4	40.3	4.6	98	wnw.	.....	.....	3	.....	8	.....	.....	0.10	2.5	overcast.....	W. F. Cooper.
Silloth Rectory	29.60	751.8	29.63	752.6	38.4	3.6	88	wnw.	.....	.....	4	.....	2	.....	.....	0	0	d. clouds....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.72	754.9	35.4	1.9	89	w.	16	7.2	.....	.....	10	.....	.....	.....	.....	raining.....	I. New.
Stratfield Turgiss	29.67	753.6	29.89	759.2	43.0	6.1	71	w.	.....	.....	3	.....	8	.....	.....	.....	.....	squally.....	Rev. O. H. Griffiths, F. M. S.
Truro, Royal Institution	30.01	762 2	30.06	763.5	50	10.0	71	n.	.....	.....	7	.....	5	.....	.....	.....	.....	d. clouds.....	W. Newcombe.
Valencia, Observatory	30.12	765.0	30.14	765.5	48.6	9.2	71	wnw.	27	12.8	.....	.....	6	.....	.....	blank	blank	squally.....	The Met'g'l Office
CANADIAN.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.60	751.8	29.64	752.8	24	— 4.4	81	sw.	6	2.7	.....	.....	10 s	.....	w.	0	0	cloudy.....	H. J. Cundall, C. E
Chatham, N. B*	29.58	753.1	29.65	753.1	15	— 9.4	91	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	G. A. Blair.
Father Point, Quebec*	29.66	753.4	29.68	753.9	27	— 2.8	88	nw.	25	11.2	.....	5 ck	5 s	nw.	nw.	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.48	748.8	30.38	771.6	14	—10.0	83	se.	9	4.0	.....	.....	10 s	.....	se.	0	0	cloudy	James Stewart.
Halifax, N. S*	29.60	751.8	29.74	755.4	27	— 2.8	77	w.	3	1.3	.....	5 k	0	w.	.....	0	0	fair.....	A. Allison.
Kingston, Ontario*	29.69	754.1	30.05	763.3	21	— 6.1	84	n.	5	2.2	.....	8 cs	2 n	ne.	calm	0.13	3.3	cloudy.....	A. P. Knight, M. A
Montreal, Quebec*	29.74	755.4	29.96	761.0	16	— 8.9	83	n.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy.....	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.45	748.0	30.21	767.3	16	— 8.9	83	n.	7	3.1	.....	0	2 ks	.....	n.	0.11	2.8	fair.....	Rev. R. Mosley.
Port Dover, Ontario	29.43	747.5	30.18	766.6	19	— 7.2	100	n.	9	4.0	.....	0	0	.....	.....	0.46	11.7	clear.....	H. Morgan.
Port Stanley, Ontario	29.45	748.0	30.13	765.3	21	— 6.1	87	nw.	7	3.1	.....	0	0	.....	.....	0.40	10.2	clear.....	M. Payne.
Quebec, Quebec*	29.52	749.8	29.83	757.7	19	— 7.2	84	nw.	.....	.....	3	.....	8 k	.....	nw.	0	0	cloudy.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.66	753.4	30.16	766.1	12	—11.1	87	nw.	6	2.7	.....	0	2 s	.....	nw.	0	0	fair.....	W. H. McIntyre.
Saugeen, Ontario*	29.42	747.3	30.17	766.3	27	— 2.8	88	ne.	10	4.5	.....	.....	10 s	.....	.....	0.41	10.4	cloudy	
St. Andrews, N. B	29.63	752.6	29.69	754.1	21	— 6.1	85	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	
Sydney, C. B*	29.60	751.8	29.66	753.4	28	— 2.2	77	sw.	16	7.2	.....	.....	10 n	.....	.....	0	0	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.75	755.6	30.16	766.1	21	— 6.1	84	n.	10	4.5	.....	0	0	.....	.....	0.48	12.2	clear.....	Magnetic Observatory.
Yarmouth, N. S*	29.65	753.1	29.72	754.9	29	— 1.7	77	nw.	2	0.9	.....	5 k	0	nw.	.....	0	0	fair.....	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.71	729.2	30.21	767.3	19.0	— 7.2	84	.....	.....	.....	2	.....	10 s	.....	.....	0.080	2.0	overcast.....	Wm. Wylie.
St. Johns, Newfoundland	29.52	749.8	29.78	756.4	34	1.1	90	sw.	3	1.3	.....	.....	10	.....	.....	0.80	20.3	snowy.....	John Delany.
CAPE COLONY.																			
Cape St. Francis Lt. House	29.94	760.5	29 97	761.2	71.0	21.7	88	wsw.	12.6	5.6	.....	0	6 s	.....	.....	0	0	hazy.....	John Duthie.
Cape Town, C. G. H. Obs'y	29.96	761.0	30.00	762.0	79.0	26.1	65	s.	19	8.5	.....	4	6	.....	.....	0	0	.....	The Staff, for D.Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang			30.03	762.8	32.9	0.5	77	calm	0.9	0.4		0	0			0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.29	769.4	30.32	770.0	39.0	3.9	87	w.	1.6	0.7		10 ck	0	w.		0	0	covered	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.34	745.3	29.39	746.5	36.0	2.2	80	nw.			4		10						Oversergent Fischer.
Fanöe	29.45	748.0	29.47	748.6	34.7	1.5	78	calm	0	0			8						Overloerer Lauridsen.
Godthaab, Greenland	29.69	754.2	29.74	755.3	21.7	— 5.7	85	ne.			4		9						S. Kleinschmidt.
Ivigtut	29.63	752.6	29.65	753.1	34.0	1.1		calm			0		10					rain & snow	
Stykkisholm, Iceland	29.95	760.6	29.99	761.7	28.0	— 2.2	89	nw.			4		10						A. O. Thorlacius.
Thorshavn	29.61	752.2	29.65	753.1	38.5	3.6	52	ne.	25.7	11.5			3						Overloerer Bergh.
Vestervig	29.36	745.7	29.45	748.1	32.2	0.1	96	ese.			2		9						Loerer Oesterhoi.
Jacobshavn	30.07	763.7	30.11	764.9	— 2.9	—19.4		e.			2		0						
French.																			
Agen, Normal School	29.48	748.8	30.14	765.6	47.8	8.8	84	nw.			1		k			0.264	6.7		M. Labroue, Director.
Alençon, Normal School	29.50	749.2	30.05	763.2	43.2	6.2	82	nw.			1		ks	se.	se.	0.157	4.0		M. Nicot, Director.
Arras, Engineer School	29.58	751.4	29.85	758.1	41.9	5.5	82	nw.			2		k			0	0		M. Fénéon, Command't.
Avignon, Normal School	29.91	759.7	29.99	761.7	52.5	11.4	57	nnw.			3		0			0.146	3.7	clear	M. Giraud, Director.
Bar-sur-Seine	29.39	746.4	29.95	760.6	44.8	7.1	74	nw.			2	0	8 k		nnw.	0.209	5.3	very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.67	753 5	29.94	760.4	43.3	6.3	77	wnw.			1		5		nw.	0	0	cloudy	M. Frère Eugène Marie.
Besançon, Normal School	29.01	736.9	29.91	759.8	44.6	7	88	ssw.			1		kn		wsw.	1.201	30.5		M. Gobin, Director.
Bordeaux, Observatory	29.86	758.5	30.13	765.2	50.4	10.2	60	w.			1		2		nw.	0.268	6.8	slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.48	748.9	30.04	763.1	47.3	8.5	86	wsw.			1		k		wsw.	0.295	7.5		M. Malet, Director.
Brest, Naval Observatory	29.92	759.9	30.16	766.1	47.8	8.8	72	n.			2		8		n.	0.031	0.8	hailing	M. de Kermaree, Dir.
Caen, Normal School	29.91	759.7	29.98	761.6	47.8	8.8	63	w.			2		10			0.24	6.	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.55	750.5	29.87	758.7	43.7	6.5	69	w.			4		0			0.008	0.2	clear	M. Jadot, Director.
Charleville, Normal School	29.32	744.8	29.84	758.0	43.2	6.2	75	w.			1		2			0.055	1.4	covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.66	727.9	30.04	763.1	45.0	7.2	73	w.			2		8		nw.	0	0	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.16	740.6	30.01	762.2	42.3	5.7	78	nw.			2		5		nw.	0.661	16.8		M. de Villemontée, Dir.
Commercy, Normal School	29.02	737.2	29.89	759.3	44.2	6.8	79	nw.			3		8	nw.	nw.	0.087	2.2	very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.32	694.0	29.87	758.7	48.6	9.2	30	n.			4		1		s.	0.256	6.5		M. Jeangirard, Director.
Gréasque, du Rhone	28.75	730.3	29.87	758.8	48.2	9.0	50	nw.			4		1		nw.	0.059	1.5		M. Klina, Director.
Grenoble, Normal School	29.21	741.9	29.99	761.8	48.2	9	61	wnw.			1		kn		n.	0.787	20.0		M. Ablard, Director.
Guéret	28.50	723.9	30.13	765.3	41.0	5	84	s.			2		10		nw.	0.335	8.5	covered	M. Delorme, Dir.
Lamballe, Normal School	29.79	756.7	30.07	763.7	45.3	7.4	83	wnw.			2	0	5 n		wnw.	c.12	3.	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.55	750.5	30.12	765.0	48.2	9.0	73	w.			1	0	5 ckn			0.638	16.2	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	30.06	763.5	30.16	766.1	51.1	10.6	88	wnw.			1		2		nw.	0.047	1.2	¼ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.96	735.5	30.05	763.2	44.8	7.1	67	nw.			6	0	5 n		nw.	0.110	2.8	cloudy	M. André, Director.
Mans, Normal School	29.73	755.2	30.04	763.0	45.0	7.2	74	ne.			4				w.	0.138	3.5		M. Piboen, Director.
Marseille, Observatory	29.62	752.3	29.89	759.2	52.3	11.3	52	nw.			4.5		1		nw.	lnap	lnap.		M. Stephan, Director.
Mt. Louis	24.75	628.6	29.59	751.6	37.4	3.0	52	wsw.	5.6	2.5			3	s.		0	0		M Caré for Dr. Fines.
Montpellier, Normal School	29.85	758.2	29.98	761.5	53.2	11.8	62	nw.			2		1	wnw.		0.173	4.4	clear	M. Gaizin, Director.
Nancy, Normal School	29.04	737.6	29.84	758.0	42.4	5.8	85	wnw.			1		kn		nw.	0.303	7.7		M. Hasse, Director
Nantes, Observatory	29.97	761.3	30.13	765.4	50.2	10.1	61	nw.			1–2	0	2 k			0.008	0.2		M. Larocque, Director.
Perpignan, Observatory	29.91	759.7	30.02	762.6	51.8	11.0	50	nw.	22.4	10.0			3		w.	0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.07	535.2			16.2	— 8.8		nw.			1		10		nw.	1.079	27.4	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.93	734.8	30.01	762.3	47.5	8.6	42	n.			3		5	n.	n.	0	0	cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.02	635.6			26.6	— 3.0	100	wnw.			4		10			0.807	20.5	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	30.08	764.0	30.11	764.8	51.3	10.7	81	nw.			2		2		nnw.	0.75	19.	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.92	760 0	30.14	765.6	47.8	8.8	64	w.			1		1		w.	0.020	0.5	clear	M. Brotier, Director.
Rodez, Normal School	27.85	707.5	30.07	763.9	39.6	4.2	93	nw.			1		10		se.	0.55	14.	misty	M. Seger, Director.
Rouen, Normal School	29.90	759.4	29.95	760.6	46.0	7.8	64	nw.			3		2	nw.		0.008	0.2	slightly cl'dy	M. Mouillot.
Saint Lô					49.8	9.9	69	nw.			1		10	nw.	nw.	0.094	2.4	hailing	M. Delaplanche, Dir.
Saint Maur, Observatory	29.78	756.5	29.95	760 7	46.4	8.0	66	w.			2		7		nw.	0	0		M. Renou, Director.
Toulouse, Observatory	29.43	747.4	30.15	765.9	49.5	9.7	72	nw.			2		8	nw.		0.488	12.4	very cloudy	M. Bailland, Director.
Tours	29.87	758.7	30.05	763.2	48.2	9.0	65	wsw.			1		5	nw.	nw.	0.039	1.0	cloudy	M. de Tastes.
Versailles, Observatory	29.46	748.2	29.95	760.7	44.2	6.8	71	nw.			2					0.043	1.1		Dr. A. Bérigny, Director.
German.																			
Ansbach	28.31	719.1	29.80	756.8	39.2	4.0	80	w.			4		5	w.		0.315	8.0		Prof. Jnedt.
Bamberg	28.91	734.3	29.75	755.6	44.6	7.0	61	w.			2		4	w.		0.039	1.0		Prof. Dr. Hoh.
Berlin	29 31	744.4	29.49	749.0	40.8	4.9	100	w.			2		10			0	0		Prof. Dr. Arndt.
Breslau	29.09	738.9	29.61	752.2	46.0	7.8	61	wsw.			2		10			0.102	2.6		Royal University Obs'y.
Carlsruhe	29.38	746.2	29.82	757.4	45.3	7.4	63	wsw.			4		9	sw.		0.217	5.5		Albert Senz.
Cassel	28.87	733.2	29.58	751.4	42.8	6.0	76	sw.			4		8	sw.		0.008	0.2		Dr. H. Möhl.
Frankfort-on-the-Main	29.43	747.4	29.78	756.4	45.3	7.4	66	w.			2		8			0.008	0.2		Physical Society.
Friedrichshafen	28.43?	722.0?	29.90	759.5	42.8	6.0	79	sw.			4		10	w.		0.209	5.3		Wilhelm, Chief Tel.
Hamburg	29.43	747.4	29.52	749.7	38.5	3.6	85	nw.			2		10			0.098	2.5		E. Preller.
Kiel	29.45	747.9	29.46	748.3	37.9	3.3	84	w.			2		10			0.114	2.9		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.19	741.4	29.61	752.2	43.7	6.5	72	w.			3		9	w.		0.008	0.2		H. Leppig, Asst.
Magdeburg	29.36	745.7	29.55	750.6	44.4	6.9	81	w.			4	0	4 k; ks		w.	0.020	0.5		Weather Observatory.
Memel	29.37	745 9	29.41	747.0	39.7	4.3	84	sw.			4		10 ks						Issermann.
Munich	27.98	710.7	29.83	757 7	41.2	5.1	78	w.			2		9	w.		0.453	11.5		Central Station.
Neufahrwasser	29.39	746.5	29.41	746.9	41.0	5.0	86	sw.			1		10			0.004	0.1		A. Lothes.
Neustadt, Palatinate																0	0		Dicknether.
Stuttgart	28.85	732.9	29.76	755.9	43.7	6.5	67	w.			2		7	w.		0.016	0.4		Prof. Dr. Schoder.
Wustrow	29.45	747.9	29.47	748.5	40.8	4.9	78	nw.			4		10 8			0	0		Profs. Brandes & Reimer
Greek.																			
Athens	29.63	752.6	30.01	762.3	65.5	18.6		sw.			1.5	0	0			0	0	clear	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.99	761.8	30.04	763.1	79.1	26.2	46	ene.	28.0	12.5			0			0	0	hazy	
Deesa	29.43	747.5	29.91	759.6	78.9	26.1	43	nne.	14.0	6.3			4	sse.		0	0	d. clouds	
Bombay	29.73	755.2	29.77	756.1	78.7	25.9	79	nnw.	15.0	6.7			8	nnw.	w.	0.01	0.3	d. clouds	
Poona, Yarrowda	27.94	709.6	29.80	757.0	74.3	23.5	82	e.	4.0	1.8			9		ese.	0.10	2.5	d. clouds	
Trichinopoly	29.56	750.8	29.84	757.9	82.3	27.9	75	ese.	1.0	0.4			6			0	0	d. clouds	
Bellary	28.30	718.9	29.77	756.1	79.0	26.1	80	ese.	4.0	1.8			4			0	0	d. clouds	
Belgaum	27.24	691.9	29.78	756.4	74.0	23.3	79	se.	4.0	1.8			4		se.	0.08	2.0	d. clouds	
Lahore	29.30	744.2	30.07	763.9	64.6	18.1	53	calm	0	0			0			0	0	blue sky	
Roorkee	29.10	739.0	30.02	762.4	69.4	20.8	46	calm	0	0			0			0	0		
Agra	29.43	747.6	30.01	762.2	73.9	23.3	44	e.	2.0	0.9			0			0	0	blue sky	
Nagpur	28.88	733.5	29.95	760.7	68.7	20.4	88	e.	5.0	2.2			9		e.	0.12	3.0	gloomy	
Jubbulpore	28.62	727.0	30.02	762.6	64.5	18.1	92	calm	0	0			10		ne.	0.36	9.1	overcast	
Lucknow	29.70	754.5	30.10	764.4	67.3	19.6	87	calm	0	0			7			0	0	d. clouds	
Allahabad	29.71	754.6	30.04	762.9	63.8	17.7	92	ene.	2.0	0.9			10		e.	0.23	5.8	overcast	
Patna	29.88	758.9	30.07	763.8	64.8	18.2	93	calm	1.2	0.5			10			0.81	20.6	drizzling	
Hazaribagh	27.98	710.6	30.07	763.8	59.7	15.4	89	e.	6.2	2.8			10			0.40	10.2	drizzling	
Cuttack	29.90	759.3	29.98	761.4	74.8	23.8	73	sw.	2.0	0.9			10			0.02	0.5	overcast	
Calcutta, Alipore	29.97	761.2	29.99	761.8	73.0	22.8	81	n.	4.0	1.8			10			0	0	overcast	
Dhubri	29.90	759.5	30.02	762.6	69.2	20.7	92	calm	1.4	0.6			10			0.18	4.6	overcast	
Chittagong	29.89	759.3	29.98	761.6	73.8	23.2	90	calm	1.0	0.4			10			0	0	overcast	
Sibsagar	29.73	755.2	30.08	764.2	66.0	18.9	94	sw.	1.0	0.4			10	w.	w.	0.05	1.3	overcast	
Zanzibar, Africa	29.82	757.5	29.85	758.1	86.1	30.1	63	e.	7.8	3.5			4		one.	0	0	d. clouds	
Jeypore	28.55	725.1	30.02	762.5	71.7	22.1	51	ese.	7.5	3.4			1		e.	0	0	d. clouds	
Italian.																			
Udine	29.23	742.5	29.65	753.1	53.1	11.7	91						8			0.913	23.2		Prof. Giovanni Clodig.
Milan	29.17	741.0	29.71	754.5	50.0	10.0	84	sw.	7.4	3.3			1	w.		0.331	8.4		Prof. Schiapparelli.
Padua	29.53	750.0	29.64	752.9	51.1	10.6	90	wsw.	4.9	2.2			8	w.		0.260	6.6		Prof. Dott. Lorenzoni.
Moncalieri	28.79	731.3	29.72	754.8	42.6	5.9	82	ese.	3.1	1.4			1	s.		0	0		Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Genoa	29.48	748.8	29.67	753.7	61.5	16.4	68	se.	3.8	1.7			2	s.		0.173	4.4		Prof. G. M. Garibaldi.
Mondovi	27.78	705.6	29.73	755.2	49.6	9.8	50	e.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.63	752.5	29.67	753.7	63.3	17.4	63	sswv.	4.3	1.9			8	wsw.		0	0		Prof. Luigi Guidi.
Florence	29.49	749.1	29.75	755.7	60.8	16.0	67	wsw.			4		9	wsw.		0.039	1.0		Prof. Costantino Pitter.
Leghorn	29.61	752.1	29.70	754.3	59.9	15.6	78	wsw.	6.9	3.1			10			0.043	1.1		Prof. P. Monte.
Rome	29.67	753.5	29.84	758.0	63.0	17.2	76	ssw.	15.0	6.7			10			0.031	0.8		Prof. P. Tachini.
Lecce	29.69	754.0	29.93	760.3	63.0	17.2	70	wsw.	11.9	5.3			3			0	0		Prof. C. de Giorgi.
Cosenza	29.11	739.3	30.00	762.1	62.6	17.0	79	sw.	2.5	1.1			0			0	0		Prof. D. Conti.
Cagliari	29.68	753.9	29.88	758.9	66.2	19.0	69	w.			2		6	w.		0	0		Prof. A. Pacinotti.
Palermo	29.64	752.8	29.89	759.1	67.6	19.8	38	sw.	16.8	7.5			0			0	0		Prof. G. Caccialore.
Syracuse	29.94	760.4	29.98	761.5	66.0	18.9	59	sw.	8.7	3.9			1	wsw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.39	746.4	29.91	759.6	60.8	16.0	79	sw.	8.7	3.9			10	w.		0.020	0.5		Prof. F. Brioschi.
Stelvio	21.83	554.6			20.5	— 6.4	94	ne.			4		8			1.110	28.2	misty	Prof. P. F. Denza.
Valdobbia	21.82	554.3			22.3	— 5.4	75	n.			6		5			1.575	40.0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.10	764.6	30.13	765.4	34.0	1.1	99	calm			0		10 ckn		w.	0.087	2.2	raining	Hattori.
Awomori	30.06	763.5	30.09	764.3	34.0	1.1	89	sw.	9.9	4.4			10s;ks			0.077	2.0	overcast	K. Ogawa.
Hakodate	30.05	763.3	30.06	763.6	19.8	— 6.8	93	calm	0	0		1	0			0	0	clear	
Hiroshima					43.7	6.5	81	nne.	0.9	3.0		0	0			0	0	clear	Y. Miwa.
Kanazawa	30.10	764.4	30.20	767.1	43.4	6.3	95	s.	1.2	0.5			10			0.393	10.0	raining	S. Endo.
Kioto	30.06	763.5	30.24	768.1	38.5	3.6	96	ssw.	1.4	0.6		1ck;cs	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.04	763.1	30.25	768.4	47.2	8.4	88	calm	0	0		4 cs	5 s	w.		0.210	5.3	cloudy	S. Takehayashi.
Nemuro	29.95	760.7	30.01	762.2	31.0	— 0.6	94	nw.	12.0	5.4		0	2			0	0	clear	
Niigata	30.11	764.8	30.15	765.8	43.0	6.1	97	sw.	3.6	1.6			10 cks		w.	0.300	7.6	covered	M. Morita.
Nobiru	30.06	763.5	30.07	763.9	43.3	6.3	70	nnw.	12.3	5.4		2 ck	1 s	w.		0.015	0.4	fair	H. Midzushina.
Osaka	30.20	767.1	30.22	767.5	43.0	6.1	83	e.	4.1	1.8		0	0			0	0	clear	
Sapporo					22.3	— 5.4	65	s.	4.6	2.1		2	7			0	0	overcast	
Tokei Obs'y, Yeddo	30.08	764.1	30.16	766.1	37.4	3.0	88	s.	2.5	1.1		0	0			0	0	clear	The Staff.
Wakayama	30.19	766.9	30.25	768.4	42.1	5.6	86	ene.	5.3	2.4			7		nnw.	0	0	fair	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.71	754.6	29.90	759.4	80.1	26.7	54	ene.	11.5	5.1		0	4 k;ks		sse.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.62	600.1	29.84	758.1	48.6	9.2	97	ese.	lmp.	lmp.		0	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.33	618.0	30.21	767.3	42.8	6.0	94	nne.			1	1 k	0	n.		0	0	foggy	Prof. M. Leal.
Mazatlan	29.79	756.6	30.04	763.1	64.5	18.1	51	nnw.	1.6	0.8		1 cs	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.09	586.4	30.24	768.1	43.5	6.4	71	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.25	616.0	30.16	766.1	49.3	9.6	77	se.	1.8	0.8		2 c	4 k	s.	se.	0	0	½ cloudy	M. Tena, M. D.
Orizaba																			Prof. M. M. Cházaro.
Pabellon, Aguascallentes	23.93	607.9	30.03	762.7	42.8	6.0	76	calm			0	0	0			0	0	fine	M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.39	594.2	30.08	763.9	42.8	6.0	80	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.48	571.0	30.19	766.8	41.5	5.4	96	wsw.	12.0	5.4		8	1	wsw.		0	0	cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.75	755.6	29.75	755.6	43.5	6.4		wnw.			5					0.024	0.6		
Groningen	29.47	748.5	29.52	749.9	42.1	5.6		w.			3					0.150	3.8		
Helder	29.57	751.1	29.57	751.1	44.4	6.9		w.			6					0.063	1.6		
Hellevoetsluis	29.09	754.2	29.09	754.2	43.0	6.1	68	w.			3					0.975	1.9		
Utrecht	29.62	752.4	29.67	753.6	43.2	6.2	82	wsw.			3		8			0.142	3.6	very cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.25	743.0	29.32	744.6	35.6	2.0	89	sse.	7	3			10			0	0	foggy	
Brono	29.59	751.6	29.03	752.6	21.6	— 5.8	52	e.	9	4			5			0	0		
Christiania	29.37	746.0	29.52	749.9	23.7	— 4.6	74	e.	7	3			10			0	0		
Gjæsvær	29.03	752.5	29.65	753.1	18.9	— 7.3		e.			2		10						
Lodingen	29.66	753.4	29.71	754.6	21.0	— 6.1	59	ene.			4		0			0.020	0.5		
PORTUGUESE.																			
Angra, Azores	30.18	766.5	30.34	770.5	61.9	16.6	70	e.	8.1	3.6			2			0	0		Dr. J. A. Sampaio.
Campo Major	29.10	739.1	30.10	764.5	66.1	15.6	64	n.	3.8	1.7			7			0.118	3.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.04	763.1	30.13	765.3	67.6	19.8	65	sw.	3.1	1.4			4	n.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.81	757.2	30.17	766.4	58.1	14.5	72	n.	15.4	6.9			7	wsw.		0.016	0.4		The Staff.
Ponta Delgada, Azores	30.30	769.5	30.37	771.3	65.5	18.6	60	ne.	5.6	2.5			4			0.039	1.0		
Saint Paul de Loando	29.70	750.0	29.97	761.1	76.5	24.7	75	w.	0.2	0.1			10			0	0		
Serra da Estrella	25.34	643.5	30.23	767.8	34.5	1.4	95	ene.	9.4	4.2			10			2.370	60.2		
RUSSIAN.																			
Akmollnski	28.95	735.4	30.10	764.4	23.4	— 4.8	81	ssw.	7	3		1 cs	0			0	0		Major K. Lasarew.
Archangel	29.14	740.2	29.16	740.7	11.8	—11.2	79	nw.	9	4			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.20	768.7	30.18	766.6	47.3	8.5	83	wsw.	2	1			10 s;n			blank	blank		Capt. Wisganow.
Barnaul	29.84	757.9	30.39	771.8	14.0	—10.0	95	sw.	4	2			8			0	0		Meteorological Obs'y.
Dorpat	29.13	739.8	29.37	746.1	31.3	— 0.4	100	sw.	4	2		2 ck	0			0.031	0.8		Observatory.
Ekaterinburg	28.74	730.1	29.73	755.2	32.5	0.3	85	sw.	13	6			10			0	0		Meteorological Obs'y.
Kasan	29.30	744.2	29.58	751.2	39.2	4.0	91	s.	18	8			10			0.130	3.3		Observatory.
Kertch	29.89	759.3	29.91	759.8	58.1	14.5	95	se.	7	3		0	3 k			0	0		Lagorio & Sastyrez.
Kieff	28.90	735.6	29.60	751.9	40.3	4.6	86	s.	7	3		cs	10ks;n						Observatory.
Lugan	29.72	754.9	29.92	760.0	55.2	12.9	69	sw.	34	15			7			0	0		Meteorological Obs'y.
Nikolaiev	29.76	755.8	29.83	757.6	54.5	12.5	90	sw.	45	20		0	0			0.008	0.2		Capt. Kurdakow.
Pekin, China	29.93	760.2	30.07	763.8	38.3	3.5	42	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	29.21	741.9	29.22	742.3	32.5	0.3	90	wsw.	13	6			10			0.043	1.1		Central Physical Obs'y.
Semipalatinsk	29.70	754.3	30.41	772.5	17.6	— 8.0	74	e.	16	7			10			0	0		Major Lasarew.
Tashkend, Laboratory	28.58	725.9	30.19	766.9	44.2	6.8	71	calm	0	0			1						Teich, A. M.
Tiflis	28.75	730.3	30.18	766.5	55.2	12.9	62	se.	11	5		0	0			0	0	foggy	Physical Observatory.
Tomsk	29.93	760.2	30.23	767.9	16.0	— 8.9	81	s.	4	2			10						
Vladivostock	30.02	762.4	30.08	764.1	36.0	2.2		calm	0	0		0	0			0	0		
Warsaw	29.14	740.2	29.57	751.1	41.5	5.3	86	sw.	9	4			9 ks						Astronomical Obs'y.
Wilna	29.10	739.6	29.52	749.8	38.7	3.7	95	ssw.	16	7			10			0.028	0.7	light fog	Berg, Assistant.
Yeniseisk	29.95	760.7	30.26	768.7	8.2	—13.2	88	w.	9	4			10			0	0		M. O. Marks.
SCOTTISH.																			
Monach Lt			29.69	754.1	41	5.0	91	nnw.			7		10			0.2	5.	showery	J. Youngclause.
North Unst			29.35	745.5				nw.			4	0	1						Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.86	758.4	29.97	761.1	55.8	13.2	76	ne.	4.0	1.8			9			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.17	766.3	30.23	767.8	53.8	12.1	73	nw.	2.2	1.0		2	3	n.		0.949	24.1	cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.16	689.9	30.19	766.9	42.1	5.6	66	n.	10.3	4.6		0	0			0.413	10.5	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.85	707.4	30.11	764.7	52.5	11.4	60	ne.	15.9	7.1		0	7			0.008	0.2	cloudy	The Staff.
Murcia, Met. Obs'y	29.86	758.4	29.99	761.8	66.6	19.2	69	sw.	3.6	1.6		2	5	ne.		0.091	2.3	cloudy	Olayo Diaz, Director.
Oviedo	29.37	745.9	30.24	768.2	46.4	8.0	87	se.	9.2	4.1			10 kn		w.	0.302	9.2	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.36	745.7	30.28	769.0	49.5	9.7	69	n.	16.1	7.2			3			0.028	0.7	cloudy	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.96	761.0	30.02	762.5	78.2	25.7	81	nne.	8.8	3.9			9 kn		e.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.04	762.9	30.14	765.5	60.6	15.9	71	wnw.	6.3	2.8		0	8		nw.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.95	760.8	30.04	763.1	78.4	25.8	84	calm	0	0		3 cs	3 k	se.	se.	0.008	0.2	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.97	761.3	30.11	764.7	72.1	22.3	91	nw.	7.0	3.1			10 ks		ene.	0	0		José L. Yrastorza.
SWEDISH																			
Haparanda	29.67	753.0	29.69	754.0	5.4	—14.8	100	ne.			4		8			0	0		
Umea	29.50	749.2	29.55	750.5	15.4	— 9.2	88	ne.			6		10			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind			Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
								Direction	Velocity.		Force.	Upper.	Lower.	Upper.	Lower.			
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill	
SWEDISH—Continued.																		
Hernosand	29.46	748.3	29.51	749.6	16.5	— 8.6	82	n.			4		10			0.016	0.4	
Stockholm	29.26	743.1	29.43	747.6	25.2	— 3.8	87	n.			2		10			0	0	
Wisby	29.32	744.6	29.37	746.1	34.5	1.4	78	ne.			2		7			0.008	0.2	
Sub-series.																		
Upsala	29.36	745.7	29.45	747.9	22.5	— 5.3	93	nnw.	11.4	5.1			10			blank	blank	S. G. Fineman.
SWISS.																		
Geneva	28.52	724.5	29.97	761.1	48.7	9.3	51	ssw.			4		5			0.610	15.5	cloudy ..... The Observatory.
TURKISH.																		
Constantinople			30.00	762.1	59.0	15.0	63	sw.	6	2.5			0			0	0	The Observatory.
Valona			30.02	762.6	61.3	16.3		s.			1		5			0	0	cloudy ..... A. Bertrand.
Sub-series.																		
Beirut, Lee Obs'y, Syria			30.01	762.2	69.4	20.8	60	n.			1		0			0	0	Prof. C. V. A. van Dyck.
UNITED STATES.																		
Albany, New York	29.86	758.4	29.94	760.5	29	— 1.7	77	nw.	5	2.2			10 s		nw.	0.29	7.4	cloudy ..... J. O. Barnes.
Alpena, Michigan	29.55	750.6	30.25	768.3	26	— 3.3	88	n.	8	3.6			10 s			0.23	5.8	cloudy..... Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.19	639.8	30.29	769.4	24	— 4.4	67	ne.	1	0.4		0	0			0	0	clear..... W. C. Barnes.
Assinnaboine, Ft., Montana	27.44	697.0	30.42	772.7	30	— 1.1	81	sw.	13	5.8			10 s		sw.	0	0	cloudy ..... B. O. Lenoir.
Atlanta, Georgia	28 87	733.3	30.09	764.3	47.0	8.3	86	n.	6	2.7			10 s			0.06	1.5	cloudy..... H. C. Smith.
Atlantic City, New Jersey	29.89	759.2	29.90	759.4	37	2.8	82	w.	8	3.6			10ks		w.	0.34	8.6	cloudy ..... Jas. M. Watson.
Augusta, Georgia	29.89	759.2	30.09	764.3	52	11.1	93	nw.	1	0.4			10 s		w.	0.02	0.5	cloudy..... John Healy.
Baltimore, Maryland	29.95	760.7	30.00	762.0	40	4.4	65	nw.	12	5.4		0	9 ks		nw.	0.07	1.8	cloudy ..... Geo W Felger.
Barnegat, New Jersey	29.87	758.7	29.89	759.2	39.0	3.9	78	w.	17	7.6			10 s		nw.	0.47	11.9	cloudy..... G. A. Hill.
Bennett, Fort, Dakota	28.51	724.1	30.20	767.1	20	— 6.7	87	nw.	4	1.8			10 n		nw.	inap.	inap.	light snow... A. Pritchard.
Benton, Fort, Montana	27.48	698.0	30.44	773.2	28	— 2.2	74	sw.	2	0.9		7 k	0	sw.		0	0	fair..... S. Wheaton.
Bismarck, Dakota	28.26	717.8	30.18	766.6	18	— 7.8	87	e.	6	2.7			10 n			0.06	1.5	light snow.. Cyrus Cramer.
Block Island, Rhode Island	29.77	756.1	29.80	756.9	32	0.0	88	n.	15	6.7			10 s		n.	0.92	23.4	cloudy..... J. T. Elker.
Boise City, Idaho	27.59	700.8	30.53	775.4	25	— 3.9	88	nw.	4	1.8			10 s		calm	inap.	inap.	cloudy..... B. E. Light.
Boston, Massachusetts	29.64	752.8	29.80	756.9	26.0	— 3.3	76	nw.	11	4.9			10s;fg		w.	0.34	8.6	cloudy..... O. B. Cole.
Brownsville, Texas	29.98	761.5	30.03	762.7	53.0	11.7	86	n.	12	5.4		0	0			0	0	clear..... M. McCarty.
Buffalo, New York	29.32	744.7	30.10	764.5	26	— 3.3	89	n.	10	4.5		0	5 s		n.	0.53	13.5	fair..... W. Finn.
Buford, Fort, Dakota	28.31	719.1	30.29	769.4	22	— 5.6	87	n.	24	10.7			10 s		nw.	0.02	0.5	cloudy ..... F. A. Mellen.
Burlington, Vermont	29.63	752.6	29.94	760.5	21.0	— 6.1	70	n.	13	5.8			10s		n.	0	0	cloudy..... W. B. Gates.
Cairo, Illinois	29.89	759.2	30.31	769.9	28.5	— 1.9	82	ne.	8	3.6			10 s			0	0	cloudy..... W. H. Ray.
Cape Henry, Virginia	30.00	762.0	30.02	762.5	44	6.7	83	n.	14	6.3		0	6 s		w.	0.15	3.8	fair ..... A. K. Alderson.
Cape May, New Jersey	29.91	759.7	29.94	760.5	41.0	5.0	56	w.	30	13.4		7 cs	0	w.		0.38	9.7	fair ..... W. E. Smith.
Cape Mendocino, California	29.43	747.5	30.11	764.8	44	6.7	83	e.			1	0	0			0	0	clear..... J. J. McLean.
Cedar Keys, Florida	29.90	761.0	29.98	761.5	63	17.2	93	e.	5	2.2			10 ks		sw.	0	0	cloudy..... F. W. Mixer.
Champaign, Illinois	29.45	748.0	30.31	769.9	16.5	— 8.6	71	nw.	11	4.9		0	0			0.16	4.1	clear..... L. A. Welsh.
Charleston, S. Carolina	29.98	761.5	30.04	763.0	56	13.3	93	n.	8	3.6			10 s		n.	0	0	threatening. J. H. Smith.
Charlotte, N. Carolina	29.15	740.4	30.03	762.7	40.0	4.4	73	n.	3	1.3		10 cs	sk.			0	0	cloudy .. .. D. O'Donoghue.
Chattanooga, Tennessee	29.30	744.2	30.15	765.8	40.0	4.4	82	n.	7	3.1			10 s		n.	0.09	2.3	cloudy ..... B. L. Goulding.
Cheyenne, Wyoming	24.15	613.4	30.36	771.1	24.8	— 4.0	37	nw.	16	7.2		0	0			0	0	clear..... E. McGovern.
Chicago, Illinois	29.54	750.3	30.28	769.1	30.0	— 1.1	71	ne.	11	4.9			10 s			0.01	0.3	cloudy ..... J. Mitchell.
Chincoteague, Virginia	29.95	760.7	29.97	761.2	37	2.8	82	nw.	14	6.3		5 cs	0			0.45	11.4	fair..... C. F. Dickens.
Cincinnati, Ohio	29.00	751.8	30.29	769.4	30	— 1.1	78	n.	4	1.8		2 k	2 s	w.	sw.	0.18	4.6	fair..... R. B. Watkins.
Cleveland, Ohio	29.42	747.3	30.18	766.6	31.7	— 0.2	76	nw.	14	6.3			10 s		nw.	0.16	4.1	cloudy..... J. B. Newlin.
Coleman City, Texas	28.23	717.0	30.12	765.0	39	3.9	100	n.	16	7.2			10 s		n.	1.30	33.0	cloudy..... L. Dorman.
Columbus, Ohio	29.33	745.0	30.22	767.6	29	— 1.7	67	nw.	3	1.3		0	0			0.06	1.5	clear..... D. Cuthbertson.
Concho, Fort, Texas	28.13	714.5	30.14	765.5	41.0	5.0	92	nw.	4	1.8			10 s			0.70	17.8	cloudy..... J. McGlone.
Custer, Fort, Montana	27.09	688.1	30.41	772.4	32	0.0	81	w.	7	3.1			10 s		calm	0	0	cloudy.. ..... W. B. Lamar.
Davenport, Iowa	29.07	753.6	30.36	771.1	22	— 5.6	73	ne.	4	1.8		0	4 s;fg		nw.	0	0	fair..... R. R. Martin.
Davis, Fort, Texas	25.22	640.6	30.12	765.0	31	— 0.6	74	calm	0	0		0	0			0.03	0.8	clear..... J. Williams.
Dayton, Washington T'y	28.65	727.7	30.43	772.9	31.3	— 0.4	76	n.	6	2.7		0	0			0	0	clear..... H. Clifford.
Deadwood, Dakota	25.41	645.4	30.24	768.1	32	0.0	74	n.	12	5.4		0	7 s		w.	0.25	6.3	fair..... G. W. Scott.
Delaware Breakwater, Del.	29.93	760 2	29.95	760.7	39	3.9	73	w..	22	9.8		2 cs	2 s	w.	w.	0.11	2.8	fair..... T. S. Townsend.
Denison, Texas	29.22	742.2	30.06	763.5	41.0	5.0	100	n.	7	3.1			10 s			0.56	14.2	cloudy ..... J. W. Byram.
Denver, Colorado	24.83	630.7	30.33	770.4	39.5	4.2	43	nw.	5	2.2		5 ck	0	w.		0	0	fair ..... F. M. Neal.
Des Moines, Iowa	29.40	746.7	30.36	771.1	18	— 7.8	67	ne.	1	0.4		0	sk.			0	0	clear..... F. W. Conrad.
Detroit, Michigan	29.46	748 3	30.20	767.1	30.6	— 0.8	78	w.	8	3.6			10 s			0.20	5.1	cloudy ..... O. F. R. Wappenhans.
Dodge City, Kansas	27.50	698.5	30.24	768.1	26	— 3.3	76	se.	6	2.7		0	0			0	0	clear..... V. P. Temple.
Dubuque, Iowa	29.60	751.8	30.35	770.9	23.3	— 4.8	73	n.	2	0.9		1 c	0	nw.		0	0	clear..... J. Harvey Smith.
Duluth, Minnesota	29.61	752.1	30.40	772.1	22	— 5.6	73	nw.	6	2.7			10 s		nw.	0	0	cloudy..... N. B. Conger.
Eagle Pass, Texas	29.31	744.5	30.14	765.5	45.2	7.3	76	nw.	7	3.1		0	0			0.01	0.3	clear..... F. Belford.
Eagle Rock, Idaho	25.61	650.5	30.47	773.9	6	—14.4	80	n.	2	0.9		0	0			0	0	clear..... J. M. Clifford.
Eastport, Maine	29.68	753.9	29.75	755.6	22.0	— 5.6	80	nw.	7	3.1		3 c	4 s			0	0	fair..... D. C. Murphy.
Elliott, Fort, Texas	27.31	693.7	30.24	768.1	23	— 5.0	64	calm	0	0		0	0			0	0	clear..... W. J. Cundall.
El Paso, Texas	26.33	668.8	30.18	766.6	42.0	5.6	92	w.	10	4.5		0	0			0.20	5.1	clear..... J. O'Dowd.
Erie, Pennsylvania	29.42	747.3	30.18	766.6	34	1.1	79	n.	10	4.5			10 s		n.	0.30	7.6	cloudy..... Peter Wood.
Escanaba, Michigan	29.64	752.8	30.34	770.6	27.0	— 2.8	88	hw.	15	6.7			10 s		nw.	0.04	1.0	cloudy ..... George Heathcote.
Fredericksburg, Texas	28.24	717.3	30.06	763.5	45	7.2	93	n.	9	4.0			10 s			0.21	5.3	cloudy ..... Frank Halwegler.
Galveston, Texas	29.80	756.9	29.86	758.4	56	13.3	93	n.	24	10.7			10 ks			1.28	32.5	cloudy ..... E. O'C. Macinerney.
Grand Haven, Michigan	29.55	750.6	30.25	768.3	31.0	— 0.6	78	w.	10	4.5		0	4 s		w.	0.24	6.1	clear..... J. Mueller.
Grant, Fort, Arizona	25.31	642.9	30.15	765.8	35	1.7	61	ne.	5	2.2		0	0			0	0	clear..... Robert C. Lord.
Hatteras, North Carolina	29.99	761.7	30.01	762.2	46	7.8	83	n.	10	4.5		6 k	3 s	se.		0	0	cloudy..... R. M. Crawford.
Helena, Montana	26.06	661.9	30.44	773.2	31	— 0.6	81	w.	3	1.3		5 ck	0	w.		0	0	fair..... N. C. Smith.
Henrietta, Texas	29.08	738.6	30.12	765.0	39	3.9	89	n.	9	4.0			10 s		n.	0.32	8.1	cloudy ..... J. P. Sherry.
Huron, Dakota	28.66	728.0	30.14	765.5	22.2	— 5.4	58	se.	15	6.7		3 k	0	se.		0	0	clear..... S. W. Glenn.
Indianapolis, Indiana	29 45	748.0	30.29	769.4	24	— 4.4	73	nw.	2	0.9		0	0			0	0	clear..... O. Schutze
Indianola, Texas	29.93	760.2	29.96	761.0	49.4	9.7	93	nw.	16	7.2		7 k	0	nw.		0.77	19.6	fair..... I. A. Reed.
Jacksboro, Texas	28.93	734.8	30.15	765.8	41	5.0	57	n.	2	0.9			10 s		n.	0.83	21.1	cloudy..... D. J. Carr.
Jacksonville, Florida	29.98	761.5	30.03	762.7	61	16.1	93	calm	0	0		3 cs	6 s			0	0	cloudy..... J. W. Smith.
Keogh, Fort, Montana	27.70	703.6	30.37	771.4	30	— 1.1	80	w.	9	4.0		6 c;k	1 s	w.	w.	0.01	0.3	fair..... A. Schneider.
Keokuk, Iowa	29.62	752.3	30.31	769.9	19.0	— 7.2	91	n.	2	0.9		0	0			0	0	clear..... F. Z. Gosewisch.
Key West, Florida	29.96	761.0	29.98	761.5	73.5	23.1	87	s.	6	2.7		0	0			0	0	clear..... R. H. Paxton.
Kittyhawk, North Carolina	30.00	762.0	30.02	762.5	41	5.0	82	nw.	13	5.8		2 c	3 s			0.04	1.0	fair..... H. Mc P. Baldwin.
Knoxville, Tennessee	29.14	740.1	30.21	767.3	36.5	2.5	84	ne.	5	2.2		5 cs;hz	0			0.33	8.4	fair..... J. A. Cody.
La Crosse, Wisconsin	29.53	750.0	30.35	770.9	21	— 6.1	70	n.	4	1.8		0	0			0	0	clear..... S. C. Emery.
Leavenworth, Kansas	29.38	746.2	30.32	770.1	26	— 3.3	88	ne.	4	1.8		0	1 s			0	0	clear..... A. W. Browne.
Lewiston, Idaho	29.66	753.4	30.53	775.4	29.0	— 1.7	82	se.	1	0.4		4 cs	0			0	0	fair..... W. Bell.
Little Rock, Arkansas	29.78	756.4	30.11	764.8	42	5.6	83	ne.	15	6.7			10 s			inap.	inap.	cloudy..... W. U. Simons.
Los Angeles, California	29.78	756.4	30.18	766.6	44	6.7	93	n.	3	1.3		0	0			0	0	clear..... T. S. Collins.
Louisville, Kentucky	29.66	753.4	30.25	768.3	29.5	— 1.4	73	n.	6	2.7		4 c	2 s	nw.	nw.	0.03	0.8	fair..... L. M. Dey.
Lynchburg, Virginia	29.34	745.2	30.06	763.5	40	4.4	57	nw.	4	1.8		0	5 s		nw.	0.05	1.3	fair..... Lewis Dunne.
Mackinaw City, Michigan	29.63	752.6	30.32	770.1	23.0	— 5.0	88	ne.	12	5.4		5 k	0	n.		0.35	8.9	fair..... F. R. Day.
Macon, Fort, North Carolina	30.01	762.2	30.02	762.5	50	10.0	71	ne.	10	4.5		10c;us	0	sw.		0	0	cloudy ..... F. P. Chaffee.
Madison, Wisconsin	29.24	742.7	30.31	769.9	19	— 7.2	84	ne.	8	3.6		0	0			0	0	clear..... O. A. Shaw.
Maginnis, Fort, Montana	25.74	653.8	30.25	768.3	28	— 2.2	59	w.	16	7.2			10 s		nw.	0.08	2.0	cloudy..... F. Burke.
McKavett, Fort, Texas	27.82	706.6	30.20	767.1	40	4.4	92	nw.	10	4.5			10 n			1.64	41.7	light rain.... J. E. Thatcher.
Marquette, Michigan	29.59	751.6	30.36	771.1	26	— 3.3	88	ne.	10	4.5			10 s			0.18	4.6	cloudy ..... J. Gilligan.
Memphis, Tennessee	29.80	756.9	30.15	765.8	39	3.9	82	se.	10	4.5			10 s		n.	0.11	2.8	cloudy..... D. T. Flannery.
Milwaukee, Wisconsin	29.52	749.8	30.31	769 9	26	— 3.3	76	nw.	10	4.5			10 ks		nw.	0	0	cloudy ..... W. Line.
Missoula, Fort, Montana	27.07	687.6	30.48	774.2	27	— 2.8	77	n.	2	0.9		0	0			0.02	0.5	clear..... J. H. Young.
Mobile, Alabama	29.86	758.4	29.90	759.4	63.5	17.5	97	ne.	3	1.3			10 s		ne.	0.82	20.8	cloudy ..... C. A. Read.
Montgomery, Alabama	29.75	755.6	29.99	761.7	56.4	13.6	94	ne.	6	2.7			10 n		no.	0.41	10.4	light rain.... J. B. McLaughlin.

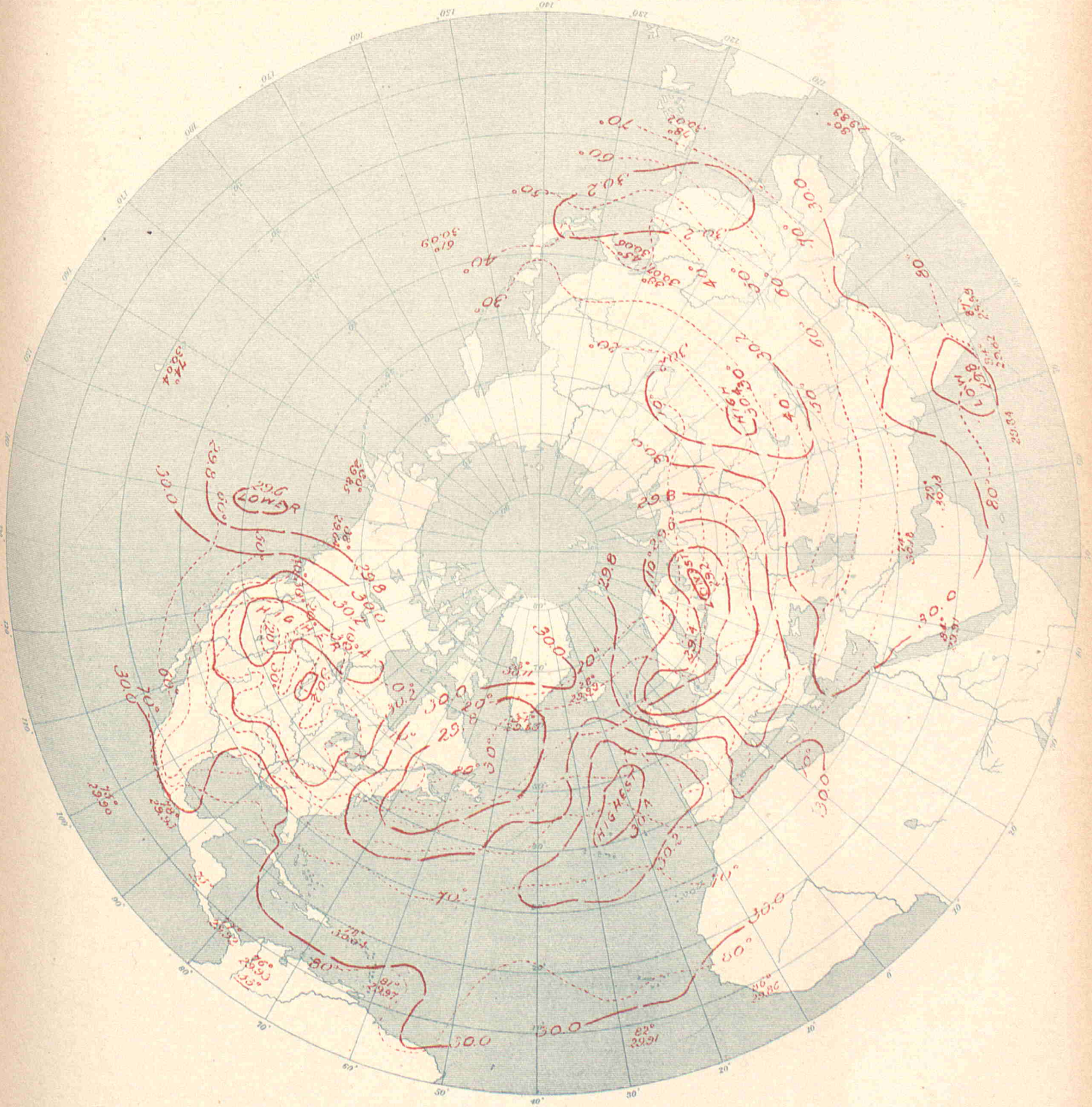
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the last 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.22	742.2	30.28	769.1	17	— 8.3	83	se.	16	7.2			10 s		s.	0	0	cloudy	H. Bessaut.
Morgantown, W. Virginia	29.13	739.9	30.19	766.8	34.6	1.4	74	w.	19	8.5		0	0			0.28	7.1	clear	J. C. Sprigg, jr
Mt. Washington, N. H.	23.27	591.0	29.83	757.7	5.0	—15.0	60	nw.	40	17.9		4 cs	2 ks		nw.	0.03	0.8	fair	J. G. Linsley.
Nashville, Tennessee	29.61	752.1	30.21	767.3	35.5	1.9	89	n.	4	1.8		10 cs	0	w.		0.42	10.7	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	29.75	755.6	29.87	758.7	26	— 3.3	88	n.	5	2.2			10 s			0.51	13.0	cloudy	J. H. Sherman.
New London, Connecticut	29.82	757.4	29.87	758.7	29	— 1.7	88	n.	3	1.3			10 s			0.69	17.5	cloudy	J. G. Lynch.
New Orleans, Louisiana	29.79	756.7	29.85	758.2	65.0	18.3	90	se.	5	2.2			10 s		se.	0.57	14.5	cloudy	L. Dunne.
Newport, Rhode Island	29.76	755.9	29.81	757.2	29.3	— 1.5	91	n.	9	4.0			10 ks		ne.	0.37	9.4	cloudy	W. McGillivray.
New York, New York	29.72	754.9	29.90	759.4	34	1.1	78	w.	4	1.8			10 s			0.37	9.4	cloudy	J. B. Merrill.
Norfolk, Virginia	29.98	761.5	30.01	762.2	41	5.0	92	nw.	5	2.2		0	hz.			0.17	4.3	clear	Wm. Davis.
North Platte, Nebraska	27.16	689.9	30.24	768.1	29.6	— 1.3	78	w.	5	2.2		0	1 s			0	0	clear	E. F. Brady.
Olympia, Washington T'y.	30.23	767.8	30.27	768.8	36.0	2.2	79	calm	0	0		10 ck	0	w.		0.11	2.8	cloudy	J. Dascomb.
Omaha, Nebraska	29.10	739.1	30.34	770.6	24.6	— 4.1	82	se.	8	3.6		7 c	0			0	0	fair	A. Pollak.
Oswego, New York	29.68	753.9	30.02	762.5	28.0	— 2.2	77	ne.	13	5.8			10 s		ne.	0.30	7.6	cloudy	S. W. Beall.
Palestine, Texas	29.41	747.0	29.98	761.5	46.0	7.8	100	ne.	6	2.7			10 n		ne.	1.63	41.4	light rain	L. M. Pindell.
Pensacola, Florida	29.86	758.4	29.89	759.2	64.3	17.9	96	se.	6	2.7			10 s		se.	1.58	40.1	cloudy	M. McGauran.
Philadelphia, Pa.	29.82	757.4	29.92	760.0	39	3.9	65	sw.	7	3.1			10 s		sw.	0.24	6.1	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.70	449.6	30.36	771.1	9	—12.8	73	nw.	40	17.9		1 c	5 s		w.	0	0	fair	H. Hall.
Ploche, Nevada	24.21	614.9	30.35	770.9	27.3	— 2.6	66	n.	7	3.1		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.29	744.0	30.14	765.5	31.0	— 0.6	85	sw.	9	4.0			10 s		sw.	0.32	8.1	cloudy	W. Daly.
Poplar River, Montana	27.96	710.2	30.25	768.3				nw.			1		10 s			0.30	7.6	cloudy	W. D. Maxwell.
Port Eads, Louisiana	29.84	757.9	29.85	758.2	67.2	19.6	97	se.	8	3.6			10 s		se.	0.70	17.8	cloudy	M. Herman.
Port Huron, Michigan	29.44	747.8	30.16	766.1	30.8	— 0.7	85	ne.	9	4.0			10 s			0.41	10.4	cloudy	W. O. Bailey.
Portland, Maine	29.74	755.4	29.79	756.7	31	— 0.6	72	nw.	3	1.3		0	0			0	0	clear	W. W. Eichelberger.
Portland, Oregon	30.15	765.8	30.22	767.6	39.0	3.9	82	nw.	6	2.7		10 k	0	nw.		0	0	cloudy	M. L. Hearne.
Portsmouth, N. C.					48	8.9	86	sw.	10	4.5		3 cs	2 ks			0	0	fair	F. S Coburn.
Prescott, Arizona	24.87	631.7	30.21	767.3	30	— 1.1	92	w.	1	0.4		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	29.72	754.9	29.76	755.9	34.5	1.4	89	calm	0	0			10 n			0.45	11.4	light snow	P. T. Jenkins.
Punta Rassa, Florida	29.98	761.5	29.99	761.7	63	17.2	93	se.	6	2.7		0	0			0	0	clear	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.37	746.0	30.07	763.8	26	— 3.3	94	n	13	5.8			10 n			0.50	12.7	heavy snow	E. W. McGann
Roseburg, Oregon	29.64	752.8	30.21	767.3	34.6	1.4	83	s.	2	0.9		8ck;cs	0	w.		0	0	cloudy	J. J. Nanry.
Sacramento, California	30.10	764.5	30.18	766.6	39.2	4.0	100	se.	4	1.8		0	fg.			0	0	light fog	J. A. Barwick
St. Louis, Missouri	29.70	754.4	30.32	770.1	26.4	— 3.1	97	n.	9	4.0			9s;sk			0	0	cloudy	J. H. Weber.
St. Paul, Minnesota	29.44	747.8	30.36	771.1	17.0	— 8.3	83	ne.	7	3.1		0	8 s		ne.	inap.	inap.	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.39	746.5	30.32	770.1	16	— 8.9	91	se.	9	4.0			10 s			0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.95	659.1	30.52	775.2	27	— 2.8	47	calm	0	0		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.31	744.5	30.03	762.7	47.5	8.6	86	nw.	6	2.7			10 s		nw.	0.07	1.8	cloudy	T. J. Kenan.
San Diego, California	30.04	763.0	30.11	764.8	51.6	10.9	94	e.	4	1.8			fg.			0	0	dense fog	A. C. Dobbins.
Sandusky, Ohio	29.49	749.0	30.21	767.3	30	— 1.1	77	nw.	16	7.2		0	8 ks		n.	0.18	4.6	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.86	758.4	29.89	759.2	35.0	1.7	89	sw.	14	6.3			10 ks		nw.	0.26	6.6	cloudy	B. A. Blundon.
San Francisco, California	30.09	764.3	30.16	766.1	47.5	8.6	89	n.	8	3.6		0	fg.			0.02	0.5	clear	N. Gorom.
Santa Fé, New Mexico	23.19	589.0	30.23	767.8	30.5	— 0.8	66	n.	16	7.2		1 c	0	sw.		0	0	clear	H. U. Jones.
Savannah, Georgia	29.94	760.5	30.04	763.0	58.5	14.7	85	nw.	4	1.8			10 n			inap.	inap.	light rain	H. W. Ford.
Shaw, Fort, Montana	26.63	676.4	30.45	773.4	18	— 7.8	87	w.	8	3.6		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.70	754.4	29.95	760.7	45	7.2	100	ne.	12	5.4			10 n		ne.	2.42	61.5	light rain	E. N. Meekins.
Sill, Fort, Indian Territory	28.85	732.8	30.16	766.1	35	1.7	82	nw.	8	3.6		3 k	0	nw.		0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.28	616.7	30.12	765.0	35.0	1.7	82	nw.	7	3.1		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.56	750.8	29.64	752.8	38.1	3.4	72	e.	16	7.2			10 s		e.	0	0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.61	752.1	30.10	764.5	40.0	4.4	82	ne.	4	1.8			10 s		ne.	0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	29.98	761.5	30.02	762.5	53	11.7	80	ne.	4	1.8			10 s		w.	0	0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.39	721.1	30.47	773.9	26	— 3.3	76	nw.	1	0.4		2 c	0			0	0	clear	D. Moore.
Springfield, Illinois	29.62	752.3	30.34	770.6	21	— 6.1	70	n.	6	2.7		0	0			0	0	clear	T. B. Jennings.
Springfield, Massachusetts	29.73	755.1	29.87	758.7	23.5	— 4.7	94	n.			1	0	0			0.36	9.1	clear	Charles Mayr.
Springfield, Mo.	28.71	729.2	30.22	767.6	27.5	— 2.5	88	ne.	7	3.1			10 s			0	0	cloudy	J. B. Marbury.
Starkville, Miss.	29.56	750.8	30.06	763.5	46	7.8	93	ne.	12	5.4			10 n		ne.	0.41	10.4	light rain	C. Dill.
Stevenson, Fort, Dakota	28.21	716.5	30.18	766.0	17	— 8.3	100	e.	4	1.8			10 n			0.05	1.3	light snow	W. Burrows.
Stockton, Fort, Texas	27.05	687.1	30.17	766.3	40.0	4.4	92	nw.	4	1.8			10 s		nw.	0.30	7.6	cloudy	J. F. Marshall.
Thatcher's Island, Mass.	29.76	755.9	29.81	757.2	31.8	— 0.1	83	nw.	18	8.0		8 k	0	w.		0.25	6.3	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.35	694.7	30.19	766.8	33.5	0.8	94	e.			1	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.47	748.5	30.20	767.1	31	— 0.6	68	w.	5	2.2			10 s		nw.	0.36	9.1	cloudy	A. Buell.
Tucson, Arizona	27.67	702.8	30.13	765.3	41	5.0	82	s.	3	1.3		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	30.08	764.0	30.40	773.7	30	— 1.1	88	calm	0	0		7 c	0			0	0	fair	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					35.4	1.9	82	nw.			1	5 cs	0	sw.		0	0	fair	D. Brooks.
Vicksburg, Mississippi	29.70	754.4	29.97	761.2	49.3	9.6	95	ne.	9	4.0			10 n		ne.	0.64	16.2	light rain	James Kenealy.
Visalia, California	29.80	756.9	30.18	766.6	34.2	1.2	92	w.	3	1.3		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.65	626.1	30.39	771.9	20.8	— 6.2	53	w.	15	6.7		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	29.92	760.0	30.04	763.0	40.3	4.0	47	nw.	12	5.4		4 k	0	nw.		0.02	0.5	fair	B. M. Pursell.
West Las Animas, Colorado	26.12	663.4	30.24	768.1	22.5	— 5.3	64	s.	6	2.7		4 c	0			0	0	fair	F. H. Brandenburg.
Williamsport, Pa.	29.34	745.2	29.97	761.2	35	1.7	79	ne.	6	2.7			10 s		n.	0.36	9.1	cloudy	B. F. Hough.
Wilmington, N. Carolina	29.98	761.5	30.04	763.0	54	12.2	74	ne.	4	1.8			10 s			0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.90	657.8	30.42	772.7	25	— 3.9	70	ne.	10	4.5		3 c	0	sw.		0	0	clear	J. Grover.
Yankton, Dakota	28.84	732.5	30.22	767.6	25	— 3.9	64	s.	11	4.9			10 s			0	0	cloudy	J. H. Atfield.
Yuma, Arizona	29.96	761.0	30.11	764.8	45.4	7.4	93	nw.	1	0.4		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3			53.0	11.7	82	sw.	2	0.9		1 cs	0			0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I.	29.90	759.4	29.97	761.2	68.4	20.2	92	se.	4	1.8		2ck;cs	0	w.		0	0	clear	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	74	23 3	75	n.	5	2.2		0	0			0	0	fine	Robert Johnston.
Navassa, W. I.	29.90	759.4	29.98	761.5	79	26.1	78	ne.	10	4.5		1 c	1 ks	c.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	77	25.0	86	e.			1					0.010	0.3	misty	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.93	760.2	76	24.4	94	calm			0	2 c	2 ks	calm	calm	0	0	fair	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					74.5	23.6	98	se.			1	0	6 ks		se.	0.50	12.7	fair	Earl Flint.
Santiago de Cuba, W. I.	30.04	763.0	30.06	763.5	75	23.9	76	n.	6	2.7		1 c	2 ks			0	0	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.79	756.7	29.85	758.2	30	— 1.1	88	n.			2	0	7 ks			0	0	fair	W. J. Fisher.
St. Thomas, W. I.	29.96	761.0	30.08	764.0	79	26.1	69	e.				0	2 k		e.	0	0	fine	Aug. Wallee.
York Factory B. A.	30.34	770.6	30.41	772.4	— 1.5	—18.6	84	n.	10	4.5		2 c	2 s	n.	n.	0	0	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, Chusan Island, China	30.32	770.1	52	11.1	.....	w.	.....	.....	1	.....	4	n.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Amethyst, Colonia, Uruguay†	29.93	760.2	63.5	17.5	78	s.	.....	.....	5-6	.....	3	.....	.....	.....	.....	3	s.	d. clouds.
H. M. S. Audacious, N. 7° 47′, E. 74° 50′	29.82	757.4	84	28.9	83	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	30.00	762.0	69	20.6	75	n.	.....	.....	2	.....	3	ene.	.....	.....	.....	3	n.	d. clouds.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	30.00	762.0	72.5	22.5	81	nnw.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Cleopatra, N. 31° 14′, E. 121° 28′	30.31	769.9	.....	.....	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	30.29	769.4	38.5	3.6	74	calm	.....	.....	0	.....	4	nne.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Condor, N. 31° 33′, E. 34° 05′	30.02	762.5	73	22.8	71	nne.	.....	.....	1	.....	3	.....	.....	.....	.....	3	.....	d. clouds.
H. M. S. Crocodile, N. 16° 45′, E. 62° 30′	29.88	758.9	78	25.6	61	nne.	.....	.....	4	.....	5	.....	.....	.....	.....	2	ne.	d. clouds.
H. M. S. Curacoa, Kobe, Japan	30.04	763.0	51.5	10.8	72	calm	.....	.....	0	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Diamond, Sydney, N. S. W*†	29.95	760.7	67	19.4	74	ne.	.....	.....	1-3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. Dock-Yard, Bermuda, W. I.	30.05	763.3	67	19.4	60	ssw.	.....	.....	1-2	.....	3	ssw.	.....	.....	.....	.....	.....	d. clouds
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.82	757 4	75.5	24.2	90	s.	.....	.....	5-6	.....	0	.....	.....	.....	.....	.....	.....	blue sky*
H. M. S. Flying Fish, N. 31° 35′ E. 131° 26′	30.22	767.6	54	12.2	79	nnw.	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	30.03	762.7	66	18.9	68	w.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.19	766.8	68	20.0	94	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	blue sky
H. M. S. Kingfisher, N. 7° 33′ W. 100° 25′	29.90	759.4	75	23.9	.....	ne.	.....	.....	2	.....	3	ne.	.....	.....	.....	2	ne.	d. clouds.
H. M. S. Lark, S. 24° 21′, E. 155° 40′	30.15	765.8	74.3	23.5	83	e.	.....	.....	4	.....	3	.....	.....	.....	.....	3	e.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.94	760.5	67	19.4	.....	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Magpie, N. 34° 37′, E. 127° 48′	30.22	767.6	52.2	11.2	64	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	foggy.
H. M. S. Northampton, N. 32° 52′ W. 61° 27′	30.09	764.3	66.5	19.2	64	sw.	.....	.....	4	.....	7	wsw.	.....	.....	.....	3	w.	d. clouds.
H. M. S. Nelson, Melbourne, Australia	29.51	749 5	75	23.9	90	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	overcast.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.88	758.9	80	26.7	89	n.	.....	.....	1	.....	4	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sappho, S. 44° 00′, W. 96° 40′	30.23	767.8	52.2	11.2	100	n.	.....	.....	6	.....	10	n.	.....	.....	.....	3	nnw.	drizzling.
H. M. S. Sylvia, Sandy Point, Patagonia	29.71	754.6	46.0	7.8	85	nnw.	.....	.....	2-3	.....	10	.....	.....	.....	.....	.....	.....	overcast.
H. M. S. Tourmaline, Aden, Arabia	29.94	760.5	.....	.....	.....	e.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, N. 28° 50′ E 50° 43′	30.08	764 0	73.5	23.1	59	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	3	nnw.	blue sky.
H. M. S. Zephyr, N 37° 33′, E. 121° 25′	30.06	763.5	45	7.2	76	ese.	.....	.....	1	.....	9	se.	.....	.....	.....	1	ne.	d. clouds.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.07	763.7	80.6	27.0	77	ne.	.....	.....	3	.....	3	.....	ne.	.....	.....	1	.....	d. clouds.
Tamega, Macao, China	30.26	768.6	62.6	17.0	52	n.	.....	.....	3	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
Swedish Naval.																		
Vanadis, N. 38° 24′, E. 7° 06′	29.97	761.1	65.8	18.8	77	wsw.	.....	.....	3	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla.	29.86	758.4	68	20.0	90	se.	7	3.1	.....	.....	10	.....	se.	1.03	26.2	.....	.....	cloudy.
Navy Yard, Portsmouth, N. H.	29.78	756.4	24	— 4.4	?	calm	0	0	.....	.....	5	.....	n.	0	0	.....	.....	fair.
Naval Hospital, Yokohama, Japan*	29.98	761.5	45	7.2	71	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear.
Adams, Sitka, Alaska *†	29.72	754.9	39	3.9	63	e.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy
Alaska, Honolulu, Sandwich Islands	30.04	763.0	74	23.3	72	n.	.....	.....	1	.....	8	.....	n.	0	0	sm'h	.....	cloudy.
Alliance, Hampton Roads, Va.	29.98	761.5	43	6.1	100	nnw.	.....	.....	1	.....	5	.....	.....	0	0	.....	.....	fair.
Ashuelot, Nagasaki, Japan	30.26	768.6	54	12.2	86	calm	.....	.....	0	.....	8	.....	calm	.....	.....	.....	.....	cloudy.
Brooklyn, Keel Point, Patagonia	29.92	760.0	51	10.6	86	w.	9	4.0	.....	.....	10	.....	w.	0	0	sm'h	.....	cloudy.
Colorado, New York, N. Y.	29.99	761.7	36	2.2	90	wnw.	3	1.3	.....	.....	10	.....	.....	.....	.....	.....	.....	raining.
Enterprise, Norfolk, Va	30.04	763 0	44	6.7	84	w.	.....	.....	1	.....	8	.....	w.	.....	.....	.....	.....	cloudy.
Essex, Callao, Peru	29.95	760.7	65	18.3	94	calm	.....	.....	0	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy.
Franklin, Norfolk, Va.	30.02	762.5	43	6.1	83	nnw.	4	1.8	.....	.....	5	.....	.....	0	0	.....	.....	fair.
Galena, Montevideo, Uruguay	29.96	761.0	64	17.8	?	s.	.....	.....	4	.....	10	.....	s.	.....	.....	mod.	s.	overcast
Hartford, Possession Bay, Patagonia*	29.28	743.7	45	7.2	84	w.	.....	.....	6	.....	8	.....	s;w.	mod.	mod.	rg'h	w.	cloudy.
Independence, Mare Island, Cal.	30.17	766.3	40	4.4	100	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear.
Iroquois, Callao, Peru	29.99	761.7	66	18.9	90	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, N. 42° 31′, W. 67° 30′	29.90	759.4	37	2.8	100	nne.	.....	.....	4	.....	10	.....	nne.	.....	.....	sm'h	nw.	cloudy.
Kearsarge, Norfolk, Va.	29.99	761.7	43	6.1	100	nnw.	.....	.....	2	.....	8	.....	w.	.....	.....	.....	.....	fair.
Lackawanna, S. 29° 20′. W. 72° 25′*	30.00	762.0	61	15.1	82	s.	.....	.....	3	.....	8	.....	se.	.....	.....	sm'h	sw.	fair.
Lancaster, N. 38° 35′, E. 13° 31′.*	29.85	758.2	68	20.0	64	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	mod.	nnw.	clear.
Michigan, Erie, Pa.	30.12	765.0	50	10.0	78	n.	.....	.....	3	.....	5	.....	ne.	.....	.....	.....	.....	fair.
Minnesota, New York, N. Y	29.93	760.2	34	1.1	90	wsw.	1	0.4	.....	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Monocacy, Yokohama, Japan	29.95	760.7	45	7.2	92	w.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	light mist.
New Hampshire, Newport, R. I.	29.85	758.2	31	— 0.6	89	n.	.....	.....	2	.....	10	.....	.....	.....	.....	sm'h	.....	snowing.
Nipsic, N. 36° 34′, W. 3° 38′*	29.98	761.5	63	17.2	78	sw.	.....	.....	3	.....	8	.....	.....	.....	.....	sm'h	.....	cloudy.
Onward, Callao, Peru†	30.09	764.3	63	17.2	94	calm	.....	.....	0	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos, Tientsin, China*	29.94	760.5	36	2.2	80	wnw.	.....	.....	1	.....	2	.....	calm	.....	.....	.....	.....	cloudy.
Pensacola, Callao, Peru*	29.92	760.0	65	18.3	89	calm	0	0	.....	.....	10	.....	.....	0	0	.....	.....	fair.
Powhatan, Boston, Mass.	29.84	757.9	26	— 3.3	100	n.	.....	.....	1	.....	5?	.....	.....	.....	.....	.....	.....	misty.
Quinnebaug, Villafrancha, France*	29.61	752.1	65	18.3	48	sw.	.....	.....	2	.....	2	.....	calm	.....	.....	sm'h	.....	cloudy.
Ranger, Salina Cruz, Mexico	29.93	760.2	78	25.6	86	n.	.....	.....	1	.....	2	.....	.....	0	0	gr'd	s.	clear.
Richmond, Yokohama, Japan*	30.07	763.8	46	7.8	85	wnw.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	fair.
Saratoga, N. 36° 44′, W. 71° 09′	29.70	755.9	54	12.2	80	nnw.	.....	.....	6	.....	8	.....	nw.	light	light	mod.	nw.	misty.
St. Louis, League Island, Pa.	30.13	765.3	38	3.3	80	w.	.....	.....	3	.....	10	.....	wsw.	0.3	8.	.....	.....	cloudy.
Swatara, N. 27° 58′ W. 64° 07′*	29.99	761.7	71	21.7	62	n.	.....	.....	1	.....	0	.....	.....	.....	.....	long	ne.	cloudy.
Tennessee, Hampton Roads, Va.	29.97	761.2	44	6.7	74	nnw.	6	2.7	.....	.....	8	.....	.....	0.02	0.5	.....	.....	clear.
Vandalia, Hampton Roads, Va*	30.00	762.0	45	7.2	84	nw.	.....	.....	1	.....	8	.....	.....	.....	.....	.....	.....	fair.
Wabash, Boston, Mass.	29.81	757.2	26	— 3.3	88	nw.	7	3.1	.....	.....	10	.....	.....	0	0	.....	.....	cloudy.
Wachusetts, Mare Island, Cal†	30.16	766.1	42	5.6	100	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	cloudy.
Wyandotte, Washington, D. C.	30.32	770.1	44	6.7	92	nw.	.....	.....	4	.....	5	.....	nw.	.....	.....	.....	.....	clear.
Yantic, Norfolk, Va*†	30.12	765.0	40	4.4	100	nnw.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	fair.
Merchant Marine.																		clear.
S. S. Grecian, Montevideo, Uruguay*	29.94	760.5	63	17.2	72	s.	.....	.....	5	.....	10	.....	s.	2 h'r	2 h'r	sm'h	.....	cloudy.
S. S. Nova Scotian, N. 44° 27′, W. 51° 37′	29.74	755.4	43	6.1	.....	sw.	.....	.....	4	.....	10	.....	ssw.	.....	.....	mod	wsw.	cloudy.
S. S. Polynesian, N. 44° 30′, W. 63° 10′*	29.90	759.4	32	0.0	.....	nnw.	.....	.....	3	.....	4	.....	nw.	0	0	mod.	w.	fair.
S. S. Scandinavian, N. 54° 51′, W. 13° 11′	30.09	764.3	45	7.2	.....	nw.	.....	.....	7	.....	4	.....	nne.	sh's	sh's	high	n.	raining.
S. S. British Crown, Liverpool, Eng	.....	.....	39	3.9	.....	w.	.....	.....	7	.....	6	.....	wnw.	0	0	sm'h	.....	fine.
S. S. Indiana, Liverpool, Eng	.....	.....	43	6.1	83	nw.	.....	.....	6	.....	10	.....	nw.	.....	.....	.....	.....	squally.
S. S. Lord Clive, N. 46° 40′, W. 49° 05′*†	29.80	756.9	.....	.....	.....	sw.	.....	.....	4	.....	8	.....	wsw.	sh's	sh's	mod.	w.	cloudy.
S. S. Lord Gough, N. 50° 53′ W. 31° 13′	30.09	764.3	52	11.1	.....	ssw.	.....	.....	5	.....	10	.....	.....	0	0	long	s.	overcast.
S. S. Ohio, N. 49° 59′, W. 34° 12′	29.79	756.7	54	12.2	93	s.	.....	.....	7	.....	10	.....	sw.	.....	.....	r'gh	s.	squally.
S. S. Pennsylvania, N. 39° 57′, W. 68° 00′ †	29.61	752.1	58	14.4	.....	w.	.....	.....	4	.....	10	.....	w.	.....	.....	long	w.	cloudy.
S. S. Castor, N. 43° 41′ W. 34° 00′*	30.08	764.0	53.6	12	.....	nnw.	.....	.....	5	.....	3	.....	nnw.	.....	.....	5	n.	fair.
S. S. Anchoria, N. 54° 20′, W. 21° 54′†	30.34	770.6	.....	.....	.....	w.	.....	.....	1	.....	1	.....	ne.	sh'rs	sh'rs	long	ne.	clear.
S. S. Devonia, N. 42° 47′, W. 58° 48′†	29.73	755 1	46	7.8	.....	w.	.....	.....	4	.....	9	.....	w.	.....	.....	h'vy	w.	cloudy.
S. S. Dorian, N. 43° 00′, W. 56° 40′*	29.71	754.6	61	16.1	.....	w.	.....	.....	2	.....	10	.....	sw.	0	0	h'vy	w.	cloudy.
S. S. Ethiopia, N. 44° 08′, W. 55° 13′	29.79	756.7	44	6.7	79	w.	.....	.....	5	.....	10	.....	w.	2 h'r	2 h'r	h'vy	w.	overcast.
S. S. Galatia, Colombo, Ceylon†	29.99	761.7	87	30.6	.....	wnw.	.....	.....	1	.....	1	.....	sw.	0	0	.....	sw.	clear.
S. S. Alpin, N. 25° 48′ W. 74° 59′	29.98	761.5	.....	.....	.....	ne.	.....	.....	4	.....	.....	.....	se.	0	0	sm'h	ne.	fine.
S. S. Alvo, Savanilla, U. S. C.	29.92	760.0	76	24.4	.....	se.	.....	.....	2-4	.....	1 k	.....	var.	0	0	.....	.....	hazy.
British Merchant, N. 31° 13′, W. 128° 00′	30.03	762.7	63	17.2	94	e.	.....	.....	5	.....	8	.....	.....	.....	.....	.....	.....	d. clouds.
Bk. Coppename, N. 21° 15′, W. 28° 58′	30.10	764.5	76	24.4	67	e.	.....	.....	3	.....	3	.....	.....	.....	.....	.....	.....	blue sky.
May Hulse, S. 26° 13, W. 39° 17′	29.92	760.0	73.4	23.0	85	nne.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Olympus, N. 30° 37′, E. 32° 18′	30.03	762.7	.....	.....	32	ene.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
Inchkeith, S. 40° 06′, E. 21° 59′	29.92	760.0	64.4	18.0	83	wsw.	.....	.....	3	.....	8	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Bothnia, N. 45° 25′, W. 41° 41′	29.83	757.7	54	12.2	?	w.	.....	.....	4	.....	5	.....	nw.	4 h'r	4 h'r	mod.	nw.	fine.
S. S. Gallia, N. 42° 19′, W. 59° 34′	29.81	757.2	48	8.9	85	wnw.	.....	.....	5	.....	10	.....	.....	0	0	r'gh	wnw.	dull.
S. S. Marathon, Constantinople, Turkey	29.97	761.2	62	16.7	.....	wsw.	.....	.....	4	.....	3	.....	wsw.	0	0	.....	.....	fine.
S. S. Parthia, N. 42° 23′, W. 57° 22′	.....	.....	47	8.3	.....	n.	.....	.....	6	.....	6	.....	w.	9 h'r	9 h'r	r'gh	w.	cloudy.
S. S. Pavonia, N. 49° 22′ W. 35° 18′*	29.79	756.7	57	13.9	94	sse.	.....	.....	6	.....	10	.....	sse.	8 h'r	8 h'r	mod.	cl'd	threatening

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Colina, Glasgow, Scotland†	29.50	749.3				sw.			5		7		sw.					snowy.
S. S. Canada, N. 49° 52′, W. 16° 35′	30.45	773.4	47.3	8.5		nw.			5–6		5?		nw.	hail	hail	h'vy	n.	clear?
S. S. Labradore, N. 48° 11′, W. 43° 00′			48.2	9		nw.			4		0			0	0	sm'h		clear.
S. S. Abyssinia, N. 51° 36′, W. 15° 09′ *	30.25	768.3	55	12.8	73	wnw.			6		5		wnw.	1 h'r	1 h'r	h'vy	nw.	squally.
S. S. Arizona, N. 41° 33′ W. 65° 04′	29.67	753.6	46	7.8		var.			2		10			8 h'r	8 h'r	mod.	w.	raining.
S. S. Bohemia, N. 52° 20′, E. 3° 11′ †	29.70	754.4				wnw.			6		5		wnw.	0	0	r'gh	wnw.	foggy.
S. S. Cimbria, N. 49° 59′, W. 10° 53′	30.27	768.8	47.3	8.5		nnw.			6		5		n.	0	0	mod.	nnw.	fair.
S. S. Gellert N. 42° 25′, W. 60° 15′	29.82	757.4	44	6.7		wnw.			4		8		wnw.	0	0	long	w.	covered.
S. S. Silesia, N. 44° 05′, W. 50° 21′ †	29.93	760.2	43.5	6.4		ese.			6		8?		se.	0	0	5–6	nw.	overcast.?
S. S. Vandalia, Hamburg, Germany			40.3	4.6		nnw.			3		10		nw.	0	0			hazy.
S. S. Wieland, N. 46° 54′, W. 38° 30′	29.87	758.7				wsw.			6		10		wsw.	6 h'r	6 h'r	r'gh	wnw.	cloudy.
S. S. City of Berlin, N 50° 15′, W. 30° 30′	30.09	764.3	56	13.3	75	s.			7		10		s.	0	0		s.	overcast.
S. S. Nessmore, N. 43° 46′, W. 56° 20′	29.61	752.1	47	8.3	92	var.			2		10			0	0	long	wsw.	cloudy.
S. S. Hevelius, N. 7° —′ W. 28° —′ *†	29.91	759.7	82	27.8		ne.			4		8?		ne.	12 h'r	12 h'r			clear?
S. S. Ptolemy, N. 37° 30′, W. 71° 45′	29.91	759.7	53	11.7	86	nnw.			7		6					5	nnw.	d clouds.
S. S. Sirius, N. 42° 00′, W. 9° 48′ *	30.23	767.8				n.			6		1		n.	0	0	mod		clear.
S. S. Bulgarian, N. 43° 06′, W. 62° 52′*	29.78	756.4				w.			1		5?		w.	2 h'r	2 h'r	light	w.	cloudy.?
S. S. Colorado, Galveston, Texas†	29.85	758.2	62	16.7		nw.			3		10		nw.	24 h'r	24 h'r			misty.
S. S. Rio Grande, N. 26° 17′, W. 80° 00′†	30.03	762.7	72	22.2		wnw.			1		3		ssw.	0	0			fair.
S. S. San Marcos, N. 38° 56′, W. 74° 20′			43	6.1														
S. S. Archimede, N. 34° 37′, W. 20° 40′ *†	30.22	767.6	70	21.1	70	nnw.			4		5		nw.	2 h'r	2 h'r	long	nw.	fair.
S. S. Hermod, N. 40° 15′, W. 70° 10′ †	29.72	754.9	41.0	5.0		n.			7		10		nne.	12 h'r	12 h'r	mod.	wsw.	hailing.
S. S. Glenapp, Santos, Brazil †..	29.97	761.2	78	25.6		var.			1		0			0	0			
S. S. Glenfyne, N. 11° 17′, W. 50° 56′						e.			4		5?		ese.	0	0	sm'h	e.	cloudy.?
S. S. Chalmette, Algiers, La †	29.84	757.9	67	19.4		e			1		10		sw.	8 h'r	8 h'r			cloudy.
S. S. New York, N. 27° 55′, W. 87° 35′†	30.03	762.7	70.0	21.1		s.			4		10			12 h'r	12 h'r	mod.	se.	cloudy.
S. S. Egypt, N. 40° 41′ W. 69° 32′*†	29.70	754.4				n.			5		10		w.	0	0	mod.	wnw.	cloudy.
S. S. Erin, Liverpool, Eng			42	5.6		wsw.			4		7		sw.					showery.
S. S. Helvetia, N. 40° 46′, W. 64° 45′	29.52	749.8	43	6.1		e.			6		10		e.	12 h'r	12 h'r	long	ssw.	raining.
S. S. Holland, N. 43° 51′, W. 52° 47′			44	6.7		sw.			4		8		w.	3 h'r	3 h'r	mod.	wsw.	cloudy.
S. S. The Queen, off Beechy Head, Eng			42	5.6		nnw.			2		3		nnw.	sh'rs	sh'rs	sm'h		clear.
S. S. Santiago, N. 34° 13′, W. 74° 20′	30.10	764.5	64	17.8	89	nnw.			4		10		nw.	4 h'r	4 h'r	small	nw.	squally.
S. S. City of Alexandria, Vera Cruz Roads, Mexico†	30.19	766.8	73	22.8		nnw			7		10		nw.	0	0	h'vy	nw.	overcast.
S. S. Knickerbocker, N. 34° 02′ W. 75° 15′*†	29.95	760.7	61	16.1		nw.			4								nne.	
S. S. Leerdam, N. 41° 06′ W. 59° 12′*	29.80	756.9	56.5	13.6		sw.			6							r'gh		squally.
S. S. America, N. 45° 25′ W. 49° 26′ *	29.88	758.9	49.0	9.4	93	sw.			5		6		sw.	0	0	long	sw.	cloudy.
S. S. Elbe, N. 49° 36′, W. 25° 13′	30.45	773.5	52.7	11.5	100	s.			5–6		10		se.	0	0	r'gh	ne.	overcast.
S. S. Hohenstaufen, N. 45° 39′, W. 1° 50′	30.14	765.5	50.0	10.0		nw.			6		8		nw.	sh'rs	sh'rs	cross	nw.	cloudy.
S. S. Neckar, N. 50° 18′, W. 22° 18′	30.47	773.9	49.5	9.7	85	wsw.			3		9		s.	0	0	long	ne.	fair.
S. S. Oder, N. 47° 09′, W. 42° 52′	29.91	759.7	45.5	7.5		wnw.			5		7		nw.	4 h'r	4 h'r	long	var.	cloudy.
S. S. Ohio, Galveston Texas	29.90	759.4				nw.			3		9		nw.	8 h'r	8 h'r	sm'h	nw.	misty.
S. S. Salier, N. 52° 44′, E. 4° 13′	29.53	750.0	44.6	7.0		wnw.			6		8		wnw.	0	0	h'vy	wnw.	fair.
S. S. Strassburg, N. 24° 23′ W. 21° 01′	30.10	764.5	70	21.1	95	ne.			4		5		ne.	0	0	mod.	ne.	fair.
S. S. Werra, N. 43° 25′, W. 57° 59′*	29.84	757.8	41.0	5.0		w.			2–3		9		wsw.	2 h'r	2 h'r	mod.	wnw.	cloudy.
S. S. Belgic, N. 32° 04′, E. 134° 03′†	30.26	768.6	61	16.1	71	nw.			3		5		nw.	0	0	mod.	nw.	fair.
S. S. Ceptic, N. 40° 50′, W. 139° 38′	29.53	750.0	58.5	14.7	82	sse.			6		4		se.	2 h'r	2 h'r	high	w.	fair.
S. S. Oceanic, N. 35° 15′, E. 156° 15′*	30.09	764.3	61	16.1	77	nw.			3		4		nw.			mod.	wnw.	clear.
S. S. City of Augusta, Savannah, Ga†	30.14	765.5				ne.			3		1		ne.	0	0			clear.
S. S. Mississippi, Seattle, Wash. Ter.†	30.35	770.9	38	3.3	72	e.			1		0							clear.
S. S. Oregon, N. 45° 53′, W. 124° 01†	30.19	766.8	46	7.8	84	calm			0		0					light	nw.	clear.
S. S. Ancon, N. 34° 00′, W. 119° 00′†	30.08	764.0	54	12.2	93	e.			2		10		e.			sm'h		cloudy.
S. S. State of California, N. 38° 30′, W. 124° 00′*†	30.10	764.5	49	9.4	85	ne.			2		0					mod.	sw.	clear.
S. S. Australia, Sydney, N. S. W	30.04	763.0	70	21.1	95	ne.			4		5?		ne.	0	0			cloudy.?
S. S. City of New York, Sydney, N. S. W †	30.03	762.7	72	22.2	71	ne.			2		0			0	0			clear.
S. S. City of Pekin, Hong Kong, China †	30.42	772.7	60	15.6	71	w.			1		0			0	0			clear.
S. S. City of Rio de Janeiro, N. 17° 18′, W. 101° 18′ †	29.96	761.0	79	26.1	70	calm			0		0			0	0	light	sw.	clear.
S. S. City of Sydney, N. 34° 41′, W. 130° 36′ †	30.14	765.5	61	16.1	82	se.			4		5		se.	0	0	mod.	se.	fair.
S. S. Grenada, Panama, Panama †	29.92	760.0	77	25.0	86	nw.			1		5?		nw.	0	0			clear.?
S. S. San José, N. 28° 01′, W. 115° 20′*†	30.30	769 6				wnw.			3		8		nnw.	0	0	light	nnw.	
S. S. Zealandia, N. 23° 18′, W. 152° 30	30.11	764.8	74	23.3	76	nne.			5		1		ne.			mod.	ne.	fine.
S. S. Bermuda, N. 38° 03′, W. 73° 00′†	29.85	758.2	46	7.8		nnw.			7		9		nnw.	sqll's	sqll's	h'vy	nnw.	cloudy.
S. S. Muriel, N. 22° 30′, W. 64° 42′	30.06	763.5	77	25.0		e.			3		13			0	0	mod.	ne.	overcast.
S. S. Claudius, N. 18° 50′, W. 82° 50′†	30.07	763.8				s.			3		4		se.	0	0	short	se.	fair.
S. S. Valencia, La Guayra, Venezuela †	30.05	763.3	78	25.6	84	wsw.			1		4		e.	0	0	mod.	ne.	fine.
S. S. Belgenland, Antwerp, Belgium †	29.77	756.1	44	6.7	84	sw.			7		4		sw.	6 h'r	6 h'r			fair.
S. S. Pennland, N. 49° 54′, W. 5° 46′..	30.10	764.5	49	9.4	93	nw.			6		4		nw.	1 h'r	1 h'r	sm'h	nw.	fine.
S. S. Rhynland, N. 42° 30′, W. 61° 00′	29.80	756.9	50	10.0	79	nw.			4		8		nw.			long	nw.	squally
S. S. Waesland, N. 50° 05′, W. 18° 01′	30.54	775.7	50	10.0	72	wnw.			3		9		nnw.	0	0	long	nnw.	cloudy.
S. S. Maas, N. 49° 38′, W. 60° 15′	30.25	768.3	50.4	10.2	81	nnw.			3		6		n.	1 h'r	1 h'r	6	n.	clear.
S. S. P. Culand, N. 49° 48′, W. 5° 54′	30.08	764 0	49.3	9.6	80	wnw.			6		2		nw.			5	wnw.	clear.
S. S. W. A. Scholten, N. 45° 41′, W. 47° 41′	30.09	764.3	43.7	6.5	83	sw.			5		7		sw.	0	0			
S. S. Zaandam, N. 48° 33′, W. 32° 50′ *	29.70	754.4	61.2	16.2	98	s.			6		10 n		n.	4 h'r	4 h'r	6	s.	
S. S. State of Florida, N. 54° 18′, W. 14° 45′	30.00	762.0	49	9.4		wnw.			7		5?		wnw.	8 h'r	8 h'r	h'vy	nw.	cloudy.?
S. S. State of Indiana, N. 55° 06′, W. 17° 00′			45	7.2		nw.			6		2		nw.	3 h'r	3 h'r	r'gh	n	squally.
S. S. State of Nevada, N. 45° 10′, W. 51° 58′†	29.83	757.7	42	5.6		wsw.			4		10		w.	0	0	mod.	w.	overcast.
S. S. Thingvalla, N. 50° 29′, W. 45° 22′†	29.70	754.4	40.1	4.5		w.			4		10		w.	3 h'r	3 h'r	long	w.	covered.
S. S. Iowa, N. 43° 18′, W. 58° 27′ *†	29.90	759.4	44	6.7		wsw.			5		8		wsw.	3 h'r	3 h'r	r'gh	w.	cloudy.
S. S. Plantyn, N. 49° 59′, W. 4° 50′	29.95	760.7							6		6		n.	0	0	cross	nnw.	
S. S. Baltic, N. 43° 12′, W. 47° 24′	30.05	763.3	49	9.4	78	sw.			2		5		wsw.	0	0	mod.	w.	d. clouds.
S. S. Celtic, Liverpool, Eng			41	5.0	82	nnw.			6		5		nnw.	sh'rs	sh'rs			showery.
S. S. Lepanto, N. 48° 43′, W. 10° 19′*	30.38	771.6	52	11.1		nnw.			6		4		n.	0	0	h'vy	n.	squally.
S. S. Marengo, N. 48° 00′, W. 36° 50′*†	29.77	756.1				s.			8		10		s.	7 h'r	7 h'r	r'gh	sw	rainy.
S. S. Salerno, N. 37° 06′, E. 11° 56′			68	20.0		wnw.			2		0			0	0	sm'h	w.	clear.
S. S. Catherine Whiting, Delaware, Bay†.	29.96	761.0				wsw.			5				wsw.	0	0			
S. S. Norman, N. 42° 23′, W. 71° 07′	29.86	758.4				nw.			1				nw.	snow	snow			cloudy.
S. S. Saxon, N. 39° 08′, W. 75° 10′ *†	29.94	760.5	40	4.4		wnw.			9		8		uw.					
MISCELLANEOUS.																		
Bk. Adelaid, N. 29° 46′ W. 73° 54′ *†	30.12	765.0	77	25.0		ssw.			5		1		ssw.	0	0	sm'h	ssw.	hazy.
Bg. Alcira, Maracaybo, Venezuela	29.92	760.0	86	30.0		ene.			3		2		ne.	0	0			clear.
S. Annie, M. Law, Kobe, Japan *†	30.18	766.6	44	6.7		n.			1		0			0	0			fine.
Bk. Anna Thormann, S. 19° 01′, E. 76° 16′*	29.91	759.7	74.7	23.7	81	se.			5		10 k		se.	0	0	r'gh	ese.	misty.
S. S. Antonio Lopez, Havana, Cuba, W. I.*	30.03	762.7	70	21.1	97	calm			0		3			0	0			fair.
Bk. Aquidneck, S. 23° 04′, W. 42° 16′ *†	30.10	764.5				ne.			3				ne.			light	ne.	clear.
Bgt. Aureola, Bristol, Eng*†	30.11	764.8	50	10.0		w.			5		4		w.					clear.
Bgt. Arthur, N. 37° 06′, W. 61° 23′*†	29.81	757.2				wnw.			7				nw.	0	0	high	wnw.	
Schr. B. J. Baker, Smithville, N. C.*†	29.98	761.5				nne.			6		7		se.					fair.
Sch. Bonny Doon, N. 41° 50′ W. 27° 50′ *†	30.48	774.2				se.			4		2		s.	0	0	sm'h	e.	hazy.
S. S. Burswell, N. 27° 41′ W. 62° 58′ *†	30.13	765.3	81	27.2		calm			0		3			½h'r	½h'r	str'g	n.	clear.
Bk. Champion, N. 35° 39′, W. 14° 00′..			64	17.8		calm			0		8		calm	½h'r	½h'r	long	nnw.	smoky.
Schr. Chas. F. Heyer, N. 27° 00′, W. 83° 41′	30.00	762.0	75	23.9	81	sse.			8	0	3 k		s.	0	0	short	s.	fair.
Schr. C. R. Flint, Cedar Keys, Fla†	30.02	762.5	56	13.3		ene.			1		10		ese	0	0			cloudy.
S. Cornelius, N. 45° 36′, W. 34° 56′			61.2	16.2		s.			5		10		ssw.	3 h'r	3 h'r	r'gh	ssw.	light rain.
Bkt. David Preston, New Orleans, La*†	29.90	759.4	56	13.3		nw.					10		nw.	rain	rain			
Bk. Don Quixote, Passeroen Roads, Java*	29.90	759.4	89	31.7		nw.			3		6		nw.	0	0			cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. E. D. Bigelow, Bordeaux, France*†	30.05	763.3				n.			4		5			0	0			squally.
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†	30.08	764.0	40	4.4		nnw.			1		3		wnw.	0	0			clear.
S. E. J. Spicer, New York, N. Y	29.86	758.4	50	10.0	?	n.			2		10		n.	20 h'r	20h'r			snowing.
Bk. Eliza Barss, Bermuda, W. I†	30.08	764.0				sw.			4		2		sw.	0	0			clear.
S. Enoch Train, St. Thomas, W. I*†	30.15	765.8				ese.			3		0			0	0			
Bk. Essex, Muscat, Arabia*†	30.03	762.7	79	26.1		n.			3								nne.	fine.
Schr. F. E. McDonald, Belfast, Maine†	29.89	759.2				nw.			1		5							
S. S. Foscolia, N. 13° 53′, W. 51° 26′						ne.			3		2		ne.	0	0	long	ne.	fair.
Bk. Freya, N. 19° 20′, W. 43° 30′			82	27.8		w.			2		0			0	0	sm'h		clear.
Bg. George, Point Caledonia, N. S*†	29.66	753.4	62	16.7		wnw.			5		5			0	0	mod.		fair
S. Grecian, N. 27° 43′, W. 69° 02′†	30.12	765.0	73	22.8	67	s.			1		3		se.	1 h'r	1 h'r	sm'h	n.	clear.
Bk. Grey Eagle, N. 30° 57′, W. 41° 50′*†	30.20	767.1	76	24.4		e.			4		1		ese.	0	0	light	nw.	hazy.
Bk. Gronsvaer, Wellington, New Zealand†	30.27	768.8	64.6	18.1	92	s.			4		0?			0	0			fair.?
Bk Hattie G. McFarland, New York, N. Y †	30.11	764.8	36	2.2		n.			3		10		n.	24 h'r	24 h'r			stormy.
Schr Hattie Weston, Port of Spain, Trinidad, W. I*†	30.04	763.0	82	27.8		calm			0		2			1 h'r	1 h'r	sm'h		fair
S. Hedwig, N. 39° 01′, W. 72° 30′	29.89	759.1	45.1	7.3	81	nw.			7		10		nw.	4 h'r	4 h'r	4	nw.	overcast.
Bk. Heinrich & Tonio, N. 45° 55′, W. 30° 15′*†	30.35	770.9	59	15.0		sse.			6		7		sse.	12 h'r	12 h'r	h'vy	ne.	showery.
Schr. Isabel Alberto, Cedar Keys, Florida†	30.01	762.2				e.			1		10		e.	0	0			cloudy.
Schr. James Slater, N. 23° 36′, W. 65° 23′†	30.09	764.3	79	26.1		ene.			2		2		ne.	0	0	r'gh	n.	
Schr. Jennie N. Huddell, Savannah, Ga†	30.04	763.0	58	14.4	100	calm			0		10			0	0			cloudy.
S. S. John Hopkins, Baltimore, Md			40	4.4		w.			5		0?			0	0			fair.
Schr. John L. Thomas, N. 21° 48′, W. 85° 04′*†	30.08	764.0				e.			2		3		s.	3 h'r	3 h'r	mod.	ese.	fair.
Bg. John Wesley, N. 23° 45′, W. 80° 48′†	29.91	759.7				s.			3		6		s.	0	0	sm'h		fair.
Bk. Joseph A. Ropes, Muscat, Arabia						e.			2		0							clear.
Light House Tender, Laurel, Key West, Fla†	29.98	761.5	74	23.3		sse.			1		2		sw.	0	0			clear.
Bk. Liberia, N. 8° 38′, W. 18° 15′.*†	29.91	759.7	84	28.9	79	ne.			1		2			0	0			
Bg. Lilian, N. 24° 36′, W. 69° 20′†	30.04	763.0	80	26.7		e.			2		1		se.	½h'r	½h'r	r'gh	n; ne	clear.
S. S. Madrid, N. 37° 32′, W. 76° 09′*†	30.04	763.0	44	6.7	76	nw.			7		3			4 h'r	4 h'r			fair.
S. S. Malabar, Suez Canal, Egypt*†	29.90	759.4				nw.			4		0			0	0	sm'h		clear.
Bg. Mary Gibbs, N. 38° 10′, W. 70° 30′*†	29.74	755.4	55	12.8		nw.			7		10		nw.	0	0	5	wnw.	cloudy.
Bk. Matilda C. Smith, N. 30° 50′, W. 33° 30′*†	30.30	769.6				ese.			6		6		sse.	0	0	mod.	nw.	fine.
Bg. Mattie B. Russell, N. 38° 00′ W. 71° 00′*†	30.06	763.5				nw.			8					0	0	h'vy		
Schr. Moravian, N. 12° 33′, W. 81° 43′†	30.08	764.0				ne.							ne.	0	0	long	n.	cloudy
Bk. Northern Queen, N. 36° 34′, W. 57° 44′*†	30.00	762.0	73	22.8	72	sw.			6		5		sw.			sm'h	w.	showery.
Bg. O. C. Clary, N. 15° 57′, W. 56° 58′*†	29.96	761.0	80	26.7	96	ene.			3		4		e.			sm'h		fair.
Bk. Orpheus, N. 46° 06′, W. 22° 54′			60	15.6		sw.			4		6 ks		ssw.	0	0	sm'h		fair.
S Paramita, San Francisco, Cal†	29.99	761.7	52	11.1		ne.			4				ne.	0	0			foggy.
S. S. Radnorshire, N. 9° 18′, E. 64° 40′*†	29.84	757.9				nne.			4		1		ne.	0	0	mod.	ne.	clear.
S. St. Francis, S. 0° 50′, W. 113° 44′†	29.93	760.2	69	20.6		se.			2		2		se.	0	0	mod.	se.	fine.
Bk. Scud, N. 13° 18′, W. 58° 33′*†	29.96	761.0				ene.			6		2		ese.	0	0	long	nne.	
Bk. Southern Belle, Antwerp, Belgium*†	29.70	754.4	58	14.4		wnw.			6		2			0	0			clear.
S. S. Strathleven, N. 20° 02′, E. 38° 49′	29.91	759.7	84.0	28.9	87	sse.			2		2		se.			2	sse.	d. clouds.
S. S. Sunbeam, N. 39° 19′, W. 18° 35′	30.31	769.9	62	16.7	77	ne.			6		5		ne.	1 h'r	1 h'r	4	ne.	d. clouds.
Bk. Truro, N. 43° 20′, W. 51° 45′*†	29.98	761.5				s.			1		10		sw.	3 h'r	3 h'r	mod.	v	cloudy.
U. S. F. C. S. S. FishHawk, Washington, D. C†	30.19	766.8	42	5.6	83	wnw.			3		6		w.	0	0			fair.
Bk. Usko, N. 45° 35′. W. 44° 51′*	29.87	758.7	53	11.7		nnw.			2		2		w.	2 h'r	2 h'r	mod.	wnw.	fair.
Bk. Vincenzo Accame, Lisbon, Portugal†	30.17	766.3	66.2	19.0		n.			3		2		n.	0	0			clear.
Schr. Walter L. Plummer, N. 19° 12′. W. 73° 32′*†	30.10	764.5				ne.			1		0			0	0	sm'h		fine.
Bk. Wandering Jew, S. 31° 20′, W. 48° 15′†	29.77	756.1	74	23.3		se.			5		10		ne.	2 h'r	2 h'r	mod.	ne.	threatening.
Bk. Warden Law S. 26° 26′, W. 73° 09′	30.05	763.3				s.			2		8		sw.	0	0	sm'h	s.	covered.
Bgt. Willie, S. 35° 00′, E. 27° 00′*†	29.95	760.7	75	23.9		ene.			5		8		ene.	0	0	r'gh	e.	cloudy.
S. Wm. Woodbury, N. 38° 20′, W. 52° 03′*†	30.10	764.5	64	17.8		wsw.			4		4		w.			long	wnw.	clear.

International Chart I. November 27, 1882. Isobars and Isotherms.



By Order of the Secretary of War:
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 28, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer: Corrected for instrumental error and for temperature.		Barometer: Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind: Direction.	Wind: Velocity.		Wind: Force.	Clouds: Amount and kind. Upper.	Clouds: Amount and kind. Lower.	Clouds: Direction. Upper.	Clouds: Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10.	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.18	766.5	62.2	16.8	77	e.	.....	.....	1	.....	4	.....	.....	inap.	inap.	cloudy	Malaterre.
Algiers	.....	.....	30.10	764.5	57.2	14.0	82	e.	.....	.....	5	.....	0	.....	.....	0.012	0.3	clear.....	Thève.
La Calle	.....	.....	29.97	761.1	60.8	16.0	79	nw.	.....	.....	5	.....	5	.....	.....	0.157	4.0	cloudy.....	Fonfrède.
Tunis	.....	.....	30.04	762.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.15	765.7	57.2	14.0	29	n.	.....	.....	2	.....	1	.....	.....	0	0	very fair.. ...	Pérès.
Tebessa	.....	.....	30.11	764.7	56.1	13.4	64	w.	.....	.....	1	.....	2	.....	.....	0.154	3.9	fair.....	Dognon.
Geriville	.....	.....	.....	.....	51.4	10.8	70	ne.	.....	.....	4	.....	4	.....	.....	0	0	cloudy	Lonchamp.
Laghouat	.....	.....	30.09	764.3	60.8	16.0	32	n.	.....	.....	1	.....	4	.....	.....	0	0	cloudy.....	Abraham.
Biskra	.....	.....	30.10	764.5	63.0	17.2	48	.....	.....	.....	.....	.....	10	.....	.....	inap.	inap.	covered.....	Maiau.
Australian.																			
Melbourne, Victoria	29.94	760.5	30.03	762.7	55.0	12.8	88	sse.	5	2.2	.....	.....	10	.....	.....	1.32	33.5	light rain....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.28	743.8	29.85	758.2	37.8	3.2	93	ne.	.....	.....	3	.....	10	.....	.....	0.220	5.6	raining.....	Prof. Ivan Stozir.
Orscow, I. R Observatory	28.99	736.4	29.78	756.3	39.6	4.2	71	nw.	3.1	1.4	.....	.....	5	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.84	732.4	29.73	755.1	40.3	4.6	90	calm	.....	.....	0	.....	10 n	.....	.....	0.362	9.2	.....	Julius Mikolik.
Gratz	28.57	725.6	29.84	758.0	40.1	4.5	86	w.	.....	.....	1	.....	10	.....	.....	0.650	16.5	.....	Andreas Rospini.
Hermannstadt	28.25	717.5	29.68	753.9	47.3	8.5	79	nw.	.....	.....	3	.....	10	.....	.....	0.319	8.1	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.43	722.0	29.80	756.8	39.6	4.2	59	nw.	.....	.....	1	.....	10	.....	.....	0.134	3.4	gloomy.....	The Staff.
Lemberg	28.74	729.9	29.74	755.5	39.9	4.4	89	nw.	.....	.....	1	.....	10	.....	.....	0.579	14.7	.....	Dr. T. Stanecki.
Pola	29.63	752.5	29.74	755.4	48.9	9.4	76	ene.	.....	.....	1	.....	6	.....	.....	0.071	1.8	.....	I. R. Hydrographic Office.
Szathmar	29.23	742.4	29.61	752.0	42.4	5.8	91	w.	.....	.....	2	.....	10	.....	.....	0.134	3.4	.....	Joseph Midlinszky, S. J.
Szegedin	29.48	748.7	29.76	755.9	44.7	7.0	74	nw.	.....	.....	1	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.68	753.8	29.78	756.4	45.3	7.4	61	ne.	.....	.....	3	.....	10	.....	.....	0	0	.....	Royal Academy.
Vienna	29.11	739.4	29.84	758.0	40.5	4.7	60	w.	.....	.....	1	.....	8	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.92	760.0	30.02	762.5	37.9	3.3	67	wnw.	27	12.8	.....	.....	9	.....	.....	0.115	2 9	rain & snow.	W. Boswell
Armagh, Observatory	29.96	761.0	30.21	767.3	38.9	3.8	84	sw.	8	3.6	.....	.....	10	.....	.....	.....	.....	overcast.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.16	766.1	42.1	5.6	58	nw.	16	7.2	.....	.....	4	.....	.....	.....	.....	d. clouds.....	John Harmup.
Bolton, Sharples	29.59	751.6	30.14	765.5	38.6	3.7	63	nw.	18	8.0	.....	.....	2	.....	.....	.....	.....	blue sky.....	Thomas Mackereth.
Bradford, Yorkshire	29.69	754.1	30.09	764.3	38.7	3.7	62	nw.	.....	.....	1	.....	6	.....	.....	0.11	2.8	d. clouds.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.96	761.0	30.00	762.0	80.0	26.7	80	ne.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds.....	Corpl. J. Sturgenor, A. H. C.
Oardington	.....	.....	.....	.....	39.0	3.9	71	n.	.....	.....	1.0	.....	1	.....	.....	.....	.....	blue sky.....	John McLaren.
Chatham, School M. E	29.91	759.7	30.04	763.0	40.5	4.7	73	nw.	.....	.....	2	.....	6	.....	.....	.....	.....	d. clouds.....	Corpl. G. A. Pickles.
Falmouth, Observatory	30.07	763.8	30.30	769.6	45.7	7.6	54	nnw.	.....	.....	3	.....	7	.....	.....	.....	.....	d. clouds.....	The Staff.
Fort Napier, Natal	27.68	703.1	29.89	759.2	80.0	26.7	50	e	.....	.....	1	.....	4	.....	.....	.....	.....	blue sky.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.65	753.1	29.86	758.4	85.0	29.4	64	n.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds.....	Sergt. John Robinson.
Gibraltar, Mediterranean	30.19	766.8	30.25	768.3	58.0	14.4	91	e.	.....	.....	4	.....	8	.....	.....	.....	.....	d. clouds.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.91	759.7	30.12	765.0	37.8	3.2	70	wnw.	.....	.....	3	.....	fg	.....	.....	.....	.....	foggy.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.89	759.2	30.07	763.8	41.7	5.4	61	nnw.	.....	.....	5	.....	1	.....	.....	.....	.....	blue sky.....	The Staff.
Guernsey	29.93	760.2	30.24	768.1	46.0	7.8	69	nw.	.....	.....	2	.....	4	.....	.....	blank	blank	d. clouds.....	A. Collenette, F. M. S.
Kew, Observatory	30.06	763.5	30.10	764.5	42.2	5.7	52	nw.	18	8.0	.....	.....	4	.....	.....	.....	.....	d. clouds.....	The Staff.
Leicester, Museum	29.85	758.2	30.11	764 8	41.0	5.0	56	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky.....	J. C. Smith.
Malta, Mediterranean	29.90	759.4	29.97	761.2	68.0	20.0	98	nw.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.96	761.0	30.01	762.2	75.0	23.9	100	s.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	C. S. Duncombe.
Oscott, St. Mary's College	29.57	751.1	30.11	764.8	40.8	4.9	56	n.	.....	.....	3	.....	1	.....	.....	.....	.....	d. clouds.....	Warren Middleton.
Oxford, Radcliffe Obs'y	29.91	759 7	30.14	765.5	41.4	5.2	65	nw.	.....	.....	5	.....	0	.....	.....	.....	.....	squally.....	The Staff.
Plymouth	30.18	766 6	30.26	768.6	44.3	6.8	79	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	John Merrifield.
Sandwick Manse, Orkneys	29.90	759.4	30.01	762.2	34.8	1.6	95	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty.....	Rev. C. Clouston, L L D.
Soutari Cemetery, Turkey	29.80	756.9	29.86	758.4	61.4	16.3	68	ssw.	.....	.....	2	.....	1	.....	.....	.....	.....	blue sky.....	W. H. Lyne.
Sheffield	29.82	757.4	30.12	765.0	39.4	4.1	75	nw.	.....	.....	3	.....	1	.....	.....	0.08	2.0	blue sky.....	W. F. Cooper.
Silloth Rectory	30.09	764.3	30.12	765.0	40.6	4.8	71	nw.	.....	.....	2	.....	4	.....	.....	0.155	3.9	d. clouds.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.14	765.5	39.0	3.9	47	nw.	18	8.0	.....	.....	7	.....	.....	.....	.....	d. clouds.....	I. New.
Stratfield Turgiss	29.91	759.7	30.14	765.5	41.9	5.5	61	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky.....	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.23	767.8	30.28	769.1	49	9.4	71	nw.	.....	.....	6	.....	6	.....	.....	.....	.....	d. clouds ...	W. Newcombe.
Valencia, Observatory	30.27	768.8	30.30	769.6	48.5	9.2	81	wsw.	8	3.6	.....	.....	10	.....	.....	blank	blank	d.clouds.....	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.78	756.4	29.82	757.4	27	— 2.8	69	W.	12	5.4	.....	.....	10 n	.....	nw.	0.030	0.8	cloudy.....	H. J. Cundall, C. E.
Chatham, N. B*	29.82	757.4	29.89	759.2	17	— 8.3	91	W.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	G. A. Blair.
Father Point, Quebec*	30.00	762.0	30.02	762.5	22	— 5.6	88	W.	27	12.1	.....	.....	10 s	.....	calm	0	0	cloudy.....	J. McWilliams.
Fort Garry, Manitoba*	29.56	750.8	30.48	774.2	9	—12.8	100	n.	8	3.6	.....	5 k	0	n.	.....	0	0	fair.....	James Stewart.
Halifax, N. S*	29.79	756.7	29.93	760.2	29	— 1.7	70	nw.	9	4.0	.....	.....	10 k	.....	.....	0	0	cloudy.....	A. Allison.
Kingston, Ontario*	29.94	760.5	30.31	769.9	13	—10.6	83	nw.	4	1.8	.....	5 c	2 s	nw.	calm	0	0	fair	A. P. Knight, M. A.
Montreal, Quebec*	29.99	761.7	30.22	767.6	15	— 9.4	96	W.	2	0.9	.....	0	2 s	.....	.....	0	0	clear.....	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.58	751.3	30.34	770.6	13	—10.6	80	n.	7	3.1	.....	2 k	2 ks	nw.	nw.	0	0	fair.....	Rev. R. Mosley.
Port Dover, Ontario	29.57	751.1	30.32	770 1	15	— 9.4	100	n.	7	3.1	.....	.....	10 n	.....	.....	0	0	cloudy.....	H. Morgan.
Port Stanley, Ontario	29.66	751.8	30.21	767.3	21	— 6.1	87	e.	6	2.7	.....	.....	10 n	.....	ne.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.78	756.4	30.13	765.3	20	— 6.7	70	n.	.....	.....	5	0	1 c	.....	n.	0	0	fair.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.79	756.7	30.29	769.4	17	— 8.3	83	nw.	2	0.9	.....	.....	10 s	.....	nw.	0	0	cloudy.....	W. H. McIntyre.
Saugeen, Ontario*	29.53	750.0	30.29	769.4	24	— 4.4	88	ne.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	
St. Andrews, N. B	29.93	760.2	29.99	761.7	23	— 5.0	80	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	
Sydney, C. B*	29.65	753.1	29.71	754.6	30	— 1.1	88	w.	5	2.2	.....	2c;ks	2 ks	w.	w.	0	0	fair	T. C. Hill, C. E
Toronto, Ontario*	29.90	759.4	30.32	770.1	14	—10.0	91	n.	7	3.1	.....	2 cs	0	.....	.....	0	0	clear.....	Magnetic Observatory.
Yarmouth, N. S*	29.94	760.5	30.01	762.2	30	— 1.1	85	n.	8	3.6	.....	.....	10 k	.....	n.	0.01	0.3	cloudy.....	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.78	731.0	30.30	769.6	17.0	— 8.3	83	nw.	.....	.....	1	.....	10 s	.....	.....	0	0	overcast.....	Wm. Wylie.
St. Johns, Newfoundland	29.32	744.7	29.58	751.3	32	0.0	100	nw.	4	1.8	.....	.....	10	.....	.....	.....	.....	snowing.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.04	763.0	30.07	763.8	73.0	22.8	79	e.	26.6	11.9	.....	3 c	0	.....	.....	0	0	clear.....	John Duthie.
Cape Town, C. G. H. Obs'y	29.93	760.2	29.97	761.2	74.0	23.3	74	s.	25	11.2	.....	4	6	.....	.....	0	0	.....	The Staff, for D.G.H.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
CHINESE (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.17	766.2	34.7	1.5	58	nw.	6.0	2.7	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.23	767.8	30.26	768.5	44.8	7.1	77	wsw.	6.3	2.8	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.72	754.9	29.77	756.1	30.2	— 1.0	82	ne.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	29.80	756.9	29.82	757.5	34.0	1.1	81	ene.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.75	755.7	29.80	756.8	19.2	— 7.1	93	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.79	756.7	29.81	757.2	31.6	— 0.2	.....	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.76	755.8	29.80	756.9	26.6	— 3.0	89	e.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	A. O. Thorlacius.
Thorshavn	29.98	761.6	30.02	762.5	36.0	2.2	72	e.	16	7	.....	.....	10	.....	.....	.....	... ..	.....	Overloerer Bergh.
Vestervig	29.78	756.3	29.87	758.7	31.3	— 0.4	87	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	Loearer Oesterboi.
Jacobshavn	29.90	759.5	29.95	760.7	0.1	—17.7	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.67	753.5	30.29	769.4	46.0	7.8	86	nw.	.....	.....	1	.....	k;kn	.....	.....	0.08	2.	.....	M. Labroue, Director.
Alençon, Normal School	29.54	750.3	30.09	764.3	43.9	6.6	94	n.	.....	.....	2	.....	n	.....	s.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.66	753.4	29.93	760.1	37.0	2.8	97	n.	.....	.....	4	.....	10	.....	.....	0.224	5.7	raining	M. Fénéon, Command't.
Avignon, Normal School	30.00	762.0	30.08	764.0	46.4	8	70	nnw.	.....	.....	4	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.43	747.4	30.00	761.9	40.6	4.8	77	nw.	.....	.....	2	...	10 k	.....	nw.	0.291	7.4	covered	M. Saillard, Director.
Beauvais, Normal School	29.75	755.7	30.03	762.7	42.1	5.6	70	wnw.	.....	.....	2	.....	10	.....	nw.	0.390	9.9	covered	M. Frère Eugène Marie.
Besançon, Normal School	29.06	738.2	29.98	761.4	36.0	2.2	96	s.	.....	.....	1	.....	10 n	.....	sw.	0.346	8.8	snowing	M. Gobin, Director.
Bordeaux, Observatory	30.02	762.4	30.28	769.2	49.1	9.5	55	nw.	.....	.....	1	.....	8	.....	nw.	0.220	5.6	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.58	751.2	30.13	765.4	45.5	7.5	57	wnw.	.....	.....	2	.....	k	.....	wnw.	0.256	0.5	.....	M. Malet, Director.
Brest, Naval Observatory	30.09	764.2	30.33	770.4	46.8	8.2	80	n.	.....	.....	2	.....	8	.....	n.	0.047	1.2	.....	M. de Kermaree, Dir.
Caen, Normal School	30.07	763.8	30.15	765.7	45.7	7.6	64	wnw.	.....	.....	3	.....	5	.....	wnw.	0.177	4.5	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.60	751.8	29.93	760.1	40.6	4.8	79	w.	.....	.....	1	.....	10	.....	.....	0.079	2.0	covered	M. Jadot, Director.
Charleville, Normal School	29.34	745.3	29.86	758.5	35.2	1.8	79	sw.	.....	.....	3	.....	10	.....	.....	0.16	4.	snowing	M. Grimard, Director
Clermont-Ferrand Obs'y	28.76	730.5	30.16	766.0	41.9	5.5	63	nw.	.....	.....	2	.....	5	.....	nw.	0.138	3.5	½ covered	M. Allnard, Director.
Cluny, Normal School	29.21	742.0	30.09	764.2	39.9	4.4	77	w.	.....	.....	2	.....	9	nw.	wnw.	0.134	3.4	light rain	M. de Villemontée, Dir.
Commercy, Normal School	29.01	736.9	29.89	759.3	34.5	1.4	93	w.	.....	.....	3	.....	10	w.	w.	0.425	10.8	covered	Dr. Coulet, Director.
Gap, Normal School	27.42	696.4	30.01	762.3	41.0	5	40	n.	.....	.....	2	.....	7	.....	s.	0.04	1.	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.88	733.6	30.04	763.0	43.2	6.2	42	nw.	.....	.....	4	.....	3	.....	nw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.30	744.3	30.10	764.5	40.3	4.6	65	nw.	.....	.....	1	.....	kn	.....	.....	0.118	3.0	.....	M. Ablard, Director.
Guéret	28.58	726.0	30.21	767.4	40.1	4.5	77	nw.	.....	.....	2	.....	10	.....	n.	0.118	3.0	covered	M. Delorme, Dir.
Lamballe, Normal School	29.98	761.4	30.25	768.4	47.1	8.4	67	nw.	.....	.....	4	0	5 k	.....	nw.	0.059	1.5	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.69	754.1	30.26	768.7	49.1	9.5	80	w.	.....	.....	1	.....	10	.....	.....	0.315	8.0	raining	M. Chauvin, Director.
Lorient, Naval Observatory	30.24	768.0	30.34	770.6	49.6	9.8	58	nnw.	.....	.....	1	.....	8	nw.	n.	0.067	1.7	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.04	737.5	30.13	765.3	40.3	4.6	65	w.	.....	.....	1	0	8 n	.....	.....	0.043	1.1	very cloudy	M. André, Director.
Mans, Normal School	29.83	757.6	30.13	765.4	45.5	7.5	60	ne.	.....	.....	4	.....	.....	.....	w.	0	0	.....	M. Piboen, Director.
Marseille, Observatory	29.74	755.5	30.02	762.4	48.7	9.3	61	nw.	.....	.....	4	.....	8	.....	nw.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.86	631.5	29.71	754.5	35.6	2.0	60	sw.	11.2	5.0	.....	.....	9	s.	.....	0.461	11.7	slightly cl'dy	M Caré for Dr. Fines.
Montpellier, Normal School	29.93	760.3	30.06	763.6	50.0	10	70	nw.	.....	.....	4	.....	2	.....	nw.	0	0	.....	M. Galzin, Director.
Nancy, Normal School	29.04	737.5	29.89	759.3	35.2	1.8	89	wsw.	.....	.....	1	.....	10	.....	.....	0.193	4.9	raining	M. Hasse, Director
Nantes, Observatory	30.15	765.7	30.31	769.8	48.4	9.1	63	wnw.	.....	.....	1–3	0	8 k;kn	.....	nnw.	0	0	.....	M. Larocque, Director.
Perpignan, Observatory	30.06	763.6	30.14	766.5	52.9	11.6	54	nw.	28.0	12.5	.....	.....	8	.....	nw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.18	538.0	.....	.....	14.7	9.6	.....	sw.	.....	.....	2–3	.....	10	.....	sw.	1.150	29.2	snowy	(Gen'l de Nansouty, Dir.
Privas, Normal School	29.01	736.8	30.10	764.4	40.6	4.8	66	n.	.....	.....	1	.....	5	n.	n.	0	0	cloudy	M. Taffleu.
Puy de Dôme Obs'y, Summit	25.06	636.6	.....	.....	22.5	5.3	100	wnw.	.....	.....	6	.....	10	.....	.....	0.650	16.5	snow & fog	M. Allnard, Director.
Rochefort, Naval Obs'y	30.17	766.3	30.20	767.1	48.6	9.2	97	n.	.....	.....	2	.....	2	.....	nw.	0.04	1.	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.05	763.2	30.27	768.8	46.8	8.2	65	w.	.....	.....	1	.....	8	.....	se.	0	0	very cloudy	M. Brotier, Director.
Rodez, Normal School	27.95	709.9	30.18	766.6	35.6	2	85	nw.	.....	.....	2	.....	cn	.....	se.	0.220	5.6	.....	M. Seger, Director.
Rouen, Normal School	30.03	762.8	30.08	764.0	44.2	6.8	68	nnw.	.....	.....	3	.....	8	nnw.	.....	0.480	12.2	very cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	46.2	7.9	60	nw.	.....	.....	2	.....	.....	n.	nw.	0.217	5.5	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.86	758.4	30.02	762.6	44.4	6.9	64	nw.	.....	.....	3	.....	10	.....	nw.	0.197	5.0	.....	M. Renou, Director.
Toulouse, Observatory	29.56	750.7	30.28	769.2	45.7	7.6	83	w.	.....	.....	3	.....	10	nw.	.....	0.142	3.6	covered	M. Baillaud, Director.
Tours	30.00	761.9	30.17	766.3	46.0	7.8	61	w.	.....	.....	2	.....	2	n.	nw.	0.055	1.4	slightly cl'dy	M. de Tastes.
Versailles, Observatory	29.54	750.3	30.03	762.8	42.1	5.6	81	nw.	.....	.....	3	.....	.....	.....	.....	0.087	2.2	.....	Dr. A. Bérigny, Director.
GERMAN.																			
Ansbach	28 32	719.4	29.82	757.5	33.4	0.8	81	sw.	.....	.....	4	.....	10	sw.	.....	0.024	0.6	.....	Prof. Jnedt.
Bamberg	28.91	734.3	29.75	755.6	37.4	3.0	70	w.	.....	.....	1	.....	10	.....	.....	0.039	1.0	snowing	Prof. Dr. Roh.
Berlin	29.51	749.6	29.69	754.2	39.7	4.3	73	sw.	.....	.....	2	.....	7	.....	.....	0.197	5.0	.....	Prof. Dr. Arndt.
Breslau	29.24	742 7	29.70	756.0	40.3	4.6	60	sw.	.....	.....	2	.....	7	.....	.....	0.008	0.2	.....	Royal University Obs'y.
Carlsruhe	29.42	747.3	29.87	758.7	37.4	3.0	79	sw.	.....	.....	5	.....	9	«w.	.....	0.031	0.8	.....	Albert Senz.
Cassel	28.89	733.8	29.60	751.9	36.7	2.6	84	nw.	.....	.....	4	.....	8	w.	.....	0.008	0.2	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.44	747.7	29.79	756.7	37.0	2.8	89	sw.	.....	.....	1	.....	10	.....	.....	0.106	2.7	raining	Physical Society.
Friedrichshafen	28.467	722.9?	29.95	760.7	37.4	3.0	70	w.	.....	.....	8	.....	8	wnw.	.....	0.102	2.6	.....	Wilhelm, Chief Tel.
Hamburg	29.61	752.1	29.70	754.4	37.8	3.2	95	s.	.....	.....	2	.....	10	.....	.....	0.130	3.3	foggy	E. Preller.
Kiel	29.70	754.4	29.72	754.8	38.1	3.4	88	ne.	.....	.....	1	.....	10	.....	.....	0.055	1.4	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.30	744.3	29.57	751.1	40.3	4.6	67	sw.	.....	.....	2	.....	8	wsw.	.....	0	c	.....	H. Leppig, Asst.
Magdeburg	29.52	749.8	29.71	754.7	38.8	3.8	82	calm	.....	.....	0	.....	10 ks	... ...	sw.	0.008	0.2	hazy	Weather Observatory.
Memel	29.60	751.8	29.65	753.0	35.4	1.9	75	n.	.....	.....	2	3 cs	0	.....	.....	.....	.....	.....	Issermann.
Munich	28.00	711.3	29.85	758.3	34.5	1.4	77	w.	.....	.....	4	.....	9	w.	.....	0.035	0.9	.....	Central Station.
Neufahrwasser	29.69	754.0	29.70	754.4	40.1	4.5	87	nw.	.....	.....	2	.....	10	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.142	3.6	.....	Dicknether.
Stuttgart	28.87	733.4	29.80	756.8	36.0	2.2	79	w.	.....	.....	7	.....	8	w.	.....	0.067	1.7	.....	Prof. Dr. Schoder.
Wustrow	29.62	752.3	29.64	752.9	35.2	1.8	91	e.	.....	.....	2	.....	10	.....	.....	0	0	.....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.56	750.9	29.95	760.6	66.9	19.4	.....	sw.	.....	.....	0.5	0	0	.....	.....	0	0	clear	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	30.00	762.0	30.05	763.3	81.2	27.3	47	nne.	18.0	8.0	.....	.....	2	.....	.....	0	0	d. clouds	
Deesa	29.49	749.1	29.97	761.2	80.6	27.0	59	nne.	9.0	4.0	.....	.....	9	e.	.....	0	0	d. clouds	
Bombay	29.87	758.6	29.90	759.6	80.3	26.8	80	wnw.	6.0	2.7	.....	.....	6	nw.	wsw.	0.02	0.5	d. clouds	
Poona, Yarrowda	28.06	712.7	29.94	760.5	72.9	22.7	93	e.	12.0	5.4	.....	.....	10	.....	ese.	1.51	38.4	drizzling	
Trichinopoly	29.67	753.6	29.96	760.9	74.3	23.5	95	ne.	1.0	0.4	.....	.....	10	.....	.....	0.09	2.3	overcast	
Bellary	28.47	723.2	29.97	761.2	72.3	22.4	94	e.	4.0	1.8	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.36	694.9	29.90	759.3	76.8	24.9	58	se.	10.0	4.5	.....	.....	6	sw.	ne.	0.04	1.0	d. clouds	
Lahore	29.33	745.0	30.10	764.6	65.0	18.3	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.14	740.1	30.07	763.7	67.2	19.6	60	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	.....	
Agra	29.49	749.0	30.07	763.7	73.2	22.9	55	w.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.93	734.8	29.99	761.7	75.6	24.2	78	calm	2.0	0.9	.....	.....	5	.....	e.	0	0	d. clouds	
Jubbulpore	28.69	728.5	30.09	764.3	67.9	19.9	89	ne.	4.0	1.8	.....	.....	10	.....	n.	0.06	1.5	overcast	
Lucknow	29.70	754.3	30.08	764.1	70.3	21.3	59	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.77	756.0	30.09	764.3	65.1	18.4	96	calm	0	0	.....	.....	2	.....	.....	0	0	d. clouds	
Patna	29.90	759.5	30.09	764.4	69.1	20.6	90	e.	0.8	0.4	.....	.....	10	e.	e.	0.03	0.8	overcast	
Hazaribagh	28.00	711.2	30.07	763.8	65.5	18.6	94	n.	5.8	2.6	.....	.....	10	.....	e.	0.04	1.0	drizzling	
Cuttack	29.96	760.8	30.04	763.0	77.0	25.0	74	w.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	30.03	762.7	30.05	763.2	73.7	23.2	79	n.	2.0	0.9	.....	.....	2	.....	.....	0.21	5.3	d. clouds	
Dhubri	29.94	760.4	30.06	763.5	70.9	21.6	77	calm	0.2	0.1	.....	.....	0	.....	.....	0.07	1.8	blue sky	
Chittagong	29.93	760.2	30.02	762.5	76.4	24.7	88	calm	1.7	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.72	754.8	30.06	763.6	65.9	18.8	89	ne.	1.0	0.4	.....	.....	8	w.	w.	0.03	0.8	d. clouds	
Zanzibar, Africa	29.83	757.6	29.85	758.2	85.8	29.9	65	ene.	6.1	2.7	.....	.....	2	.....	.....	0	0	d. clouds	
Jeypore	28.60	726.3	30.06	763.6	73.9	23.3	54	e.	5.0	2.2	.....	.....	2	e.	.....	0	0	d. clouds	
ITALIAN.																			
Udine	29.40	746.7	29.82	757.3	47.3	8.5	61	e.	3.8	1.7	.....	.....	6	.....	.....	0.165	4.2	.....	Prof. Giovanni Clodig.
Milan	29.32	744.7	29.85	758.2	44.6	7.0	74	sw.	3.1	1.4	.....	.....	2	nw.	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.68	753.9	29.80	756.8	48.2	9.0	67	wsw.	8.7	3.9	.....	.....	2	w.	.....	0.138	3.5	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.90	734.1	29.83	757.6	49.1	9.5	24	w.	6.9	3.1	.....	.....	3	ne.	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Genoa	29.62	752.3	29.81	757.2	56.3	13.5	16	se.	0.7	0.3			0			0	0		Prof. G. M. Garibaldi.
Mondovi	27.90	708.6	29.85	758.2	46.2	7.9	28	w.			6		0			0	0		Prof. D. C. Bruno.
Pesaro	29.73	755.2	29.78	756.4	50.0	10.0	64	wsw.	26.2	11.7			9			0	0		Prof. Luigi Guidi.
Florence	29.55	750.5	29.81	757.1	51.8	11.0	62	sw.			2		4			0	0		Prof. Costantino Pitter.
Leghorn	29.59	751.5	29.67	753.7	56.5	13.6	37	nw.	10.5	4.7			4			0	0		Prof. P. Monte.
Rome	29.65	753.2	29.83	757.7	56.8	13.8	49	wsw.	3.8	1.7			1			0.012	0.3		Prof. P. Tachini.
Lecce	29.61	752.0	29.86	758.5	61.2	16.2	75	nnw.	11.9	5.3			8			0	0		Prof. C. de Giorgi.
Cosenza	29.09	738.8	29.98	761.6	56.5	13.6	77	ssw.	3.1	1.4			10	sw.		0.126	3.2		Prof. D. Conti.
Cagliari	29.79	756.6	29.98	761.6	55.6	13.1	38	nw.			6		3	nw.		0	0		Prof. A. Pacinotti.
Palermo	29.73	755.2	29.98	761.5	65.3	18.5	48	w.	6.9	3.1			8	nnw.		0	0		Prof. G. Cacciatore.
Syracuse	29.90	759.4	29.94	760.5	65.5	18.6	66	wsw.	6.3	2.8			10	wsw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.37	746.0	29.90	759.4	55.4	13.0	59	sw.	15.0	6.7			10	wnw.		0	0		Prof. F. Brioschi.
Stelvio	21.81	554.0			15.4	— 9.2	87	sw.			2		6			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.84	554.8			16.3	— 8.7	76	se.			2		10			2.362	60.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.96	761.1	30.00	761.9	36.4	2.4	86	calm			0	0	1 s		sw.	0.417	10.6	clear	Hattori.
Awomori	29.97	761.2	30.01	762.2	22.3	— 5.4	94	w.	5.5	2.5		0	0			0.024	0.6	clear	K. Ogawa.
Hakodate	30.00	762.0	30.01	762.3	28.5	— 1.9	83	ne.	1.8	0.8		1	0			0.012	0.3	clear	
Hiroshima					48.7	9.3	92	ssw.	8.5	3.8		1 cs	2 ck	sw.	ne.	0	0	clear	Y. Miwa.
Kanazawa	29.82	757.5	29.93	760.1	50.2	10.1	72	sw.	7.4	3.3			10			0.060	1.5	overcast	S. Endo.
Kioto	29.84	757.9	30.01	762.2	50.5	10.3	85	calm	0	0		2 cs	8ks;ck			0.038	1.0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.87	758.7	30.08	763.9	57.1	13.9	55	wsw.	13.5	6.0		4 c	0	nw.		0.210	5.3	clear	S. Takehayashi.
Nemuro	30.17	766.3	30.23	767.8	33.0	0.6	94	calm	0	0		0	2			0	0	clear	
Niigata	29.92	759.9	29.95	760.7	47.8	8.8	68	se.	5.8	2.6			10 ck		se.	0.230	5.8	foggy	M. Morita.
Nobiru	30.02	762.6	30.04	763.0	50.7	10.4	81	se.	21.5	9.6			10ks;8		se.	0.015	0.4	covered	H. Midzushina.
Osaka	29.99	761.7	30.00	762.1	51.0	10.6	86	ne.	5.3	2.3			10 n			0.030	0.8	light rain	
Sapporo					27.5	— 2.5	90	s.	10.2	4.6		0	0			0.082	2.1	clear	
Tokei Obs'y, Yeddo	30.00	761.9	30.07	763.9	41.5	5.3	87	n.	2.5	1.1		4ck;cs	0	sw.		0.445	11.3	fair	The Staff.
Wanayama	29.94	760.5	30.00	762.0	55.6	13.1	89	ssw.	3.1	1.4			10			0.060	1.5	raining	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.73	755.1	29.92	760.0	80.5	26.9	57	nne.	13.5	6.0		0	3 ks;n		ne.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.73	602.7	29.95	760.7	46.0	7.8	84	sse.	lmap.	lmap.		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.38	619.2	30.38	769.1	42.1	5.6	83	nne.			1	6 c	0	sw.		0	0	⅛ cloudy	Prof. M. Leal.
Mazatlan	29.80	756.8	30.06	763.5	65.0	18.3	68	ne.	0.9	0.4		0	1 s			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.15	588.0	30.33	770.3	42.8	6.0	69	nw.	0.9	0.4		0	0			0	0	very fine	The Staff.
Morelia	24.26	616.2	30.15	765.7	47.3	8.5	76	se.	0.9	0.4		1 c	1 k	s.	s.	0	0	clear	M. Tena, M. D.
Orizaba																			Prof. M. M. Cházaro.
Pabellon, Aguascallentes	24.02	610.2	30.14	765.5	46.8	8.2	58	nnw.				0	0			0	0	very fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.5	30.38	771.7	40.1	4.5	88	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.57	573.2	30.23	767.9	38.0	3.2	85	ne.	4.5	2.0		0	9		wsw.	0	0	very cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.89	759.3	29.89	759.3	43.2	6.2		a.			4					0.071	1.8		
Groningen	29.73	755.2	29.79	756.6	40.1	4.5		nne.			1					0.240	6.1		
Helder	29.82	757.4	29.82	757.4	42.8	6.0		nnw.			5					0.063	1.6		
Hellevoetsluis	29.85	758.2	29.85	758.2	44.2	6.8	77	n.			1					0.252	6.4		
Utrecht	29.80	757.0	29.85	758.2	43.3	6.3	77	nnw.			2		2			0.220	5.6	lightly cl'dy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.71	754.6	29.77	756.2	34.5	1.4	74	e.	7	3			8			0.315	8.0	rain & snow	
Brono	30.00	762.1	30.04	763.1	21.6	— 5.8	50	se.	4	2			3			0	0		
Christiania	29.83	757.6	29.98	761.6	22.8	— 5.1	78	ne.	9	4			10					snowing	
Gjesvær	29.72	754.9	29.74	755.5	17.6	— 8.0		e.			6		10						
Lodingen	29.79	756.7	29.84	757.9	23.7	— 4.6	88	w.			3		10			0.039	1.0	snowing	
PORTUGUESE.																			
Angra, Azores	30.29	769.4	30.45	773.4	59.7	15.4	83	ese.	9.8	4.4			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.35	745.6	30.37	771.5	55.0	12.8	32	nne	8.7	3.9			0			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.10	766.1	30.25	768.3	65.8	18.8	73	ene.	9.4	4.2			5			0.134	3.4		Capt. D. A. de Cunha.
Lisbon, Observatory	30.07	763.8	30.44	773.2	52.7	11.5	41	nne.	23.0	10 3			0			0	0		The Staff.
Ponta Delgada, Azores	30.47	773.8	30.54	775.6	63.3	17.4	57	e.	9.8	4.4			4			0	0		
Saint Paul de Loando	29.80	756.8	30.00	762.0	71.6	22.0	91	w.	0.7	0.3			10			0	0		
Serra da Estrella	25.55	649.0	30.45	773.5	37.2	2.9	24	se.	7.4	3.3			0			0.004	0.1		
RUSSIAN.																			
Akmollnski	28.97	735.7	30.10	764.4	29.7	— 1.3	67	sw.	9	4		0	8 n			0	0		Major K. Lasarew.
Archangel	29.74	755 4	29.76	755.9	7.5	—13.6	92	s.	2	1			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.28	769.0	30.19	766.9	43.3	6.3	88	sse.	7	3			10			0	0	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.52	749.7	30.04	763.0	28.4	— 2.0	70	sw.	18	8			10			0.020	0.5		Meteorological Obs'y.
Dorpat	29.39	746.4	29.64	752.8	30.0	— 1.1	100	n.	9	4			10 n			0	0		Observatory.
Ekaterinburg	28.82	731.9	29.81	757.1	31.8	— 0.1	78	wnw.	18	8			9			0.091	2.3		Meteorological Obs'y.
Kasan	29.45	748.1	29.73	755.2	34.7	1.5	84	ene.	2	1			10			0.315	8.0	light rain	Observatory.
Kertch	29.87	758.6	29.89	759.1	58.6	14.8	90	se.	4	2		0	0			0	0		Lagorio & Sastyrez.
Kieff	29.05	737.8	29.69	754.2	40.1	4.5	92	nnw.	2	1			10 n						Observatory.
Lugan	29.64	752.9	29.85	758.1	53.1	11.7	79	ssw.	18	8			7			0	0		Meteorological Obs'y.
Nikolaiev	29.68	753.9	29.75	755.7	55.8	13.2	86	sw.	13	6		0	0			0	0		Capt. Kurdakow.
Pekin, China	30.08	763.9	30.22	767.5	36.1	2.3	33	nw.	11	5		0	0			0	0		Physical Observatory.
St. Petersburg	29.61	752.0	29.62	752.4	26.8	— 2.9	89	nne.	11	5			10			0.083	2.1		Central Physical Obs'y.
Semipalatinsk	29.58	751.2	30.28	769.0	25.2	— 3.8	80	se.	9	4			2			0	0		Major Lasarew.
Tashkend, Laboratory	28.70	729.0	30.32	770.1	45.0	7.2	49	calm	0	0			2						Teich, A. M.
Tiflis	28.76	730.5	30.20	767.0	51.6	10.9	62	nnw.	4	2		0	0			0	0		Physical Observatory.
Tomsk	29.41	747.1	29.71	754.5	23.7	— 4.6	83	s.	13	6			10						
Vladivostock	29.50	749.2	29.56	750.9	39.6	4.2		se.	13	6			10 n			0.756	19.2		
Warsaw	29.29	744.0	29.72	755.0	37.2	2.9	99	w.	9	4			10					heavy cl'ds.	Astronomical Obs'y.
Wilna	29.23	742.4	29.66	753.3	37.0	2.8	88	sw.	7	3			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.37	746.1	29.68	753.8	23.2	— 4.9	84	sse.	25	11			10			0.008	0.2	snowing	M. O. Marks.
SCOTTISH.																			
Monach Lt			30.03	762.7	44	6.7	92	s.			4		10			0.3	8.	gloomy	J. Youngclause.
North Unst			29.94	760.5				ne.			4	4	2	e.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.06	763.5	30.17	766.2	54.1	12.3	51	nw.	3.6	1.6		0	0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.35	770.8	30.41	772.3	52.9	11.6	80	nw.	2.9	1.3			10			0.362	9.2	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.41	696.2	30.52	775.2	40.1	4.5	75	n.	4.7	2.1			9			0	0	almost cov.	Domingo Martin.
Madrid, Royal Obs'y	28.09	713.6	30.39	771.9	49.3	9.6	48	ne.	17.2	7.7		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.11	764.7	30.24	768.0	56.8	13.8	62	nw.	4.0	1.8		0	0			0	0	clear	Olayo Diaz, Director.
Oviedo	29.56	750.7	30.43	773.0	47.1	8.4	90	se.	6.9	3.1			10		n.	0.189	4.8	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.58	751.3	30.50	774.8	47.3	8.5	87	ne.	6.3	2.8			9			0.024	0.6	almost cov.	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.93	760.3	29.99	761.7	79.5	26.4	81	n.	6.6	3 0		0	8 ks			0.634	16.1	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.15	765.9	30.26	768.5	60.4	15.8	41	nne.	10.6	4.7		0	3		ne.	0	0		Capt. C. Pujazon, R. N
San Juan de Porto Rico, W.I	29.96	760.9	30.05	763.2	75.2	24.0	98	calm	0	0		2 s	5 kn	n.	n.	0.047	1.2	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.94	760.4	30.07	763.7	73.8	23.2	92	nnw.	8.5	3.8		0	7 ks		ne.	lmap.	lmap.		José L. Yrastorza
SWEDISH																			
Haparanda	29.95	760.8	29.99	761.8	—10.5	—23.6	100	n.			2		0			0	0		
Umea	29.98	761.5	30.03	762.8	— 2.2	—19.0	100	calm			0		5			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
SWEDISH—Continued.																			
Hernosand	30.00	762.0	30.05	763.3	11.1	—11.6	85	calm			0		5			0	0		
Stockholm	29.66	753.3	29.84	757.8	24.1	— 4.4	91	ne.			6		10			0.028	0.7		
Wisby	30.00?	762.0?	30.06?	763.5?	34.5	1.4	85	e.			4		10			0.091	2.3		
Sub-series.																			
Upsala	29.79	756.7	29.88	758.9	24.8	— 4.0	75	ne	14.5	6.5			10		ne.	0	0		S. G. Fineman.
SWISS.																			
Geneva	28.61	726.7	30.08	764.1	39.4	4.1	53	ssw.			3		10			0.028	0.7	covered	The Observatory.
TURKISH.																			
Constantinople			29.91	759.7	61.7	16.5	69	sw.	13	6.0			2		sw.	0	0		The Observatory.
Salona			29.93	760.2	57.4	14.1		s.			1		10			0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			29.95	760.7	70.7	21.5	74	w.			1	10 cs		sw.		0	0		Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.20	767.1	30.28	769.1	22	— 5.6	64	ne.	1	0.4		3 cs	0	nw.		0.02	0.5	clear	J. O. Barnes.
Alpena, Michigan	29.62	752.3	30.32	770.1	26	— 3.3	88	n.	3	1.3			10 s			0	0	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.29	642.4	30.39	771.9	24	— 4.4	67	ne.	2	0.9		0	0			0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.48	698.0	30.46	773.7	7	—13.9	58	w.	6	2.7		0	0			0	0	clear	B. O. Lenoir.
Atlanta, Georgia	28.80	731.5	30.02	762.5	34.0	1.1	89	ne.	14	6.3			10 n			0.97	24.6	light snow	H. C. Smith.
Atlantic City, New Jersey	30.24	768.1	30.25	768.3	25	— 3.9	68	n.	5	2.2			10 s			0	0	cloudy	Jas. M. Watson.
Augusta, Georgia	29.80	756.9	30.00	762.0	40	4.4	82	ne.	13	5.8			10 n		ne.	0.76	19.3	light rain	John Healy.
Baltimore, Maryland	30.23	767.8	30.28	769.1	29	— 1.7	67	n.	6	2.7			10 s		w.	0	0	cloudy	Geo W Felger.
Barnegat, New Jersey	30.25	768.3	30.27	768.8	27.0	— 2.8	67	n.	10	4.5			10 s			0	0	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.71	729.2	30.40	772.1	15	— 9.4	83	nw.	24	10.7		3 c	3 s	nw.	nw.	0.02	0.5	fair	A. Pritchard.
Benton, Fort, Montana	27.53	699.2	30.49	774.4	7	—13.9	80	calm	0	0		0	0			0	0	clear	S. Wheaton.
Bismarck, Dakota	28.51	724.1	30.43	772.9	11	—11.7	83	n.	9	4.0		8 k	0	n.		0.02	0.5	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.20	767.1	30.22	767.6	25.5	— 3.6	73	n.	14	6.3		4 cs	0	nw.		0.12	3.0	fair	J. T. Elker.
Boise City, Idaho	27.54	699.5	30.48	774.2	24	— 4.4	88	ne.	1	0.4		6 cs	0			0	0	fair	B. E. Light.
Boston, Massachusetts	30.01	762.2	30.17	766.3	20.0	— 6.7	70	nw.	10	4.5		4 cs	fg.			0	0	fair	O. B. Cole.
Brownsville, Texas	30.24	768.1	30.29	769.4	48.6	9.2	77	n.	11	4.9		0	0			0	0	clear	M. McCarty.
Buffalo, New York	29.50	749.3	30.28	769.1	18	— 7.8	88	ne.	4	1.8			10 s		ne.	inap.	inap.	cloudy	W. Finn.
Buford, Fort, Dakota	28.63	727.2	30.61	777.5	6	—14.4	76	w.	10	4.5		0	1 s			0.03	0.8	clear	F. A. Mellen.
Burlington, Vermont	29.94	760.5	30.25	768.3	21.0	— 6.1	70	n.	3	1.3		0	0			inap.	inap.	clear	W. B. Gates.
Cairo, Illinois	29.76	755.9	30.18	766.6	29.0	— 1.7	88	n.	8	3.6			10 s		n.	0	0	cloudy	W. H. Ray.
Cape Henry, Virginia	30.14	765.5	30.16	766.1	38	3.3	82	n.	15	6.7			10 s		n.	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.22	767.6	30.25	768.3	30.0	— 1.1	61	n.	12	5.4			10 s			0	0	cloudy	W. E. Smith.
Cape Mendocino, California																			J. J. McLean.
Cedar Keys, Florida	29.80	756.9	29 82	757.4	65	18.3	93	nw.	16	8.0		0	8 ks		w.	1.45	36.8	cloudy	F. W. Mixer.
Champaign, Illinois	29.26	743.2	30.12	765.0	19.4	— 7.0	60	ne.	11	4.9		0	hz.			0	0	clear	L. A. Welsh.
Charleston, S. Carolina	29.81	757.2	29.87	758.7	42	5.6	100	ne.	20	8.9			10 s		ne.	0.98	24.9	threatening	J. H. Smith.
Charlotte, N. Carolina	29.16	740.7	30.04	763.0	33.0	0.6	85	ne.	12	5.4			10 n		ne.	0.34	8.6	light rain	D. O'Donoghue.
Chattanooga, Tennessee	29.14	740.1	30.00	762.0	39.0	3.9	89	ne.	2	0.9			10 n		n.	0.70	17.8	light rain	B. L. Goulding.
Cheyenne, Wyoming	24.17	613.9	30.38	771.6	26.4	— 3.1	20	nw.	18	8.0		0	0			0	0	clear	E. McGovern.
Chicago, Illinois	29.41	747.0	30.15	765.8	35.2	1.8	78	se.	10	4.5			10 s		se.	0.01	0.3	cloudy	J. Mitchell.
Chincoteague, Virginia	30.22	767.6	30.24	768 1	31	— 0.6	57	n.	16	7.2			10ks		sw.	0	0	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.38	746.2	30.07	763.8	33	0.6	78	ne.	6	2.7			10 s		w.	0	0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.46	748.3	30.23	767.8	28.7	— 1.8	86	e.	5	2.2			10 s		e.	inap.	inap.	cloudy	J. B. Newlin.
Coleman City, Texas	28.52	724.4	30.41	772.4	32	0.0	88	n.	12	5.4		0	0			0	0	clear	L. Dorman.
Columbus, Ohio	29.22	742.2	30.11	764.8	29	— 1.7	77	ne.	12	5.4			10 s			0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.45	722.6	30.46	773.7	32.0	0.0	81	calm	0	0		0	0			0	0	clear	J. McClone.
Custer, Fort, Montana	27.18	690.4	30.50	774.7	10	—12.2	80	s.	3	1.3		0	0			0	0	clear	W. B. Lamar.
Davenport, Iowa	29.48	748.8	30.16	766.1	29	— 1.7	67	se.	2	0.9			10 s			0	0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.45	646.4	30.35	770.9	28	— 2.2	70	calm	0	0		0	3 s			0	0	clear	J. Williams.
Dayton, Washington T'y	28.52	724.4	30.30	769.6	24.8	— 4.0	93	ne.	1	0.4		0	0			0	0	clear	H. Clifford.
Deadwood, Dakota	25.54	648.7	30.37	771.4	21.5	— 5.8	87	se.	3	1.3		0	3 k		w.	inap.	inap.	clear	G. W. Scott.
Delaware Breakwater, Del.	30.21	767.3	30.23	767.8	32	0.0	68	ne.	25	11.2			10 s		w.	0	0	cloudy	T. S. Townsend.
Denison, Texas	29.54	750.3	30.38	771.6	31.0	— 0.6	88	nw.	0	2.7		0	0			0	0	clear	J. W. Byram.
Denver, Colorado	24.94	633.5	30.44	773.2	26.0	— 3.3	58	s.	4	1.8		0	0			0	0	clear	F. M. Neal.
Des Moines, Iowa	29.21	741.9	30.16	766.1	23	— 5.0	73	n.	1	0.4			10 s		n.	0.08	2.0	cloudy	F. W. Conrad.
Detroit, Michigan	29.51	749.5	30.25	768.3	33.8	1.0	78	e.	15	6.7			10 k		ne.	0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.72	704.1	30.46	773.7	18	— 7.8	87	w.	10	4.5		0	0			0	0	clear	V. P. Temple.
Dubuque, Iowa	29.40	746.7	30.15	765.8	28.3	— 2.1	77	calm	0	0			10 s		s.	0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.47	748.5	30.26	768.6	29	— 1.7	77	e.	20	8.9			10 s		e.	0	0	cloudy	N. B. Conger.
Eagle Pass, Texas	29.61	752.1	30.44	773.2	40.0	4.4	82	nw.	6	2.7		0	0			0	0	clear	F. Belford.
Eagle Rock, Idaho	25 61	650.5	30.47	773.9	2	—16.7	76	n.	5	2.2		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	29.94	760.5	30.01	762.2	24.0	— 4.4	73	nw.	12	5.4		0	0			0	0	clear	D. O. Murphy.
Elliott, Fort, Texas	27.55	699.8	30.48	774.2	26	— 3.3	67	nw.	8	3.6		0	0			0	0	clear	W. J. Cundall.
El Paso, Texas	26.58	675.1	30.43	772.9	34.0	1.1	82	ne.	3	1.3		0	0			0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.50	749.3	30.26	768.6	30	— 1.1	78	e.	8	3.6			10 s		e.	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.60	751.8	30.30	769.6	26.5	— 3.1	63	ne.	21	9.4			10s;ks		ne.	0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.58	725.9	30.40	772.1	39	3.9	65	n.	16	7.2		0	0			0	0	clear	Frank Halwegler.
Galveston, Texas	30.17	766.3	30.22	767.6	46	7.8	83	n.	27	12.1			10 ks		ne.	inap.	inap.	threatening	E. O'C. Machierney.
Grand Haven, Michigan	29.51	749.5	30.21	767.3	31.5	— 0.3	83	ne.	6	2.7			10 s		ne.	0	0	cloudy	J. Mueller.
Grant, Fort, Arizona	25.42	645.7	30.26	768.6	36	2.2	66	ne.	4	1.8		0	0			0	0	clear	Robert O. Lord.
Hatteras, North Carolina	30.05	763.3	30.07	763.8	47	8.3	93	ne.	25	11.2			10 s		e.	0.04	1.0	cloudy	R. M. Crawford.
Helena, Montana	26.11	663 2	30.49	774.4	18	— 7.8	87	calm	0	0		0	0			0	0	clear	N. C. Smith.
Henrietta, Texas	29.39	746.5	30.43	772.9	30	— 1.1	78	n.	8	3.6		0	0			0	0	clear	J. P. Sherry.
Huron, Dakota	28.76	730.5	30.24	768.1	18	— 7.8	67	nw.	12	5.4			10 s			inap.	inap.	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.23	742.4	30.07	763.8	28	— 2.2	77	ne.	6	2.7		3 ck	3 s	s.	s.	0	0	fair	O. Schutze.
Indianola, Texas	30.26	768.6	30.29	769.4	45.0	7.2	76	n.	28	12.5		0	0			0	0	clear	I. A. Reed.
Jacksboro, Texas	29.13	739.9	30.35	770.9	37	2.8	72	n.	4	1.8		0	0			0	0	clear	D. J. Carr.
Jacksonville, Florida	29.78	756.4	29.83	757.7	65	18.3	93	sw.	2	0.9			10 s		sw.	1.40	35.6	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.91	708.9	30.58	776.7	13	—10.6	66	n.	10	4.5		0	0			0	0	clear	A. Schneider.
Keokuk, Iowa	29.49	749.0	30.18	766.6	27.6	— 2.8	77	w.	1	0.4			10 s			0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	29.92	760.0	29.94	760.5	76.0	24.4	90	s.	16	7.2		4 cs	6 s	w.	sw.	0	0	threatening	R. H. Paxton.
Kittyhawk, North Carolina	30.13	765.3	30.15	765.8	45	7.2	80	ne.	28	12.5			10 s			0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	28.94	735.1	30.01	762.2	35.5	1.9	100	ne.	6	2.7			10 n			0.59	15.0	light rain	J. A. Cody.
La Crosse, Wisconsin	29.30	744.2	30.12	765.0	31	— 0.6	67	se.	4	1.8			10 s			0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.32	744.7	30.26	768.6	29	— 1.7	77	w.	2	0.9		2 k	0	nw.		0.01	0.3	clear	A. W. Browne.
Lewiston, Idaho	29.53	750.0	30.40	772.1	27.5	— 2.5	82	sw.	1	0.4		3 cs	0	w.		0	0	clear	W. Bell.
Little Rock, Arkansas	29.87	758.7	30.20	767.1	33	0.6	78	nw.	6	2.7		0	0			0	0	clear	W. U. Simens.
Los Angeles, California	29.78	756.4	30.18	766.6	49	9.4	72	n.	8	3.6		3 c	0	w.		0	0	clear	T. S. Collins.
Louisville, Kentucky	29.42	747.3	30.01	762.2	33	0.6	63	n.	5	2.2		0	6 s			0	0	fair	L. M. Dey.
Lynchburg, Virginia	29.50	749.3	30.22	767.6	33	0.6	78	ne.	5	2.2			10 s		ne.	0	0	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.65	753.1	30.34	770.6	27.5	— 2.5	77	e.	22	9.8		10 k	0	e.		0	0	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.00	762.0	30.02	762.5	44	6.7	100	ne.	26	11.6			10 n			0 30	7.6	heavy rain	F. P. Chaffee.
Madison, Wisconsin	29.10	739.1	30.17	766.3	33	0.6	88	se.	3	1.3			10 n			0.01	0.3	sleeting	C. A. Shaw.
Maginnis, Fort, Montana	25.82	655.8	30.33	770.4	13	—10.6	48	w.	2	0.9		0	0			0	0	clear	F. Burke.
McKavett, Fort, Texas																inap.	inap.		J. E. Thatcher.
Marquette, Michigan	29.55	750.6	30.32	770.1	26	— 3.3	88	s.	8	3.6			10 s			inap.	inap.	cloudy	J. Gilligan.
Memphis, Tennessee	29.78	756.4	30.13	765.3	32	0.0	78	nw.	12	5.4		0	0			0.01	0.3	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.38	746.2	30.17	766.3	36	2.2	79	s.	6	2.7			10 s			0	0	cloudy	W. Line.
Missoula, Fort, Montana	27.08	687.8	30.48	774.2	17	— 8.3	46	calm	0	0		0	0			0	0	clear	J. H. Young.
Mobile, Alabama	29.91	759.7	29.95	760.7	47.5	8.6	87	nw.	14	6.3			10 s		nw.	0.67	17.0	cloudy	C. A. Read.
Montgomery, Alabama	29.67	753.6	29.91	759.7	46.4	8.0	88	ne.	8	3.6			10 n		ne.	0.39	9.9	light rain	J. B. McLaughlin.

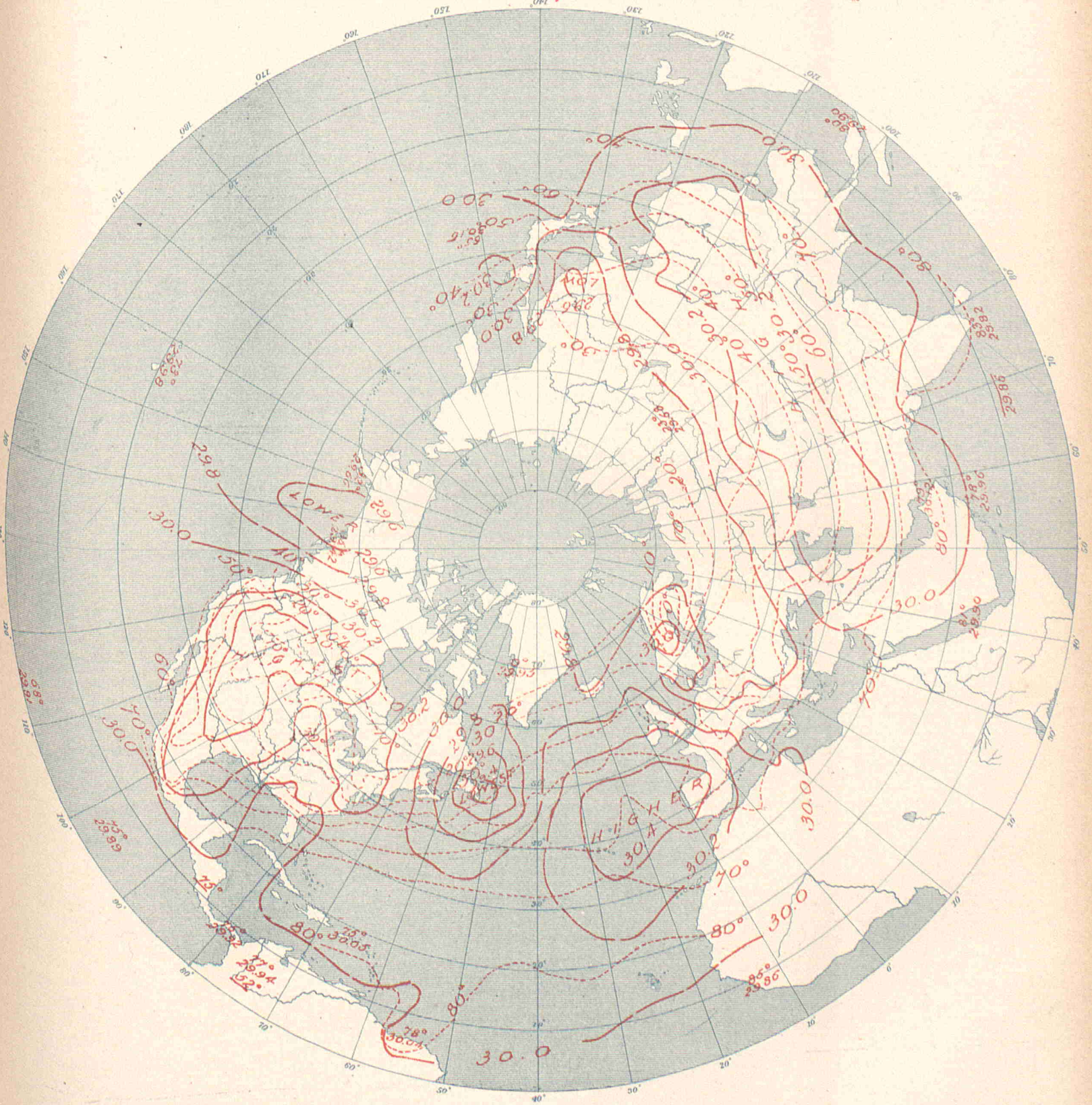
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.18	741.2	30.24	768.1	20	— 6.7	84	ne.	12	5.4			10 s		ne.	0.35	8.9	cloudy	H. Bessant.
Morgantown, W. Virginia	29.11	739.4	30.17	766.3	30.0	— 1.1	88	e.	7	3.1			10 s			0	0	cloudy	J. C. Sprigg, jr
Mt. Washington, N. H.	23.51	597.1	30.07	763.8	3.0	—16.1	79	nw.	60	26.8		0	6 s		nw.	0	0	fair	J. G. Linsley.
Nashville, Tennessee	29.43	747.5	30.03	762.7	37.0	2.8	85	nw.	5	2.2		10 cs	0	w.		0.07	1.8	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.14	765.5	30.26	768.6	18	— 7.8	76	nw.	2	0.9		10 c	0	w.		0.01	0.3	cloudy	J. H. Sherman.
New London, Connecticut	30.20	767.1	30.25	768.3	21	— 6.1	70	calm	0	0		5 c	0	w.		0	0	fair	J. G. Lynch.
New Orleans, Louisiana	30.00	762.0	30.06	763.5	47.0	8.3	68	n.	15	6.7			10 s		n.	0.50	12.7	cloudy	L. Dunne.
Newport, Rhode Island	30.15	765.8	30.20	767.1	23.3	— 4.8	92	nw.	12	5.4		6 c	1 s	nw.		inap.	inap.	fair	W. McGillivray.
New York, New York	30.10	764.5	30.28	769.1	27	— 2.8	77	nw.	3	1.3		5 cs	fg.			inap.	inap.	fair	J. B. Merrill.
Norfolk, Virginia	30.18	766.6	30.21	767.3	37	2.8	72	ne.	11	4.9			10 s		ne.	0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.27	692.6	30.35	770.9	22.6	— 5.2	74	w.	12	5.4		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.11	764 8	30.15	765.8	34.0	1.1	88	calm	0	0		0	0			0	0	clear	J. Dascomb.
Omaha, Nebraska	28.97	735 8	30.21	767.3	29.2	— 1.6	87	nw.	16	7.2			10 s			0.03	0.8	cloudy	A. Pollak.
Oswego, New York	29.92	760.0	30.26	768.6	24.0	— 4.4	78	e.	10	4.5			10 s			0	0	cloudy	S. W. Beall.
Palestine, Texas	29.74	755.4	30.31	769.9	34.5	1.4	68	n.	9	4.0		0	0			0.31	7.9	clear	L. M. Pindell.
Pensacola, Florida	29.88	758.9	29.91	759.7	51.8	11.0	86	nw.	12	5.4			10 s		nw.	0.90	22.9	cloudy	M. McGauran.
Philadelphia, Pa	30.20	767.1	30.30	769.6	28	— 2.2	77	nw.	5	2.2		10 cs	0	n.		0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.76	451.1	30.42	772.7	1	—17.2	65	n.	46	20.6		0	0			0	0	clear	H. Hall.
Ploche, Nevada	24.25	615.9	30.39	771.9	28	— 2.2	51	w.	5	2.2		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.36	745.7	30.21	767.3	24.0	— 4.4	73	ne.	8	3.6			10 s		ne.	0	0	cloudy	W. Daly.
Poplar River, Montana	28.25	717.5	30.54	775.7				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.00	762.0	30.01	762.2	49.1	9.5	89	nw.	20	8.9			10 s		nw.	0.02	0.5	cloudy	M. Herman.
Port Huron, Michigan	29.56	750.8	30.28	769.1	25.0	— 3.9	100	e.	7	3.1			10 s			0	0	cloudy	W. O. Bailey.
Portland, Maine	30.08	764.0	30.13	765.3	24.0	— 4.4	73	nw.	5	2.2		0	hz.			0	0	clear	W. W. Eichelberger.
Portland, Oregon	30.08	764.0	30.15	765.8	42.0	5.6	58	e.	6	2.7		7 c	0			0	0	fair	M. L. Hearne.
Portsmouth, N. C.					47	8.3	93	ne.	37	16.5			10 n		ne.	0.11	2.8	light rain	F. S. Coburn.
Prescott, Arizona	24.96	634.0	30.30	769.6	27	— 2.8	80	sw.	1	0.4		2 c	0	nw.		0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.11	764.8	30.14	765.5	29	— 1.7	88	nw.	8	3.6		0	8 s		nw.	0.12	3.0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	29.89	759.2	29.90	759.4	68	20.0	92	se	22	9.8			10 ks		sw.	0.43	10.9	threatening	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.56	750.8	30.26	768.6	20.5	— 6.4	89	w.	7	3.1			10 s			0.01	0.3	cloudy	E. W. McGann
Roseburg, Oregon	29.60	751.8	30.17	766.3	30	— 1.1	88	calm	0	0		0	fg.			0	0	light fog	J. J. Nanry.
Sacramento, California	30.12	765.0	30.20	767.1	38.4	3.6	89	calm	0	0		0	0			0	0	clear	J. A. Barwick
St. Louis, Missouri	29.55	750.6	30.18	766.6	24.4	— 4.2	96	nw.	10	4.5		1 c	2 s			0	0	clear	J. H. Weber.
St. Paul, Minnesota	29.19	741.4	30.11	764.8	26.0	— 3.3	88	e.	11	4.9			10 s		e.	0.04	1.0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.48	748.8	30.41	772.4	12	—11.1	89	n.	6	2.7		6 cs	0			0.07	1.8	fair	C. B Dilley.
Salt Lake City, Utah	25.98	659.9	30.55	776.0	25	— 3.9	42	ne.	3	1.3		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.63	752.6	30.35	770.9	40.5	4.7	65	nw.	7	3.1		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.07	763.8	30.14	765.5	52.3	11.3	65	ne.	4	1.8		10 ck	0	w.		0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.49	749.0	30.21	767.3	31	— 0.6	88	se.	13	5.8			10 s		s.	0	0	threatening	M. H. Perry.
Sandy Hook, New Jersey	30.26	768.6	30.29	769.4	28.0	— 2.2	77	n.	10	4.5		8 k	0			0.02	0.5	cloudy	B. A. Blundon.
San Francisco, California	30.10	764.5	30.17	766.3	49	9.4	86	sw.	2	0.9		8cs;ck	fg.	sw.		0	0	cloudy	N. Gorom.
Santa Fé, New Mexico	23.43	595.1	30.47	773.9	23	— 5.0	67	calm	0	0		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	29.78	756.4	29.88	758.9	44.5	6.9	88	ne.	14	6.3			10 ks		ne.	0.83	21.1	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.61	675.9	30.43	772.9	18	— 7.3	83	ne.	2	0.9		3 cs	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.98	761.5	30.23	767.8	37	2.8	82	n.	7	3.1		0	0			0.85	21.6	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.13	739.9	30.44	773.2	34	1.1	79	nw.	5	2.2		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.52	622.8	30.36	771.1	27.0	— 2.8	88	n.	2	0.9		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.34	745.2	29.42	747.3	36.1	2.3	83	e.	4	1.8			10 s		e.	0.15	3.8	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.80	756.9	30.29	769.4	28.0	— 2.2	76	w.	4	1.8		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	29.90	759.4	29.94	760.5	46	7.8	100	ne.	23	10.3			10 n		ne.	0.11	2.8	light rain	O. Parker.
Spokane Falls, Wash. Ter.	28.30	718.8	30.38	771.6	25	— 3.9	80	ne.	4	1.8		0	0			0	0	clear	D. Moore.
Springfield, Illinois	29.43	747.5	30.15	765.8	30	— 1.1	78	n	4	1.8			10 s		n.	0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.01	762.2	30.15	765.8	16.5	— 8.9	20	calm			0	3 k	0			0	0	clear	Charles Mayr.
Springfield, Mo	28.73	729.7	30.24	768.1	25	— 3.9	69	nw.	8	3.6		0	0			0	0	clear	J. B. Marbury.
Starkville, Miss	29.57	751.1	30.07	763.8	37	2.8	89	nw.	14	6.3			10 s		nw.	2.48	63.0	cloudy	C. Dill.
Stevenson, Fort, Dakota	28.50	723.9	30.47	773.9	11	—11.7	100	nw.	17	7.6		6 cs	0	nw.		0.02	0.5	fair	W. Burrows
Stockton, Fort, Texas	27.35	694.7	30.47	773.9	32.0	0.0	81	nw.	3	1.3		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	30.11	764.8	30.16	766.1	24.3	— 4.3	73	nw.	12	5.4		2 c	0	w.		0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.51	698.7	30.35	770.9	34	1.1	92	calm			0	3 cs	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.48	748.8	30.21	767.3	32	0.0	68	se.	4	1.8			10 s		se.	0	0	cloudy	A. Buell.
Tucson, Arizona	27.72	704.1	30.18	766.6	45	7.2	71	se.	4	1.8		1 c	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	30.02	762.5	30.40	772.1	26	— 3.3	94	se.	3	1.3		3 c	0			0	0	clear	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					35.6	2.0	64	n.			1	0	6 s		nw.	0	0	fair	D. Brooks.
Vicksburg, Mississippi	29.88	758.9	30.15	765.8	39.0	3.9	78	nw.	13	5.8			10 s		nw.	0.78	19.8	cloudy	James Kenealy.
Visalia, California	29.80	756.9	30.18	766.6	35.6	2.0	97	calm	0	0			fg.			0	0	dense fog	O. D. Stewart.
Washakie, Fort, Wyoming	24.71	627.6	30.45	773.4	4.1	—15.5	87	e.	3	1.3		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	30.17	766.3	30.29	769.4	27.5	— 2.5	64	n	4	1.8			10 s		nw.	0	0	cloudy	B. M. Purssell.
West Las Animas, Colorado	26.32	668.5	30.44	773.2	8	—13.3	68	nw.	8	3.6		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.68	753.9	30.31	769.9	16.3	— 8.7	93	w.	6	2.7			10 s		w.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	29.94	760.5	30.00	762.0	40	4.4	100	ne.	7	3.1			10 n		ne.	0.85	21.6	light rain	Samuel A. Haney.
Winnemucca, Nevada	25.86	656.8	30.40	772.1	23	— 5.0	68	e.	8	3.6		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.83	732.3	30.22	767.6	22	— 5.6	73	nw.	12	5.4			10 s			0.03	0.8	cloudy	J. H. Atfield.
Yuma, Arizona	30.00	762.0	30.15	765.8	46.9	8.3	77	w.	2	0.9		5 cs	0	w.		0	0	fair	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.04	559.8			52.0	11.1	76	sw.	1	0.4		1 cs	1 n			0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I.	29.86	758.4	29.93	760.2	73.4	23.0	89	s.	8	3.6		3c;ck	2 k	w;sw	s.	0	0	fair	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	30.04	763.0	30.05	763.3	75	23.9	76	calm	0	0		2 cs	2 s			0	0		Robert Johnston.
Navassa, W. I.	30.227	767.67	30.307	769.67	81	27.2	78	ne.	8	3.6		1 c	1 ks	e.	se.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	78	25.6	86	e.			1	4 ck	3 s			0.020	0.5	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.94	760.5	77	25.0	94	calm			0	3 ck	7 ks	calm	calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75	23.9	98	ne.			1	cs	ks	se.	ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.01	762.2	30.04	763.0	76	24.4	72	calm	0	0		1 c	1 n			0	0	clear	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.60	751.8	29.66	753.4	32	0.0	78	n.			2	5 c	0			0.33	8.4	fair	W. J. Fisher.
St. Thomas, W. I.	29.98	761.5	30.10	764.5	78	25.6	77	e.				0	6 k		e.	0.09	2.3	fair	Aug. Walloe.
York Factory R. A.	30.36	771.1	30.43	772.9	— 4.5	—20.3	82	nw.	12	5.4		0	0			0	0	clear	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, N. 28° 34′, E. 122° 08′	30.27	768.8	56	13.3	.....	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Amethyst, Colonia, Uruguay†	30.37	771.4	61.5	16.4	77	wnw.	.....	.....	1–2	.....	2	se.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Audacious, N. 7° 39′, E. 77° 07′	29.82	757.4	83	28.3	83	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Beacon, N. 30° 34′ E. 32° 16′	29.97	761.2	69	20.6	75	n.	.....	.....	2–3	.....	10	ne.	.....	.....	.....	2	n.	overcast.
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	29.98	761.5	68.5	20.3	95	nnw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
H. M. S. Cleopatra, N. 31° 14′ E. 121° 28′	30.24	768.1	45	7.2	.....	calm	.....	.....	0	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island	30.11	764.8	37	2.8	71	n.	.....	.....	1	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Condor, N. 31° 50′ E. 34° 34′	30.04	763.0	72	22.2	81	nnw.	.....	.....	4–5	.....	8	nnw.	.....	.....	.....	6	nnw.	d. clouds.
H. M. S. Crocodile, N. 15° 48′, E. 57° 25′	29.96	761.0	78	25.6	65	ne.	.....	.....	3–4	.....	2	.....	.....	.....	.....	1–2	ene.	d. clouds.
H. M. S. Curacoa, Kobe, Japan	29.86	758.4	56.5	13.6	69	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.90	759 4	67	19.4	84	ne.	.....	.....	3	.....	9	.....	.....	.....	.....	.....	.....	raining
H. M. Dock Yard, Bermuda, W. I.	30.06	763.5	65.5	18.6	76	nnw.	.....	.....	2–3	.....	6	nnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.78	756.4	77	25.0	88	s.	.....	.....	5	.....	2	sew.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flying Fish, N. 31° 27′, E. 131° 11′	30.05	763.3	60.5	15.8	85	nw.	.....	.....	2	.....	7	nw.	.....	.....	.....	1	nw.	misty.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.94	760.5	62	16.7	77	w.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.23	767.8	69	20.6	95	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Kingfisher, N. 6° 07′, W. 97° 07′	29.89	759.2	75	23.9	.....	sse.	.....	.....	3	.....	10	s	.....	.....	.....	4	s.	squally.
H. M. S. Lark, S. 26° 40′, E. 153° 50′	30.11	764.8	73.3	22.9	93	ene.	.....	.....	2	.....	8	.....	.....	.....	.....	2	e.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.90	759.4	65	18.3	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Magpie, N. 34° 32′, E. 127° 46′	30.03	762.7	52.5	11.4	60	wsw.	.....	.....	2–5	.....	0	.....	.....	.....	.....	.....	.....	squally.
H. M. S. Northampton, N. 30° 55′ W. 60° 50′	30.07	763.8	71.5	21.9	80	ssw.	.....	.....	3	.....	9	ssw.	.....	.....	.....	2	wsw.	d clouds.
H. M. S. Nelson, Melbourne, Australia	29.75	755.6	60	15.6	88	s.	.....	.....	2–3	.....	.....	.....	.....	.....	.....	.....	.....	showery
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.90	759.4	80	26.7	84	nw.	.....	.....	1	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sappho, S. 42° 30′, W. 92° 00′	30.26	768.6	49.2	9.6	100	s.	.....	.....	5–6	.....	7	ssw.	.....	.....	.....	3	ssw.	misty.
H. M. S. Sylvia, Royal Road, Patagonia	29.37	746.0	40.0	4.4	86	w.	.....	.....	4–6	.....	8	.....	.....	.....	.....	.....	.....	showery.
H. M. S. Tourmaline, Aden, Arabia	29.98	761.5	.....	.....	.....	ese.	.....	.....	2	.....	1	ne.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, Bushire, Persia	30.07	763.8	70.5	21.4	71	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Zephyr, N. 37° 33′, E. 121° 25′	30.09	764.3	43	6.1	100	nw.	.....	.....	4–6	.....	2	n.	.....	.....	.....	5	n.	d. clouds.
Portuguese Naval.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.07	763.7	81.5	27.5	80	ne.	.....	.....	2	.....	3	.....	ne.	.....	.....	.....	.....	d. clouds.
Tamega, Macao, China	30.24	768.0	63.7	17.6	56	n.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	29.71	754.6	53	11.7	86	nw.	10	4.5	.....	.....	10	.....	nw.	0.20	5.1	.....	.....	cloudy.
Navy Yard, Portsmouth, N. H.	30.02	762.5	25	— 3.9	?	nw.	6	2.7	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Naval Hospital, Yokohama, Japan*	29.99	761.7	48	8.9	81	calm	.....	.....	0	.....	8	.....	sw.	0	0	.....	.....	cloudy.
Adams, Sitka, Alaska *†	29.42	747.3	37	2.8	90	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Alaska, Honolulu, Sandwich Island	29.98	761.5	73	22.8	67	nne.	.....	.....	4	.....	2	.....	.....	0	0	mod.	ne.	fair.
Alliance, Hampton Roads, Va.	30.18	766.6	38	3.3	100	nne.	.....	.....	3	.....	10	.....	.....	0	0	.....	.....	cloudy.
Ashuelot, Nagasaki, Japan	30.08	764.0	59	15.0	58	wsw.	.....	.....	4	.....	8	.....	w.	.....	.....	.....	.....	cloudy.
Brooklyn, Keel Point, Patagonia	29.53	750.0	55	12.8	62	wsw.	55	24.6	.....	.....	0	.....	.....	0	0	mod.	wsw.	clear.
Colorado, New York, N. Y.	30.34	770.6	26	— 3.3	76	nw.	5	2.2	.....	.....	2	.....	.....	0.02	0.5	.....	.....	clear.
Enterprise, Norfolk, Va.	30.22	767.6	30	— 1.1	?	ne.	.....	.....	2	.....	10	.....	calm	.....	.....	.....	.....	cloudy.
Essex, Callao, Peru	29.98	761.5	66	18.9	90	s.	.....	.....	1	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy.
Franklin, Norfolk, Va.	30.23	767.8	38	3.3	80	ne.	11	4.9	.....	.....	10	.....	ne.	0.56	14.2	.....	.....	overcast.
Galena, Montevideo, Uruguay	30.22	767.6	62	16.7	56	ssw.	.....	.....	4	.....	0	.....	.....	.....	.....	mod	ssw.	clear.
Hartford, Sandy Point, Patagonia*	29.30	744.2	41	5.0	91	wsw.	.....	.....	5–6	.....	07	.....	.....	light	light	sm'h	.....	cloudy.?
Independence, Mare Island, Cal.	29.14	740.1	43	6.1	100	ese.	4	1.8	.....	.....	8	.....	ssw.	.....	.....	.....	.....	cloudy.
Iroquois, S. 12° 00′, W. 77° 25′	29.00	736.6	66	18.9	90	se.	.....	.....	1	.....	10	.....	.....	.....	.....	mod.	se.	overcast.
Jamestown, N. 42° 20′, W. 69° 05′	29.06	738.1	34	1.1	100	nw.	.....	.....	2	.....	10	.....	.....	.....	.....	sm'h	.....	
Kearsarge, Norfolk, Va.	29.22	742.2	40	4.4	91	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Lackawanna, S. 27° 11′, W. 72° 50′ *	29.96	761.0	61	16.1	77	s.	.....	.....	2	.....	10	.....	s.	.....	.....	mod.	sw.	cloudy.
Lancaster, Naples, Italy*	29.78	756 4	58	14.4	69	w.	.....	.....	3	.....	8	.....	w.	.....	.....	mod.	nnw.	fair.
Michigan, Erie, Pennsylvania	30.02	762.5	61	16.1	55	e.	.....	.....	3	.....	10	.....	e.	.....	.....	.....	.....	cloudy.
Minnesota, New York, N. Y.	30.31	769.9	23	— 5.0	86	n.	3	1.3	.....	.....	5	.....	.....	.....	.....	.....	.....	fair.
Monocacy, Yokohama, Japan*	29.90	759.4	49	9.4	100	w.	.....	.....	1	.....	8	.....	.....	.....	.....	.....	.....	misty.
New Hampshire, Newport, R. I.	30.23	767.8	25	— 3.9	100	nw.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	.....	fair.
Nipsic, Gibralter, Mediterranean*	30.21	767.3	61	16.1	70	e.	.....	.....	4	.....	8	.....	e.	.....	.....	sm'h	.....	fair.
Onward, Callao, Peru†	30.10	764.5	65	18.3	89	sse.	.....	.....	1	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos, Tientsin, China*	30.11	764.8	36	2.2	62	nw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear.
Pensacola, Callao, Peru*	29.89	759.2	65	18.3	89	s.	3	1.3	.....	.....	10	.....	.....	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass	30.14	765.5	19	— 7.2	100	nw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear.
Quinnebaug, Villafranche, France*	29.82	757.4	57	13.9	41	sw.	.....	.....	2–4	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Ranger, Salina Crez, Mexico	30.03	762.7	78	25.6	73	n.	.....	.....	5	.....	2	.....	.....	0	0	gr'd	s.	fair.
Richmond, Yokohama, Japan*	29.98	761.5	48	8.9	85	calm	.....	.....	0	.....	5	.....	.....	0	0	.....	.....	clear.?
Saratoga, N. 36° 25′, W. 71° 45′	30.03	762.7	52	11.1	66	nne.	.....	.....	4	.....	8	.....	ne.	0	0	mod.	ne.	cloudy.
St. Louis, League Island, Pa.	30.54	775.7	24	— 4.4	87	n.	.....	.....	1	.....	8	.....	s.	.....	.....	.....	.....	cloudy.
Swatara, N. 36° 03′, W. 66° 37′ *	29.90	759.4	72	22.2	85	nw.	.....	.....	4	.....	8	.....	w.	.....	.....	cross	var.	fair.
Tennessee, Hampton Roads, Va.	30.17	766.3	42	5.6	58	ne.	14	6.3	.....	.....	10	.....	.....	0	0	.....	.....	cloudy.
Vandalia, Cape Henry, Va*	30.21	767.3	42	5.6	75	ne.	.....	.....	4	.....	10	.....	ne.	.....	.....	sm'h	.....	cloudy.
Wabash, Boston, Mass.	30.18	766.6	20	— 5.6	70	w.	6	2.7	.....	.....	2	.....	sw.	0	0	.....	.....	clear.
Wachusetts, Mare Island, Cal†	30.18	766.6	44	6.7	100	e.	.....	.....	2	.....	2	.....	calm	0	0	sm'h	.....	fair.
Wyandotte, Washington, D. C	30.26	768.6	34	1.1	79	nne.	.....	.....	1	.....	10	.....	calm	.....	.....	.....	.....	snowing.
Yantic, Norfolk, Va.	30.16	766.1	41	5.0	83	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Merchant Marine.																		
S. S. Grecian, Montevideo, Uruguay*	30.20	767.1	62	16.7	46	s.	.....	.....	4	.....	0	.....	.....	2 h'r	2 h'r	sm'h	.....	clear.
S. S. Nova Scotian, N. 43° 14′ W. 57° 09′	29.76	755.9	39	3.9	.....	wnw.	.....	.....	4	.....	10	.....	wnw.	.....	.....	mod.	w.	hailing.
S. S. Polynesian, Halifax, N. S*	29.78	756.4	32	0.0	.....	nw.	.....	.....	1	.....	10	.....	nne.	0	0	.....	.....	overcast.
S. S. Scandinavian, N. 54° 30′, W. 18° 39′	29.99	761.7	47	8.3	.....	w.	.....	.....	6	.....	7	.....	w.	3 h'r	3 h'r	high	ssw.	showery.
S. S. British Crown, Liverpool, Eng.	.....	.....	41	5.0	.....	w.	.....	.....	6	.....	2	.....	nw.	3 h'r	3 h'r	sm'h	.....	clear.
S. S. Indiana, Liverpool, Eng†	30.01	762.2	50	10.0	86	n.	.....	.....	3	.....	2	.....	n.	.....	.....	.....	.....	squally.
S. S. Lord Clive, N. 44° 50′, W. 54° 10′*†	29.58	751.3	.....	.....	.....	w.	.....	.....	6	.....	9	.....	wsw.	sq 'lls	sq 'lls	mod.	w.	cloudy.
S. S. Lord Gough, N. 52° 11′, W. 23° 28′	30.14	765 5	50	10.0	.....	nw.	.....	.....	3	.....	5	.....	nw.	driz'l	driz'l	mod.	sw.	fair.
S. S. Ohio, N. 48° 45′, W. 41° 02′	30.10	764.5	62	16.7	100	sse.	.....	.....	4	.....	3	.....	s.	.....	.....	h'vy	s.	clear.
S. S. Pennsylvania, N. 39° 03′, W 72° 58′†	30.13	765.3	38	3.3	.....	w.	.....	.....	3	.....	10	.....	nw.	.....	.....	sm'h	w.	snowing.
S. S. Castor, N. 43° 29′, W. 39° 15′ *	30.11	764.8	53.6	12	.....	nnw.	.....	.....	4	.....	3	.....	nnw.	.....	.....	4	n.	squally.
S. S. Anchoria, N. 55° 04′ W. 13° 54′†	30.10	764-5	.....	.....	.....	sw.	.....	.....	2	.....	10	.....	w.	6 h'r	6 h'r	long	nne.	raining.
S. S. Devonia, N. 42° 10′, W. 60° 48′†	29.73	755.1	40	4.4	.....	nw.	.....	.....	5	.....	6	.....	nw.	.....	.....	short	nw.	squally.
S. S. Dorian, N 43° 40′, W. 52° 20′*	29.51	749.5	51	10.6	.....	wnw.	.....	.....	6	.....	5	.....	nw.	5 h'r	5 h'r	hv'y	sw.	fair.
S. S. Ethiopia, N. 42° 08′, W. 60° 30′	29.87	758.7	38	3.3	100	wnw.	.....	.....	5	.....	8	.....	w	5 h'r	5 h'r	r'hg	nw.	cloudy.
S. S. Galatin, N. 7° 10′, E. 79° 14′†	30.02	762.5	81.3	27.4	.....	w.	.....	.....	4	.....	8	.....	wsw.	0	0	.....	sw.	cloudy.
S. S. Alpin, N. 28° 50′, W. 75° 04′	29.97	761.2	.....	.....	.....	se.	.....	.....	5	.....	.....	.....	sw.	0	0	.....	s.	
S. S. Alvo, Cartagena, U. S. C.	29.83	757.7	78	25.6	.....	ese.	.....	.....	3	8ck	0	.....	.....	0	0	.....	.....	fine.
S. S. Antillas, Montega Bay, Jamacia, W. I†	29.95	760.7	.....	.....	.....	s.	.....	.....	1	.....	2	.....	se.	0	0	.....	.....	fine.
British Merchant, N. 35° 04′ W. 124° 27′	30.07	763.8	57.5	14.2	94	e.	.....	.....	5	.....	8	.....	.....	.....	.....	.....	.....	d. clouds.
Bk. Coppename, N. 19° 15′ W. 30° 44′	30.12	765.0	79	26.1	66	ene.	.....	.....	4	.....	3	.....	.....	.....	.....	.....	.....	blue sky.
S. S. Gordon Castle, N. 29° 07′, E. 121° 53′	30.27	768.8	55.5	13.1	57	wsw.	.....	.....	2	.....	4	.....	.....	.....	.....	.....	.....	d. clouds.
May Hulse, S. 28° 18′, W. 40° 47′	29.85	758.2	71.6	22.0	90	s.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	.....	showery.
S. S. Olympus. N. 30° 37′, E. 32° 18′	30.02	762.5	.....	.....	26	ne.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Inchkeith, S. 40° 11′ E. 24° 05′	30.11	764.8	57.2	14.0	94	e.	.....	.....	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Mertola, N. 37° 15′ W. 9° 30′	30.39	771.9	56.2	13.4	63	nne.	.....	.....	6	.....	0	.....	.....	.....	.....	.....	.....	blue sky
S. S. Bothina, N. 47° 53′, W. 34° 42′	30.25	768.3	60	15.6	88	se.	.....	.....	4	.....	10	.....	sse.	0	0	.....	sw.	overcast
S. S. Gallia, N. 46° 59′, W. 65° 55′	30.03	762 7	44	6.7	?	w.	.....	.....	3	.....	10	.....	w.	hail	hail	mod.	w.	fair.
S. S. Marathon, Constantinople, Turkey	29.92	760.0	60	15.6	.....	wsw.	.....	.....	5	.....	3	.....	wsw.	0	0	.....	.....	
S. S. Parthia, N. 42° 44′, W. 50° 45′*†	29.70	754.4	51	10.6	.....	wsw.	.....	.....	5	.....	4?	.....	sw.	10 h'r	10 h'r	r'gh	w.	cloudy?

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		WEATHER.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Pavonia, N. 47° 18′, W. 41° 49′*	29.78	756.4	60	15.6	94	s.			7		9		s.	4 h'r	4 h'r	mod.	ssw.	threatening.
S. S. Colina, Glasgow, Scotland†	30.06	763.5				s.			1		3?		sw.	o	o			overcast?
S. S. Canada, N. 49° 41′, W. 22° 10′	30.40	772.2	53.6	12		sw.			5		6?		w.	o	o	h'vy	sw.	covered.?
S. S. Labrador, N. 49° 37′, W. 36° 15′			51.8	11		s.			6		7		sw.			h'vy	sw.	
S. S. Abyssinia, N. 51° 23′, W. 22° 12′ *	30.14	765.5	55	12.8	87	sw.			6		10		w.			h'vy	w.	drizzling.
S. S. Arizona N. 40° 28′, W. 72° 36′	30.23	767.8	39	3.9		n.			4		3		nw.	o	o	sm'h		fair.
S. S. Wyoming, New York, N. Y*	30.20	767.1	24	— 4.4		n.			2		6		e.	o	o			
S. S. Bohemia, N. 50° 11′, W. 2° 23′†	30.15	765.8				nnw.			6		5		nnw.			r'gh	nw.	foggy.
S. S. Cimbria, off Start Point, Eng	30.19	766.8	48.2	9.0		nnw.			6		3		n.	o	o	sm'h	w.	fair.
S. S. Gellert, N. 41° 20′, W. 66° 10′	29.90	759.4	53	11.7		ne.			6		9			4 h'r	4 h'r	long	wnw.	cloudy.
S. S. Silesia, N. 46° 12′, W. 43° 47′†	29.63	752.6	55	12.8		s.			9		4?		s.	1 h'r	1 h'r	5–6	sw.	overcast?
S. S. Vandalia, Hamburg, Germany			40.1	4.5		n.			3		10		n.	o	o			foggy.
S. S. Wieland, N. 45° 29′, W. 44° 47′	29.84	757.9				wsw.			6		10		wsw.	4 h'r	4 h'r	high	wsw.	
S. S. City of Berlin, N. 49° —′, W. 38° 30′	29.99	761.7	55	12.8	93	s.			5		4		ssw.	o	o	mod.	s.	fair.
S. S. Mentmore, Baltimore, Md *	30.23	767.8				nw.			3		2		n.	o	o			fair.
S. S. Nessmore, N. 42° 54′, W. 61° 36′	29.91	759.7	41	5.0	91	nw.			5		8		wsw.	o	o	long	w.	foggy.
S. S. Hevelius, S. 11° —′, W. 27° —′*†	29.99	761.7	80	26.7		ne.			5		8?		ne.	o	o			clear?
S. S. Ptolemy, off Barnegat, N. J	30.25	768.3	41	5.0	82	n.			3		8			o	o	2	nnw.	d. clouds.
S. S. Sirius, Lisbon, Portugal *	30.30	769.6				nne.			4		o			o	o			clear.
S. S. Bulgarian, N. 42° 34′ W. 68° 26′ *	30.19	766.8				wnw.			4		10		wnw.	1 h'r	1 h'r			cloudy.
S. S. Colorado, Galveston, Texas †	30.25	768.3	47	8.3		wnw.			5		6		wnw.	3 h'r	3 h'r			fair
S. S. Rio Grande, N. 24° 46′, W. 83° 40′†	29.90	759.4	75	23.9		sw.			4		7		wsw.	sh'rs	sh'rs	irreg.	sw.	heavy rain.
S. S. San Marcos, N. 34° 40′, W. 76° 25′	30.15	765.8	52	11.1		e.			5									
S. S. Archimede, N. 33° 56′, W. 26° 30′*†	30.42	772.7	72	22.2	71	ene.			4		2		ene.			r'gh	var.	clear.
S. S. Hermod, N. 40° 05′ W. 65° 52′†	30.22	767.6	44.6	7		nw.			2		8		w.	4 h'r	4 h'r	r'gh	wsw.	clearing.
S. S. Glenapp, S. 23° 00, W. 43° 00′ †	29.96	761.0	78	25.6		var.			1		hz.			o	o	mod.	se.	hazy.
S. S. Glenfyne, N. 8° 56′, W. 49° 05′						se.			5		8		ese.	4 h'r	4 h'r	mod	ese.	cloudy.
S. S. Chalmette, Algiers, La †	30.01	762.2	49	9.4		nw.			5		10		nw.	2 h'r	2 h'r			cloudy.
S. S. New York, N. 25° 35′ W. 84° 25′†	29.95	760.7	77.0	25.0		nw.			6		8		nw.	6 h'r	6 h'r	mod.	se.	cloudy.
S. S. Egypt, Sandy Hook, N. J						nnw.			4		8?		nnw.	o	o	mod.	nw.	clear?
S. S. Erin, Liverpool, Eng			51	10.6		sw.			6		10		sw.	8 h'r	8 h'r			squally.
S. S. Helvetia, N. 41° 18′, W. 58° 45′	29.80	756.9	44	6.7		nw.			5		5		nw.	4 h'r	4 h'r	long	nnw.	hailing.
S. S. Holland, N. 43° 05′, W. 57° 46′	29.68	753.9	39	3.9		nw.			6		8		nw.	4 h'r	4 h'r	r'gh	nw.	clearing.
S. S. Santiago, N. 37° 39′ W. 74° 18′	30.32	770.1	51	10.6	79	nne.			3		10		ne.	o	o	small	n.	squally.
S. S. City of Alexandria, Vera Cruz Roads, Mexico†	30.36	771.1	73	22.8		wnw.			8		9		nw.	o	o	h'vy	nw.	overcast.
S. S. Knickerbocker, N. 30° 04′, W. 77° 16′ *†	29.88	758.9	74	23.3		ssw.			9								nne.	
S. S. Leerdam, N. 39° 48′, W. 60° 40′*	29.86	758.4	56	13.3		nw.			6							ong		cloudy.
S. S. America, N. 44° 00′, W. 55° 03′ *	29.69	754.1	46.0	7.8	92	nw.			8		10		nw.	hail	hail	h'vy	nw.	squally.
S. S. Elbe, N. 48° 55′, W. 34° 18′	30.28	769.2	52.7	11.5	100	sse.			5		2		se.	o	o	long	s.	clear.
S. S. Hohenstaufen, N. 44° 38′, W. 7° 36′	30.46	773.7	52.7	11.5		nw.			5		9		nw.	shr's	sh'rs	cross	nnw.	covered.
S. S. Neckar, N. 50° 06′ W. 30° 01′	30.39	771.9	57.0	13.9	69	w.			3		3		wnw.	6 h'r	6 h'r	long	wsw.	clear.
S. S. Oder, N. 48° 44′, W. 35° 06′	30.20	767.1	56.7	13.7		se.			6		2			o	o	mod.	sse.	clear.
S. S. Ohio, N. 28° 38′, W. 93° 31′	30.23	767.8				n.			6		3		n.	2 h'r	2 h'r	r'gh	n.	fair.
S. S. Salter, Southampton, Eng						wnw.			6		5		wnw.	o	o			fair.
S. S. Strassburg, N. 20° 31′. W. 23° 13′	30.11	764.8	72	22.2	95	ne.			4		5			o	o	mod.	ne.	fair.
S. S. Werra, N. 46° 12′, W. 49° 41′*	29.48	748.8	44.6	7.0		wnw.			6		6		wnw.	4 h'r	4 h'r	high	w.	raining.
S. S. Belgic. N. 34° 20′. E. 138° 50′†	30.05	763.3	65	18.3	78	se.			2		10		se.	o	o	mod.	nw.	overcast.
S. S. Coptic, N. 40° 45′, W 145° 14′	29.66	753.4	50.5	10.3	65	nnw.			4		8		nw.	3 h'r	3 h'r	high	var.	cloudy.
S. S. Oceanic, N. 35° 15′, E. 150° 47′*	30.16	766.1	65	18.3	58	s.			2		3		wsw.			light	ne.	clear.
S. S. City of Augusta, Savannah, Ga †...	29.83	757.7				ne.			9		9?			o	o			cloudy.?
S. S. Mississippi, Seattle, Wash. Ter.†	30.22	767.6	37	2.8	81	calm			0		o							light fog.
S. S. Oregon, Portland, Oregon †	30.13	765.3	44	6.7	92	calm			0		o							
S. S. Ancon, N. 32° 46′, W 117° 23′†	30.13	765 3	57	13.9	94	ene.			2		10		e.			sm'h		foggy.
S. S. State of California, San Francisco, Cal *†	30.12	765.0	45	7.2	92	calm			0		4							fair.
S. S. Australia, Sydney, N. S W	29.88	758.9	68	20.0	95	ne.			3		8		ne.	o	o			cloudy.
S. S. City of New York, Sydney, N. S. W†	29.99	761.7	74	23.3	76	n.			1		10		n.	o	o			cloudy.
S. S. City of Pekin, Hong Kong, China †	30.41	772.4	65	18.3	52	nw.			1		o			o	o			clear.
S. S. City of Rio de Janeiro, Acapulco, Mexico†	30.00	762.0	76	24.4	73	e.			2		2		e.	o	o	light	sw.	fair.
S. S. City of Sydney, N. 36° 50′ W. 125° 11′ †	30.10	764.5	55	12.8	74	ese.			2		8		se.	o	o	mod.	se.	cloudy.
S. S. Grenada, Panama, Panama †	29.92	760.0	76	24.4	91	nw.			1		2		nw.	o	o			clear.
S. S. San Jose, N. 31° 35′ W. 117° 30′*†	30.30	769 6				nw.			3		8		nnw.	o	o	light	nnw.	
S. S. Zealandia, Honolulu, Sandwich Islands	30.01	762.2	76	24.4	91				3		5							fine.
S. S. Bermuda, N. 39° 49′, W. 73° 58′†	30.15	765.8	36	2.2		n.			2		3		n.	o	o	gentle	n.	fine.
S. S. Muriel, N. 19° 12′, W. 63° 31′	30.05	763.3	79	26.1		e.			4		10			o	o	mod.	ne.	overcast.
S. S. Claudius, N. 18° 10′, W. 86° 50′ †	30.02	762.5				s.			4		7		ssw.	o	o	short	s.	fair.
S. S. Valencia, Puerta Cabello, Venezuela †..	30.05	763.3	83	28.3	71	ne.			5		3		ne.	o	o	sm'h		fine
S. S. Belgenland, Antwerp, Belgium†	29.81	757.2	39	3.9	100	w.			4		9		w.	sq'lls	sq'lls			cloudy.
S. S. Pennland, N. 49° 48′, W. 11° 10′	30.40	772.1	52	11.1	86	wnw.			6		10		wnw.	1 h'r	1 h'r	long	n	threatening.
S. S. Rhynland, N. 44° 15′, W 55° 00′	29.64	752.8	44	6.7	92	nw.			7		8		nw.			high	wnw.	snowy.
S. S. Waesland, N. 49° 44′, W. 10° 50′	30.47	773.9	52	11.1	79	wnw.			4		10		nw.	o	o	long	nw.	cloudy.
S. S. Maas, N. 50° 44′, E. 0° 12′			56.8	13.8	82	nw.			6		9		nne.	8½h'r	8½h'r	7	w.	overcast.
S. S. P. Caland, N. 50° 06′, W. 10° 50′	30.37	771.4	50.2	10.1	92	w.			6		9		w.			5	wnw.	cloudy.
S. S. W. A. Scholten, N. 46° 59′, W. 41° 27′	29.82	757.4	51.6	10.9	65	ssw.			7		10		sw.	o	o	high	ssw.	
S. S. Zaandam, N. 47° 20′, W. 28° 13′			64.6	18.1	96	s.			5		9 n		n.	6 h'r	6 h'r	5	s.	hazy.
S. S. State of Florida, N. 53° 15′, W. 20° 45′	30.03	762.7	54	12.2		wsw.			6		10			6 h'r	6 h'r	high	wsw.	cloudy.
S. S. State of Indiana. N. 55° 19′, W. 9° 30′			42	5.6		sw.			2		10		w.	4 h'r	4 h'r	r'gh	nne.	drizzling.
S. S. State of Nevada, N. 47° 12′ W. 45° 20′†	29.45	748.0	44	6.7		s.			7		10		ssw.	hv'y	hv'y	high	sse.	heavy rain.
S. S. Thingvalla, N. 48° 36′, W. 50° 39′†	29.26	743.2	38.3	3.5		sse.			9		10		sse.	8 h'r	8 h'r	h'vy	sw.	covered.
S. S. Iowa, N. 42° 39′, W. 63° 47′ *†	30.07	763.8	37	2.8		wnw.			6		8		nw.	rain	rain	h'vy	wnw.	cloudy.
S. S. Plantyn, N. 50° 57′, E. 1° 48′									7		8		nw.	o	o	r'gh	nw.	
S. S. Baltic, N. 46° 18′, W. 40° 26′	29.97	761.2	61	16.1	88	sw.			6		6		sw.	o	o	r'gh	var.	d. clouds.
S. S. Celtic, Liverpool, Eng†	30.21	767.3	44	6.7	76	n.			5		8		nw.	sh'rs	sh'rs			fair.
S. S. Lepanto, N. 49° 50′, W. 5° 45′ *	30.41	772.4	50	10.0		nnw.			6		4		n.	o	o			clear.
S. S. Marengo, N. 47° 30′, W. 41° 10′*†	29.69	754.1				se.			8		6		ese.	3 h'r	3 h'r	con.	s.	cloudy.
S. S. Romano, New York, N. Y	30.18	766.6	26	— 3.3		n.			1		10		n.					
S. S. Salerno, N. 37° 16′, E. 7° 55′*	29.83	757.7	56	13.3		n			3		10		n.	3 h'r	3 h'r	r'gh	nnw.	raining.
S. S. Catherine Whiting, Philadelphia, Pa†	30.32	770.1				nw.			1									
S. S. Norman, N. 42° 23′, W. 71° 07′	30.17	766 3				w.			1		hz.			o	o			cloudy.
S. S. Saxon, Philadelphia, Pa*†	30.41	772.4	30	— 1.1		n.			6		10							
MISCELLANEOUS.																		
Bk. Adelaid, N. 31° 57′, W. 74° 02′ *†	30.16	766.1	70	21.1		ese.			6		10		ese.	o	o	r'gh	e.	cloudy.
Bg. Aleira, Maracaibo, Brazil	29.95	760.7	86	30.0		ene.			2		2		ne.	o	o			clear.
Bk. Annie M. Law, Kobe, Japan *†	30.24	768.1	45	7.2		wnw.			2		o			o	o			
S. S. Anna Thormann, S. 19° 19′ E. 74° 15′*	29.95	760.6	75.9	24.4	86	e.			5		10 n		e.	map.	map.	mod.	e.	misty.
Bk. Antonio Lopez, Havana, Cuba, W. I*	29.97	761.2	75	23.9	93	s.			2		3			o	o			hazy.
Bgt. Arthur, N. 37° 06′, W. 57° 10′ *†			48	8.9		wnw.			5		3		wnw.	5 h'r	5 h'r			clear.
Sch. B. J. Baker, Smithville, N. C *†	29.99	761.7				wnw.			5				wnw.	o	o	high	wnw.	
Sch. Bonny Doon, N. 42° 02′, W. 25° 35′*†	29.88	758.9				ne.			8		10		ne.					rainy.
S. S. Burswell, N. 27° 20′, W. 67° 21′*†	30.56	776.2				sse.			4		10		sw.	o	o	sm'h	e.	hazy.
Bk. Champion, N. 33° 20′, W. 17° 11′	30.10	764.5	81	27.2		ssw.			2		o		w.	o	o	sli't	con.	fine.
Schr. Chas. F. Heyer, N. 27° 06′, W. 83° 19′			63.6	17.6		one.			7		8		ne.	o	o	long	n.	fair.
Schr. C. R. Flint, Cedar Keys, Fla†	29.89	759.2	74	23.3	90	ssw.			3		9 8		sw.	1.85	47.0	r'gh	s.	squally.
S. S. Cornelius, N. 46° 48′, W. 33° 54′	29.85	758.2	62	16.7		nw.			3		10		wsw.	6 h'r	6 h'r			cloudy.
			59.0	15.0		sse.			3		9		ssw.	2 h'r	2 h'r	mod.	ssw.	sprinkling.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bkt. David Preston, New Orleans, La*†	30.15	765.8	60	15.6	.....	nw.	.....	.....	6	.....	0	.....	.....	0	0	.....	.....	
Bk. Don Quixote, Pasoeroen Roads, Java*	29.89	759.2	90	32.2	.....	nw.	.....	.....	6	.....	5?	.....	nw.	0	0	sm'h	.....	cloudy?
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†	30.20	767.1	36	2.2	.....	ne.	.....	.....	1	.....	7	.....	.....	0	0	.....	.....	cloudy.
S. E. J. Spicer, Off Little Gull Ids, N. Y.	30.26	768.6	51	10.6	100	nnw.	.....	.....	3	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bk. Eliza Barss, Bermuda, W. I †.	30.06	763.5	.....	.....	.....	nne.	.....	.....	2	.....	2	.....	nne.	0	0	.....	.....	clear.
Bk. E. L. Pettingill, N. 36° 47′, W. 123° 42′*†	30.20	767.1	58	14.4	.....	ese.	.....	.....	3	.....	8	.....	s.	0	0	sm'h	w.	cloudy.
S. Enoch Train, St. Thomas, W. I*†	30.20	767.1	.....	.....	.....	ese.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	
Bk. Essex, Muscat, Arabia*†	30.02	762.5	79	26.1	.....	nne.	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	nnw.	
Schr. F E. McDonald, Belfast, Maine†	30.07	763.8	.....	.....	.....	nw.	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	
S S. Foscolia, N. 16° 11′ W. 53° 28′	.....	.....	83	28.3	.....	ne.	.....	.....	3	.....	2	.....	ne.	0	0	sm'h	.....	fair.
Bk. Freya, N. 19° 06′ W. 44° 30′	.....	.....	.....	.....	.....	ene.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bg. George, Point Caledonia, N. S*†	29.70	754.4	.....	.....	.....	wsw.	.....	.....	5	.....	8	.....	.....	0	0	mod.	.....	fair.
S. Grecian, N. 29° 32′, W. 70° 40′†	30.07	763.7	72	22.2	71	ene.	.....	.....	4	.....	9	.....	e.	4 h'r	4 h'r	mod.	nw.	fair.
Bk. Grey Eagle, N. 28° 30′, W. 40° 00′	.....	.....	74	23.3	.....	nne.	.....	.....	5	.....	10	.....	ne.	sh'rs	sh'rs	light	ne.	hazy.
Bk. Gronsvaer, Wellington, N. Zealand†	30.35	770.9	66.0	18.9	97	var.	.....	.....	2	.....	4	.....	nw.	0	0	.....	.....	fair.
Bk. Hattie G. McFarland, New York, N. Y†	30.01	762.2	34	1.1	.....	ne.	.....	.....	1	.....	3	.....	n.	0	0	.....	.....	clear.
Schr. Hattie Weston, Port of Spain, Trinidad, W.I*†	30.08	764.0	83	28.3	.....	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
S. Hedwig, N. 39° 12′, W. 73° 12′	30.25	768.3	37.0	2.8	83	nne.	.....	.....	3	.....	9	.....	nne.	0	0	3	nw.	overcast
Bk. Heinrich & Tonio, N. 46° 50′, W. 26° 00′*†	30.53	775.4	58.5	14.7	.....	s.	.....	.....	4	.....	5	.....	wsw.	8 h'r	8 h'r	mod.	ssw.	clearing.
Schr. Isabel Alberto, Cedar Keys, Fla†	29.83	757.7	.....	.....	.....	nw.	.....	.....	3	.....	9	.....	w.	hv'y	h'vy	.....	.....	cloudy.
Schr. James Slater, N. 24° 39′, W. 66° 21′†	30.18	766.6	80	26.7	.....	se.	.....	.....	1	.....	0.	.....	.....	0	0	mod.	ene.	
Schr. Jennie N. Huddell, Savanah, Ga†	29.92	760.0	46	7.8	92	ne.	.....	.....	5	.....	10	.....	.....	rain	rain	.....	.....	stormy.
S. S. John Hopkins, Norfolk, Va	.....	.....	45	7.2	.....	ne.	.....	.....	6	.....	10	.....	n.	rain	rain	.....	.....	stormy.
Schr. John L. Thomas, N. 23° 45′, W. 83° 42′*†	30.04	763.0	.....	.....	.....	sw.	.....	.....	4	.....	10	.....	wnw.	0	0	mod.	sw.	threatening
Bg. John Wesley, N. 25° 50′ W. 79° 40′†	29.98	761.5	.....	.....	.....	nw.	.....	.....	5	.....	8	.....	nnw.	0	0	mod.	nw.	cloudy.
Bk. Joseph A. Ropes, N. 23° 30′ E. 58° 58′*†	30.10	764.5	76	24.4	73	calm	.....	.....	0	.....	0	.....	.....	.....	.....	mod.	.....	clear.
Light House Tender, Laurel, Key West, Florida†	29.93	760 2	77	25.0	.....	s.	.....	.....	3	.....	9	.....	sw.	3½h'r	3½h'r	.....	.....	cloudy.
Bk. Liberia, N. 8° 17′, W. 17° 47′*	29.91	759.7	84	28.9	79	ne.	.....	.....	1	.....	2	.....	.....	0	0	.....	.....	
Bg. Lilian, N. 25° 50′, W. 70° 17′ †	30.04	763.0	79	26.1	.....	wsw.	.....	.....	2	.....	10	.....	wsw.	1½h'r	1½h'r	mod.	s.	rainy.
S. S. Madrid, Annapolis, Md*†	30.30	769.6	32	0.0	90	ne.	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	fair.
S. S. Malabar, Suez Canal*†	29.98	761.5	.....	.....	.....	nne.	.....	.....	6	.....	5?	.....	ne.	0	0	sm'h	.....	cloudy?
Bg. Mary Gibbs, N. 38° 25′, W. 70° 48′*†	30.05	763.3	51	10.6	.....	nw.	.....	.....	2	.....	10	.....	n.	0	0	2	wnw.	cloudy.
Bk. Matilda C. Smith, N. 29° 50′ W. 36° 30′*†	30.25	768.3	.....	.....	.....	se.	.....	.....	7	.....	8	.....	s.	6 h'r	6 h'r	mod.	.....	threatening
Schr. Moravian, N. 12° 33′, W. 81° 43†	30.08	764.0	.....	.....	.....	ne.	.....	.....	.....	.....	.....	.....	ne.	0	0	long	n.	cloudy.
S. M. P. Grace. N. 8° 08′, W. 120° 28′*	29.85	758.2	78	25.6	.....	s., se.	.....	.....	5	.....	5	.....	se.	slight	slight	short	ese.	
Bg. Myrtle, Boston, Mass†	30.12	765.0	.....	.....	.....	nw.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	clear.
Bk. Northern Queen, N. 37° 21′, W. 53° 00′*†	29.90	759.4	76	24.4	64	nw.	.....	.....	8	.....	5	.....	n.	.....	.....	h'vy	.....	
Bg. O. C. Clary, N. 13° 28′, W. 56° 40′*†	29.96	761.0	80	26.7	96	ene.	.....	.....	4	.....	1	.....	e.	.....	.....	sm'h	.....	clear.
Bk. Orpheus, N. 46° 42′, W. 20° 23′	30.64	778.2	60	15.6	.....	wsw.	.....	.....	3	.....	4 ks	.....	sw.	0	0	sm'h	.....	fair.
S.Paramita, San Francisco, Cal	.....	.....	50	10.0	.....	calm	.....	.....	0	.....	.....	.....	.....	0	0	.....	.....	foggy.
S. S. Radnorshire, N. 8° 34′, E. 68° 39′*†	29.86	758.4	.....	.....	.....	nne.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear.
S. St. Francis, N. 0° 50′, W. 114° 45′†	29.91	759.7	68	20.0	.....	ne.	.....	.....	2	.....	3	.....	e.	0	0	mod.	se.	fine.
Bk. Scud, N. 10° 44′, W. 57° 30′*†	29.96	761.0	.....	.....	.....	ene.	.....	.....	6	.....	2	.....	ene.	0	0	sm'h	.....	
Bk. Southern Belle, Antwerp, Belgium*†	29.80	756.9	45	7.2	.....	n.	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	clear.
S. S. Strathleven, N. 16° 56′, E. 40° 44′	29.90	759.4	80.8	27.1	87	sse.	.....	.....	5	.....	.....	.....	.....	.....	.....	4	se.	blue sky.
S. S. Sunbeam, N. 36° 27′ W. 22° 44′	30.49	774.4	65	18.3	84	e.	.....	.....	5	.....	8	.....	e.	½ hr	½ hr	4	e.	d. clouds.
Bk. Truro, N. 43° 10′, W. 53° 15′†*	29.78	756.4	.....	.....	.....	w.	.....	.....	6	.....	8	.....	w.	2 h'r	2 h'r	mod.	sw.	fair.
U.S.F.C.S.S.Fish Hawk, Washington, D. C†	30.34	770.6	30	—1.1	.....	nne.	.....	.....	1	.....	8?	.....	calm	0	0	.....	.....	clear?
Bk. Usko, N. 48° 09′ W. 40° 53′*	29.87	758.7	57	13.9	.....	se.	.....	.....	6	.....	10	.....	s.	0	0	r'gh	sse.	cloudy.
Bk. Vincenzo Accame, N. 38° —′, W. 13° 30′†	30.48	774.3	62.6	17	.....	ne.	.....	.....	6	.....	2	.....	ne.	0	0	r'gh	n.	clear.
Schr. Walter L. Plummer, N. 20° 53′, W. 73° 41′*†	30.10	764.5	.....	.....	.....	ese.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	.....	fine.
Bk. Wandering Jew, S. 32° 10′, W. 50° 00′†.	30.19	766.8	67	19.4	.....	ssw.	.....	.....	8	.....	5	.....	s.	4 h'r	4 h'r	large	ssw.	fair.
Bk.Warden Law, S. 24° 48′, W. 72° 28′	30.09	764.3	.....	.....	.....	calm	.....	.....	0	.....	10	.....	nnw.	0	0	sm'h	ssw.	covered.
Bgt. Willie, S. 34° 10′, E. 27° 45′*†	30.08	764.0	80	26.7	.....	sw.	.....	.....	4	.....	4	.....	sw.	2 h'r	2 h'r	light	sw.	fair.
S. Wm. Woodbury, N. 39° 24′, W. 48° 44′*†	29.87	758.7	62	16.7	.....	sw.	.....	.....	7	.....	6	.....	sw.	.....	.....	high	w.	squally.

International Chart I. November 28, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 29, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.30	769.6	59.7	15.4	87	n.	.....	.....	1	.....	4	.....	.....	0	0	cloudy	Malaterre.
Algiers	.....	.....	30.26	768.6	59.0	15.0	58	nw.	.....	.....	2	.....	8	.....	.....	0.169	4.3	very cloudy	Thève.
La Calle	.....	.....	30.14	765.6	60.4	15.8	61	nw.	.....	.....	5	.....	5	.....	.....	0.354	9.0	cloudy	Foufrède.
Tunis	.....	.....	30.12	765.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.27	768.8	56.8	13.8	59	n.	.....	.....	2	.....	6	.....	.....	0.020	0.5	cloudy	Pérès.
Tebessa	.....	.....	30.22	767.7	44.6	7.0	74	nnw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair	Dognon.
Geriville	.....	.....	.....	.....	51.4	10.8	36	n.	.....	.....	3	.....	2	.....	.....	0	0	fair	Louchamp.
Laghouat	.....	.....	30.24	768.0	58.4	13.0	45	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.24	768.0	68.7	20.4	39	nw	.....	.....	2	.....	3	.....	.....	0	0	pretty fair	Malau.
Australian.																			
Melbourne, Victoria	30.21	767.3	30.30	769.6	55.0	12.8	66	sse.	13	5.8	.....	.....	2	.....	.....	0.04	1.0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.45	748.0	30.02	762.4	39.9	4.4	63	s.	.....	.....	2	.....	3	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29 20	741.6	29.99	761.8	36.3	2.4	75	w.	0.7	0.3	.....	.....	5	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.04	737.5	29.94	760 5	37.8	3.2	70	calm	.....	.....	0	2c;cs	0	w.	.....	0	0	.....	Julius Mikolik.
Gratz	28.72	729.5	30.00	762.1	40.1	4.5	71	nw.	.....	.....	2	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.39	721 2	29.86	758.4	39.4	4.1	92	nw.	.....	.....	2	.....	10	.....	.....	0.465	11.8	rain & snow	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.67	728.3	30.07	763.8	34.2	1.2	87	w.	.....	.....	1	.....	10	.....	.....	0.020	0.5	gloomy	The Staff.
Lemberg	28.95	735.3	29.98	761.5	32.7	0.4	92	nw.	.....	.....	1	.....	10	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.83	757.6	29.94	760.5	46.4	8.0	44	ene.	.....	.....	1	.....	7	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.39	746.6	29.86	758.4	41.0	5.0	89	nw.	.....	.....	2	.....	10	.....	.....	0	0	light fog	Joseph Midlinszky, S. J.
Szegedin	29.62	752.4	29.91	759.7	41.4	5.2	66	nw.	.....	.....	1	.....	4	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.90	759.5	30.00	762.1	44.2	6.8	51	e.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....
Vienna	29.30	744.3	30.05	763.2	37.8	3.2	75	wnw.	.....	.....	2	.....	2	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.61	752.1	29.71	754.6	39.1	3.9	90	ssw.	8	3.6	.....	.....	10	.....	.....	0.180	4.6	raining	W. Boswell
Armagh, Observatory	29.66	753.4	29.91	759.7	43.7	6.5	88	sw.	9	4.0	.....	.....	3	.....	.....	.....	.....	d. clouds	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.77	756.1	45.7	7.6	84	w.	33	14.8	.....	.....	4	.....	.....	.....	.....	d. clouds	John Hartnup.
Bolton, Sharples	29.22	742.2	29.76	755.9	44.2	6.8	88	nw.	12	5.4	.....	.....	9	.....	.....	.....	.....	overcast	Thomas Mackereth.
Bradford, Yorkshire	29.33	745.0	29.72	754.9	42.3	5.7	86	nw.	.....	.....	1	.....	5	.....	.....	0.01	0.3	d. clouds	McLandsborough & Preston
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	82.0	27.8	74	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H.C.
Cardington	.....	.....	.....	.....	42.6	5.9	81	w.	.....	.....	1.0	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E	29.58	751.3	29.71	754.6	42.1	5.6	98	n.	.....	.....	1	.....	10	.....	.....	blank	blank	misty	Corpl. G. A. Pickles.
Falmouth, Observatory	29.74	755.4	29.97	761.2	48.7	9.3	71	nw.	.....	.....	6	.....	6	.....	.....	.....	.....	squally	The Staff.
Fort Napier, Natal	27.58	700.5	29.80	756.9	89.0	31.7	37	ne.	.....	.....	1	.....	7	.....	.....	.....	.....	.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	87.0	30.6	65	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.22	767 6	30.27	768.8	58.2	14.6	85	ne.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.55	750.6	29.75	755.6	34.4	1.3	95	wnw.	.....	.....	1	.....	fg.	.....	.....	.....	.....	foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.54	750 3	29.72	754.9	44.6	7.0	84	nnw.	.....	.....	4	.....	10	.....	.....	.....	.....	drizzling	The Staff.
Guernsey	29.61	752.1	29.91	759.7	49.0	9.4	71	nw.	.....	.....	3	.....	9	.....	.....	blank	blank	d. clouds	A. Collenette, F. M. S
Kew, Observatory	29.70	754.4	29.74	755.4	45.3	7.4	80	nw.	18	8.0	.....	.....	10	.....	.....	.....	.....	drizzling	The Staff.
Leicester, Museum	29.48	748.8	29.74	755.4	45.5	7.5	80	nw.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.94	760 5	30.02	762.5	59.0	15.0	95	sw.	.....	.....	2	.....	7	.....	.....	blank	blank	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.90	761.0	30.01	762.2	73.0	22.8	97	nw.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.22	742.2	29.76	755 9	44.2	6.8	85	nw.	.....	.....	4	.....	9	.....	.....	.....	.....	raining	Warren Middleton.
Oxford, Radcliffe Obs'y	29.53	750.0	29.76	755 9	45.9	7.7	86	nw.	.....	.....	6	.....	7	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.85	758.2	29.92	760.0	47.0	8.3	89	nnw.	.....	.....	3	.....	6	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	29.53	750.0	29.63	752.6	39	3.9	100	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	raining	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.75	755 6	29.82	757.4	65.8	18.8	60	s.	.....	.....	2	.....	8	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.45	748.0	29.73	755.1	44.0	6.7	90	nw.	.....	.....	1	.....	10	.....	.....	0.01	0.3	overcast	W. F. Cooper.
Silloth Rectory	29.72	754.9	29.75	755.6	45.0	7.2	86	wnw.	.....	.....	2	.....	2	.....	.....	0.040	1.0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.77	756.1	43.9	6.6	79	wnw.	19	8.5	.....	.....	10	.....	.....	.....	.....	d. clouds	I. New.
Stratfield Turgiss	29.56	750.8	29.78	756.4	45.0	7.2	84	nw.	.....	.....	3	.....	5	.....	.....	.....	.....	d. clouds	Rev. C. H. Griffith, s, F M.S.
Truro, Royal Institution	29.95	760.7	30.00	762 0	52	11.1	66	nw.	.....	.....	7	.....	5	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	30.08	764.0	30.11	764.8	48.6	9.2	81	nw.	26	11.6	.....	.....	5	.....	.....	blank	blank	squally	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	30.14	765.5	30.18	766.6	25	— 3.9	86	se.	1	0.4	.....	.....	10 s	.....	calm	0	0	cloudy	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.13	765.3	30.20	767.1	8	—13.3	87	calm	0	0	.....	0	0	.....	calm	0	0	clear	H. J. Cundall, C. E
Chatham, N. B*	30.16	766 1	30.18	766.6	19	— 7.2	80	n.	13	5.8	.....	.....	10 n	.....	calm	.....	.....	light snow	G. A. Blair.
Father Point, Quebec*	30.13	765.3	30.20	767.1	8	—13.3	87	calm	0	0	.....	0	0	.....	calm	0	0	clear	G. A. Blair.
Fort Garry, Manitoba*	30.16	766 1	30.18	766.6	19	— 7.2	80	n.	13	5.8	.....	.....	10 n	.....	calm	.....	.....	light snow	J. McWilliams.
Halifax, N. S*	29.48	748.8	30.39	771.9	6	—14.4	100	sw.	5	2.2	.....	.....	10 n?	.....	.....	0	0	clear?	James Stewart.
Kingston, Ontario*	30.06	763.5	30.19	766.8	27	— 2.8	88	n.	2	0.9	.....	8 k	0	w.	.....	0	0	cloudy	A. Allison.
Montreal, Quebec*	29.77	756.1	30.13	765.3	21	— 6.1	87	ne.	12	5.4	.....	.....	10 s	.....	ne.	0	0	cloudy	A. P. Knight, M. A.
Parry Sound, Ontario*	29.94	760.5	30.16	766.1	20	— 6.7	91	ne.	4	1.8	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	C. H. McLeod, C. E.
Port Dover, Ontario	29.47	748.5	30.21	767.3	21	— 6.1	84	n.	9	4.0	.....	5 k	5 ks	ne.	ne.	0	0	cloudy	Rev. R. Mosley.
Port Stanley, Ontario	29.36	745.7	30.10	764.5	20	— 6.7	100	ne.	14	6.3	.....	.....	10 n	.....	.....	0.05	1.3	light snow	H. Morgan.
Quebec, Quebec*	29.41	747 0	30.10	764.5	20	— 6.7	91	n.	10	4.5	.....	.....	10 n	.....	n.	0.05	1.3	cloudy	M. Payne.
Rockliffe, Ontario*	29.84	757 9	30.19	766.8	12	—11.1	83	calm	.....	.....	0	.....	8 k	.....	.....	0	0	cloudy	Capt. Ashe, R. N.
Saugeen, Ontario*	29.71	754.6	30.21	767.3	19	— 7.2	70	se.	5	2.2	.....	.....	10 s	.....	n.	0	0	cloudy	W. H. McIntyre.
St. Andrews, N. B	29.42	747.3	30.17	766.3	24	— 4.4	88	ne.	9	4.0	.....	.....	10 s	.....	.....	inap.	inap.	light snow	.....
Sydney, C. B*	30.08	764.0	30.13	765.3	22	— 5.6	86	ne.	2	0.9	.....	.....	1c n	.....	.....	0	0	cloudy	.....
Toronto, Ontario*	30.14	765.5	30.20	767.1	30	— 1.1	81	sw.	6	2.7	.....	5 c;k	5 s	.....	.....	0	0	cloudy	T. C. Hill, C. E
Yarmouth, N. S*	29.73	755.1	30.14	765.5	21	— 6.1	91	ne.	10	4.5	.....	.....	10 n	.....	.....	0.01	0.3	light snow	Magnetic Observatory.
	30.02	762.5	30.09	764.3	28	— 2.2	84	e.	3	1.3	.....	.....	10 k	.....	sw.	0	0	cloudy	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.66	728.0	30.16	766.1	18.0	— 7.8	84	nnw.	.....	.....	3	.....	10 s	.....	.....	0.057	1.4	overcast	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	32	0.0	100	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.12	765.0	30.15	765.8	72.0	22.2	69	s.	4.7	2.1	.....	0	2 k	.....	.....	0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	30.04	763.0	30.08	764.0	78.5	25.8	65	s.	26	11.6	.....	0	2	.....	.....	0	0	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction Upper.	Clouds. Direction Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	30.15	765.8	32.0	0.0	61	w.	4.7	2.1	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.35	771.0	30.38	771.6	35.1	1.7	83	nw.	0.4	0.2	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.89	759.3	29.94	760.5	32.2	0.1	79	nw.	.....	.....	2	.....	9	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	29.84	757.9	29.86	758.5	33.4	0.8	87	ese.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.25	742.9	29.29	744.0	31.6	— 0.2	100	s.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	S. Kleinschmidt.
Ivigtut	29.19	741.3	29.21	741.8	39.6	4.2	.....	se.	.....	.....	6	.....	9	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	30.26	768.6	30.30	709.7	18.7	— 7.4	86	e.	.....	.....	7	.....	2	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.98	761.6	30.02	762.5	29.8	— 1.2	82	n.	25	11	.....	.....	3	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.80	757.0	29.90	759.4	31.1	— 0.5	88	e.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	Loearer Oesterbol.
Jacobshavn	29.54	750.4	29.59	751.6	12.6	—10.8	..	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.53	750.1	30.16	766 9	46.0	7.8	94	sw.	.....	.....	1	.....	8	.....	w.	0.020	0.5	light rain	M. Labroue, Director.
Alençon, Normal School	29.33	744.9	29.88	758.9	46.8	8.2	97	nw.	.....	.....	1	.....	10 n	.....	se.	.....	.....	raining	M. Nicot, Director.
Arras, Engineer School	29.47	748.5	29.74	755.3	34.3	1.3	98	s.	.....	.....	1	.....	10	.....	.....	0.240	6.1	covered	M. Fénéon, Command't.
Avignon, Normal School	29.92	760.0	30.00	762.0	45.3	7.4	57	nw.	.....	.....	2	.....	10	.....	.....	0	0	covered	M. Giraud, Director.
Bar-sur-Seine	29.38	740.3	29.96	761.0	36.1	2.3	100	ssw.	.....	.....	2	.....	10	.....	ssw.	0.024	0.6	rain & snow	M. Saillard, Director.
Beauvais, Normal School	29.50	749.4	29.78	756.4	41.5	5.3	87	ssw.	.....	.....	2	.....	10	.....	wnw.	0.185	4.7	covered	M. Frère Eugène Marie.
Besançon, Normal School	29.10	739.0	30.01	762.3	40.5	4.7	71	s.	.....	.....	2	.....	n	.....	ssw.	0.31	8.	.....	M. Gobin, Director.
Bordeaux, Observatory	29.85	758.3	30.12	765 0	49.8	9.9	84	sw.	.....	.....	1	.....	10	.....	.....	0.016	0.4	raining	M. Rayet, Director.
Bourges, Normal School	29.31	744.4	29.87	758.6	39.2	4	93	ssw.	.....	.....	2	.....	10 n	.....	ssw	.....	.....	rain & snow	M. Malet, Director.
Brest, Naval Observatory	29.80	756.9	30.04	763.1	50.7	10.4	74	nw.	.....	.....	4	.....	9	.....	nw.	0.177	4.5	raining	M. de Kermaree, Dir.
Caen, Normal School	29.91	759.8	29.99	701.7	48 6	9.2	71	wnw.	.....	.....	3	.....	10	.....	.....	0.217	5.5	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.56	750.8	29.89	759.1	35.1	1.7	87	s.	.....	.....	2	.....	10	.....	.....	0.016	0.4	covered	M. Jadot, Director.
Charleville, Normal School	29.35	745.5	29.87	758.7	34.5	1.4	77	se.	.....	.....	2	.....	10	.....	.....	0.24	6.	snowing	M. Grimard, Director
Clermont-Ferrand Obs'y	28.68	728.5	30.10	764.6	33.4	0.8	92	sse.	.....	.....	1	.....	10	.....	.....	0.004	0.1	covered	M. Allnard, Director.
Cluny, Normal School	29.22	742.3	30.10	764.5	38.3	3.5	62	ssw.	.....	.....	2	.....	10	ssw.	ssw.	.....	.....	light snow	M. de Villemontée, Dir.
Commercy, Normal School	29.09	738.8	29.98	761.4	38.1	3.4	83	s.	.....	.....	1	.....	10	s.	s.	0.189	4.8	covered	Dr. Coulet, Director.
Gap, Normal School	27.56	699.9	30.19	766.9	35.6	2	67	ne.	.....	.....	3	.....	3	.....	s.	0.177	4.5	.....	M. Jeanglrard, Director.
Gréasque, du Rhone	28.97	735 9	30.13	765.4	42.4	5.8	61	nw.	.....	.....	3	.....	7	.....	nw.	0	0	.....	M. Kina, Director.
Grenoble. Normal School	29.37	740.0	30.17	766 2	41.0	5	63	se.	.....	.....	1	.....	ks	.....	n.	0.433	11.0	.....	M. Ablard, Director.
Guéret	28 39	721.0	30.01	762.3	36.5	2.5	89	s.	.....	.....	6	.....	10	.....	s.	0.020	15.9	covered	M. Delorme, Dir.
Lamballe, Normal School	29.65	753.1	29.93	760.1	46.8	8.2	89	wnw.	.....	.....	3	0	8 n	.....	wnw.	0.205	5.2	raining	M. Ollivault, Director.
Lescar, Normal School	29 64	752.9	30.22	767.5	49.1	9.5	82	wsw.	.....	.....	3	.....	10	.....	.....	0.283	7.2	covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.94	760.4	30.04	763.0	52.2	11.2	86	wnw.	.....	.....	2	.....	10	w.	calm	0.031	0.8	raining	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.04	737.6	30.13	765 4	39.2	4.0	73	s.	.....	.....	2	.....	10	.....	.....	0	0	dense haze	M. André, Director.
Mans, Normal School	29.54	750.2	29.84	757.9	48.0	8.9	87	nw.	.....	.....	1	.....	.....	.....	ne.	0	0	.....	M. Piboen, Director.
Marseille, Observatory	29.83	757.6	30.10	764.6	46.6	8.1	46	nw.	.....	.....	2	.....	10	.....	nw.	0.256	6.5	.....	M. Stephan, Director.
Mt. Louis	24 80	629.9	29.64	752.9	36.3	2.4	56	w	16.8	7.5	.....	.....	8	.....	ne.	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	30.02	762.6	30.15	765.9	46.8	8.2	67	nw.	.....	.....	2	.....	5	nw.	.....	.....	.....	light rain	M. Galzin, Director.
Nancy, Normal School	29.12	739.6	29.92	760.0	38.5	3.6	80	sse.	.....	.....	1	.....	n	.....	.....	0.204	6.7	.....	M. Basse, Director
Nantes, Observatory	29 81	757.2	29.97	761.3	50.0	10.0	75	nw.	.....	.....	2-3	.....	10 n; kn	.....	nw.	0.024	0.6	.....	M. Larocque, Director.
Perpignan, Observatory	30.09	764.3	30.21	767.2	53.8	12.1	44	nw.	7.4	3.3	.....	.....	8	nnw	.....	0.071	1.8	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21 19	538.2	.....	.....	21.2	— 6.0	.....	nw.	.....	.....	2	.....	10	.....	nw.	1.496	38.0	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.04	737.7	30.14	765.5	42.8	6	61	ne.	.....	.....	1	.....	10	ne.	ne.	0	0	covered	M. Taillieu.
Puy de Dôme Obs'y, Summit	24.97	634.2	.....	.....	25.3	— 3.7	100	wsw.	.....	.....	6	.....	10	.....	.....	0.201	5.1	snow & fog	M. Allnard, Director.
Rochefort, Naval Obs'y	29.97	701 3	30.00	762.1	51.1	10.6	100	sw.	.....	.....	3	.....	10	.....	w.	0.35	9.	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.71	754.6	29.93	760.1	52.9	11.6	95	sw.	.....	.....	4	.....	10	.....	e.	0.098	2.5	light rain	M. Brotier, Director.
Rodez, Normal School	27.98	710.8	30.22	767.5	36.5	2.5	96	n.	.....	.....	2	.....	10	.....	.....	0	0	covered	M. Seger, Director.
Rouen, Normal School	29.71	754.7	29.76	755.9	47 1	8.4	89	wnw.	.....	.....	1	.....	8	nw.	.....	0.406	10.3	very cloudy	M. Moullot.
Saint Lô	.....	.....	.....	.....	49.3	9.6	72	w.	.....	.....	2	.....	.....	.....	n.	0.508	12.9	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.64	752.8	29.80	757.0	36.9	2.7	98	ssw.	.....	.....	1	.....	10	.....	.....	0.291	7.4	.....	M. Renou, Director.
Toulouse, Observatory	29.52	749.8	30.25	768.3	47.7	8.7	71	wsw.	.....	.....	3	.....	10	nw.	.....	0	0	covered	M. Baillaud, Director.
Tours	29.67	753.5	29.84	758.0	48.6	9.2	86	sw.	.....	.....	2	.....	10	.....	nw.	0.067	1.7	rainy	M. de Tastes.
Versailles, Observatory	29.30	744.2	29.79	756.7	38.8	3.8	97	sw.	.....	.....	3	.....	.....	.....	.....	0.382	9.7	.....	Dr. A. Bérigny, Director
German.																			
Ansbach	28.56	725.5	30.08	763 9	34.2	1.2	86	sw.	.....	.....	2	.....	8	sw.	.....	0.169	4.3	.....	Prof. Jnedt.
Bamberg	29.16	740.7	30.00	702.1	39.2	4.0	73	w.	.....	.....	1	.....	10	.....	.....	0.639	1.0	snowing	Prof. Dr. Hoh.
Berlin	29.77	756.2	29.95	760.8	41.0	5.0	69	w.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.48	748.8	30.01	762.3	35.4	1.9	86	nw.	.....	.....	2	.....	5	wsw.	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.57	751.1	30.02	762.6	38.8	3.8	83	sw.	.....	.....	4	.....	10	sw.	.....	0	0	.....	Albert Senz.
Cassel	29 18	741.2	29.89	758.3	37.8	3.2	87	sw.	.....	.....	1	.....	4	sw.	.....	0.004	0.1	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.65	753 1	30.00	762 1	38.1	3.4	92	ssw	.....	.....	2	.....	10	.....	.....	0.008	0.2	.....	Physical Society.
Friedrichshafen	28.60?	720.3?	30.08	764.0	39.6	4.2	69	ssw.	.....	.....	2	.....	4	sw.	.....	0.043	1.1	.....	Wilhelm, Chief Tel.
Hamburg	29.84	757.9	29.93	760.2	36.9	2.7	79	sse.	.....	.....	2	.....	7	.....	.....	0	0	.....	E. Preller.
Kiel	29.91	759.6	29.92	760.0	34.9	1.6	88	ese.	.....	.....	2	.....	5	.....	.....	0.008	0.2	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.57	751.0	30.00	762.1	37.8	3.2	81	w.	.....	.....	3	.....	10	w.	.....	0	0	prinkling	H. Leppig, Asst.
Magdeburg	29 77	756.2	29.97	761.2	37.8	3.2	81	calm	.....	.....	0	.....	10 ks	.....	w.	0	0	.....	Weather Observatory.
Memel	30.04	703.1	30.09	764 3	21.9	— 5.6	75	ene.	.....	.....	4	4 cs	0	.....	.....	.....	.....	.....	Issermann.
Munich	28.21	716 4	30.07	763.8	35.8	2.1	65	nw.	.....	.....	2	.....	6	sw.	.....	0.007	1.7	.....	Central Station.
Neufahrwasser	29.21	741.9	30.01	762.3	33.6	0.9	85	ne.	.....	.....	1	.....	10	.....	.....	0.197	5.0	raining	A. Lothes.
Neustadt, Palatinate	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	Dicknether.
Stuttgart	29.04	737.5	29.96	760 9	39.6	4.2	66	w.	.....	.....	2	.....	7	w.	.....	0.035	0.9	.....	Prof. Dr. Schoder.
Wustrow	29.97	701.3	30.00	761.9	32.4	0.2	85	se.	.....	.....	2	.....	10 8	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.45	747.9	29.83	757.6	66.2	19.0	.....	s.	.....	.....	4.0	0	6 k	.....	.....	0.043	1.1	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.01	762.2	30.06	763.5	81.8	27.7	45	sw.	12.0	5.4	.....	.....	3	.....	.....	0	0	d. clouds	
Deesa	29.48	748.8	29.96	761.0	75.7	24.3	69	une.	22.0	9.8	.....	.....	2	sw.	.....	0	0	hazy	
Bombay	29.86	758 5	29.90	759.5	80.2	26.7	82	wnw.	7.0	3.1	.....	.....	3	s.	wsw.	0	0	d. clouds	
Poona, Yarrowda	28.06	712.6	29.92	759.8	78.9	26.1	62	e.	4.0	1.8	.....	.....	8	e.	e.	0	0	d. clouds	
Trichinopoly	29.58	751.4	29.86	758.6	75.3	24.1	92	ne.	1.0	0.4	.....	.....	10	.....	.....	0.43	10.9	overcast	
Bellary	28.41	721.6	29.89	759.1	78.0	25.6	78	ne.	.....	.....	.....	.....	10	.....	.....	0	0	gloomy	
Belgaum	27.36	695.0	29.90	759.5	76.4	24.7	65	ne.	7.0	3.1	.....	.....	9	s.	ne.	0	0	d. clouds	
Lahore	29.25	742.9	30.02	762.5	65.6	18.7	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.04	737.6	29.97	761.2	66.6	19.2	41	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.42	747.2	30.00	761.9	72.7	22.6	35	calm	0	0	.....	.....	4	.....	.....	0	0	d. clouds	
Nagpur	28 87	733.3	29.92	759.9	77.9	25.5	75	ese.	2.0	0.9	.....	.....	2	.....	.....	0	0	blue sky	
Jubbulpore	28.63	727.3	30.02	762.5	70.0	21.1	80	calm	0	0	.....	.....	3	n.	.....	0	0	d. clouds	
Lucknow	29.61	752.2	30.00	761.9	75.2	24.0	50	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.68	753.8	30.00	762.0	64.8	18.2	94	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.82	757.3	30.01	762.2	69.1	20.6	77	wnw.	2.0	0.9	.....	.....	4	wnw.	wnw.	0	0	d. clouds	
Hazaribagh	27.94	709.7	30.02	762.4	63.7	17.6	80	nw.	5.2	2.3	.....	.....	1	.....	.....	0.02	0.5	drizzling	
Cuttack	29.89	759.1	29.97	761.2	77.1	25.1	74	n.	2.0	0.9	.....	.....	4	.....	.....	0	0	d. clouds	
Calcutta, Alipore	29.94	760.4	29.96	761 0	75.5	24.2	78	nnw	2.0	0.9	.....	.....	1	.....	.....	0	0	d. clouds	
Dhubri	29.85	758.1	29.97	761.2	72.0	22.2	77	nne.	2.6	1.2	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.84	757 9	29.93	760 2	75.4	24.1	79	calm	1.7	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.66	753.4	30.01	762.2	67.0	19.4	87	ne.	1.0	0.4	.....	.....	4	.....	.....	0	0	blue sky	
Zanzibar, Africa	29.81	757.2	29.83	757.7	85.7	29.8	61	ene.	8.8	3.9	.....	.....	3	.....	.....	0.03	0.8	d. clouds	
Jeypore	28.54	725.0	30.01	762.2	75.3	24.1	55	e.	2.2	1.0	.....	.....	8	.....	e.	0	0	d. clouds	
Italian.																			
Udine	29.59	751.6	30.01	762.2	44.2	6.8	40	w.	0.7	0.3	.....	.....	0	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.48	748.9	30.02	762.4	43.9	6.6	43	w.	7.4	3.3	.....	.....	0	.....	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.88	759.0	30.00	761 9	45.9	7.7	52	ssw.	6.3	2.8	.....	.....	1	sw.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.09	738.8	30.01	762.3	43.0	6.1	52	e.	6.3	2.8	.....	.....	2	.....	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Genoa	29.84	758.0	30.04	762.9	51.4	10.8	18	ne.	3.8	1.7			2	sw.		0	0		Prof. G. M. Garibaldi.
Mondovi	27.66	702.5	29.61	752.1	45.1	7.3	25	ese.			2		1	w.		0	0		Prof. D. C. Bruno.
Pesaro	29.92	760.0	29.97	761.2	46.8	8.2	70	nw.	28.0	12.5			6	nnw.		0	0		Prof. Luigi Guidi.
Florence	29.76	756.0	30.02	762.6	49.1	9.5	44	ne.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.87	758.8	29.96	761.0	49.8	9.9	42	n.	1.8	0.8			0			0	0		Prof. P. Monte.
Rome	29.73	755.2	29.91	759.7	50.4	10.2	41	n.	14.3	6.4			0			0	0		Prof. P. Tachini.
Lecce	29.49	749.1	29.75	755.6	52.0	11.1	63	nnw.	9.4	4.2			9	nw.		0.079	2.0		Prof. C. de Giorgi.
Cosenza	28.95	735.4	29.85	758.2	50.4	10.2	74	sw.	2.5	1.1			10	w.		0.161	4.6		Prof. D. Conti.
Cagliari	29.85	758.3	30.05	763.3	49.5	9.7	75	nw.			2		6	nw.		0.583	14.8		Prof. A. Pacinotti.
Palermo	29.74	755.4	29.99	761.7	54.3	12.4	38	nw.	18.6	8.3			7	nw.		0.197	5.0		Prof. G. Cacciatore.
Syracuse	29.91	759.8	29.96	760.9	58.6	14.8	46	wnw.	23.7	10.6			5	w.		0.228	5.8		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.33	745.0	29.86	758.5	50.0	10.0	68	nw.	1.3	0.6			3	ne.		0.169	4.3		Prof. F. Brioschi.
Stelvio	21.91	556.6			8.2	—13.2	76	sw.			2		4			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.97	557.9			13.6	—10.2	65	e.			2		3			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.55	750.6	29.58	751.4	44.8	7.1	79	nw.			2		10 n		w.	0.209	5.3	raining	Hattori.
Awomori	29.49	749.0	29.53	750.0	40.0	4.4	84	w.	9.8	4.4			10 n			0.295	7.5	light rain	K. Ogawa.
Hakodate	29.46	748.2	29.47	748.5	42.5	5.8	66	w.	24.0	10.7		0	2		w.	0	0	clear	
Hiroshima					45.7	7.6	60	w.	4.9	2.1		0	0			0	0	clear	Y. Miwa.
Kanazawa	29.67	753.5	29.77	756.2	45.7	7.6	86	w.	18.0	8.0			10			1.330	33.7	raining	S. Endo.
Kioto	29.64	752.8	29.82	757.4	48.6	9.2	68	w.	10.7	4.8		0	6 s;ck			0.038	1.0	fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.88	758.9	30.09	764.3	47.3	8.5	68	nw.	9.0	4.3		0	7 s		nw.	0.180	4.6	cloudy	S. Takehayashi.
Nemuro	29.42	747.2	29.48	748.8	44.0	6.7	79	ssw.	12.0	5.4		0	0			0	0	clear	
Niigata	29.61	752.1	29.65	753.1	47.9	8.8	78	w.	18.9	8.4			10 n			0.335	8.5	light rain	M. Morita.
Nobiru	29.57	751.0	29.58	751.4	44.3	6.8	83	nnw.	7.5	3.4		0	2 s			0.025	0.6	fair	H. Midzushina.
Osaka	29.80	757.0	29.82	757.4	50.1	10.1	68	nnw.	17.6	7.9		1 cs	9 s;ks			0.010	0.2	cloudy	
Supporo					39.5	4.2	77	se.	7.8	3.5		3	1			0.210	5.3	clear	
Tokei Obs'y, Yeddo	29.56	750.9	29.64	752.8	45.4	7.4	96	w.	6.8	3.0		0	0			0	0	clear	The Staff.
Wanayama	29.79	756.7	29.85	758.2	53.3	11.8	61	nnw.	22.8	10.2			10			0.024	0.6	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.73	755.1	29.92	760.0	78.2	25.7	77	ene.	7.0	3.1			10ks;n		n.	0	0	overcast	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.76	603.6	29.98	761.6	47.3	8.5	68	sw.	lnap.	lnap.		2 c	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.47	621.5	30.42	772.7	40.1	4.5	85	ene.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.76	755.9	30.02	762.5	68.0	20.0	70	nne.	0.9	0.4		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.19	589.1	30.35	770.9	46.9	8.3	79	sw.	0.4	0.2			10 kn			0	0	covered	The Staff.
Morelia	24.23	615.3	30.03	762.8	47.1	8.4	78	s.	1.8	0.8		2 c	2 k	e.	e.	0	0	¼ cloudy	M. Tena, M. D.
Orizaba																			Prof. M. M. Chazaro.
Pabellon, Aguascalientes	24.07	611.3	30.19	766.9	46.4	8.0	81	n.			2		10 kn		n.	0	0	covered	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.40	772.2	39.2	4.0	82	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.50	571.5	30.23	767.9	39.5	4.0	79	ne.	6.3	2.8		0	0			0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.74	755.5	29.74	755.5	37.2	2.9		se.			5					0.094	2.4		
Groningen	29.80	750.8	29.85	758.2	38.1	3.4		s.			2					0	0		
Helder	29.80	757.0	29.90	757.0	39.4	4.1		s.			2					0	0		
Hellevoetsluis	29.78	756.5	29.78	756.5	37.9	3.3	90	se.			2					0.047	1.2		
Utrecht	29.80	750 8	29.84	758.0	37.6	3.1	83	s.			2		8			0.031	0.8	very cloudy	H. van der Brink
NORWEGIAN.																			
Bergen	29.85	758.3	29.92	759.9	30.2	— 1.0	54	e.	4	2			9			0.012	0.3		
Brono	30 00	761.9	30.04	762.9	23.7	— 4.6	49	sse.	18	8			3			0	0		
Christiania	29.99	761.7	30.15	765.7	21.6	— 5.8	74	ne.	7	3			10			0.004	0.1	snowing	
Gjæsvær	29.82	757.3	29.84	757 9	23.0	— 5.0		ne.			2		7						
Lodingen	29.74	755.5	29.79	756.7	32.4	0.2	93	sw.			8		10			0.106	2.7	snowing	
PORTUGUESE.																			
Angra, Azores	30.43	773.0	30.59	776.9	63.7	17.6	78	se.	9.4	4.2			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.35	745.6	30.37	771.4	56.8	13.8	47	ene.	4.9	2.2			0			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.26	768.7	30.35	770.9	65.7	18.7	50	sw.	3.8	1.7			5	nne.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.08	764.0	30.45	773.4	53.8	12.1	56	n.	19.2	8.6			0			0	0		The Staff.
Ponta Delgada, Azores	30.55	775.9	30.62	777.7	64.0	17.8	56	se.	8.7	3.9			3			0	0		
Saint Paul de Loando	29.81	757.2	30.01	762.3	76.8	24.9	78	w.	1.3	0.6			1	ssw.		0	0		
Serra da Estrella	25.52	648.3	30.39	771.8	40.5	4.7	85	nnw.	13.0	6.1			0			0	0		
RUSSIAN.																			
Akmolinski	29.05	737.9	30.18	766.5	31.1	— 0.5	100	sw.	11	5		5 ck	0			0	0		Major K. Lasarew.
Archangel	29.98	761.6	30.00	762.1	— 4.4	—20.2	82	ese.	4	2			10			0	0		Capt. Sselliwerstow.
Astrachan	30.23	767.8	30.15	765.7	50.5	10.3	81	se.	7	3			10			0	0	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.53	750.1	30.06	763.4	31.6	— 0.2	98	sw.	13	6			10			0.268	6.8		Meteorological Obs'y.
Dorpat	29.92	760.0	30.19	766.8	15.4	— 9.2	81	n.	4	2		9 cs	0			0	0		Observatory.
Ekaterinburg	28.86	733.0	29.85	758.2	31.5	— 0.3	96	calm	0	0			10			0.452	10.8	snowing	Meteorological Obs'y.
Kasan	29.36	745.7	29.63	752.7	33.3	0.7	93	n.	4	2			10			0.457	11.6	rain & fog	Observatory.
Kertch	29.84	757.9	29.80	758.4	59.2	15.1	97	calm	0	0		3 c	0			0	0		Lagorio & Sastyrez.
Kieff	29.26	743.3	29.92	760.0	36.0	2.2	98	nw.	7	3		c;ck	7 ks						Observatory.
Lugan	29.64	752.9	29.85	758.1	53.4	11.9	72	ssw.	9	4			10			0	0		Meteorological Obs'y.
Nikolaiev	29.78	750.5	29.85	758.3	47.5	8.6	91	nne.	9	4			10 n			0	0		Capt. Kurdakow.
Pekin, China	30.00	762.1	30.15	765 7	32.5	0.3	48	sw.	7	3		0	0			0	0		Physical Observatory.
St. Petersburg	30.10	764.5	30.11	764.9	9.3	—12.6	84	nnw.	7	3		0	0			0.008	0.2		Central Physical Obs'y.
Semipalatinsk	29.62	752.3	30.30	709.7	36.0	2.2	75	sw.	13	6			10			lnap.	lnap.		Major Lasarew.
Taskkend, Laboratory	28.71	729 2	30.33	770.4	44.6	7.0	53	calm	0	0			0						Telch, A. M.
Tiflis	28.70	728.9	30.11	764.8	59.2	15.1	41	nw.	4	2		0	0			0	0		Physical Observatory.
Tomsk	29.56	750.7	29.84	758.0	30.7	— 0.7	74	nw.	11	5			10						
Vladivostock	29.70	754.4	29.77	756.1	21.9	— 5.6		n.	11	5		0	0			0	0		
Warsaw	29.54	750.3	29.98	761.5	33.8	1.0	90	w.	7	3			10					heavy cl'ds.	Astronomical Obs'y.
Wilna	29.57	751.1	30.01	762.3	27.5	— 2.5	92	ne.	16	7			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.47	748.6	29.78	756.4	15.8	—9.0	90	w.	11	5			10			0.008	0.2	snowing	M. O. Marks.
SCOTTISH.																			
Monach Lt			29.85	758.2	46	7.8	92	n.			8		10			0.2	5.	cloudy	J. Youngclause.
North Unst			29.83	757.7				sw.			4	5	3	nw.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.98	761 5	30.09	764.2	55.4	13.0	64	ne.	3.6	1.6		0	5			0	0	½ covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.047	763.07	30.107	764.57	55.0	12.8	70	nw.	3.4	1.5		2	7	w.		0.472	12.0	almost cov.	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.35	694.8	30.44	773.2	41.2	5.1	76	sw.	6.3	2.8		0	1			0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.08	713.3	30.38	771.7	47.8	8.8	66	sw.	2.0	0.9		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.13	765.2	30.27	768.9	52.3	11.3	61	sw.	2.5	1.2		0	0			0	0	clear	Olayo Diaz, Director.
Oviedo	29.52	749.7	30.39	770.0	50.9	10.5	88	e.	13.0	5.8			10 n		w.	0.287	7.3	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.50	749.3	30.43	772.8	47.7	8.7	95	n.	5.6	2.5			10			0.035	0.9	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.88	758.9	29.94	760.4	77.0	25.0	83	n.	2.6	1.2			9 kn			1.142	29.0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.19	766.9	30.30	769.5	60.1	15.6	42	ne.	4.0	1.8		0	1		n.	0	0		Capt. C. Pujazon, R. N
San Juan de Porto Rico, W.I	29.98	761.6	30.08	763.9	77.0	25.0	92	calm	0	0		5 cs	3 kn	se.	se.	0.039	1.0	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.90	759.4	30.03	762.7	73.2	22.9	95	e.	0	0			10 n			0.51	13.0	raining	José L. Yrastorza
SWEDISH.																			
Haparanda	30.03	762.8	30.07	763.8	— 2.9	—19.4	100	calm			0		10			0	0		
Umea	30.06	763.5	30.11	764.8	8.6	—13.0	92	n.			2		3			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	30.17	766.2	30.22	767.5	2.5	—16.4	70	calm			0		0			0	0		
Stockholm	30.03	762.8	30.21	767.3	20.5	— 6.4	84	nne.			2		2			0	0		
Wisby	30.03	762.8	30.09	764.3	28.8	— 1.8	72	ese.			4		10			0.012	0.3		
Sub-series.																			
Upsala	30.14	765.6	30.23	767.8	8.6	—13.0	100	nw.	0	0			1			0	0		S. G. Fineman.
Swiss.																			
Geneva	28.65	727.7	30.12	765.0	40.3	4.6	66	s.			2		10			0.122	3.1	covered	The Observatory.
Turkish.																			
Constantinople			29.87	758.8	62.8	17.1	67	se.	9	4.0			8		sw.	0.165	4.2		The Observatory.
Valona			29.80	756.9	53.2	11.8		se.			1		10			0.39	1c.	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.00	762.0	71.6	22.0	73	calm			0	10 cs		sw.		0	0		Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	29.98	761.5	30.06	763.5	27	— 2.8	77	n.	6	2.7			10 n			0.04	1.0	light snow	J. O. Barnes.
Alpena, Michigan	29.57	751.1	30.27	768.8	23	— 5.0	88	n.	14	6.3			10 n			0.03	0.8	light snow	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.28	642.1	30.38	771.6	23	— 5.0	67	ne.	1	0.4		0	0			0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	27.28	692.9	30.26	768.6	37	2.8	56	sw.	13	5.8		8 k	0	sw.		0	0	cloudy	B. O. Lenoir.
Atlanta, Georgia	28.90	734.0	30.12	765.0	29	— 1.7	84	w.	7	3.1		0	fg.			0.13	3.3	clear	H. C. Smith.
Atlantic City, New Jersey	29.80	756.9	29.81	757.2	31	— 0.6	78	nw.	24	10.7			10 s			0.02	0.5	cloudy	Jas. M. Watson.
Augusta, Georgia	29.89	759.2	30.09	764.3	39	3.9	82	w.	1	0.4			10 s		nw.	0.21	5.3	cloudy	John Healy.
Baltimore, Maryland	29.92	760.0	29.97	761.2	28	— 2.2	88	n.	10	4.5			10 s			0.14	3.6	cloudy	Geo W Felger.
Barnegat, New Jersey	29.79	756.7	29.81	757.2	32.0	0.0	96	ne.	36	16.1			10 n		ne.	0.34	8.6	sleeting	G. A. Hill.
Bennett, Fort, Dakota	28.79	731.3	30.49	774.4	10	—12.2	80	se.	4	1.8		2 c	3 s	se.	se.	0	0	fair	A. Pritchard.
Benton, Fort, Montana	27.30	693.4	30.26	768.6	43	6.1	40	sw.	14	6.3		0	6 s		sw.	0	0	fair	S. Wheaton.
Bismarck, Dakota	28.45	722.6	30.37	771.4	9	—12.8	80	se.	4	1.8		4 c	0			lnap.	lnap.	fair	Cyrus Cramer.
Block Island, Rhode Island	29.85	758.2	29.88	758.9	38	3.3	100	e.	40	17.9			10 n		e.	0.14	3.6	light rain	J. T. Elker.
Boise City, Idaho	27.52	699.0	30.46	773.7	26	— 3.3	88	calm	0	0		3 cs	0			0	0	clear	B. E. Light.
Boston, Massachusetts	29.84	757.9	30.00	762.0	28.0	— 2.2	77	ne.	16	7.2			10n;fog		ne.	lnap.	lnap.	light snow	O. B. Cole.
Brownsville, Texas	30.38	771.6	30.42	772.7	42.0	5.6	82	n.	6	2.7		0	0			0	0	clear	M. McCarty.
Buffalo, New York	29.28	743.7	30.06	763.5	21	— 6.1	95	n.	6	2.7			10 n			0.07	1.8	light snow	W. Finn.
Buford, Fort, Dakota	28 29	718.6	30.27	768.8	9	—12.8	70	s.	4	1.8		0	0			lnap.	lnap.	clear	F. A. Mellen.
Burlington, Vermont	29.82	757.4	30.13	765.3	20.3	— 6.5	69	n.	3	1.3			10 s		n.	0	0	cloudy	W. B Gates.
Cairo, Illinois	29.82	757.4	30.24	768.1	29.5	— 1.4	88	n.	4	1.8			10 n			0.05	1.3	light snow	W. H. Ray.
Cape Henry, Virginia	29.81	757.2	29.83	757.7	38	3.3	89	nw.	48	21.5			10 n		nw.	1.03	26.2	light rain	A. K. Alderson.
Cape May, New Jersey	29.79	756.7	29.82	757.4	35.0	1.7	89	n.	20	8.9			10 s			0.43	10.9	cloudy	W. E. Smith.
Cape Mendocino, California	29.29	744.0	29.97	761.2	55	12.8	39	se.			2	2 c	0	nw.		0	0	clear	J. J. McLean.
Cedar Keys, Florida	30.10	764.5	30.12	765.0	46	7.8	77	n.	21	9.4		0	8 ks		nw.	0	0	cloudy	F. W. Mixer.
Champaign, Illinois	29.36	745 7	30.22	767.6	27.0	— 2.8	64	nw.	10	4.5			10 s		nw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	29.99	761.7	30.05	763 3	38	3.3	89	nw.	12	5.4		0	8 s		nw.	0.02	0.5	cloudy	J. H. Smith.
Charlotte, N. Carolina	29.12	739.6	30.00	762.0	32.0	0.0	88	w.	1	0.4			10s;fg		sw.	0.57	14.5	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.29	744.0	30.14	765.5	28.5	— 1.9	82	sw.	8	3.6		4 cs	sk.			0.06	1.5	fair	B. L. Goulding.
Cheyenne, Wyoming	24.21	614.9	30.42	772.7	30.8	— 0.7	47	w.	4	1.8		0	0			0	0	clear	E. McGovern.
Chicago, Illinois	29.45	748 0	30.19	766.8	31.8	— 0.1	89	ne.	15	6.7			10 s		ne.	0.08	2.0	cloudy	J. Mitchell.
Chincoteague, Virginia	29.77	756.1	29.79	756.7	32	0.0	100	ne.	30	13.4			10 n		ne.	0.25	6.3	light rain	C. F. Dickens.
Cincinnati, Ohio	29.43	747.5	30.12	765.0	27	— 2.8	77	n.	6	2.7			10 s		w.	0.03	0.8	cloudy	R. B. Watkins.
Cleveland, Ohio	29.26	743.2	30.04	763.0	25	— 3.9	92	e.	3	1.3			10 n			0.09	2.3	light snow	J. B. Newlin.
Coleman City, Texas	28.70	729.0	30.60	777.2	27	— 2.8	88	n.	16	7.2		0	0			0	0	clear	L. Dorman.
Columbus, Ohio	29.13	739 9	30.02	762 5	27	— 2.8	77	nw.	6	2.7			10 s		nw.	0.81	20.6	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.54	724 9	30.55	776.0	32.0	0.0	71	n.	3	1.3		0	0			0	0	clear	J. McClone.
Custer, Fort, Montana	26.99	685.5	30.31	769 9	16	— 8.9	70	e.	5	2.2		6 k	0	calm		0	0	fair	W. B. Lamar.
Davenport, Iowa	29.66	753.4	30.35	770 9	27	— 2.8	77	n.	10	4.5		hz.	8 s		n.	0.02	0.5	cloudy	R. R. Martin.
Davis, Fort, Texas	25.48	647.2	30.38	771.6	26	— 3.3	80	calm	0	0		0	0			0	0	clear	J. Williams.
Dayton, Washington T'y	28.53	724.6	30.31	769.9	29.3	— 1.5	86	sw.	3	1.3		2 c	2 k	sw.		0	0	fair	H. Clifford.
Deadwood, Dakota	25.49	647.4	30.32	770.1	25.5	— 3.6	88	e.	6	2.7		0	0			0	0	clear	G. W. Scott.
Delaware Breakwater, Del.	29.79	756.7	29.81	757.2	37	2.8	100	ne.	45	20.1			10 n		ne.	0.21	5.3	light rain	T. S. Townsend.
Denison, Texas	29.68	753 9	30.52	775.2	26.8	— 2.9	77	n.	9	4.0		0	0			0	0	clear	J. W. Byram.
Denver, Colorado	24.95	633.7	30.45	773.4	26.0	— 3.3	58	s.	7	3.1		0	0			0	0	clear	F. M. Neal.
Des Moines, Iowa	29.50	749.3	30.45	773.4	29	— 1.7	77	n.	6	2.7		0	5 s		n.	0.05	1.3	fair	F. W. Conrad.
Detroit, Michigan	29.37	746.0	30.11	764.8	28.8	— 1.8	88	n.	12	5.4			10 s		ne.	0.12	3.0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.86	707.6	30.60	777.2	10	—12.2	80	nw.	12	5.4		0	0			0	0	clear	V. P. Temple.
Dubuque, Iowa	29.63	752 6	30.38	771.6	24.3	— 4.3	73	nw.	6	2.7		0	7 s		nw.	0.02	0.5	fair	J. Harvey Smith.
Duluth, Minnesota	29.68	753 9	30.47	773 9	22	— 5.6	73	w.	1	0.4		0	0			0.13	3.3	clear	N. B. Conger.
Eagle Pass, Texas	29.68	753.9	30.51	774.9	35.0	1.7	79	calm	0	0		0	0			0	0	clear	F. Belford.
Eagle Rock, Idaho	25.62	650.7	30.48	774.2	4	—15.6	57	n.	5	2.2		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	30.08	764.0	30.15	765.8	25.0	— 3.9	80	n.	8	3.6			10 s		s.	0	0	cloudy	D. O. Murphy.
Elliott, Fort, Texas	27.64	702 0	30.56	776.2	18	— 7.8	70	n.	16	7.2		0	0			0	0	clear	W. J. Cundall.
El Paso, Texas	26.62	676.1	30.48	774.2	30.0	— 1.1	81	calm	0	0		0	0			0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.27	743.4	30.03	762.7	27	— 2.8	88	e.	1	0.4			10 s		e.	0.08	2.0	cloudy	Peter Wood.
Escanaba, Michigan	29.68	753.9	30.38	771.6	23.0	— 5.0	80	nw.	3	1.3			10 n		nw.	0.01	0.3	light snow	George Heathcote.
Fredericksburg, Texas	28.68	728.5	30.50	774.7	40	4.4	73	n.	9	4.0		0	0			0	0	clear	Frank Halwegler.
Galveston, Texas	30.31	769.9	30.36	771.1	46	7.8	76	w.	9	4.0		0	hz.			0	0	clear	E. O'C. MacInerney.
Grand Haven, Michigan	29.52	740 8	30.22	767.6	26.0	— 3.3	88	w.	15	6.7		0	9 s		w.	0.01	0.3	cloudy	J. Mueller.
Grant, Fort, Arizona	25.47	646.9	30.31	769.9	38	3.3	51	ne.	6	2.7		0	0			0	0	clear	Robert O. Lord.
Hatteras, North Carolina	29.83	757.7	29.85	758.2	38	3.3	89	nw.	22	9.8			10 s		w.	2.99	75.9	cloudy	R. M. Crawford.
Helena, Montana	26.02	660 9	30.40	772.1	29	— 1.7	49	calm	0	0		3 c	1 k			0	0	fair	N. C. Smith.
Henrietta, Texas	29.53	750 0	30.57	776.5	25	— 3.9	73	n.	14	6.3		0	0			0	0	clear	J. P. Sherry.
Huron, Dakota	29.07	738.4	30.55	776.0	20.8	— 6.2	61	nw.	7	3.1			10 s			0.01	0.3	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.30	744 2	30.14	765.5	26	— 3.3	76	n.	4	1.8			10 s		n.	lnap.	lnap.	cloudy	O. Schutze
Indianola, Texas	30.38	771.6	30.41	772 4	41.0	5.0	73	nw.	5	2.2		0	hz.			0	0	clear	I. A. Reed.
Jacksboro, Texas	29.33	745.0	30.55	776.0	27	— 2.8	64	n.	8	3.6		0	0			0	0	clear	D. J. Carr.
Jacksonville, Florida	30.08	764.0	30.13	765.3	47	8.3	63	nw.	8	3.6		0	8 s		nw.	0	0	clearing	J. W. Smith.
Keogh, Fort, Montana	27.04	702.0	30.31	769 9	13	—10.6	83	sw.	6	2.7		4 c	0			0	0	fair	A. Schneider.
Keokuk, Iowa	29.64	752.8	30.33	770.4	30.0	— 1.1	77	n.	10	4.5		10 k	0	n.		0.08	2.0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.02	762.5	30.04	763.0	72.0	22.2	70	nw.	15	6.7		5 c;cs	4 s	w.	nw.	1.00	25.4	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	29.85	758.2	29.87	758.7	35	1.7	89	nw.	27	12.1			10 n		n.	3.77	95.8	light rain	H. Mc P. Baldwin.
Knoxville, Tennessee	29.06	738.1	30.13	765.3	27	— 2.8	88	nw.	4	1.8		0	4 s			0.06	1.5	fair	J. A. Cody.
La Crosse, Wisconsin	29.56	750 8	30.38	771.6	22	— 5.6	73	n.	4	1.8		9	2 s			0.02	0.5	clear	S. C. Emery.
Leavenworth, Kansas	29.55	750.6	30.49	774.4	27	— 2.8	88	n.	8	3.6		6 k	0	n.		0.02	0.5	fair	A. W. Browne.
Lewiston, Idaho	29.50	749 3	30.36	771.1	31.0	— 0.6	83	nw.	2	0.9		0	0			0	0	clear	W. Bell.
Little Rock, Arkansas	30.01	762.2	30.34	770.6	29	— 1.7	67	nw.	10	4.5		0	0			0	0	clear	W. U. Simons.
Los Angeles, California	29.74	755.4	30.14	765.5	62	16.7	31	ne.	11	4.9		5 k	0	ne.		0	0	fair	T. S. Collins.
Louisville, Kentucky	29.51	749.5	30.10	764.5	31	— 0.6	78	nw.	8	3.6			10 s		nw.	0	0	cloudy	L. M. Dey.
Lynchburg, Virginia	29.23	742 4	29.95	760.7	32	0.0	68	w.	5	2.2			10 s		w.	0.63	16.0	cloudy	Lewis Dunne.
Mackinaw City, Michigan	29.67	753.6	30.30	771.1	23.0	— 5.0	73	ne.	12	5.4		0	8 k		ne.	0	0	cloudy	F. R. Day.
Macon, Fort, North Carolina	29.88	758 9	29.89	759.2	34	1.1	89	nw.	13	5.8			fg.			2.11	53.6	dense fog	F. P. Chaffee.
Madison, Wisconsin	29.27	743.4	30.34	770.6	21	— 6.1	84	n.	16	7.2			10 s		n.	0.15	3.8	cloudy	C. A. Shaw.
Maginnis, Fort, Montana	25.65	651.5	30.16	766.1	44	6.7	47	w.	20	8.9		10 ck	0	w.		0	0	cloudy	F. Burke.
McKavett, Fort, Texas																			J. E. Thatcher.
Marquette, Michigan	29.60	751 8	30.37	771.4	29	— 1.7	59	ne.	8	3.6		5 k	0	n.		0.02	0.5	fair	J. Gilligan.
Memphis, Tennessee	29.89	759.2	30.24	768.1	30	— 1.1	88	w.	8	3.6			10 s		nw.	0.15	3.8	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.49	749.0	30.28	769.1	26	— 3.3	76	n.	18	8.0			10 n			0.10	2.5	light snow	W. Line.
Missoula, Fort, Montana	27.04	686.8	30.45	773.4	21	— 6.1	61	calm	0	0			8 s			0	0	cloudy	J. H. Young.
Mobile, Alabama	30.20	767 1	30.24	768.1	35	1.7	83	w.	5	2.2		0	0			0	0	clear	C. A. Read.
Montgomery, Alabama	29.94	760.5	30.18	766.6	32.4	0.2	87	w.	2	0.9		0	0			0.01	0.3	clear	J. B. McLaughlin.

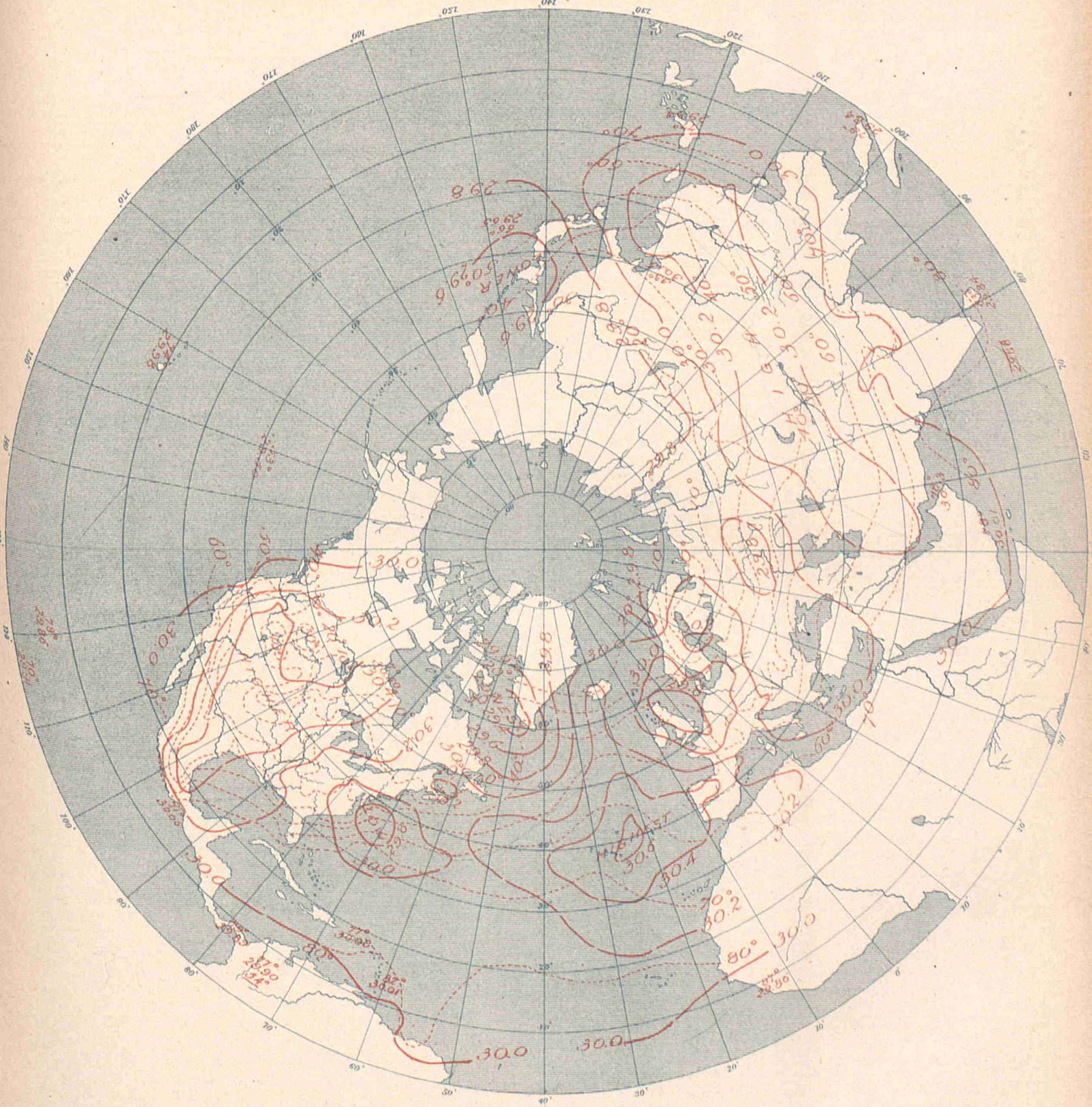
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.43	747.5	30.49	774.4	7	—13.9	76	s.	10	4.5			10 s			0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	28.94	735.1	30.00	762.0	32.5	0.3	78	calm	0	0			10 n			0.12	3.0	light snow	J. C. Sprigg, jr
Mt. Washington, N. H.	23.56	598.4	30.12	765.0	22.0	— 5.6	76	sw.	8	3.6			10n;fg		sw.	0.01	0.3	light snow	J. G. Linsley.
Nashville, Tennessee	29.52	749.8	30.12	765.0	29.5	— 1.4	94	n.	3	1.3			10 n		w.	0.06	1.5	light snow	L. N. Jesunofsky.
New Haven, Connecticut	29.83	757.7	29.95	760.7	25	— 3.9	96	n.	16	7.2			10 n		n.	0.07	1.8	heavy snow	J. H. Sherman.
New London, Connecticut	29.87	758.7	29.92	760.0	31	— 0.6	100	n.	7	3.1			10 n		n.	0.07	1.8	heavy snow	J. G. Lynch.
New Orleans, Louisiana	30.23	767.8	30.29	769.4	42.5	5.8	64	nw.	8	3.6		0	sk.			0	0	clear	L. Dunne.
Newport, Rhode Island	29.87	758.7	29.92	760.0	33.8	1.0	97	n.	10	4.5			10 n			0.06	1.5	light snow	W. McGillivray.
New York, New York	29.74	755.4	29.92	760.0	30	— 1.1	100	n.	20	8.9			10 n			0.18	4.6	heavy snow	J. B. Merrill.
Norfolk, Virginia	29.86	758.4	29.89	759.2	36	2.2	100	nw.	10	4.5			10 n			1.26	32.0	light rain	Wm. Davis.
North Platte, Nebraska	27.46	697.5	30.54	775.7	7.6	—13.6	74	calm	0	0		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.06	763.5	30.10	764.5	37.0	2.8	89	calm	0	0		10 ck	0	sw.		0	0	cloudy	J. Dascomb.
Omaha, Nebraska	29.29	744.0	30.53	775.4	26.2	— 3.2	83	ne.	8	3.6			10 ks			0.03	0.8	cloudy	A. Pollak.
Oswego, New York	29.73	755.1	30.07	763 8	25.0	— 3.9	88	e.	7	3.1			10 n			0.02	0.5	heavy snow	S. W. Beall.
Palestine, Texas	29.87	758.7	30.44	773.2	34.0	1.1	60	nw.	12	5.4		0	0			0	0	clear	L. M. Pindell.
Pensacola, Florida	30.21	767.3	30.24	768.1	35.8	2.1	75	n.	5	2.2		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	29.83	757.7	29.93	760.2	28	— 2.2	100	n.	12	5.4			10 n		n.	0.02	0.5	light snow	T. T. Townsend.
Pike's Peak, Colorado	17.92	455 2	30.58	776.7	12	—11.1	76	ne.	25	11.2		0	0			0	0	clear	H. Hall.
Ploche, Nevada	24.28	616.7	30.42	772.7	30	— 1.1	54	s.	2	0.9		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.13	739.9	29.98	761.5	28.0	— 2.2	88	nw.	3	1.3			10 n			0.14	3.6	light snow	W. Daly.
Poplar River, Montana	27.98	710.7	30.27	768.8				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Ends, Louisiana	30.27	768.8	30.28	769.1	47.9	8.8	86	n.	14	6.3		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.41	747.0	30.13	765.3	23.0	— 5.0	94	ne.	15	6.7			10 n			0.03	0.8	light snow	W. O. Bailey.
Portland, Maine	30.06	763.5	30.11	764.8	27.5	— 2.5	77	n.	13	5.8			10 s		n.	0	0	threatening	W. W. Eichelberger.
Portland, Oregon	30.07	763.8	30.14	765.5	43.0	6.1	60	s.	5	2.2		3 c	0			0	0	clear	M. L. Hearne.
Portsmouth, N. C.					37	2.8	100	n.	22	9.8			10 n		ne.	2.71	68.8	light rain	F. S Coburn.
Prescott, Arizona	25.01	635.2	30.35	770.9	29.7	— 1.3	80	sw.	1	0.4		8 c	0	nw.		0	0	cloudy	W. H. Clendenon.
Provincetown, Mass	29.95	760.7	29.98	761.5	38	3.3	82	ne.	10	4.5			10 n			inap.	inap.	light rain	P. T. Jenkins.
Punta Rassa, Florida	30.06	763.5	30.07	763 8	59	15.0	72	nw.	10	4.5			10 s		nw.	0.38	9.7	cloudy	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.37	746.0	30.07	763.8	20	— 6.7	91	s.	3	1.3			10 n			0.01	0.3	light snow	E. W. McGann
Roseburg, Oregon	29.55	750.6	30.12	765.0	31	— 0.6	89	calm	0	0		0	fg.			0	0	clear	J. J. Naury.
Sacramento, California	30.09	764.3	30.17	766.3	38.9	3.8	100	se.	3	1.3			fg.			0	0	dense fog	J. A. Barwick
St. Louis, Missouri	29.66	753.4	30.29	769.4	29.2	— 1.6	97	nw.	12	5.4			10 s		nw.	0.31	7 9	cloudy	J. H. Weber.
St. Paul, Minnesota	29.56	750.8	30.48	774.2	17.0	— 8.3	83	nw.	3	1.3		7 cs	0			0.03	0.8	fair	P. F. Lyons.
St. Vincent, Minnesota	29.45	748 0	30.38	771.6	— 1	—18.3	63	s.	8	3.6			10 s			0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.96	659.4	30.53	775.4	27	— 2.8	56	calm	0	0		3 cs	0			0	0	clear	J. Craig.
San Antonio, Texas	29.71	754.6	30.43	772.9	39.0	3.9	65	n.	3	1.3		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.03	762.7	30.10	764.5	57.0	13.9	53	w.	2	0.9		10 ck	0	w.		0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.31	744 5	30.03	762 7	29	— 1.7	100	ne.	41	18.3			10 n		ne.	0.27	6.9	light snow	M. H. Perry.
Sandy Hook, New Jersey	29.88	758.9	29.91	759.7	32.0	0.0	88	ne.	35	15.6			10 n			0.04	1.0	heavy snow	B. A. Blundon.
San Francisco, California	30.03	762 7	30.10	764.5	51	10.6	80	s.	2	0.9		9 k	0	s.		0	0	cloudy	N. Gorom.
Santa Fé, New Mexico	23.49	596.6	30.53	775.4	27	— 2.4	70	ne.	8	3.6		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.00	762.0	30.08	764.0	45	7.2	65	nw.	8	3.6			10 ks		w.	0.01	0.3	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.52	673.6	30.34	770.6	46	7.8	43	sw.	13	5.8		10 k	0			c	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	30.08	764 0	30.34	770.6	35	1.7	64	nw.	20	8.9		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.28	743 7	30.59	777.0	24	— 4.4	88	nw.	7	3.1		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.56	623.8	30.40	772.1	25.0	— 3.9	96	nw.	4	1.8		0	2 s			0	0	clear	N. D. Lane.
Sitka, Alaska	29.78	756.4	29.86	758.4	30.1	2.3	79	ne.	4	1.8		8 ck	0	ne.		0.11	2.8	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.96	761.0	30.45	773.4	29.0	— 1.7	67	nw.	12	5.4			10 s		n.	0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	29.93	760.2	29.97	761.2	34	1.1	88	nw.	10	4.5			10 s		w.	0.62	15.7	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.27	718.0	30.35	770.9	32	0.0	81	ne.	5	2.2			10 s		ne.	0	0	cloudy	D. Moore.
Springfield, Illinois	29.56	750.8	30.28	769 1	32	0.0	78	nw.	4	1.8			10 n		n.	0.01	0.3	light snow	T. B. Jennings.
Springfield, Massachusetts	29.85	758.2	29.99	761.7	25.0	— 3.9	92	n.			2		10 n			inap.	inap.	cloudy ?	Charles Mayr.
Springfield, Mo	28.88	733.5	30.39	771.9	22	— 5.6	87	nw.	15	6.7			10 k		nw.	0.01	0.3	cloudy	J. B. Marbury.
Starkville, Miss	29.64	752.8	30.14	765 5	36	2.2	79	w.	9	4.0		3 c	2 s		sw.	0	0	fair	O. Dill.
Stevenson, Fort, Dakota	28.33	719.6	30.30	769 6	6	—14.4	76	ne.	2	0.9		0	0			0.02	0.5	clear	W. Burrows
Stockton, Fort, Texas	27.30	694.9	30.48	774.2	30.0	— 1.1	80	sw.	3	1.3		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.95	760.7	30.00	762.0	38.0	3.3	82	ne.	20	8.9			10 s		ne.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.56	700.0	30.40	772.1	35.5	1.9	83	s.			1	0	2 k			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.34	745.2	30.07	763.8	25	— 3.9	88	nw.	7	3.1			10 n			0.02	0.5	light snow	A. Buell.
Tucson, Arizona	27.76	705.1	30.22	767.6	50	10.0	48	se.	8	3.6		1 k	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	30.02	762.5	30.40	772.1	27	— 2.8	94	se.	2	0.9		0	0			0	0	clear	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					33.4	0.8	81	nw.			1	8 cs	0	w.		0	0	cloudy	D. Brooks.
Vicksburg, Mississippi	29.98	761.5	30.24	768.1	39.2	4.0	71	w.	11	4.9		0	0			0	0	clear	James Kenealy.
Visalia, California	29.74	755.4	30.12	765.0	45.8	7.7	93	sw.	2	0.9		10 k	0	sw.		0	0	cloudy	O. D. Stewart
Washakie, Fort, Wyoming	24.08	626.9	30.42	772.7	7.0	—13.9	87	calm	0	0			10 k			0	0	cloudy	T. M. Ambler.
Washington, D. C.	29.86	758.4	29.98	761.5	26.0	— 3.3	94	n.	8	3.6			10 n		nw.	0.22	5.6	light snow	B. M. Purssell.
West Las Animas, Colorado	20.39	670.3	30.51	774.9	4.5	—15.3	64	nw.	4	1.8		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.39	746.5	30.02	762.5	27	— 2.8	88	calm	0	0			10 s			0.23	5.8	cloudy	B. F. Hough.
Wilmington, N. Carolina	29.93	760.2	29.99	761.7	36	2.2	89	nw.	11	4.9			10 s		n.	0.35	8.9	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.86	656.8	30.39	771.9	28	— 2.2	67	ne.	13	5.8		0	0			0	0	clear	J. Grover.
Yankton, Dakota	29.15	740.4	30.53	775.4	23	— 5.0	61	calm	0	0			10 ks			0.03	0.8	cloudy	J. R. Atfield.
Yuma, Arizona	30.02	762.5	30.17	766.3	50.3	13.5	34	n.	6	2.7			10 s		w.	0	0	cloudy	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3			54.0	12.2	71	calm	0	0		0	4 ks		n.	0	0	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.94	760.5	30.01	762.2	73.9	23.3	69	nw.	7	3.1		3 c	6 ks	w.	nw.	0.24	6.1	cloudy	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	69	20.6	76	calm	0	0		0	0			0	0	fine	Robert Johnston.
Navassa, W. I.	29.90	759.4	29.98	761.5	80	26.7	78	ne.	10	4.5		1 c	1 ks	e.	e.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.06	763 5	30.06	763.5	79	26.1	82	se.			2	4 c	5 k	e.	e.	0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.90	759.4	77	25.0	89	calm			0	3 ck	5 ks	calm	calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					74	23.3	94	ne.			1	ck	0	se.		0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.00	762.0	30.03	762 7	75	23.9	76	calm	0	0		5 ck	0			0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska	29.81	757.2	29.87	758.7	30	— 1.1	88	w.			1		9 n			0	0	cloudy	W. J. Fisher.
St. Thomas, W. I.	30.00	762.0	30.12	765.0	79	26.1	74	e.				0	2 k		e.	0.02	0.5	fine	Aug. Wallee.
York Factory, B. A.	30.44	773.2	30.50	774.7	6.5	—14.2	88	s.	21	9.4		1 c	2 s	s.	s.	0	0	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, N. 27° 16′, E. 121° 09′	30.36	771.1	61	16.1		e.			3		4	ne.				1	ne.	d. clouds.
H. M. S. Amethyst, S. 34° 47, W. 57° 34′†	30.15	765.8	66	18.9	62	nw.			4		0					2	nw.	misty.
H. M. S. Audacious, Colombo, Ceylon, India	29.84	757.9	83	28.3	83	sw.			1									d. clouds.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	29.98	761.5	71	21.7	75	nw.			2		7	nne.				1	nw.	d. clouds.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	30.02	762.5	74.5	23.6	76	nnw.			2		1							blue sky.
H. M. S. Cleopatra, N. 31° 14′, E. 121° 28′	30.33	770.4	41	5.0	91	calm			0		0							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C.	30.09	764.3	43	6.1	83	n.			2		5							showery.
H. M. S. Condor, Jaffa, Syria	30.02	762.5	71	21.7	85	nnw.			3		6	nnw.				4	nnw.	showery.
H. M. S. Crocodile, N. 14° 31′, E. 53° 00′	29.91	759.7	78	25.6	57	nne.			3–4		1					1	ne.	blue sky.
H. M. S Curacoa, Kobe, Japan	29.74	755 4	52.5	11.4	79	w.			2–5		4	w.						squally.
H. M. Dock-Yard, Bermuda, W. I.	30.00	762.0	64	17.8	63	sw.			1		3	ne.						d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.92	760.0	72	22.2	90	ssw.			4–5		5	ssw.						d. clouds.
H. M. S. Flying Fish, N. 31° 27′, E. 131° 11′	29.79	756.7	77	25.0	82	s.			5		0							misty.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	30.01	762.2	55	12.8	83	wnw.			3		7					2	nw.	misty.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.00	762.0	61	16.1	82	calm			0		10							misty.
H. M. S. Kingfisher, N. 5° 43′ W. 94° 58′	30.17	766.3	65	18.3	94	n.			1		6	ne.						d. clouds.
H. M. S. Lark, S. 29° 45′, E. 153° 40′	29.92	760.0	75	23.9		s.			3		6	s.				3	s.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	30.04	763 0	69.3	20.7	92	nne.			5		10					3	e.	raining.
H. M. S. Magpie, N. 34° 32′ E. 127° 46′	29.94	760.5	64	17.8		calm			0		10							d. clouds.
H. M. S. Northampton, N. 29° 07′, W. 60° 26′	30.16	766.1	40.5	4.7	63	nw.			2–6		0					2		squally.
H. M. S. Nelson, S 38° 45′ E. 143° 50′	30.20	767.1	74	23.3	79	sse.			3		5	e.				1	wnw.	d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	30.05	763.3	59	15.0	79	s.			4–6									d. clouds.
H. M. S. Sappho, S. 41° 00′, W. 90° 00′	29.84	757.9	79	26.1	84	nw.			1		10							d. clouds.
H. M. S. Sylvia, Pecket Harbor, Patagonia	30.26	768.6	49.2	9.6	71	s.			2-3		6	sw				2	sw.	d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.38	746.2	49.5	9.7	75	wsw.			4		8							squally.
H. M. S. Woodlark, Bushire, Persia	30.00	762.0				ese.			3		1	e.						blue sky.
H. M. S. Zephyr, N. 37° 33′, E. 121° 25′	30.12	765.0	70.5	21.4	71	nnw.			2		0							blue sky.
Portuguese Naval	30.23	767.8	34	1.1	?	w.			2		0					1	w.	blue sky.
Rio Lima, Porto Praya, Cape Verd Islands	30.05	763 2	82.4	28.0	71	ne.			3		2		ne.					d. clouds.
Tamega, Macao, China	30.22	767.5	68.0	20.0	64	n.			4		10							overcast.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.08	764.0	36	2.2	90	n.	2	0.9			0			0	0			clear.
Navy Yard, Portsmouth, N. H.	30.05	763.3	25	— 3.9		ne.	14	6.3			10		ne.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	29.35	745.5	51.5	10.8	56	sw.			4		2		sw.	0.69	17.5			clear.
Adams, Sitka, Alaska†.	29.92	760.0	35	1.7	90	calm			0		10							cloudy.
Alaska, N. 22° 30′, W. 157° 29′	29.98	761.5	71	21.7	80	n.			3		5		n.	0	0	sm'h		fair.
Alliance, Hampton Roads, Va	29.84	757.9	38	3.3	100	nnw.			3		10		h'vy	h'vy				cloudy.
Ashuelot, Nagasaki, Japan	30.11	764.8	51	10.6	77	wnw.			3-4		8		w.					cloudy.
Brooklyn, Keel Point, Patagonia	29.48	748.8	55	12.8	68	wnw.	20	8.9			0			0	0	sm'h		clear.
Colorado, New York, N. Y.	30.11	764.8	28	— 2.2	100	ne.	7	3.1			10							snowing.
Enterprise, Norfolk, Va	29.86	758.4	36	2.2	80	nw.			4		10		calm					cloudy.
Essex, Callao, Peru	29.95	760.7	66	18.9	90	se.			1		5		se.			sm'h	se.	fair.
Franklin, Norfolk, Va	29.86	758.4	35	1.7	100	nnw.	16	7.2			10		nnw.	0.56	14.2			overcast.
Galena, Montevideo, Uruguay	30.08	764.0	63	17.2	83	nw.			3		0					sm'h		clear.
Hartford, Sandy Point, Patagonia*	29.26	743.2	50	10.0	86	sw.			5		5		w.	light	light	sm'h		squally.
Independence, Mare Island, Cal	30.12	765 0	47	8.3	92	e.	6	2.7			10		e.			mod.	s.	cloudy.
Iroquois, S. 11° 51′, W. 178° 00′	30.03	762.7	67	19.4	90	sse			2		5		sse.			sm'h		fair.
Jamestown, N. 42° 19′, W. 70° 53′	29.99	761 7	39	3.9	?	ene.			4		10		ene.			sm'h		cloudy.
Kearsarge, Norfolk, Va	29.90	759.4	37	2.8	100	nnw.			4		10							rainy.
Lackawanna, S. 25° 38′, W. 73° 08′*	30.04	763.0	63	17.2	78	ne.			2		10					sm'h	sw.	cloudy.
Lancaster, Naples, Italy*	29.76	755.9	52	11.1	72	wnw.			2		5		calm			sm'h	w.	fair.
Michigan, Erie, Pa	30.01	762.2	28	— 2.2	?	ne			3		10							snowing.
Minnesota, New York, N. Y.	29.95	760.7	32	0.0	100	nne.	15	6.7			10							cloudy.
Monocacy, Kaneda Bay, Japan*	29.46	748.3	58	14.4	93	wsw.			5		8					long	se.	cloudy.
New Hampshire, Newport, R. I.	29.97	761.2	35	1.7	100	nne.			4		10					sm'h		overcast
Nipsic, Gibraltar, Mediterranean*	30.24	768.1	60	15.6	70	e.			3		2					sm'h		clear.
Onward, Callao, Peru	30.11	764.8	66	18.9	90	sse.			2		5		n.			long	w.	fair.
Palos, Tien-Tsin, China*	30.14	765.5	30	— 1.1	78	wsw			1		0							clear.
Pensacola, Callao, Peru*	29.94	760.5	66	18.9	90	se.	6	2.7			2			0	0	sm'h		fair.
Powhatan, Boston, Mass.	30.04	763.0	29	— 1.7	100	n.			1		2?							cloudy.
Quinnebaug, Villefranche, France*	30.05	763.3	55	12.8	50	sw.			1		5		calm			sm'h		fair.
Ranger, Salina Cruz, Mexico	30.06	763.5	71	21.7	49	n.			6		2			0	0	mod.	n	fair.
Richmond, Yokohama, Japan*	29.58	751.3	56	13.3	62	wsw.			3					0.15	3.8			clear.
Saratoga, N. 37° 07′, W. 72° 24′	29.83	757.7	62	16.7	100	ne.			3-4		5		ne.	light	light	r'gh	ne.	fair.
St. Louis, League Island, Pa	30.15	765.8	27	— 2.8	100	n.			3		10		n.					cloudy
Swatara, N. 32° 25′, W. 69° 23 *	29.68	753.9	72	22.2	80	sw.			6		5		sw.			mod.	sw.	fair.
Tennessee, Hampton Roads, Va	29.84	757.9	39	3.9	63	nnw.	16	7.2			10			0.04	1.0			cloudy.
Vandalia, N. 38° 04′, W. 74° 47′*	29.70	754.4	47	8.3	92	n.			6		10		n.			r'gh	nne.	cloudy.
Wabash, Boston, Mass.	30.00	762.0	30	— 1.1	89	n.	5	2.2			10		ne.	0	0			cloudy.
Wachusetts, Mare Island, Cal	30.11	764.8	47	8.3	92	e.			3		8		calm	0	0	sm'h		cloudy.
Wyandotte, Washington, D. C	30.16	766.1	39	3.9	71	nw.			1		10		calm					cloudy.
Yantic, Norfolk, Va	29.80	756.9	37	2.8	100	nnw.			3		10							rainy.
Merchant Marine.																		
S. S. Grecian, S. 34° 20′, W. 53° 30′*	30.10	764.5	61	16.1	71	nnw.			4		0			0	0	sm'h		clear.
S. S. Nova Scotian, N. 43° 14′ W. 63° 39′	30.10	764.5	34	1.1		e.			3		10		ese.			sm'h		gloomy.
S. S. Polynesian, Halifax, N. S*	30.12	765 0	31	— 0.6		calm			0		8		sw.	0	0			fair.
S. S. Scandinavian, N. 53° 53′ W. 23° 08′	30.23	767.8	51	10.6		sse.			4		10		s.	0	0	mod.	var.	drizzling.
S. S. Indiana, Liverpool, Eng†			41	5.0		wnw.			5		2		wsw.	0	0	sm'h		clear.
S. S. Lord Clive, N. 43° 12′ W. 58° 30′*†	29.65	753.1	47	8.3	92	nw.			5		8		nw.					fine.
S. S. Lord Gough, N. 51° 42′, W. 15° 29′	30.02	762.5				se.			5		6		wsw.	0	0	slt	w.	cloudy.
S. S. Ohio, N. 47° 21′, W 45° 59′	30.26	768.6	50	10.0		nnw.			2		4		nw.	0	0	mod.	nw.	cloudy.
S. S. Pennsylvania, Delaware River†	30.06	763.5	41	5.0	91	wsw.			4		10		w.			r'gh	w.	clear.
S. S. Castor, N. 43° 22′, W. 43° 30′*	29.80	750.9	34	1.1		nne.			6		3		n.			sm'h	wsw.	snowing.
S. S. Devonia, N. 41° 35′, W. 63° 10′†	30.22	767.6	46.4	8		nnw.			3		10		n.			sm'h		
S. S. Dorian, N. 45° 08′, W. 47° 56′ *	30.09	764.3	44	6.7		ene			4		4		nw.			4	nw.	fair.
S. S. Ethiopia, N. 40° 39′ W. 66° 20′	30.13	765 3	46	7.8		wsw.			3		10		var.			sm'h		cloudy.
S. S. Galatia, N. 8° 17′, E. 75° 48′†	29.93	760.2	46	7.8		e.			6		4		wsw.	0	0	mod.	wsw.	fine.
S. S. Ailsa, N. 39° 01′, W. 74° 11′†	30.04	763.0	81.3	27.4		wnw.			5		10		ne.	14 h'r	14 h'r	r'gh	ne.	raining.
S. S. Alpin, N. 31° 40′, W. 75° 02′	29.82	757.4	46	7.8	84	ne.			3		3		w.	0	c		sw.	fair.
S. S. Alvo, Cartagena, U. S. C	29.99	761.7				ssw.			6		10		ne.	0	0	r'gh	ne.	cloudy.
British Merchant, off Farallones, Cal	29.88	758.9	79	26.1		e.			7				w.	1 h'r	1 h'r			
Bk. Coppename, N. 17° 58′, W. 32° 50′	30.01	762.2	54.5	12.5	93	e.			1–2		2 c.			0	0			hazy.
May Hulse, S. 28° 43′, W. 41° 47′	30.16	766.1	79.5	26.4	60	ene.			3		7							d clouds.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.97	761.2	97.2	36.2	32	nne.			4		8							d. clouds.
S. S. Inchkeith, S. 40° 48′, E. 26° 17′	30.06	763.5	62.5	16.9	88	n.			3		10							overcast.
S. S. Mertola, N. 38° 11′, W. 11° 00′	30.51	774.9	57.3	14.1	82	nne.			1		0							blue sky.
S. S. Bothnia, N. 49° 30′, W. 26° 05′	30.27	768.8	57	13.9	94	ssw.			4		3							d. clouds.
S. S. Gallia, off Fire Island, N. Y.	29.82	757.4	38	3.3	90	ne.			6		8							d. clouds.
S. S. Marathon, Constantinople, Turkey	29.83	757.7	62	16.7		ssw.			6		10		sw.			mod.	sw.	showery.
S. S. Parthia, N. 44° 36′, W. 44° 43′*†	30.36	771.1	52	11.1		wnw.			5		7		ssw.	snow	snow	sm'h		
S. S. Pavonia, N. 45° 09′, W. 46° 13′*	30.25	768.3	46	7.8	77	w.			3		3?		sw.	0	0	mod.	sw.	
S. S. Colina, Glasgow, Scotland†	29.64	752.8				w.			6		2		w.	6 h'r	6 h'r	r'gh	w.	cloudy.?
									1		1?		w.	0	0	hv'y	w.	clear.
																		overcast.?

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE —Continued.																		
S. S. Canada, N. 49° 02′ W. 28° 30′	30.32	770.2	55.4	13		s.			4–5		6?		sw.			sm'h	ssw.	covered.?
S. S. Labradore, N. 50° 00′, W. 27° 51′*†	30.34	770.5	55.4	13		s.			6		7		sw.	0	0	h'vy	sw.	
S. S. Abyssinia, N. 50° 50′, W. 29° 28′			57	13.9	94	ssw.			6		10		sw.			h'vy	w.	drizzling.
S. S. Bohemia, N. 49° 36′, W. 8° 12′†.	29.80	756.9	42	5.6		ene.			6		7		s.	0	0	h'vy	ese.	threatening.
S. S. Gellert, N. 40° 40′, W. 73° 43′	30.15	765.8				nw.			7		6		nw.	rain	rain	r'gh	nw.	
S. S. Silesia, N. 47° 58′, W. 36° 44′†	29.90	761.0	36	2.2		nnw.			4		10		ne.	2 h'r	2 h'r	mod.	e.	squally.
S. S. Vandalia, Hamburg, Germany	30.14	765.5	49.1	9.5		wsw.			5		6		w.	6 h'r	6 h'r	6	w.	d. clouds.
S. S. Wieland, N. 44° 41′, W. 50° 40′			40.6	4.8		sw.			3		10		sw.	0	0			cloudy.
S. S. City of Berlin, N. 47° —′, W. 45° —′	30.34	770.6				w.			5		8		w.	2 h'r	2 h'r	r'gh	wsw.	cloudy.
S. S. Mentmore, Baltimore, Md *	30.09	764.3	43	6.1		wsw.			7		3		w.	2 h'r	2 h'r	r'gh	wsw.	
S. S. Nessmore, N. 40° 46′ W. 66° 49′	30.01	762.2				ne.			4		8		ne.	0	0			threatening.
S. S. Hevelius, N. 14° —′, W. 26° —′*†	29.89	759.2	51	10.6	93	e.			5		10					light	cross	drizzling.
S. S. Sirius, Lisbon, Portugal *	30.07	763.8	78	25.6		ne.			5		4?		ne.	0	0			clear.?
S. S. Colorado, Galveston, Texas†	30.39	771.9				e.			2		0			0	0			clear.
Sr S. Rio Grande, N. 26° 14′, W. 86° 53′	30.35	770.9	43	6.1		nw.			4		1		nw.	0	0			clear.
S. S. San Marcos, N. 32° 05′, W. 80° 25′			68	20.0		wnw.			5		3		nw.	0	0	lig.	nw.	fair.
S. S. Archimede, N. 33° 44′, W. 32° 16′*†			48	8.9		nw.			5							sm'h		
S. S. Hermod, N. 40° 22′, W. 61° 35′	30.46	773.7	74	23.3	72	ese.			4		3		ese.	0	0	r'gh	var.	clear.
S. S. Glenapp, Rio de Janeiro, Brazil †			50.0	10.0		e.			5		10		se.	10 h'r	10 h'r	r'gh	s.	showery.
S. S. Glenfyne, N. 5° 44′, W. 47° 14′	29.96	761.0	78	25.6		var.			5		10		se.	10 h'r	10 h'r	r'gh	s.	showery.
S. S. Chalmette, Algiers, La†						e.			4		10 k			7 h'r	7 h'r			heavy rain.
S. S. New York, N. 24° 37′, W. 80° 30′ †.	30.25	768.3	57	13.9		sw.			4		2		ese.	0	0	sm'h	e.	fair.
S. S. Erin, Liverpool, Eng	30.05	763.3	74.0	23.3		nw.			2		0			0	0			clear.
S. S. Helvetia, N. 42° 00′ W. 52° 30′	29.89	759.2	45	7.2		wnw.			4		8		n.	0	0	sm'h		cloudy.
S. S. Holland, N. 41° 57′, W. 62° 42′	30.23	767.8	50	10.0		wsw.			3		4		wnw.	12 h'r	12 h'r			clear.
S. S. City of Alexandria, Vera Cruz Roads, Mexico†	30.07	763.8	42	5.6		e.			1		10		w.	0	0	long	sw.	cloudy.
S. S. Knickerbocker, N. 27° 03′, W. 79° 40′ *†	30.53	775.4	69	20.6		wnw.			4		8		sw.	4 h'r	4 h'r	sm'h	e.	cloudy.
S. S. Leerdam, N. 40° 00′. W. 65° 08′*	30.00	762.0	68	20.0		nw.			6		10		nw.	0	0	h'vy	nw.	overcast.
S. S. America, N. 42° 46′, W. 61° 57′*	29.82	757.4	56	13.3		e.			6							sm'h		clearing.
S. S. Elbe, N. 47° 43′, W. 42° 34′	30.13	765.3	42.0	5.6	83	e.			5							mod.		cloudy.
S. S. Hohenstaufen, N. 41° 16′, W. 10° 50′	30.00	763.5	43.7	6.5	100	wsw.			5		9		w.	0	0	long	w.	covered.
S. S. Neckar, N. 49° 08′, W. 37° 20′ ..	30.49	774.4	62.6	17.0		nnw.			6		6		wsw.	8 h'r	8 h'r	r'gh	v'sw.	cloudy.
S. S. Oder, N. 49° 58′, W. 26° 30′	30.08	764.0	49.0	9.4	78	w.			4		6		nnw.	shr's	shr's	light	nnw.	fair.
S. S. Ohio, N. 26° 20′, W. 89° 00′	30.29	769.4	57.2	14.0		sse.			6		8		w.	4 h'r	4 h r	long	wsw.	fair.
S. S. Salier, N. 49° 59′, W. 4° 48′	30.31	769.9				nne.			5		2		sse.	0	0	mod	sse.	hazy
S. S. Strassburg, St Vincent, Cape Verd Islands	29.99	761.7	50.9	10.5		nw.			6		4		nne.	0	0	mod.	n.	fair.
S. S. Werra, N. 48° 57′, W. 41° 10′ *	30.12	765.0	73	22.8	95	ne.			6		5		nw.	3 h'r	3 h'r	cross	nw.	fair.
S. S. Belgic, Yokohama, Japan	30.00	762.0	44.6	7.0		w.			5–6		5			0	0	mod.	ne.	fair.
S. S. Coptic, N. 40° 40′ W. 149° 55′			56	13.3	67	sw.			6		6		wnw.	1 h'r	1 h'r	high	w.	fair.
S. S. Oceanic N. 35° 12′, E. 145° 26′ *..	29.50	749.3	52.5	11.4	73	w.			3		2			0	0	sm'h		clear.
S. S. City of Augusta, N. 34° 03′, W. 76° 46′†	29.65	753.1	66	18.9	74	wsw.			6–7		4		w.	6 h'r	6 h'r	high	w.	fair.
S. S. Mississippi, Seattle, Wash. Ter †	29.81	757.2				wnw.			6		4		wsw.			rg'h	w.	fine.
S. S. Columbia, Mouth of Willamette River, Oregon†	30.17	766.3	43	6.1	83	calm			6		4		nw.	0	0	h'vy	ne.	foggy.
S. S. Oregon, Portland, Oregon†	30.11	764.8	48	8 9	70	e.			0		0							clear.
S. S. Ancon, San Pedro Bay, Cal †.. ..	30.05	763 3	44	6.7	92	calm			1		2							clear.
S. S. State of California, San Francisco, Cal*†	30.09	764 3	61	16.1	61	nne.			0		0							clear.
S. S. Australia, Sydney, N. S. W	30.04	763.0	50	10.0	79	calm			1		5		ne.			sm'h		fair.
S. S. City of New York, Sydney, N. S. W †.	30.05	763.3	68	20.0	90	se.			0		4		s.					fair.
S. S. City of Pekin, Hong Kong, China †	30.15	765.8	67	19.4	69	s.			4		10			0	0			cloudy.
S. S. City of Rio de Janeiro N. 16° 04′ W. 98° 32′†.	30.35	770.9	68	20.0	60	ne.			1		0			0	0			clear.
S. S. Grenada, Panama, Panama†	30.00	762.0	81	27.2	83	nne.			2		10		ne.	0	0			cloudy.
S. S. San José, N. 35° 03′. W. 121° 50′*†	29.89	759.2	79	26.1	78	nw.			2		5		ne.	0	0	h'vy	n.	fair.
S. S. Zealandia, N. 18° 35′, W. 158° 56′	30.29	769.4				nw.			1		0			0	0			clear.
S. S. Muriel, St. Kitts, W. I	29.98	761.5	74	23 3	86	se.			2		8		nnw.	sh'rs	sh'rs	hv'y	sse.	overcast.
S. S. Claudius, Belize, Honduras†	30.07	763.8	81	27.2		e.			4		5		se.			mod	se.	light rain.
S. S. Valencia, Curacoa, W. I.†	30.13	765.3				nw.			5		10			0	0	sm'h		overcast.
S. S. Belgenland, Antwerp, Belgium	30.04	763.0	83	28.3	71	ne.			2		2		n.	3 h'r	3 h'r			fair.
S. S. Pennland, N. 50° 11′, W. 15° 22′			35	1.7	?	calm			5		2		ene.	0	0	sm'h		fine.
S. S. Rhynland, N. 46° 30′, W. 49° 00′	30.36	771.1	52	11.1	93	wnw.			0		7?			0	0			overcast?
S. S. Waesland, N. 50° 15′, W. 2° 41′	30 09	764.3	41	5.0	100	sse.			5		5		nw.	3 h'r	3 h'r	long	w.	fine.
S. S. Maas, N. 51° 30′, E. 4° 12′	29.93	760.2	52	11.1	73	nw.			6		10		wnw.			high	wnw.	cloudy.
S. S. P. Culand, N. 50° 15′, W. 15° 22′	29.93	760.3	48.6	9.2	84	ne.			5		4		nnw.	9 h'r	9 h'r	mod.	wnw.	fair.
S. S. W. A. scholten, N. 48° 54′, W. 35° 20′	30.35	770 9	52 3	11.3	90	wnw.			2		4		e.	2 h'r	2 h'r			clear.
S. S. Zaandam, N. 46° 18′, W. 42° 13′ *			50.8	10.4	65	wsw.			0		7		nw.			5	wnw.	cloudy.
S. S. State of Florida, N. 51° 58′, W. 27° 10′	30.13	765 3			80	w.			6		5		wsw.	6 h'r	6 h'r	mod.	wsw.	
S. S. State of Nevada, N. 49° 20′, W. 40° 15′†.	30.02	762.5	46	7.8		w.			5		4 k		e.	8 h'r	8 h'r	5	w.	squally.
S. S. Thingvalla, N. 46° 38′, W. 53° 56′ †	30.05	763.3	35.6	2.0		w.			6		10			2 h'r	2 h'r	r'gh	sw.	cloudy.
S. S. Iowa, Boston Bay, Mass*†	30.10	764.5	39	3.9		ne.			8		2		w.	sh'rs	sh'rs	high	w.	squally.
S. S. Baltic, N. 48° 36′ W. 31° 56′	30.09	764.3	52	11.1	86	w.			6		8		w.	0	0	cross	w.	covered.
S. S. Celtic, Liverpool, Eng	29.78	756.4	46	7.8	69	nnw.			4		8		ne.	0	0	mod.	ne.	cloudy.
S. S. Lepanto, N. 50° 29′, W. 1° 20′			47	8.3		w.			6–7		10			6 h'r	6 h'r			showery.
S. S. Marengo, N. 46° 32′, W. 44° 50′ *†	30.14	765.5				wsw.			6		8		n.	8 h'r	8 h'r			raining.
S. S. Salerno, N. 37° 25′ E. 4° 12′						ne.			6		6		wsw.	2 h'r	2 h'r	con.	sw.	cloudy.
S. S. Aries, N. 40° 20′, W. 71° 00′*†	29.75	755.6				nne.			2		5		ne.	1 h'r	2 h'r	long	ne.	fine.
S. S. Catherine Whiting, Philadelphia, Pa†	29.92	760 0				n.			6		10		une.	2 h'r	2 h'r	long	nne.	stormy.
S. S. Norman, N. 42° 23′, W. 71° 07′	29.85	758 2				ne.			5					snow	snow			snowing.
S. S. Saxon, Philadelphia, Pa*†	29.98	761.5	31	— 0.6		n.			6					snow	snow			heavy snow
MISCELLANEOUS.											10							snowing.
Bg. Alcira, Maracaybo, Venezuela	29.94	763.5	86	30 0		ene.			2		2		ese.	0	0			clear.
S. S. Annie M. Law, Kobe, Japan*†	29.74	755.4	50	10.0		wnw.			6		10			0	0			threatening
Bk. Anna Thormann, S. 19° 35′, E. 72° 22′*	29.94	760.5	75.9	24.4	90	e.			4		10 n		e.			mod.	e.	misty.
S. S. Antonio Lopez, Havana, Cuba, W. I*	30.04	763.0	74	23.3	81	wnw.			4					3 h'r	3 h'r			fair.
Bk. Aureola, Bristol, Eng			56	13.3		wsw.			3		4			3 h'r	3 h'r			fair.
Brt. Arthur, N. 37° 00′, W. 56° 00′ *†	30.00	762.0				se.			3		6		w.	1 h'r	1 h'r			fair.
Schr. B. J. Baker, Smithville, N. C*†	29.86	758.4				nw.			7				se.	rain	rain		se.	
Bkt. Bonny Doon, N. 41° 26′, W. 22° 20′*†	30.52	775.2				w.			5		7		nw.					clearing.
S. S. Burswell, N. 26° 58′, W. 71° 17′*†	30.04	763.0	80	26.7		ssw.			4		2		wsw.	0	0	sm'h	e.	clear.
Bk. Champion, N. 31° 10′, W. 20° 00′			65.0	18.3		ene.			4		7		ssw.	0	0	brk'n	ssw.	light haze.
Schr. Chas. F. Heyer, N. 25° 14′, W. 83° 06′			71	21.7	71	nnw.			5		8		ene.	0	0	long	e.	fair.
Schr. C. R. Flint, Cedar Keys, Fla†	30.10	764.5	45	7.2		nne.			3		10 s		n.	0	0	r'gh	nw.	cloudy.
S. S. Cornelius, N. 48° 04′, W. 28° 34′	30.06	763.5							3		10		ne.	0	0			cloudy.
Bkt. David Preston, New Orleans, La*†			59.0	15.0		s.			3		10		sw.	0	0	mod.	sw.	sprinkling.
Bk. Don Quixote, Passeroen Roads, Java*.	30.55	776.0	60	15.6		ne.			5		10		sw.	0	0			
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†	29.93	760.2	89	31.7	96	se.					0			0	0			
S. E. J. Spicer, N. 40° 10′, W. 70° 30′	29.95	760.7	35	1.7		nnw.			3		3?		se.	0	0	sm'h		cloudy.?
Bk. Eliza Barss, Bermuda, W. I†	29.76	755.9	52	11.1	?	ene.			2		8			snow	snow			snowing.
Bk. E. L. Pettingill, N. 34° 35′, W. 125° 10′*†	29.93	760.2				sw.			6		10		ene.	4 h'r	4 h'r	mod.	ene.	raining.
Bk. Essex, Muscat, Arabia*†	29.90	759.4	60	15.6		se.			6		5?		sw.	0	0			cloudy?
Schr. F. E. McDonald, Belfast, Maine†	30.03	762.7	78	25.6		nw.			5		10		s.			r'gh	wnw.	overcast.
S. S. Foscolia, N. 18° 39′, W. 55° 50′	30.23	767.8				ne.			3							h'vy	n.	fine.
Bk. Freya, N. 18° 55′, W. 46° 30′..						ene.			1									
Bg. George, Point Caledonia, N. S*†			82	27.8		nnw.			7		5		ene.	0	0	r'gh	ene.	fair.
S. Grecian, N. 31° 56′, W. 72° 20′†	30.25	768.3				s.			3		1		nne.	0	0	sm'h		clear.
	29.87	758.7	73	22.8	72	w.			1		10			0	0	mod.		cloudy.
									6		6		w.	0	0	long	n.	fair.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
										Upper.	Lower.	Upper.	Lower.					
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Grey Eagle, N. 27° 04′ W. 38° 25′			78	25.6		sw.			2		1		w.	0	0	sm'h	nw.	threatening.
Bk. Gronsvaer, Wellington, N. Zealand†	30.36	771.2	72.8	22.7	96	nw.			6		2		nw.	0	0			fair.
Bk. Hattie G. McFarland, New York City, N. Y†	29.91	759.7	30	—1.1		nne.			5		10		nne.	7 h'r	7 h'r			stormy.
Schr. Hattie Weston, N. 12° 30′ W. 63° 48′*†	30.10	764.5	83	28.3		ene.			4		5		e.	½ h'r	½ h'r	long	ene.	fair.
S. Hedwig, N. 39° 02′, W. 73° 29′	29.73	755.2	44.8	7.1	96	nne.			8		10		nne.	7 h'r	7 h'r	7	ne.	stormy.
Bk. Heinrich & Tonio, N. 47° 48′, W. 22° 20′*†	30.58	776.7	56	13.3		ssw.			3		4		wsw.	o	o	sm'h	w.	fair.
Schr. Isabel Alberto, Cedar Keys, Fla†	30.13	765.3				nw.			5		10		nw.	o	o			cloudy.
Schr. James Slater, N. 26° 33′, W. 67° 38′†	30.11	764.8	80	26.7		s.w.			6		2		sw.	o	o	long	ese.	
Schr. Jennie N. Huddell, Savannah, Ga†	30.09	764.3	45	7.2	84	nnw.			5		5			o	o			fair.
S. S. John Hopkins, Cape Henry, Va			38	3.3		nnw.			6		10		w.	sleet	sleet	long	ne.	stormy.
Schr. John L. Thomas, N. 24° 27′, W. 81° 10′*†	30.10	764.5				nnw.			4		5?		wsw.	4 h'r	4 h'r	light	sw.	cloudy?
Bg. John Wesley, N. 27° 15′, W. 79° 50′†	29.98	761.5				nnw.			6		5?		n.	o	o	rg'h	n.	cloudy?
Bk. Joseph A. Ropes, S. 22° 00′ E. 60° 22′*†	30.08	764.0	77	25.0	69	nne.			4		1					mod.		clear.
Bkt. Josephine, N. 42° 16′, W. 70° 04′†	30.05	763.3	45	7.2	61	ene.			6		10					mod.	ene.	sprinkling.
Light House Tender, Laurel, Key West, Fla†	30.00	762.0	74	23.3		nnw.			2		9		nnw.	o	o			cloudy.
Bk. Liberia, N. 8° 16′, W. 17° 15′*	29.95	760.7	81	27.2	79	nw.			2		1			o	o	long	sw.	
Bg. Lilian, N. 28° 18′, W. 71° 52′†	30.02	762.5	79	26.1		sw.			6		10		w.	3 h'r	3 h'r	r'gh	sw.	squally.
S. S. Madrid, Baltimore, Md*†	30.08	764.0	30	—1.1		ne.												
S. S. Malabar, N. 32° 13′, E. 30° 01′*†	30.00	762.0				nw.			2		0			o	o	sm'h		clear.
Bg. Mary Gibbs, N. 38° 20′, W. 72° 30′*†	29.50	749.3				ne.			8					o	o	5	cross	stormy.
Bk. Matilda C. Smith, N. 30° 10′, W. 39° 45′*†	30.15	765.8				s.			9		10		ssw.	8 h'r	8 h'r	con.	ese.	stormy.
Bg. Mattie B. Russell, N. 39° 20′, W. 73° 00′						ne.			8					o	o	high	var.	cloudy.
Schr. Moravian, N. 12° 33′, W. 81° 43′†	30.08	764.0				ene.							ne.	o	o	long	n.	cloudy.
S. M. P. Grace, N. 69 47′, W. 121° 02′*	29.86	758.4	78	25.6		s.to se.			5		5		se.	o	o	short	ese.	
Bg. Myrtle, Boston, Mass†	30.07	763.8				se.			4				ne.					snowing
Bk. Northern Queen, N. 37° 56′, W. 52° 00′ *†	30.30	769.6	73	22.8	67	e.			1		8					hv'y	w.	
Bg. O. C. Clary, N. 10° 39′ W. 56° 56′*†	29.90	759.4	80	26.7	91	e.			5		5		e.			short		fair.
Bk. Orpheus, N. 47° 26′ W. 17° 22′	30.34	770.6	54	12.2		wsw.			5		10 k			o	o	mod	wsw.	foggy.
S. Paramita, San Francisco, Cal†	30.04	763.0	51	10.6		calm			0					o	o			cloudy.
S. S. Radnorshire, N. 7° 25′, E. 72° 38′*†	29.88	758.9				calm			0		0			o	o	sm'h		clear.
S. St. Francis, N. 2° 17′ W. 116° 45′†	29.91	759.7	70	21.1		se.			5		6		se.	¼ h'r	¼ h'r	mod	se.	cloudy.
Bk. Scud, N. 8° 11′ W. 56° 53′*†	29.99	761.7				e.			5		8		e.	½h'r	½h'r	sm'h		squally.
Bk. Southern Belle, Antwerp, Belgium*†	29.75	755.6	42	5.6		s.			5		8							light rain.
S. S. Strathleven, N. 14° 27′ E. 42° 32′	29.87	758.7	80.8	27.1	74	sse.			6							6	sse	blue sky.
S. S. Sunbeam, N. 33° 41′, W. 26° 36′	30.50	774.7	68	20.0	74	ese.			5		5		ese.	o	o	4	ese	d, clouds.
Bk. Truro, N. 41° 37′ W. 53° 45′*†	30.25	768.3				calm			0		10		sw.	o	o	mod.	wnw.	cloudy.
U. S. F. C. S. S. Fish Hawk, Washington, D. C†	30.07	763.8	35	1.7	80	nne.			3		10		nne.					light snow.
Bk. Usko, N. 50° 20′, W. 37° 13′*	29.95	760.7	56	13.3		wsw.			6		8		wsw.	o	o	r'gh	wsw.	cloudy.
Bk. Vincenzo Accame, N. 37° 18′, W. 18° 02′†	30.68	779.3	60.8	16		ne.			5		10		ne.	o	o	r'gh	ne.	covered.
Schr. Walter L. Plummer, N. 22° 50′, W. 74° 25′*†	30.10	764.5				ese.			4		0			o	o	sm'h		fine.
Bk. Wandering Jew, S. 32° 30′, W. 50° 00′†	30.17	766.3	69	20.6		calm			0		3		ne.	o	o	long	ssw.	clear.
Bk. Warden Law, S. 23° 41′, W. 71° 35′	30.07	763.8				ssw.			1		10		nw.	o	o	sm'h	ssw.	covered
S. Wm. Woodbury, N. 39° 38′ W. 46° 33′*†	30.37	771.4	63	17.2		n.			2		2?		sw.			long	w.	cloudy?

International Chart I. November 29, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON NOVEMBER 30, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.19	766.7	60.1	15.6	83	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.06	763.5	59.0	15.0	62	w.	.....	.....	5	.....	4	.....	.....	0.256	6.5	cloudy	Thève.
La Calle	.....	.....	30.00	761.9	55.0	12.8	82	nnw.	.....	.....	5	.....	5	.....	.....	0.492	12.5	cloudy	Fonfrède.
Tunis	.....	.....	30.00	761.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.18	766.5	57.6	14.2	39	nnw.	.....	.....	2	.....	3	.....	.....	0.008	0.2	pretty fair	Pérès.
Tebessa	.....	.....	30.08	764.1	50.7	10.4	76	w.	.....	.....	3	.....	1	.....	.....	0.039	1.0	very fair	Dognon.
Geriville	.....	.....	.....	.....	50.7	10.4	37	nw.	.....	.....	3	.....	0	.....	.....	0	0	clear	Lonchamp.
Laghouat	.....	.....	30.15	765.8	54.7	12.6	40	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.14	765.6	61.9	16.6	39	wnw.	.....	.....	3	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	30.22	767.6	30.31	769.9	55.6	13.1	78	s.	9	4.0	.....	.....	0	.....	.....	0	0	very fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.37	746.1	29.95	760.6	36.0	2.2	79	sw.	.....	.....	2	.....	7	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.23	742.5	30.04	762.9	32.4	0.2	89	e.	11.2	5.0	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.00	736.7	29.92	760.0	32.4	0.2	85	n.	.....	.....	2	.....	10 n	.....	.....	0.059	1.5	.....	Julius Mikolik.
Gratz	28.66	727.9	29.96	761.0	33.6	0 9	87	s.	.....	.....	1	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.35	720.1	29.82	757.4	37.8	3.2	90	nnw.	.....	.....	1	.....	10	.....	.....	0.020	0.5	rain & snow	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.51	724.2	29.92	759.9	29.1	— 1.6	88	ne.	.....	.....	1	4 c	0	.....	.....	0	0	fair	The Staff.
Lemberg	28.96	735.5	29.99	761.8	30.6	— 0.8	85	ne.	.....	.....	1	.....	10	.....	.....	0.051	1.3	.....	Dr. T. Stanecki.
Pola	29.73	755.1	29.84	758.0	45.1	7.3	51	e.	.....	.....	1	.....	5	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.35	745.6	29.82	757.4	38.5	3.6	87	n.	.....	.....	2	.....	10	.....	.....	0.323	8.2	.....	Joseph Midlinszay, S. J.
Szegedin	29.60	751.7	29.88	759.0	40.1	4.5	63	nw.	.....	.....	1	.....	6	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.80	756.8	29.90	759.4	42.4	5.8	58	e.	.....	.....	1	.....	1	.....	.....	0	0	.....	Royal Academy.
Vienna	29.22	742.2	29.97	761.2	32.9	0.5	80	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	30.10	764.5	30.20	767.1	38.7	3.7	60	nw.	12	5.4	.....	.....	2	.....	.....	0	0	blue sky	W. Boswell
Armagh, Observatory	29.97	761.2	30.22	767.6	36.9	2.7	79	s.	3	1.3	.....	.....	3	.....	.....	.....	.....	misty	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.18	766.6	42.1	5.6	87	n.	6	2.7	.....	.....	1	.....	.....	.....	.....	blue sky	John Hartnup.
Bolton, Sharples	29.62	752.3	30.17	766.3	41.9	5.5	76	ne.	6	2.7	.....	.....	6	.....	.....	.....	.....	d. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.75	755.6	30.14	765.5	42.6	5.9	77	ne.	.....	.....	2	.....	7	.....	.....	0	0	d. clouds	McLandsborough&Preston
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	81.0	27.2	70	ne.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	43.0	6.1	75	n.	.....	.....	1.0	.....	6	.....	.....	.....	.....	d. clouds	John McLaren.
Chatham, School M. E	29.96	761.0	30.10	764.5	41.9	5.5	87	nne.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.97	761.2	30.22	767.6	44.9	7.2	83	nnw.	.....	.....	3	.....	8	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.75	704 8	29.97	761.2	74.0	23.3	59	e.	.....	.....	1	.....	8	.....	.....	blank	blank	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88.0	31.1	66	n.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.11	764.8	30.18	766.6	58.2	14.6	91	nw.	.....	.....	4	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	30.01	762.2	30.21	767.3	35.8	2.1	75	nw.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.92	760.0	30.10	764.5	41.7	5.4	90	n.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.90	759.4	30.21	767.3	44.2	6.8	76	nnw.	.....	.....	1	.....	8	.....	.....	.....	.....	d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.08	764.0	30.11	764.8	42.2	5.7	87	n.	13	5.8	.....	.....	4	.....	.....	.....	.....	hazy	The Staff.
Leicester, Museum	29.89	759.2	30.15	765.8	43.6	6.4	79	ne.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast	J. O. Smith.
Malta, Mediterranean	29.91	759.7	29.99	761.7	58.6	14.8	95	sw.	.....	.....	2	.....	4	.....	.....	blank	blank	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.19	766.8	30.24	768.1	67.2	19.6	58	ne.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.62	752 3	30.16	766.1	41.6	5.3	81	nne.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	Warren Middleton.
Oxford, Radcliffe Obs'y	29.90	759.4	30.13	765.3	42.0	5.6	90	ne.	.....	.....	3	.....	10	.....	.....	.....	.....	threatening	The Staff.
Plymouth	30.10	764.5	30.18	766.6	45.5	7.5	73	n.	.....	.....	3	.....	0	.....	.....	.....	.....	blue sky	John Merrifield.
Sandwick Manse, Orkneys	30.16	764.5	30.21	767.3	36	2.2	92	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	d. clouds	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.75	755.6	29.82	757.4	59.0	15.0	64	wsw.	.....	.....	2	.....	7	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.86	758.4	30.15	765.8	42.9	6.1	81	nne.	.....	.....	1	.....	5	.....	.....	0	0	d. clouds	W. F. Cooper.
Silloth Rectory	30.17	766.3	30.20	767.1	40.2	4.6	82	n.	.....	.....	1	.....	0	.....	.....	0	0	blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.18	766.6	43.1	6.2	67	ne.	2	0.9	.....	.....	5	.....	.....	.....	.....	d. clouds	I. New.
Strathfeld Turgiss	29.88	758.9	30.10	764.5	42.2	5.7	84	nw.	.....	.....	1	.....	6	.....	.....	.....	.....	d. clouds	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.14	765.5	30.19	766.8	48	8.9	85	n.	.....	.....	4	.....	8	.....	.....	.....	.....	gloomy	W. Newcombe.
Valencia, Observatory	30.17	766.3	30.19	766.8	44.7	7.1	80	se.	23	10.3	.....	.....	10	.....	.....	blank	blank	gloomy	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.59	751.6	29.63	752.6	34	1.1	92	n.	15	6.7	.....	.....	10 n	.....	calm	0.700	17.8	cloudy	H. J. Cundall, C E
Chatham, N. B*	29.73	755.1	29.80	756.9	25	— 3.9	96	n.	7	3.1	.....	.....	10 s	.....	n.	0.59	15.0	cloudy	G. A. Blair.
Father Point, Quebec*	29.90	759.4	29.92	760.0	17	— 8.3	87	nw.	14	6.3	.....	.....	10 n	.....	calm	inap.	inap.	light snow	J. McWilliams.
Fort Garry, Manitoba*	29.17	740.9	30.05	763.3	21	— 6.1	84	w.	5	2.2	.....	4 k	0	nw.	.....	0	0	fair	James Stewart.
Halifax, N. S*	29.58	751.3	29.71	754.6	35	1.7	89	nw.	4	1.8	.....	.....	10 k	.....	n.	0.433	11.0	cloudy	A. Allison.
Kingston, Ontario*	29.73	755.1	30.09	764.3	18	— 7.8	84	w.	4	1.8	.....	.....	10 n	.....	.....	0.01	0.3	light snow	A. P. Knight, M. A
Montreal, Quebec*	29.79	756.7	30.01	762.2	16	— 8.9	87	w.	4	1.8	.....	.....	10 s	.....	.....	inap.	inap.	light snow	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.37	746.0	30.12	765.0	20	— 6.7	70	n.	6	2.7	.....	5 k	5 ks	n.	n.	0	0	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.40	746.7	30.21	767.3	18	— 7.8	100	w.	9	4.0	.....	10 c	0	sw.	.....	0.01	0.3	cloudy	H. Morgan.
Port Stanley, Ontario	29.52	749.8	30.21	767.3	20	— 6.7	84	w.	16	7.2	.....	5 k	0	w.	.....	0.02	0.5	fair	M. Payne.
Quebec, Quebec*	29.63	752.6	29.97	761.2	18	— 7.8	84	e.	.....	.....	1	.....	10 n	.....	e.	inap.	inap.	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.58	751.3	30.07	763.8	17	— 8.3	83	w.	2	0.9	.....	.....	10 s	.....	nw.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.37	746.0	30.14	765.5	21	— 6.1	91	s.	16	7.2	.....	.....	10 s	.....	.....	0.31	7.9	heavy snow	
St. Andrews, N. B	29.72	754.9	29.77	756.1	23	— 5.0	93	nne.	4	1.8	.....	.....	10 n	.....	.....	0.48	12.2	light snow	
Sydney, C. B*	29.42	747.3	29 49	749.0	38	— 3.3	96	sw.	12	5.4	.....	.....	10 n	.....	.....	0.82	20.8	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.77	756.1	30.18	766.6	20	— 6.7	80	nw.	6	2.7	.....	.....	10 ks	.....	nw.	0.04	1.0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.67	753.6	29.74	755.4	33	0.6	88	n.	1	0.4	.....	10 k	0	.....	.....	0.69	17.5	cloudy	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.65	727.7	30.18	766.6	16.0	— 8.9	83	wnw.	.....	.....	3	.....	10 s	.....	.....	0.037	0.9	.....	Wm. Wylie.
St. Johns, Newfoundland	29.66	753.4	29.92	760.0	41	5.0	100	se.	3	1.3	.....	.....	10 n	.....	.....	0.48	12.2	raining	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.04	763.0	30.07	763.8	71.0	21.7	83	e.	9.0	4.0	.....	3 c	0	.....	.....	0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.98	761.5	30.02	762.5	84.0	28.9	56	sse.	35	15.6	.....	0	0	.....	.....	0	0	.....	The Staff, for D.Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
CHINESE (*Sub-series*).																			
Tchang-kia-tchouang	.....	.....	29.86	758.5	39.0	3.9	72	w.	4.9	2.2	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.14	765.6	30.17	766.2	45.0	7.2	85	sse.	10.7	4.8	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	30.06	763.5	30.11	764.7	34.9	1.6	78	se.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	30.03	762.7	30.05	763.3	34.3	1.3	92	se.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.47	748.6	29.52	749.7	26.4	— 3.1	89	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut	29.58	751.3	29.60	751.8	29.1	— 1.6	.....	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.60	751.7	29.64	752.8	35.6	2.0	89	se.	.....	.....	7	.....	10 /	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	30.19	766.8	30.22	767.7	33.1	0.6	83	s.	9	4	.....	.....	10	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.97	761.1	30.06	763.5	32.9	0.5	90	ese.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	Loerarer Oesterboi.
Jacobshavn	29.47	748.6	29.52	749.8	22.3	— 5.4	.....	calm	.....	.....	0	.....	7	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.42	747.2	30.09	764.2	44.6	7	77	nw.	.....	.....	2	.....	10 n	.....	nw.	0.173	4.4	raining	M. Labroue, Director.
Alençon, Normal School	29.50	749.4	30.06	763.4	41.4	5.2	97	n.	.....	.....	2	.....	n	.....	s.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.69	754.2	29.96	760.9	39.2	4.0	80	ne.	.....	.....	2	.....	.....	.....	.....	0.154	3.9	.....	M. Fénéon, Command't.
Avignon, Normal School	29.76	756.0	29.84	758.0	48.2	9	63	nw.	.....	.....	2	.....	.....	.....	.....	0.063	1.6	.....	M. Giraud, Director.
Bar-sur-Seine	29.29	744.0	29.87	758.7	36.1	2.3	100	ne.	.....	.....	1	.....	10	.....	.....	0.559	14.2	covered	M. Saillard, Director.
Beauvais, Normal School	29.73	755.2	30.01	762.2	38.7	3.7	76	nne.	.....	.....	3	.....	8	.....	nnw.	0.173	4.4	very cloudy	M. Frère Eugène Marie.
Besançon, Normal School	28.88	733.6	29.79	756.7	39.4	4.1	93	ssw.	.....	.....	1	.....	10 n	.....	sw.	0.453	11.5	raining	M. Gobin, Director.
Bordeaux, Observatory	29.79	756.6	30.06	763.4	47.8	8.8	63	nnw.	.....	.....	2	.....	8	.....	nnw.	0.260	6.6	almost cov'd	M. Rayet, Director.
Bourges, Normal School	29.37	746.0	29.93	760.1	40.1	4.5	83	nnw.	.....	.....	1	.....	n	.....	nne.	0.728	18.5	.....	M. Malet, Director.
Brest, Naval Observatory	29.97	761.1	30.21	767.2	49.6	9.8	54	n.	.....	.....	2	.....	9	.....	n.	0.047	1.2	.....	M. de Kermaree, Dir.
Caen, Normal School	29.96	760.9	30.03	762.8	45.7	7.6	69	n.	.....	.....	1	.....	10	.....	.....	0.24	6.	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.45	748.1	29.78	756.4	35.6	2.0	96	nw.	.....	.....	4	.....	5	.....	ne.	0.118	3.0	cloudy	M. Jadot, Director.
Charleville, Normal School	29.34	745.3	29.86	758.5	39.9	4.4	73	ne.	.....	.....	1	.....	8	.....	.....	0.39	10.	¾ covered	M. Grimard, Director
Clermont-Ferrand Obs'y	28.51	724.2	29.91	759.6	40.1	4.5	77	nw.	.....	.....	2	.....	10	.....	nw.	0.504	12.8	covered	M. Allnard, Director.
Cluny, Normal School	29.00	736.5	29.84	758.0	40.3	4.6	83	wnw.	.....	.....	2	.....	10	w.	w.	0.12	3.	raining	M. de Villemontée, Dir.
Commercy, Normal School	28.97	735.9	29.85	758.3	35.2	1.8	93	nne.	.....	.....	1	.....	10	nne.	nne.	0.260	6.6	covered	Dr. Coulet, Director.
Gap, Normal School	27.40	696.0	29.97	761.1	46.0	7.8	67	w.	.....	.....	2	.....	3	.....	s.	0.12	3.	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.63	727.3	29.78	756.5	45.1	7.3	71	nw.	.....	.....	3	.....	3	.....	nw.	0.205	5.2	.....	M. Kina, Director.
Grenoble, Normal School	29.10	739.1	29.89	759.3	35.6	2	100	wnw.	.....	.....	1	.....	10 kn	.....	.....	0.343	8.7	snowing	M. Ablard, Director.
Guéret	28.35	720.2	29.97	761.3	37.4	3	86	n.	.....	.....	2	.....	10	.....	n.	0.295	7.5	covered	M. Delorme, Dir.
Lamballe, Normal School	29.81	757.2	30.09	764.2	45.3	7.4	83	sw.	.....	.....	3	.....	10 n	.....	sw.	0.110	2.8	hazy	M. Ollitrault, Director.
Lescar, Normal School	29.49	749.0	30.06	763.6	47.3	8.5	77	w.	.....	.....	3	.....	10	.....	w.	0.654	16.6	covered	M. Chauvin, Director.
Lorient, Naval Observatory	30.10	764.5	30.20	767.1	48.6	9.2	50	nnw.	.....	.....	2	.....	8	nw.	n.	0	0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.80	731.6	29.89	759.2	39.4	4.1	98	nw.	.....	.....	1	.....	10	.....	.....	0.138	3.5	raining	M. André, Director.
Mans, Normal School	29.74	755.4	30.05	763.3	42.3	5.7	77	nne.	.....	.....	4	.....	.....	.....	nne.	0.453	11.5	.....	M. Piboeu, Director.
Marseille, Observatory	29.53	750.1	29.80	757.0	48.2	9.0	61	nw.	.....	.....	4	.....	2	.....	nw.	0.039	1.0	.....	M. Stephan, Director.
Mt. Louis	24.69	627.2	29.54	750 2	24.8	— 4.0	99	e.	26.2	11.7	.....	.....	10	se.	.....	1.177	29.9	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29.71	754.6	29.84	757 9	49.3	9.6	71	nw.	.....	.....	4	.....	2	nw.	.....	0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.00	736 7	29.81	757.2	34.5	1.4	93	nw.	.....	.....	1	.....	.....	.....	.....	0.039	1.0	.....	M. Hasse, Director
Nantes, Observatory	29.96	761.0	30.12	765 1	47.5	8.6	60	nnw.	.....	.....	1–3	.....	10 n;kn	.....	n.	0.20	5.	.....	M. Larocque, Director.
Perpignan, Observatory	29.82	757.5	29.94	760.4	49.1	9.5	58	nw.	22.4	10.0	.....	.....	10	.....	nw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.94	532.0	.....	.....	19.4	— 7.0	.....	nw.	.....	.....	4–5	.....	10	.....	nw.	3.780	96.0	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.78	731.0	29.86	758.4	43.2	6.2	85	nw.	.....	.....	1	.....	5	n.	nw.	0	0	cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.88	632.0	.....	.....	25.7	— 3.5	100	nw.	.....	.....	4	.....	10	.....	.....	1.319	33.5	covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.99	761.8	30.02	762.6	47.8	8.8	84	nw.	.....	.....	3	.....	2	.....	nnw.	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.88	759.0	30.11	764 7	42.4	5.8	100	nnw.	.....	.....	3	.....	2	.....	s.	0.154	3.9	slightly cl'dy	M. Brotier, Director.
Rodez, Normal School	27.73	704.3	29.95	760.6	36.0	2.2	93	nw.	.....	.....	1	.....	10	.....	se.	0.28	7.	covered	M. Seger, Director.
Rouen, Normal School	29.99	761.7	30.04	762 9	43.5	6.4	70	nne.	.....	.....	2	.....	2	nne.	.....	0.43	11.	slightly cl'dy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	49.6	9.8	85	n.	.....	.....	1	.....	.....	n.	n.	0.177	4.5	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.79	756.7	29.96	760.9	38.3	3.5	85	n.	.....	.....	2	.....	10	.....	n.	0.087	2.2	.....	M. Renou, Director.
Toulouse, Observatory	29.32	744.7	30.04	763.1	45.0	7.2	71	wnw.	.....	.....	6	.....	10	nw.	.....	0.264	6.7	covered	M. Baillaud, Director.
Tours	29.82	757.3	29.97	761.2	43.9	6.6	82	nnw.	.....	.....	1	.....	10	.....	n.	0.441	11.2	covered	M. de Tastes.
Versailles, Observatory	29.48	748.8	29.97	761.2	37.4	3.0	83	n.	.....	.....	2	.....	.....	.....	.....	0.016	0.4	.....	Dr. A. Bérigny, Director.
GERMAN.																			
Ansbach	28.40	721.3	29.91	759.7	31.3	— 0.4	77	se.	.....	.....	2	.....	9	sw.	.....	0.012	0.3	.....	Prof. Jnedt.
Bamberg	29.05	737.8	29.89	759.1	36.5	2.5	64	e.	.....	.....	1	.....	9	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.84	757.9	30.02	762.6	37.4	3.0	78	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29 51	749.6	30.04	763.1	33.1	0.6	87	e.	.....	.....	2	.....	10	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.41	746.9	29.86	758.4	35.2	1.8	86	ne.	.....	.....	1	.....	10	ne.	.....	0.024	0.6	light snow	Albert Senz.
Cassel	29.20	741.6	29.91	759 7	36.3	2.4	66	e.	.....	.....	1	.....	4	s.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.56	750.9	29.92	760.0	37.4	3.0	73	w.	.....	.....	2	.....	8	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.37?	720.7?	29.86	758.5	36.0	2.2	85	ne.	.....	.....	1	.....	10	w.	.....	0.236	6.0	snow flakes	Wilhelm, Chief Tel.
Hamburg	29.97	761.1	30.06	763.4	36.1	2.3	85	ese.	.....	.....	3	.....	10	.....	.....	0	0	foggy	E. Preller.
Kiel	30.04	763.0	30.06	763.4	35.2	1.8	88	sse.	.....	.....	2	.....	10	.....	.....	0.008	0.2	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.58	751.3	30.02	762.4	34.2	1.2	82	e.	.....	.....	2	.....	3	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.82	757.4	30.02	762.5	33.8	1.0	90	ene.	.....	.....	1	0	9 ks;k	.....	ese.	0	0	foggy	Weather Observatory.
Memel	30.26	768 7	30.31	769.9	23.2	— 4.9	45	e.	.....	.....	3	.....	0	.....	.....	.....	.....	clear	Issermann.
Munich	28.00	711.3	29.85	758.3	32.2	0.1	67	e.	.....	.....	2	.....	5	w.	.....	0.004	0.1	.....	Central Station.
Neufahrwasser	30.21	767.4	30.23	767.8	26.1	— 3.3	85	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.30	744.1	29.82	757.4	35.1	1.7	93	w.	.....	.....	2	.....	10	.....	.....	0.248	6.3	.....	Dicknether.
Stuttgart	28.87	733.2	29.79	756.7	33.4	0.8	90	s.	.....	.....	1	.....	10	.....	.....	0.067	1.7	.....	Prof. Dr. Schoder.
Wustrow	30.08	764.0	30.10	764.6	32.7	0.4	93	ese.	.....	.....	2	.....	10 s	.....	.....	0	0	.....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.55	750.5	29.93	760.3	61.0	16.1	.....	w.	.....	.....	2.0	0	1 k	.....	.....	0	0	.....	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	29.90	759.5	29.95	760.8	78.7	25.9	58	wsw.	15.0	6.7	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.38	746.1	29.85	758.1	82.8	28.2	36	nnw.	11.0	4.9	.....	.....	0	.....	.....	0	0	.....	
Bombay	29.80	757.0	29.84	758.0	79.5	26.4	85	nw.	14.0	6.3	.....	.....	2	ssw.	sw.	0	0	d. clouds	
Poona, Yarrowda	27.99	711.0	29.87	758.8	71.3	21.8	89	nne.	4.0	1.8	.....	.....	10	.....	w.	0.38	9.6	overcast	
Trichinopoly	29.54	750.2	29.82	757.4	80.3	26.8	80	wnw.	1.0	0.4	.....	.....	6	.....	.....	0	0	d. clouds	
Bellary	28.36	720.2	29.55	758.2	70.6	21.4	96	w.	.....	.....	.....	.....	10	.....	.....	0.09	2.3	overcast	
Belgaum	27.29	693.2	29.81	757.2	79.6	26.4	54	nne.	5.0	2.2	.....	.....	6	se.	n.	0.05	1.3	d. clouds	
Lahore	29.16	740.6	29.93	760.1	64.6	18.1	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	28.98	736.0	29.90	759.5	66.4	19.1	50	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.33	744.9	29.91	759.6	71.7	22.1	38	calm	0	0	.....	.....	2	.....	.....	0	0	d. clouds	
Nagpur	28.80	731.4	29.84	758.0	78.2	25.7	68	calm	1.0	0.4	.....	.....	8	.....	ne.	0	0	d. clouds	
Jubbulpore	28.53	724.7	29.91	759.6	73.6	23.1	61	ne.	4.0	1.8	.....	.....	6	.....	n.	0	0	d. clouds	
Lucknow	29.52	749.9	29.91	759.6	73.2	22.9	34	calm	0	0	.....	.....	2	.....	ene.	0	0	d. clouds	
Allahabad	29.57	751.1	29.89	759.2	67.2	19.6	80	calm	0	0	.....	.....	9	.....	.....	0	0	d. clouds	
Patna	29.73	755.2	29.93	760.1	67.2	19.6	82	n.	3.1	1.4	.....	.....	4	n.	n.	0	0	d. clouds	
Hazaribagh	27.86	707.6	29.92	760.0	65.2	18.4	72	nnw.	4.1	1.8	.....	.....	2	.....	.....	0	0	.....	
Cuttack	29.80	757.0	29.88	759.1	77.8	25.4	76	nne.	1.0	0.4	.....	.....	9	.....	.....	0	0	d. clouds	
Calcutta, Alipore	29.87	758.6	29.89	759.1	71.2	21.8	78	nw.	0.5	0.2	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.76	755.9	29.88	759.0	71.4	21.9	72	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.79	756.6	29.88	759.0	74.1	23.4	75	nw.	2.1	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.58	751.4	29.93	760.2	67.5	19.7	82	ne.	2.0	0.9	.....	.....	6	w.	w.	0	0	d. clouds	
Zanzibar, Africa	29.80	757.0	29.83	757.6	86.5	30.3	61	e.	5.3	2.4	.....	.....	3	.....	.....	0	0	d. clouds	
Jeypore	28.44	722.3	29.90	759.4	73.9	23.3	60	w.	0.5	0.2	.....	.....	1	.....	w.	0	0	blue sky	
ITALIAN.																			
Udine	29.49	749.0	29.95	760.6	41.4	5.2	55	e.	3.8	1.7	.....	.....	2	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.37	746.1	29.91	759.6	39.6	4.2	77	ne.	4.5	2.1	.....	.....	10	.....	.....	0.118	3.0	.....	Prof. Schiapparelli.
Padua	29.77	756.2	29.89	759.1	39.7	4.3	60	nne.	8.7	3.9	.....	.....	10	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.97	735.8	29.89	759.3	37.6	3.1	76	nw.	3.8	1.7	.....	.....	10	.....	.....	0	0	.....	Prof. F. F. Denza.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	WEATHER.	OBSERVERS.
ITALIAN.—Continued.																			
Genoa	29.61	752.1	29.80	757.0	37.6	3.1	78	nw.	8.7	3.9			10	sw.		1.295	32.9		Prof. G. M. Garibaldi.
Mondovi	27.93	709.4	29.88	759.0	31.6	— 0.2	91	w.			2		10			0	0		Prof. D. C. Bruno.
Pesaro	29.77	756.1	29.82	757.3	46.8	8.2	55	sse.	7.4	3.3			10	n.		0	0		Prof. Luigi Guidi.
Florence	29.53	750.1	29.79	756.7	40.6	4.8	70	ne.			2		10			0	0		Prof. Costantino Pittei.
Leghorn	29.60	751.7	29.68	753.9	33.8	1.0	85	ne.	7.4	3.3			10			0.535	13.6		Prof. P. Monte.
Rome	29.59	751.5	29.76	756.0	48.6	9.2	41	ese.	12.5	5.6			10			0	0		Prof. P. Tachini.
Lecce	29.69	754.1	29.95	760.6	50.0	10.0	58	n.	4.3	1.9			3			0	0		Prof. C. de Giorgi.
Cosenza	29.02	737.2	29.92	760.0	49.6	9.8	74	s.	2.5	1.1			7	sw.		0	0		Prof. D. Conti.
Cagliari	29.52	749.8	29.72	754.8	51.3	10.7	75	nw.			2		8	w.		0.366	9.3		Prof. A. Pacinotti.
Palermo	29.61	752.0	29.99	761.7	54.3	12.4	38	nw.	18.6	8.3			7	nw.		0.228	5.8		Prof. G. Cacciatore.
Syracuse	29.86	758.4	29.90	759.5	58.1	14.5	67	wsw.	12.5	5.6			10	wsw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.31	744.4	29.84	757.9	51.1	10.6	59	e.	0.7	0.3			6	sw.		0	0		Prof. F. Brioschi.
Stelvio	21.78	553.1			12.0	—11.1	89	w.			2		3			0	0		Prof. P. F. Denza.
Valdobbia	21.81	553 9			13.6	—10.2	67	e.			2		5			3.937	100.0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.96	761.1	30.00	761.9	43.0	6.1	86	calm			0	0	3 ck		w.	0.476	12.1	fair	Hattori.
Awomori	29.87	758.7	29.90	759.4	36.9	2.7	77	s.	14.6	6.5		0	0			0.247	6.3	clear	K. Ogawa.
Hakodate	29.82	757.4	29.83	757.7	41.8	5.4	66	wsw.	12.0	5.4		2	0	w.		0	0	clear	
Hiroshima					-39.1	3.9	87	ssw.	0.6	2.9		0	0			0.006	0.1	clear	Y. Miwa.
Kanazawa	30.02	762.4	30.12	765.1	45.0	7.2	67	s.	10.5	4.6		0	1			0.545	13.8	fair	S. Endo.
Kioto	30.02	762.5	30.20	767.1	34.3	1.3	90	wnw.	0.9	0.4		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.04	763.1	30.25	768.5	43.5	6.4	85	ne.	0.6	0.3			10 s			0	0		S. Takehayashi.
Nemuro	29.69	754.1	29.75	755.6	30.0	— 1.1	84	calm	0	0		0	0			0	0	clear	
Niigata	30.04	763.0	30.08	764.0	42.5	5.8	81	se.	8.9	3.9		0	7 ck;s		w.	0.050	1.3	cloudy	M. Morita.
Nobiru	30.02	762.4	30.03	762.8	38.6	3.7	76	nnw.	3.2	1.4		0	0			0	0	clear	H. Midzushima.
Osaka	30.17	766.4	30.19	766.8	39.5	4.2	85	s.	3.0	1.3		0	0			0	0	clear	
Supporo					31.0	— 0.6	75	se.	12.0	5.6		2	3			0.010	0.2	fair	
Tokei Obs'y, Yeddo	30.03	762.7	30.11	764.7	40.2	4.6	71	nnw.	3.3	1.4		1 cs	0	ssw.		0	0	clear	The Staff.
Wakayama	30.15	765.7	30.20	767.2	39.5	4.2	83	ne.	0.1	2.7		0	0			0	0	clear	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.72	754.9	29.90	759.4	80.0	26.7	63	nnw.	5.5	2.5			10 ks;n			0.08	2.0	overcast	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.90	607.1	30.12	765.1	37.4	3.0	74	ne.	14.1	6.3		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.59	624.6	30.61	777.5	37.4	3.0	87	wsw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.87	758.6	30.13	765.3	74.0	23.3	36	ene.	0.9	0.4		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.32	592 3	30.63	778.0	33.4	0.8	83	w.	2.0	0.9		0	0			0	0	very fine	The Staff.
Morelia	24.20	614.6	30.02	762.5	46.4	8.0	77	s.	5.1	2.3		2 c	1 k	s.	s.	0	0	clear	M. Tena, M. D.
Orizaba																			Prof. M. M. Cházaro.
Pabellon, Aguascallentes	24.20	614.6	30.42	772.7	38.7	3.7	79	n.				0	0			0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.55	598.1	30.66	778.7	34.7	1.5	73	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.62	574.6	30.49	774.3	32.2	0.1	91	nne.	9.9	4.4		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.02	762.5	30.02	762.5	40.5	4.7		nnw.			3					0.161	4.1		
Groningen	29.98	761 4	30.03	762.8	33.1	0.6		e.			1					0	0		
Helder	30.03	762.7	30.03	762.7	37.0	2.8		ene.			2					0.079	2.0		
Hellevoetsluis	30.01	762.3	30.01	762.3	37 6	3.1	81	ene.			1					0	0		
Utrecht	29.97	761.2	30.02	762.4	37.6	3.1	81	ese.			2		2			0	0	lightly cld'y	H. van der Brink.
NORWEGIAN.																			
Bergen	29.99	761.8	30.06	763.4	33.4	0.8	85	sse.	13	6			10			0.118	3.0		
Brono	29.87	758.7	29.91	759.7	24.4	— 4.2	93	calm	0	0			10			0.386	9.8	snowing	
Christiania	30.04	762.9	30.19	766.9	21.7	— 5.7	90	e.	2	1			9			0.047	1.2		
Gjæsvær	29.57	751.1	29.60	751.7	20.3	— 6.5		se.			2		8						
Lodingen	29.57	751.0	29.61	752.2	32.9	0.5	57	wsw.			9		10			0.157	4.0		
PORTUGUESE.																			
Angra, Azores	30.45	773.3	30.60	777.2	65.5	18.6	78	e.	7.4	3.3			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.22	742.2	30.23	767.9	57.2	14.0	47	ne.	12.5	5.6			2			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	30.35	770.8	30.44	773.1	67.5	19.7	50	sw.	4.3	1.9			5	n.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.98	761.6	30.35	770.9	56.7	13.7	59	n.	29.8	13.3			2	nw.		0	0		The Staff.
Ponta Delgada, Azores	30.63	777.9	30.70	779.7	63.7	17.6	65	calm	0	0			3			0	0		
Saint Paul de Loando	29.78	750.5	29.98	761.6	72.3	22.4	85	wnw.	0.7	0.3			10			0	0		
Serra da Estrella	25.44	646.1	30.30	769.5	39.2	4.0	57	nne.	23.0	10.3			3			0	0		
RUSSIAN.																			
Akmolinski	28.98	736.0	30.10	764.5	32.2	0.1	62	sw.	9	4		0	5 s			0	0		Major K. Lasarew.
Archangel	30.14	765.6	30.16	766.1	— 2.6	—19.2	86	sse.	2	1			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.06	763.5	29.98	761.4	52.7	11.5	58	s.	7	3		0	0			0	0		Capt. Wisganow.
Barnaul	29.41	746.9	29.92	760.0	32.0	0.0	87	sw.	18	8			10			0.366	9.3		Meteorological Obs'y.
Dorpat	30.10	764.5	30.37	771.3	13.5	—10.3	100	w.	4	2		4 cs	0			0	0	light clouds	Observatory.
Ekaterinburg	28.86	733.1	29.86	758.4	29.7	— 1.3	92	calm	0	0			10			0.016	0.4		Meteorological Obs'y.
Kasan	29.76	755.8	30.05	763.2	18.1	— 7.7	73	n.	18	8			10			blank	blank		Observatory.
Kertch	29.58	751.4	29.60	751.9	56.7	13.7	95	calm	0	0			9 n			0	0		Lagorio & Sastyrez.
Kieff	29.21	741.8	29.87	758.7	29.5	— 1.4	86	n.	10	7			10 ks;n						Observatory.
Lugan	29.45	747.9	29.65	753.0	54.1	12.3	62	s.	4	2			9			0	0		Meteorological Obs'y.
Nikolaiev	29.43	747.5	29.50	749.3	52.7	11.5	87	ssw.	9	4			10 n			0	0		Capt. Kurdakow.
Pekin, China	29.71	754.7	29.85	758.3	36.9	2.7	55	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	30.31	769.8	30.32	770.2	7.9	—13.4	90	w.	4	2			10			inap.	inap.		Central Physical Obs'y.
Semipalatinsk	29.52	749 9	30.21	767.4	32.7	0.4	80	ssw.	9	4			7			0	0		Major Lasarew.
Tashkend, Laboratory	28.60	726.3	30.22	767.5	42.8	6.0	57	calm	0	0			0						Teich, A. M.
Tiflis	28.57	725.7	29.98	761.4	61.2	16.2	38	calm	0	0		0	0			0	0		Physical Observatory.
Tomsk	29.74	755.3	30.05	763.2	— 1.5	—18.6	67	calm	0	0			10						
Vladivostock																			
Warsaw	29.67	753 7	30.12	765 0	29.5	— 1.4	94	e.					10					heavy clouds	Astronomical Obs'y.
Wilna	29.87	758.6	30.32	770.1	21.0	— 6.1	66	ne.	11	5			0			0	0		Berg, Assistant.
Yeniseisk	29.85	758.3	30.19	766.9	—23.8	—31.0	78	wnw.	2	1			0			0	0		M. O. Marks.
SCOTTISH.																			
Monach Ll			30.16	766.1	42	5.6	91	se.			4		10			0	0	gloomy	J. Youngclause
North Unst			30.16	766.1				n.			6	4	2	nne.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.80	756.9	29.91	759.6	57.2	14	49	nw.	2.9	1.3		0	0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.15	765.7	30.21	767.2	52.7	11.5	69	nw.	7.4	3.3			10			0.681	17.3	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.21	691.1	30.27	768.8	44.6	7.0	72	nw.	8.7	3.9		0	4			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.93	709.4	30.19	766.9	51.3	10.7	45	nw.	6.9	3.1		1	2			0	0	light clouds	The Staff.
Murcia, Met. Obs'y	29.95	760.7	30.08	763.9	52.9	11.6	52	nw.	5.8	2.6		0	2			0	0	almost clear	Olayo Diaz, Director.
Oviedo	29.42	747.3	30.30	769.6	47.5	8.6	93	e.	6.9	3.1			10 km		w.	0.150	3.8	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.42	747.3	30.34	770.6	51.6	10.9	79	n.	7.4	3 3			10			0.098	2.5	covered	R. Gil Villanueva, Dir.
Sub-series.																			
Manilla, Philippine Islands	29.83	757.6	29.88	759.0	77.7	25.4	80	n.	2.2	1.0		3 c	4 ks		ne.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.13	765.4	30.23	767.9	55.2	12.9	52	n.	6.6	3.0		0	0			0	0		Capt. C. Pujazon, R. N
San Juan de Porto Rico, W. I	30.03	762.7	30.12	765.0	75.6	24.2	95	calm	0	0		4 cs	4 k	sw.	sw.	0.236	6.0	d. clouds	Manuel Maese.
Tuguegarao, Philippine Id's	29.85	758.3	29.98	761.6	71.1	21.7	92	nnw.	11.9	5.3			10 kn		ne.	0.09	2.3	covered	José L. Yrastorza
SWEDISH																			
Haparanda	30.03	762.8	30.07	763.9	15.1	— 9.4	87	sw.			2		0			0	0		
Umea	30.10	764.4	30.15	765.7	14.0	—10.0	94	wsw.			2		1			0	0		

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Swedish—Continued.																			
Hernosand	30.13	765.3	30.18	766.6	24.1	— 4.4	77	ese.			6		5			0	0		
Stockholm	30.13	765.2	30.30	769.7	27.7	— 2.4	59	s.			2		2			0	0		
Wisby	30.22	767.5	30.28	769.0	27.7	— 2.4	71	sse.			2		0			0	0		
Sub-series.																			
Upsala	30.20	767.0	30.28	769.2	5.7?	–14.6?	87	w.	0	0			6	wnw.	s.	0	0	foggy	S. G. Fineman.
Swiss.																			
Geneva	28.40	721.4	29.87	758.7	40.3	4.6	87	s.			1		10			0.287	7.3	covered	The Observatory.
Turkish.																			
Constantinople			29.85	758.2	57 9	14.4	64	wnw.	8	3.5			7		sw.	0	0		The Observatory.
Yalona			29.96	760.9	53.8	12.1		s.			1		10			0.08	2.	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.12	765.1	72.3	22.4	66	n.			1		2 k		sw.	0	0		Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	29.96	761.0	30.04	763.0	28	— 2.2	70	n.	4	1.8		4 cs	5 s	nw.	nw	0.30	7.6	cloudy	J. O. Barnes.
Alpena, Michigan	29.44	747.8	30.14	765.5	19	— 7.2	84	sw.	9	4.0			10 n			0.07	1.8	*light snow*	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.29	642.4	30.39	771.9	24	— 4.4	67	ne.	4	1.8		0	0			0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	27.18	690.4	30.16	766.1	42	5.6	52	s.	12	5.4		10 k	0	sw.		0	0	cloudy	B. O. Lenoir.
Atlanta, Georgia	29.23	742.4	30.45	773.4	29	— 1.7	84	w.	13	5.8		0	0			0.14	3.6	clear	H. C. Smith.
Atlantic City, New Jersey	30.00	763.5	30.07	763.8	28	— 2.2	77	nw.	10	4.5			10 s			0.62	15.7	cloudy	Jas. M. Watson.
Augusta, Georgia	30.23	767.8	30.43	772.9	37	2.8	72	nw.	7	3.1			10 s		nw.	0	0	cloudy	John Healy.
Baltimore, Maryland	30.14	765.5	30.19	766.8	29	— 1.7	67	nw.	8	3.6		0	0			0.01	0.3	clear	Geo W Felger.
Barnegat, New Jersey	30.00	762.0	30.02	762.5	31.0	— 0.6	92	nw.	20	8.9			10 s			0.39	9.9	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28.62	726.9	30.31	769.9	15	— 9.4	73	calm	0	0		0	0			0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.22	691.4	30.18	766.6	46	7.8	63	sw.	10	4.5			10 s		sw.	0	0	cloudy	S. Wheaton.
Bismarck, Dakota	28.29	718.6	30.21	767.3	10	—12.2	80	calm	0	0		0	0			0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	29.90	759.4	29.93	760.2	32	0.0	88	n.	9	4.0			10 s		n.	0.20	5.1	cloudy	J. T. Elker.
Boise City, Idaho	27.48	698.0	30.42	772.7	31	— 0.6	92	n.	3	1.3			10 s			0	0	cloudy	B. E. Light.
Boston, Massachusetts	29.75	755.6	29.91	759.7	26.0	— 3.3	76	nw.	9	4.0			10 n		n.	0.36	9.1	light snow	O. B. Cole.
Brownsville, Texas	30.54	775.7	30.58	776.7	38.8	3.8	89	n.	6	2.7		0	0			0	0	clear	M. McCarty.
Buffalo, New York	29.38	746.2	30.16	766.1	20	— 6.7	74	w.	9	4.0			10 s		w.	0.09	2.3	cloudy	W. Finn.
Buford, Fort, Dakota	28 24	717.3	30.22	767.6	21	— 6.1	87	sw.	1	0.4		0	0			0	0	clear	F. A. Mellen.
Burlington, Vermont	29.72	754.9	30.03	762.7	20.0	— 6.7	84	n.	6	2.7			10 n		n.	0.01	0.3	light snow	W. B Gates.
Cairo, Illinois	30.13	765.3	30.55	776.0	31.0	— 0.6	78	n.	3	1.3		0	0			0.01	0.3	*clear*	W. H. Ray.
Cape Henry, Virginia	30.22	767.0	30.24	768.1	32	0.0	68	nw.	17	7.6		0	3 s		w.	0.33	8.4	clear	A. K. Alderson.
Cape May, New Jersey	30.10	764.5	30.13	765.3	31.0	— 0.6	78	nw.	38	17.0		0	5 s		nw.	0.14	3.6	fair	W. E. Smith.
Cape Mendocino, California	29.22	742.2	29.90	759.4	56	13.3	62	se.			7		10 n		se.	0.34	8.6	light rain	J. J. McLean.
Cedar Keys, Florida	30.44	773.2	30.46	773.7	38	3.3	72	nw.	13	5.8		0	0			0	0	clear	F. W. Mixer.
Champaign, Illinois	29.52	749.8	30.38	771.6	17.0	— 8.3	67	sw.	10	4.5			10 s		sw.	0.01	0.3	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.27	768.8	30.33	770.4	36	2.2	79	nw.	8	3.6		0	3 s		nw.	0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.45	748.0	30.33	770.4	29.0	— 1.7	67	nw.	6	2.7		0	sk.			0	0	clear	*D. O'Donoghue.*
Chattanooga, Tennessee	29.64	752.8	30.49	774.4	32.0	0.0	78	n.	5	2.2		c	9 ks		n.	0.11	2.8	cloudy	B. L. Goulding.
Cheyenne, Wyoming	24.26	616.2	30.48	774.2	23.0	— 5.0	40	nw.	1	0.4		0	0			0	0	clear	E. McGovern.
Chicago, Illinois	29.65	753.1	30.39	771.9	23.8	— 4.6	50	sw.	6	2.7		3 c	0			0.10	2.5	clear	J. Mitchell.
Chincoteague, Virginia	30.14	765.5	30.16	766.1	31	— 0.6	78	nw.	21	9.4		0	4 k		nw.	0.07	1.8	fair	C. F. Dickens.
Cincinnati, Ohio	29.71	754.6	30.40	772.1	31	— 0.6	78	sw.			2		10 s		w.	0.03	0.8	cloudy	R. B. Watkins.
Cleveland, Ohio	29.50	749.3	30.27	768.8	22.8	— 5.1	90	w.	11	4.9			9 k		nw.	0.13	3.3	cloudy	J. B. Newlin.
Cojeman City, Texas	28.66	728.0	30.55	776.0	25	— 3.9	76	s.	3	1.3		3 c	0			0	0	clear	L. Dorman.
Columbus, Ohio	29.44	747.8	30.33	770 4	23	— 5.0	73	w.	4	1.8		3 ck	3 s	nw.		0.05	1.3	fair	D. Cuthbertson.
Concho, Fort, Texas	28.52	724.4	30.54	775.7	28.0	— 2.2	77	calm	0	0		5 cs	0			0	0	fair	J. McGlone.
Custer, Fort, Montana	26.94	684.3	30.26	768.6	26	— 3.3	77	e.	5	2.2		6 k	0	calm		0	0	fair	W. B. Lamar.
Davenport, Iowa	29.61	752.1	30.30	769.6	26	— 3.3	64	sw.	10	4.5		3 cs	hz.	sw.		0	0	clear	R. R. Martin.
Davis, Fort, Texas	25.51	647.9	30.41	772.4	33	0.6	74	calm	0	0		10 ck	0	sw.		0	0	cloudy	J. Williams.
Dayton, Washington T'y	28.38	720.8	30.16	766.1	31.3	— 0.4	87	sw.	1	0.4			10 s		sw.	0	0	*cloudy*	H. Clifford.
Deadwood, Dakota	25.51	647.9	30.34	770.6	37	2.8	58	calm	0	0		0	0			0	0	clear	G. W. Scott.
Delaware Breakwater, Del.	30.11	764.8	30.13	765.3	31	— 0.6	100	nw.	32	14.3		0	5 ks		nw.	0.31	7.9	fair	T. S. Townsend.
Denison, Texas	29.72	754.9	30.56	776.2	26.0	— 3.3	88	sw.	4	1.8		0	2 s			0	0	clear	J. W. Byram.
Denver, Colorado	24.98	634.5	30.48	774.2	36.0	2.2	46	s.	8	3.6		0	0			0	0	clear	F. M. Neal.
Des Moines, Iowa	29.32	744 7	30.26	768.6	27	— 2.8	77	sw.	6	2.7		0	3 s			0	0	clear	F. W. Conrad.
Detroit, Michigan	29.53	750.0	30.27	768.8	24.0	— 4.4	84	w.	7	3.1			10 s		w.	0.06	1.5	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.68	703.1	30.42	772.7	24	— 4.4	76	nw.	3	1.3		0	0			0	0	clear	V. P. Temple.
Dubuque, Iowa	29.52	749.8	30.27	768.8	25.2	— 3.8	73	s.	2	0.9		0	0			0	0	clear	J. Harvey Smith.
Duluth, Minnesota	29.27	743.4	30.06	763.5	26	— 3.3	88	w.	5	2.2			10 s		w.	0	0	*cloudy*	N. B. Conger.
Eagle Pass, Texas	29.80	756 9	30.63	778.0	33.0	0.6	78	ne.	1	0.4		4 cs	0			0	0	fair	F. Belford.
Eagle Rock, Idaho	25.60	650.2	30.46	773.7	8	—13.3	63	n.	6	2.7		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	29.71	754.6	29.78	756.4	25.0	— 3.9	100	n.	16	7.2			10 n; fog		n.	0.38	9.7	light snow	D. C. Murphy.
Elliott, Fort, Texas	27.52	699.0	30.44	773.2	15	— 9.4	51	calm	0	0		0	0			0	0	clear	W. J. Cundall.
El Paso, Texas	26.51	673.3	30.36	771.1	33.0	0.6	81	w.	2	0.9		0	0			0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.43	747.5	30.19	766.8	28	— 2.2	88	w.	4	1.8			10 s		w.	0.14	3.6	cloudy	Peter Wood.
Escanaba, Michigan	29.37	746.0	30.07	763.8	25.5	— 3.6	82	s.	1	0.4			10 s			0.02	0.5	cloudy	George Heathcote.
Fredericksburg, Texas	28.78	731.0	30.60	777.2	27	— 2.8	76	n.	2	0.9		0	0			0	0	clear	Frank Halwegler.
Galveston, Texas	30.58	776.7	30.63	778.0	40	4.4	57	ne.	8	3.6		0	2 s			0	0	clear	E. O'C. Machierney.
Grand Haven, Michigan	29.51	749 5	30.21	767.3	33.0	0.6	78	se.	17	7.6			10 s		se.	inap.	inap.	cloudy	J. Mueller.
Grant, Fort, Arizona	25.46	646.7	30.30	769.6	38	3.3	59	ne.	4	1.8		3 cs	0			0	0	clear	Robert O. Lord.
Hatteras, North Carolina	30.22	767.6	30.24	768.1	36	2.2	79	n.	21	9.4		hz.	0			0.03	0.8	clear	R. M. Crawford.
Helena, Montana	25.90	657.8	30.28	769.1	37	2.8	42	n.	3	1.3		5 c	0			0	0	fair	N. C. Smith.
Henrietta, Texas	29.46	748.3	30.50	774.7	27	— 2.8	77	se.	7	3.1		0	0			0	0	clear	J. P. Sherry.
Huron, Dakota	28.78	731.0	30.26	768.6	18	— 7.8	67	nw.	5	2.2		0	0			0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.54	750.3	30.38	771.6	26	— 3.3	80	sw.	4	1.8		0	2 s		nw.	inap.	inap.	clear	O. Schutze
Indianola, Texas	30.63	778.0	30.66	778.7	38.2	3.4	73	n.	17	7.6		0	0			0	0	clear	I. A. Reed.
Jacksboro, Texas	29.31	744.5	30.53	775.4	28	— 2.2	64	n.	6	2.7		0	0			0	0	*clear*	D. J. Carr.
Jacksonville, Florida	30.37	771.4	30.42	772.7	39	3.9	54	nw.	5	2.2		0	0			0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.61	701.3	30.28	769.1	23	— 5.0	73	w.	2	0.9		0	0			0	0	clear	A. Schneider.
Keokuk, Iowa	29.64	752.8	30.33	770.4	26.0	— 3.3	84	sw.	4	1.8		0	1 s			0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.25	768.3	30.27	768.8	62.0	16.7	68	ne.	5	2.2		0	0			0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.22	767.6	30.24	768.1	31.5	— 0.3	68	nw.	17	7.6		hz.	0			0.10	2.5	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	29.41	747.0	30.48	774.2	28.6	— 1.9	77	nw.	4	1.8			10 s		nw.	inap.	inap.	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.34	745.2	30.16	766.1	27	— 2.8	88	sw.	8	3.6			10 s			0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.44	747 8	30.38	771.6	27	— 2.8	88	s.	2	0.9		0	0			0	0	clear	A. W. Browne.
Lewiston, Idaho	29.32	744.7	30.19	766.8	37.0	2.8	61	e.	8	3.6			10 s			0	0	cloudy	W. Bell.
Little Rock, Arkansas	30.24	768.1	30.57	776.5	28	— 2.2	77	calm	0	0		0	0			0	0	clear	W. U. Simons.
Los Angeles, California	29.76	755.9	30.16	766.1	64	17.8	34	*ne.*	12	5.4		10 k	0	ne.		0	0	cloudy	T. S. Collins.
Louisville, Kentucky	29.82	757.4	30.41	772.4	32	0.0	78	w.	4	1.8		0	0			inap.	inap.	clear	L. M. Dey.
Lynchburg, Virginia	29.54	750.3	30.26	768.6	32.2	0.1	43	nw.	7	3.1		0	4 s		nw.	0	0	fair	Lewis Duane.
Mackinaw City, Michigan	29.38	746.2	30.07	763.8	25.0	— 3.9	73	sw.	10	4.5			10 k		sw.	inap.	inap.	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.26	768.6	30.27	768.8	33	0.6	74	nw.	13	5.8		0	0			0	0	clear	F. P. Chaffee.
Madison, Wisconsin	29.15	740.4	30.22	767.6	27	— 2.8	88	sw.	11	4.9		10 cs	0			inap.	inap.	cloudy	C. A. Shaw.
Maginnis, Fort, Montana	25.63	651.0	30.14	765.5	49	9.4	34	w.	20	8.9		10 k	0	w.		0	0	cloudy	F. Burke.
McKavett, Fort, Texas																			J. E. Thatcher.
Marquette, Michigan	29.23	742.4	30.00	762.0	27	— 2.8	77	sw.	12	5.4		10 k	0	n.		inap.	inap.	cloudy	J. Gilligan.
Memphis, Tennessee	30.32	770.1	30.67	779.0	32	0.0	78	calm	0	0		0	0			inap.	inap.	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.44	747.8	30.23	767.8	27	— 2.8	77	calm	0	0						0	0	clear	W. Line.
Missoula, Fort, Montana	26.91	683.5	30.32	770.1	19	— 7.2	70	calm	0	0			10 s			0.05	1.3	cloudy	J. H. Young.
Mobile, Alabama	30.55	776.0	30.59	777.0	30	— 1.1	77	nw.	4	1.8		0	5 s			0	0	fair	C. A. Read.
Montgomery, Alabama	30.29	769.4	30.53	775.4	28.9	— 1.7	93	nw.	3	1.3		0	0			inap.	inap.	clear	J. B. McLaughlin.

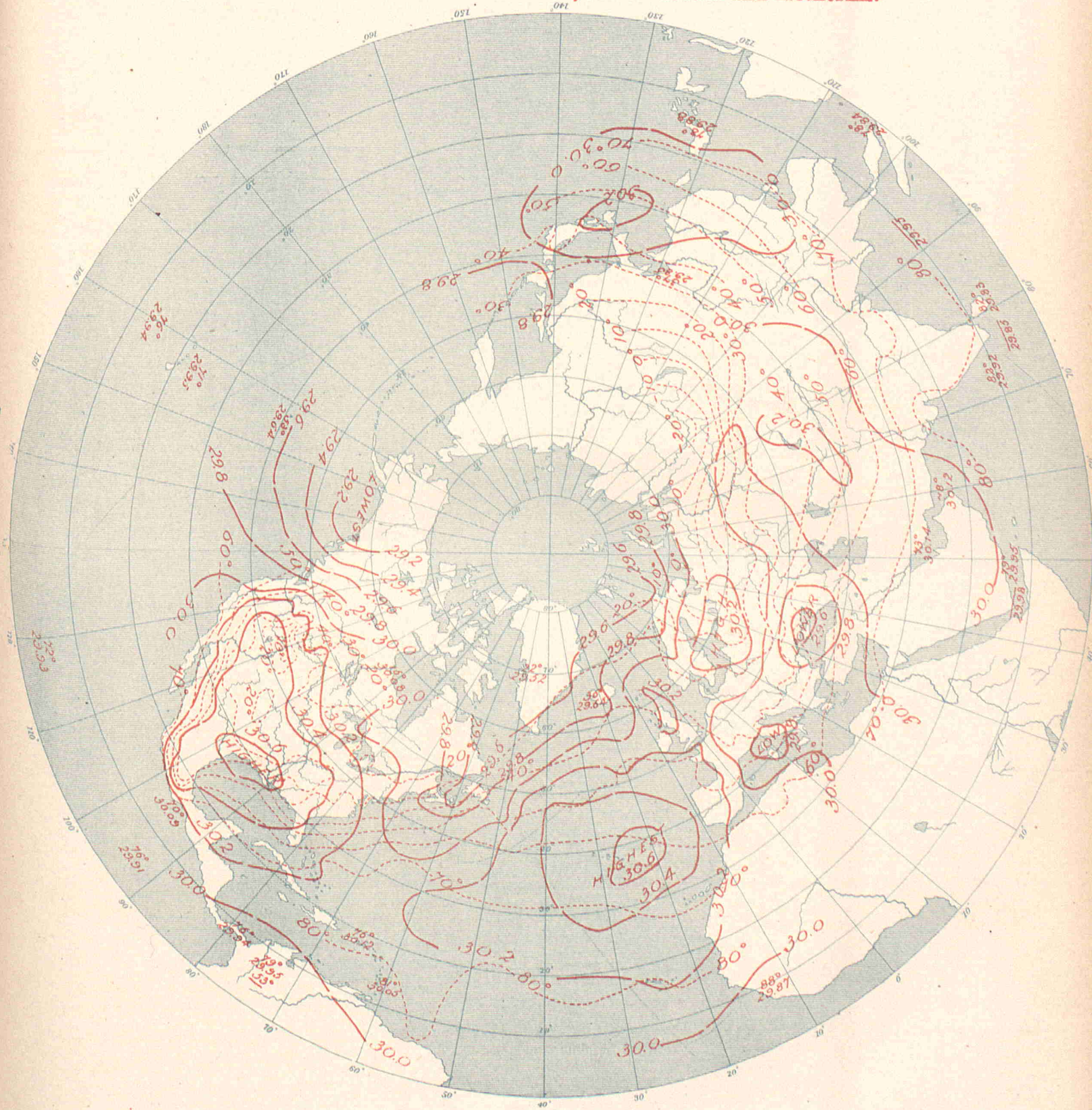
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Moorhead, Minnesota	29.10	739.1	30.16	766.1	12	—11.1	80	w.	3	1.3		0	0			0	0	clear	H. Bessant.
Morgantown, W. Virginia	29.24	742.7	30.30	769.6	29.0	— 1.7	84	w.	6	2.7			10 n		w.	0.08	2.0	light snow	J. C. Sprigg, jr
Mt. Washington, N. H.	23.37	593.6	29.93	760.2	13.0	—10.6	100	nw.	5	2.2			10n;fg		nw.	0.27	6.9	light snow	J. G. Linsley.
Nashville, Tennessee	29.90	759.4	30.50	774.7	32.5	0.3	88	w.	4	1.8		0	4 s		n.	0.07	1.8	fair	L. N. Jesunofsky.
New Haven, Connecticut	29.86	758.4	29.98	761.5	25	— 3.9	96	nw.	5	2.2			10 n		nw.	0.25	6.3	light snow	J. H. Sherman.
New London, Connecticut	29.94	760.5	29.98	761.5	28	— 2.2	100	calm	0	0			10 n			0.60	15.2	light snow	J. G. Lynch.
New Orleans, Louisiana	30.57	776.5	30.63	778.0	39.7	4.3	53	n.	6	2.7		0	sk.			0	0	clear	L. Dunne.
Newport, Rhode Island	29.87	758.7	29.92	760.0	31.0	— 0.6	92	nw.	7	3.1			10 n		nw.	0.35	8.9	light snow	W. McGillivray.
New York, New York	29.85	758.2	30.03	762.7	27	— 2.8	100	w.	5	2.2		4 cs	5 s		nw.	0.54	13.7	cloudy	J. B. Merrill.
Norfolk, Virginia	30.22	767.6	30.25	768.3	32	0.0	68	nw.	10	4.5		0	0			0.05	1.3	clear	Wm. Davis.
North Platte, Nebraska	27.32	693.9	30.40	772.1	21.6	— 5.8	68	w.	6	2.7		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y.	29.89	759.2	29.93	760.2	45.0	7 2	83	s.	2	0.9			10 n			inap.	inap.	light rain	J. Dascomb.
Omaha, Nebraska	29.04	737.6	30.28	769.1	25.8	— 3.4	77	w.	6	2.7		0	0			0	0	clear	A. Pollak.
Oswego, New York	29.74	755.4	30.08	764.0	24.4	— 4.2	75	nw.	11	4.9			10 s		nw.	0.24	6.1	cloudy	S. W. Beall.
Palestine, Texas	30.06	763.5	30.63	778.0	28.5	— 1.9	61	nw.	1	0.4		1 cs	0			0	0	clear	L. M. Pindell.
Pensacola, Florida	30.55	776.0	30.58	776.7	30.3	— 0.9	83	n.	4	1.8		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	29.99	761.7	30.09	764.3	30.5	— 0.8	68	nw.	9	4.0		0	8 ks		nw.	0.34	8.6	clearing	T. T. Townsend.
Pike's Peak, Colorado	17.97	456.4	30.63	778.0	13	—10.6	53	nw.	20	8.9		0	0			0	0	clear	H. Hall.
Ploche, Nevada	24.28	616.7	30.42	772.7	32.8	0.4	41	sw.	4	1.8		10 c	0			0	0	cloudy	G. N. Kitchel.
Pittsburg, Pennsylvania	29.40	746.7	30.24	768.1	26.5	— 3.1	98	sw.	7	3.1			10 n			0.09	2.3	light snow	W. Daly.
Poplar River, Montana	28.00	711.2	30.29	769.4				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.57	776.5	30.58	776.7	41.9	5.5	62	n.	23	10.3		0	0			0	0	clear	M. Herman.
Port Huron, Michigan	29.50	749.3	30.22	767.6	15.4	— 9.2	93	w.	8	3.6			10 s			0.33	8.4	cloudy	W. O. Bailey.
Portland, Maine	29.82	757.4	29.87	758.7	29.0	— 1.7	88	n.	4	1.8			10 n			0.44	11.2	light snow	W. W. Eichelberger.
Portland, Oregon	29.91	759.7	29.98	761.5	46.8	8.2	58	calm	0	0			10 s		e.	0	0	cloudy	M. L. Hearne.
Portsmouth, N. C.					36	2.2	69	nw.			2	hz.	hz.			0.13	3.3	light haze	F. S Coburn.
Prescott, Arizona	25.01	635.2	30.35	770.9	28.6	— 1.9	80	sw.	1	0.4		2 c	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	29.83	757.7	29.86	758.4	33.5	0.8	88	nw.	13	5.8			10 n		nw.	0.85	21.6	light snow	P. T. Jenkins.
Punta Rassa, Florida	30.33	770.4	30.34	770.6	52.5	11.4	63	n	10	4.5		6 c	4 k	w.	w.	0	0	cloudy	W. J. Evans.
Red Bluff, California																			E. van Dyk.
Rochester, New York	29.42	747.3	30.12	765.0	19	— 7.2	100	w.	12	5.4			10 n			0.34	8.6	heavy snow	E. W. McGann
Roseburg, Oregon	29.41	747.0	29.98	761.5	43.8	6.6	85	nw.	1	0.4		0	9 s		sw.	0	0	cloudy	J. J. Naury.
Sacramento, California	30.06	763.5	30.14	765.5	52.0	11.1	72	sw.	3	1.3			10 s		se.	0.01	0.3	cloudy	J. A. Barwick
St. Louis, Missouri	29.85	758.2	30.48	774.2	23.0	— 5.0	94	w.	6	2.7		0	sk.			0	0	clear	J. H. Weber.
St. Paul, Minnesota	29.21	741.9	30.13	765.3	22.0	— 5.6	87	sw.	7	3.1		8 cs	0			0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.18	741.2	30.11	764.8	11	—11.7	80	sw.	3	1.3		0	0			0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.94	658.9	30.51	774.9	27	— 2.8	56	se.	2	0.9		2 cs	0			0	0	clear	J. Craig.
San Antonio, Texas	29.90	759.4	30.62	777.7	31.0	— 0.6	68	calm	0	0		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.04	763.0	30.11	764.8	65.3	18.5	17	ne.	12	5.4		7 k	3 s	sw.		0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.57	751.1	30.29	769.4	21.8	— 5.7	73	w.	10	4.5			10 s			0.01	0.3	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.00	762.0	30.02	762.5	28.0	— 2.2	77	nw.	19	8.5		10 k	0	nw.		0.21	5.3	cloudy	B. A. Blundon.
San Francisco, California	30.04	763.0	30.11	764.8	54	12.2	80	nw.	2	0.9			10 s		s.	0.01	0.3	threatening	N. Gorom.
Santa Fé, New Mexico	23.49	596.6	30.53	775.4	26.5	— 3.1	53	ne.	15	6.7		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.29	769.4	30.38	771.6	37	2.8	61	nw.	10	4.5		0	0			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.43	671.3	30.25	768.3	47	8.3	38	sw.	22	9.8		10 k	0	nw.		0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	30.35	770.9	30.60	777.2	29	— 1.7	88	nw.	2	0.9		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.20	741.7	30.51	774.9	24.5	— 4.2	66	s.	2	0.9		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.58	624.3	30.42	772.7	29.0	— 1.7	92	calm	0	0		1 c	1 s			0	0	clear	N. D. Lane.
Sitka, Alaska	28 96	735.6	29.03	737.3	45.4	7.4	60	e.	28	12.5			10 ks		e.	0.10	2.5	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	30.07	763.8	30.56	776.2	24.0	— 4.4	88	calm	0	0		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.27	768.8	30.31	769.9	32	0.0	78	n.	8	3.6		1 k	0	w.		0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.08	713.2	30.16	766.1	31	— 0.6	81	ne.	7	3.1		5 c	0			0	0	fair	D. Moore.
Springfield, Illinois	29.70	754.4	30.42	772.7	24.5	— 4.2	73	sw.	5	2.2		4 c	0	nw.		0.01	0.3	fair	T. B. Jennings.
Springfield, Massachusetts	29.84	757.9	29.98	761.5	27.5	— 2.5	88	calm			0	4cs;hz	0			0.52	13.2	fair	Charles Mayr.
Springfield, Mo	28.96	735.6	30.47	773.9	26.5	— 3.1	77	s.	12	5.4		0	0			inap.	inap.	clear	J. B. Marbury.
Starkville, Miss	30.07	763.8	30.57	776.5	30	— 1.1	88	nw.	6	2.7		0	0			inap.	inap.	clear	C. Dill.
Stevenson, Fort, Dakota	28.22	716.8	30.19	766.8	9	—12.8	80	ne.	4	1.8		0	0			0	0	clear	W. Burrows.
Stockton, Fort, Texas	27.35	694.7	30.47	773.9	34.0	1.1	82	s.	5	2.2		4 c	0			0	0	fair	J. F. Marshall.
Thatcher's Island, Mass	29.84	757.9	29.89	759.2	28.5	— 1.9	82	nw.	14	6.3		0	5 s			0.83	21.1	fair	G. Liebmann.
Thomas, Camp, Arizona	27.57	700.3	30.41	772.4	35	1.7	85	nw.			1	3 cs	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.55	750.6	30.28	769.1	25	— 3.9	73	sw.	7	3.1		0	0			inap.	inap.	cloudy	A. Buell.
Tucson, Arizona	27.77	705.3	30.23	767.8	53	11.7	44	se.	7	3.1		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.85	758.2	30.23	767.8	33	0.6	88	sw.	1	0.4			10 n			inap.	inap.	light rain	J. Daly.
Uvalde, Texas																			E. C. Imlay.
Verde, Fort, Arizona					32.9	0.5	81	w.			1	6 cs	0	w.		0	0	fair	D. Brooks.
Vicksburg, Mississippi	30.35	770.9	30.62	777.7	31.7	— 0.2	88	calm	0	0		0	fg.			0	0	clear	James Kenealy.
Visalia, California	29.78	756.4	30.16	766.1	54.5	12.5	77	calm	0	0			10 s			0	0	cloudy	O. D. Stewart
Washakie, Fort, Wyoming	24.73	628.1	30.47	773.9	6.4	—14.2	86	nw.	4	1.8		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	30.09	764.3	30.21	767.3	27.0	— 2.8	80	nw.	5	2.2		0	2 k		nw.	inap.	inap.	clear	B. M. Purssell.
West Las Animas, Colorado	26.35	669.3	30.47	773.9	15	— 9.4	51	nw.	6	2.7		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.51	749.5	30.14	765.5	22	— 5.6	87	nw.	3	1.3			10 s		nw.	nap.	inap.	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.26	768.6	30.32	770.1	36	2.2	79	nw.	6	2.7		hz.	0			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.86	656.8	30.39	771.9	32	0.0	76	ne.	7	3.1		0	5 s		sw.	0	0	fair	J. Grover.
Yankton, Dakota	28.90	734.0	30.27	768.8	25	— 3.9	64	nw.	3	1.3		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	30.01	762.2	30.16	766.1	53.0	11.7	41	ne.	5	2.2		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.05	560.1			52.5	11.4	79	calm	0	0		1 ck	1 s	e.	sw.	0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I.	30.20	767.1	30.26	768.6	66.9	19.4	73	n.	15	6.7		2 k	2 ks	nw	n.	0.02	0.5	fair	Chas. Hasselbrink.
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	75	23.9	72	n.	1	0.4		7 cs	0	w.		0.05	1.3	fair	Robert Johnston.
Navassa, W. I.					78	25.6	78	ne.	14	6.3		3 s	5 ks	ne.	n.	0	0	cloudy	F. M. Everett.
Paramaribo, S. A.	30.06	763.5	30.06	763.5	80	26.7	82	se			2	3 c	4 k	e.	e.	0.020	0.5		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	79	26.1	89	calm			0	6 ck	1 k	calm	calm	0	0	fair	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					74	23 3	92	ne.			4	0	0			0.04	1.0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.12	765.0	30.14	765.5	75	23.9	81	nw.	12	3.4		7 ck	1 n		n.	0	0	fair	Robert Mason.
St. Paul, Kodiak Id., Alaska																			W. J. Fisher.
St. Thomas, W. I.	30.05	763.3	30.17	766.3	75	23.9	85	e.					8 kn		e.	0.18	4.6	cloudy	Aug. Wallee.
York Factory, B. A.	30.01	762.2	30.08	764.0	16.0	— 8.9	100	nw.	34	15.2			10 n		nw.	0.50	12.7	snowing	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill			
British Naval.																		
H. M. S. Albatross, N. 25° 59′, E. 119° 28′	30.24	768.1	60	15.6	.....	ne.	.....	.....	5	.....	4	ne.	.....	.....	.....	.....	.....	squally.
H. M. S. Amethyst, S. 35° 04′, W. 57° 30′†	30.13	765.3	68.5	20.3	86	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Audacious, Colombo, Ceylon	29.83	757.7	82	27.8	87	sw.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Beacon, N. 30° 34′, E. 32° 16′	30.03	762.7	73	22.8	59	nnw.	.....	.....	1	.....	.....	.....	.....	.....	.....	1	nnw.	blue sky.
H. M. S. Carysfort, N. 29° 56′, E. 32° 33′	30.08	764.0	70.5	21.4	75	n.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Cleopatra, N. 31° 14′, E. 121° 28′	30.17	766.3	45.5	7.5	92	s.	.....	.....	1–2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	29.82	757.4	46	7.8	92	calm	.....	.....	0	.....	10	ssw.	.....	.....	.....	.....	.....	raining.
H. M. S. Condor, N. 31° 49′, E. 31° 50′	30.08	764.0	69	20.6	.....	wnw.	.....	.....	2–3	.....	5	wnw.	.....	.....	.....	4	wnw.	d. clouds.
H. M. S. Crocodile, N. 13° 16′, E. 48° 00′	29.95	760.7	79	26.1	69	se.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Curacoa, Kobe, Japan	30.14	765.5	49.5	9.7	71	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Diamond, Sydney, N. S. W*†	30.06	763.5	63	17.2	78	sse.	.....	.....	1–3	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	30.04	763 0	72	22.2	90	ssw.	.....	.....	4–5	.....	7	ssw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.73	755.1	78.5	25.8	84	s.	.....	....	3–4	.....	5	ssw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Flying Fish, N. 31° 20′ E. 131° 06′	30.20	767.1	50	10.0	86	ssw.	.....	.....	1	.....	3	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	30.06	763.5	62	16.7	77	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.08	764.0	66	18.9	90	ne.	.....	.....	1	.....	10	ne.	.....	.....	.....	.....	.....	d. clouds
H. M. S. Kingfisher, N. 5° 14′ W. 93° 53′	29.91	759.7	76	24.4	.....	calm	.....	.....	0	.....	10	s.	.....	.....	.....	4	var.	raining.
H. M. S. Lark, S. 31° 00′, E. 153° 35′	30.16	766.1	69.3	20.7	82	se.	.....	.....	3	.....	5	.....	.....	.....	.....	4	se.	d. clouds.
H. M. S. Liffey, S. 29° 54′, W. 71° 20′	29.93	760.2	65	18.3	.....	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Magpie, N. 34° 30′, E. 127° 49′	30.18	766.6	48.5	9.2	67	wsw.	.....	.....	1–2	.....	0	.....	.....	.....	.....	2	sse.	blue sky.
H. M. S. Northampton, N. 27° 10′ W. 60° 04′	30.24	768.1	75	23.9	83	ese.	.....	.....	3	.....	5	ese.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Nelson, S. 37° 00′, E. 139° 00′	30.09	764.3	59	15.0	76	ese.	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Pegasus, N. 1° 17′, E. 103° 53′	29.84	757.9	78	25.6	93	nw.	.....	.....	1	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sappho, S. 40° 00′, W. 88° 00′	30.29	769.4	52.2	11.2	60	calm	.....	.....	0	.....	6	wsw.	.....	.....	.....	2	wsw.	d. clouds.
H. M. S. Sylvia, Pecket Harbor, Patagonia	29.49	749.0	48.5	9.2	71	wsw.	.....	.....	5–6	.....	5	.....	.....	.....	.....	.....	.....	squally.
H. M. S. Tourmaline, Aden, Arabia	29.98	761.5	.....	.....	.....	e.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, N. 28° 20′ E 50° 45′	30.04	763.0	72.5	22.5	80	nnw.	.....	.....	2	.....	1	.....	.....	.....	.....	2	nw.	blue sky.
H. M. S. Zephyr, N. 37° 33′, E. 121° 25′	29.98	761.5	44	6.7	100	sw.	.....	.....	2	.....	0	.....	.....	.....	.....	1	w.	blue sky.
Portuguese Navab.																		
Rio Lima, Porto Praya, Cape Verd Islands	30.22	767.5	78.8	26.0	76	ne.	.....	.....	3	.....	1	.....	ne.	.....	.....	.....	.....	blue sky
Tamega, Macao, China	30.15	765.8	65.3	18.5	66	n.	.....	.....	2	.....	8	.....	n.	10 mi	nutes	.....	.....	overcast.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.48	774.2	28	— 2.2	89	nw.	2	0.9	.....	.....	5	.....	n.	0	0	.....	.....	fair.
Navy Yard, Portsmouth, N. H	29.89	759.2	28	— 2.2	?	nw.	12	5.4	.....	.....	10	.....	nw.	0	0	.....	.....	cloudy.
Naval Hospital, Yokohama, Japan*	29.93	760.2	44	6.7	63	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	foggy.
Adams, Sitka, Alaska *†	29.11	739 4	46	7.8	60	e.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Alaska, N. 23° 40′, W. 157° 43′	29.95	760.7	71	21.7	85	nne.	.....	.....	1	.....	5	.....	n.	0.225	5.7	mod.	n.	fair.
Alliance, Hampton Roads, Va	30.20	767.1	34	1.1	100	wnw.	.....	.....	2–3	.....	2	.....	.....	0	0	.....	.....	clear.
Ashuelot, Nagasaki, Japan	30.27	768.8	50	10.0	86	calm	.....	.....	0	.....	5	.....	w.	.....	.....	.....	.....	fair.
Brooklyn, Keel Point, Patagonia	29.57	751.1	56	13.3	62	sw.	18	8.0	.....	.....	0	.....	.....	0	0	sm'h	.....	clear.
Colorado, New York, N. Y	30.10	764.5	28	— 2.2	100	nw.	3	1.3	.....	.....	8	.....	nw.	blank	blank	.....	.....	cloudy
Enterprise, Norfolk, Va	30.22	767.6	32	0.0	100	w.	.....	.....	1	.....	2	.....	calm	.....	.....	.....	.....	clear.
Essex, Callao, Peru	30.01	762.2	66	18.9	90	calm	.....	.....	0	.....	5	.....	se.	.....	.....	sm'h	s.	fair.
Franklin, Norfolk, Va	30.23	767.8	31	— 0.6	79	w.	8	3.6	.....	.....	0	.....	.....	0.05	1.3	.....	.....	clear.
Galena, Montevideo, Uruguay	30.01	762.2	69	20.6	65	n.	.....	.....	1	.....	1	.....	n.	.....	.....	sm'h	n.	clear.
Hartford, Sandy Point, Patagonia*	29.45	748.0	50	10.0	86	sw.	.....	.....	4	.....	5	.....	w.	light	light	sm'h	.....	fair.
Independence, Mare Island, Cal	30.13	765.3	54	12.2	73	se.	.....	.....	1	.....	10	.....	sw.	.....	.....	.....	.....	cloudy.
Iroquois, S. 11° 58′, W. 77° 48′	30.04	763.0	68	20.0	84	sse.	.....	.....	2	.....	8	.....	.....	.....	.....	mod	sse.	cloudy.
Jamestown, Boston, Mass	29.86	758.4	39	3.9	?	nw.	.....	.....	1	.....	10	.....	nw.	.....	.....	.....	.....	cloudy.
Kearsarge, Norfolk, Va	30.16	766.1	31	— 0.6	89	wnw.	.....	.....	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear.
Lackawanna, S. 23° 40′, W. 73° 40′*	30.09	764.3	64	17.8	67	s.	.....	.....	2	.....	10	.....	.....	.....	.....	sm'h	sw.	cloudy
Lancaster, Naples, Italy*	29.73	755.1	55	12.8	68	se.	.....	.....	2	.....	2	.....	calm	.....	.....	sm'h	w.	fair.
Michigan, Erie, Pa	30.05	763.3	30	— 1.1	68	sw.	.....	.....	4	.....	10	.....	sw.	.....	.....	.....	.....	cloudy.
Minnesota, New York, N. Y	30.07	763.8	29	— 1.7	100	nnw.	3	1.3	.....	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Monocacy, Oma Saki Point, Japan*	29.92	760.0	48	8.9	100	w.	.....	.....	3	.....	2	.....	w.	.....	.....	sm'h	.....	fair.
New Hampshire, Newport, R. I	29.92	760.0	34	1.1	90	n.	.....	.....	3	.....	10	.....	n.	.....	.....	sm'h	.....	snowing.
Nipsic, N 36° 19′, W. 8° 02′ *	30.23	767.8	57	13.9	75	nnw.	.....	.....	3	.....	2	.....	.....	.....	.....	sm'h	.....	clear.
Onward, Callao, Peru†	30.11	764.8	65	18.3	94	sse.	.....	.....	1	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos, Tientsin, China*	29.85	758.2	34	1.1	90	w.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Pensacola, Callao, Peru*	29.94	760.5	66	18.9	90	s.	2	0.9	.....	.....	10	.....	.....	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass	29.91	759.7	28	— 2.2	100	nnw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	hazy.
Quinnebaug, Villafranchа, France*	29.73	755 1	57	13.9	57	s.	.....	.....	1	.....	2	.....	s.	.....	.....	sm'h	s.	clear.
Ranger, Salina Cruz, Mexico	30.28	769.1	71	21.7	52	nnw.	.....	.....	7	.....	2	.....	.....	0	0	sm'h	.....	fair.
Richmond, Yokohama, Japan*	30.01	762.2	50	10.0	59	w.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear.
Saratoga, N. 38° 06′, W. 71° 57′	30.02	762.5	38	3.3	?	sw.	.....	.....	6	.....	10	.....	.....	light	light	mod.	sw.	cloudy.
St. Louis, League Island, Pa	30.40	772.1	28	— 2.2	88	nw.	.....	.....	2	.....	5	.....	nw.	0.04	1.0	.....	.....	fair.
Swatara, N. 33° 44′ W. 70° 48′*	29.93	760.2	60	15.6	65	nw.	.....	.....	5	.....	10	.....	nw.	.....	.....	mod.	nw.	cloudy.
Tennessee, Hampton Roads, Va	30.17	766.3	35	1.7	52	wnw.	15	6.7	.....	.....	10	.....	.....	0	0	.....	.....	cloudy.
Vandalia, N. 38° 45′, W. 74° 54′.*	30.12	765.0	33	0.6	89	nw.	.....	.....	6	.....	8	.....	nw.	.....	.....	mod.	nw.	cloudy.
Wabash, Boston, Mass	29.86	758.4	28	— 2.2	88	nw.	6	2.7	.....	.....	8	.....	nw.	0	0	.....	.....	fair.
Wachusetts, Mare Island, Cal†	30.13	765.3	56	13.3	74	e.	.....	.....	1	.....	10	.....	calm	0	0	sm'h	.....	cloudy.
Wyandotte, Washington, D. C	30.44	773.2	40	4.4	91	nw.	.....	.....	3	.....	2	.....	n.	.....	.....	.....	.....	fair.
Yantic, Norfolk, Va	30.18	766.6	32	0.0	89	nw.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	clear.
Merchant Marine.																		
S. S. Grecian, S. 31° 10′, W. 50° 00′*	30.02	762.5	71	21.7	85	ne.	.....	.....	5	.....	5?	.....	nne.	0	0	sm'h	.....	cloudy.?
S. S. Nova Scotian, Off Half Way Rock, Me	29.78	756.4	27	— 2.8	.....	nnw.	.....	.....	3	.....	10	.....	.....	.....	.....	long	e.	snowing.
S. S. Polynesian, Halifax, N. S*	29.63	752.6	37	2.8	.....	calm	.....	.....	0	.....	10	.....	.....	snow	snow	mod	.....	overcast
S. S. Scandinavian, N. 53° 19′, W. 27° 36′	30.12	765.0	45	7.2	.....	wsw.	.....	.....	6	.....	4	.....	sw.	.....	.....	high	wsw.	rain & hail.
S. S. British Crown, Queenstown, Ireland	.....	.....	44	6.7	.....	s.	.....	.....	4	.....	3	.....	s.	0	0	sm'h	.....	clear.
S. S. Indiana, Liverpool, Eng †	30.03	762.7	45	7.2	92	n.	.....	.....	3	.....	2?	.....	n.	.....	.....	.....	.....	cloudy?
S. S. Lord Clive, N. 41° 56′, W. 64° 15′*†	29.81	757.2	.....	.....	.....	wsw.	.....	.....	4	.....	9	.....	wsw.	4 h'r	4 h'r	mod.	ssw.	cloudy.
S. S. Lord Gough, Off Mine Head, Ireland	30.18	766.0	49	9.4	.....	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
S. S. Ohio, N. 45° 18′, W. 51° 27′	.....	.....	52	11.1	93	wsw.	.....	.....	6	.....	4	.....	ssw.	.....	.....	r'gh	ssw.	clear.
S. S. Pennsylvania, Philadelphia, Pa†	30.03	762.7	27	— 2.8	.....	w.	.....	.....	2	.....	5	.....	nw.	.....	.....	.....	.....	fair.
S. S. Castor, N. 43° 15′ W. 47° 00′*	30.24	768.1	50.0	10	.....	nnw.	.....	.....	5	.....	8	.....	nnw.	.....	.....	4	nnw.	hazy.
S. S. Devonia, N. 40° 40′, W. 67° 36′†	29.76	755.9	43	6.1	.....	wnw.	.....	.....	2	.....	9	.....	wnw.	.....	.....	high	sw.	cloudy.
S. S. Dorian, N. 47° 08′, W. 43° 40′*	30.21	767.3	49	9.4	.....	sse.	.....	.....	5	.....	10	.....	w.	2 h'r	2 h'r	h'vy	wnw.	overcast.
S. S. Ethiopia, N. 40° 33′, W. 73° 13′	.....	.....	34	1.1	79	nw.	.....	.....	5	.....	8	.....	nw.	10 h'r	10 h'r	r'gh	n.	showery.
S. S. Galatia, N. 9° 42′, E. 72° 11′†	30.02	762.5	82	27.8	.....	w.	.....	.....	3	.....	3	.....	wnw.	0	0	.....	wnw.	fair.
S. S. Ailsa, N. 35° 42′, W. 74° 21′†	30.17	760.3	44	6.7	76	ne.	.....	.....	0	.....	10	.....	ne.	6 h'r	6 h'r	r'gh	ne.	cloudy.
S. S. Alpin, N. 33° 48′ W. 74° 42′	.....	.....	.....	.....	.....	nw.	.....	.....	7	.....	.....	.....	nnw.	0	0	.....	.....	
S. S. Alvo, Cartagena, U. S. C	29.94	760.5	80	26.7	.....	nne.	.....	.....	6	.....	2 k	.....	e.	0	0	mod.	ne.	fine.
S. S. Antillas, Savana La Mar, Jamaica, W. I†	30.00	762.0	.....	.....	.....	nne.	.....	.....	2	.....	5?	.....	n.	0	0	.....	.....	cloudy.?
Bk. Coppename, N. 16° 50′, W. 35° 36′	30.14	765.5	77.5	25.3	76	ene.	.....	.....	5	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.
Bk. Julia n., N. 38° 40′ W. 71° 05′	29.97	761.2	44.5	6.9	73	wnw.	.....	.....	8	.....	8	.....	.....	.....	.....	.....	.....	d. clouds.
May Hulse, S. 29° 07, W. 30° 40′	30.15	765.8	70	21.1	75	ene.	.....	.....	2	.....	6	.....	.....	.....	.....	.....	.....	showery.
S. S. Olympus, N. 30° 37′, E. 32° 18′	29.94	760.5	.....	.....	54	n.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
Inchkeith, S. 40° 48′, E. 29° 43′	30.02	762.5	67.6	19.8	84	nw.	.....	.....	5	.....	2	.....	.....	.....	.....	.....	.....	misty.
S. S. Merfola, N. 38° 51′, W. 13° 22′	30.49	774 4	58.4	14.7	99	n.	.....	.....	5	.....	8	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Bothnia, N. 5° 58′, W. 17° 50′	30.23	767.8	55	12.8	87	nw.	.....	.....	4	.....	7	.....	w.	1 h'r	1 h'r	mod.	nw.	showery.
S. S. Marathon, Constantinople, Turkey	29.88	758.9	65	18.3	.....	w.	.....	.....	4	.....	4?	.....	wnw.	1 h'r	1 h'r	.....	.....	cloudy.?
S. S. Parthia, N. 46° 43′, W. 38° 42′*†	30.45	773 4	56	13.3	.....	s.	.....	.....	5	.....	3?	.....	s.	0	0	rg'h	wnw	cloudy.?
S. S. Pavonia, N. 42° 50′ W. 52° 05′*	29.99	761 0	56	13.3	94	s.	.....	.....	4	.....	fg.	.....	s.	4 h'r	4 h'r	mod.	ssw.	foggy.
S. S. Colina, Glasgow, Scotland	.....	.....	.....	.....	.....	sw.	.....	.....	2	.....	2	.....	.....	0	0	.....	.....	

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Canada, N. 48° 10′, W. 34° 40′	30.49	774.4	48.2	9		wsw.			4–5		6?		w.	0	0	h'vy	w.	clear?
S. S. Labradore, N. 50° 00′, W. 20° 16′ *†	30.39	772.0	55.4	13.		w.			3		5		sw.	0	0	sm'h		clear.
S. S. Abyssinia, N. 50° 14′, W. 33° 52′ *	30.48	774.2	51	10.6	79	wsw.			0		5		wsw.	0	0	h'vy	w.	squally.
S. S. Wyoming, N. 42° 09′, W. 62° 14′*	29.73	755.1	46	7.8		wsw.			5		6		w.	0	0	cross	e.	clearing.
S. S. Bohemia, N. 49° 23′, W. 14° 46′†	30.25	768.3				ssw.			5		10			6 h'r	6 h'r	long	wnw.	drizzling.
S. S. Silesia, N. 49° 08′, W. 29° 20′ †	30.33	770.4	49.5	9.7		wsw.			4		2		w.	0	0	5	w.	d clouds.
S. S. Vandalia, Hamburg, Germany	30.20	767.1	37.8	3.2		e.			2		10		e.	0	0			cloudy.
S. S. Wieland, N. 43° 47′, W. 56° 07′	29.89	759.2				wsw.			5		8			12 h'r	12 h'r	r'gh	w.	misty.
S. S. City of Berlin, N 45° 45′, W. 52° 15′	29.81	757.2	49	9.4	100	sse.			5		10			0	0	r'gh	s.	misty.
S. S. Nessmore, N. 38° 36′, W. 70° 59′	29.93	760.2	51	10.6	93	w.			6		8		w.	0	0	high	w.	
S. S. Hevelius, N. 17° —′ W. 25° —′ *†	30.23	767.8	80	26.7		ne.			6		6?		ne.	0	0			clear?
S. S. Sirius, N. 37° 40′, W. 10° 10′ *	30.29	769.4				n.			6		3		n.	0	0	r'gh	n.	clear.
S. S. Colorado, Galveston, Texas†	30.65	778.5	38	3.3		nnw.			3		1		nnw.	0	0			clear.
S. S. Rio Grande, N. 27° 33′, W. 90° 12′†	30.54	775.7	53	11.7		n.			4		1		n.	0	0	small	n	fair.
S. S. San Marcos, N. 27° 20′, W. 80° 05′			53	11.7		nw.			4		1		nw.			sm'h		
S. S. Archimede, N. 33° 43′, W. 38° 05′ *†	30.55	776.0	78	25.6	73	ese.			3		1		ese.	0	0	r'gh	var.	clear.
S. S. Hermod, N. 40° 52′, W. 57° 55′			68.0	20.0		s.			6		10		sw.	6 h'r	6 h'r	r'gh	s.	threatening.
S. S. Glenapp, Rio de Janeiro, Brazil†	29.94	760.5	77	25.0		var.			4		10 k			7 h'r	7 h'r			heavy rain.
S. S. Glenfyne, N. 2° 44′, W. 46° 18′						e.			5		8		e.	0	0	mod.	e.	cloudy.
S. S. Chalmette, N. 28° 23′, W. 88° 10′†	30.57	776.5	57	13.9		nne.			6		10		ne.	0	0	r'gh	nne.	cloudy.
S. S. Lone Star, N. 38° 00′, W. 74° 30′ †	30.05	763.3	39	3.9		wnw.			6		7		wsw.	snow	snow	mod.	var.	cloudy.
S. S. New York, N. 28° 45′, W. 79° 50′			60.0	15.6		nnw.			7		8		n.	0	0	r'gh		cloudy.
S. S. Erin, N. 51° 40′, W. 8° 26′	30.24	768.1	51	10.6		e.			2		0			4 h'r	4 h'r			
S. S. Greece, N. 40° 25′, W. 70° 12′ *†	29.85	758.2	41	5.0		nw.			6		10		nnw.	21 h'r	21 h'r	h'vy	ne.	showery.
S. S. Helvetia, N. 43° 50′, W. 47° 00′	30.08	764.0	59	15.0		ssw.			5		10		sw.	6 h'r	6 h'r	long	wsw.	hazy.
S. S. Holland, N. 40° 52′, W. 68° 01′	29.74	755.4	45	7.2		wsw.			4		8		wsw.	3 h'r	3 h'r	r'gh	n.	cloudy.
S. S. City of Alexandria, Vera Cruz Roads, Mexico†	30.48	774.2	67	19.4		nw.			6		8		nw.	0	0	h'vy	nw.	overcast.
S. S. Knickerbocker, N. 24° 28′ W. 82° 45′*†	30.30	769 6	63	17.2		nw.			9								se.	
S. S. Leerdam, N. 40° 42′ W. 70° 31′*	29.84	757.9	45	7.2		nw.			4							mod.		cloudy.
S. S. America, N. 40° 59′ W. 66° 47′ *	29.85	758.2	46.0	7.8	92	wsw.			3		10		wsw.	2 h'r	2 h'r	long	sw	covered.
S. S. Elbe, N. 45° 45′, W. 49° 46′	30.03	762.8	47.3	8.5	100	s.			4		10			2 h'r	2 h'r	mod.	se.	foggy.
S. S. Hohenstaufen, N. 36° 50′, W. 12° 58′	30.41	772.4	66.2	19.0		n.			6		5		n.			light	n.	fair.
S. S. Neckar, N. 47° 37′, W. 42° 14′	30.37	771.4	48.0	8.9	96	sw.			2		10		sw.	0	0	long	wnw.	fair.
S. S. Oder, N. 49° 53′, W. 18° 07′	30.28	769.1	58.1	14.5		nw.			4		3		nw.	3 h'r	3 h'r	mod.	wnw.	clear.
S. S. Ohio, N 24° 46′ W. 84° 45′	30.38	771.6				n.			6		8		n.	1 h'r	1 h'r	mod.	n.	misty.
S. S. Saller, N. 49° 48′, W. 11° 57′	30.24	768.1	52.7	11.5		sw.			3		10		sw.	0	0	mod.	sw.	misty.
S. S. Strassburg, St. Vincent, Cape de Verd Islands	30.12	765.0	72	22.2	90	ne.			4–5		5		ne.	0	0	mod.	ne.	fair.
S. S. Werra, N. 50° 36′, W. 31° 15′*	30.36	771.1	49.1	9.5		wnw.			5		4		w.	2 h'r	2 h'r	mod.	w.	
S. S. Belgic, Yokohama, Japan†	30.08	764.0	51	10.6	79	calm			0		2			0	0	sm'h		clear.
S. S. Coptic, N. 40° 05′, W. 155° 40′	29.64	752.8	52.5	11.4	73	wsw.			5		4		w.	5 h'r	5 h'r	high	w.	fair.
S. S. Oceanic, N. 35° 02′, E. 142° 14′*	30.10	764.5	59	15.0	49	sw.			3		4		sw.			mod.	nw.	fine.
S. S. City of Augusta, N. 37° 49′, W. 74° 41′†	30.07	763.8				nnw.			9		5?		nw.	0	0	short	nnw.	cloudy.†
S. S. Mississippi, Seattle, Wash. Ter.†	30.06	763.5	50	10.0	79	se.			1		10		s.					light rain.
S. S. Columbia, N. 43° 51′ W. 124° 31′ †	29.89	759.2	54	12.2	80	sse.			3		10		sse.			hv'y	sw.	raining.
S. S. Oregon, Portland, Oregon†	29.97	761.2	45	7.2	100	calm			0		10							raining.
S. S. Ancon, N. 34° 34′, W. 120° 41′ †	30.13	765 3	61	16.1	66	nne.			3		10		n			mod.	wnw.	cloudy.
S. S. State of California, San Francisco, Cal*†	30.08	764.0	53	11.7	80	s.			2		7?							overcast.†
S. S. Australia, S. 33° 51′, E. 152° 55′	30.17	766.3	71	21.7	95	se.			6		10		se.	0	0			cloudy.
S. S. City of New York, Sydney, N. S. W †	30.25	768.3	66	18.9	74	sse.			1		0			0	0			clear.
S. S. City of Pekin, Hong Kong, China †	30.29	769.4	63	17.2	57	ne.			4		10		e.	0	0			overcast.
S. S. City of Rio de Janeiro, N. 14° 40′, W. 95° 35′ †	30.09	764.3	70	21.1	80	n.			7		0			0	0	light	se.	clear.
S. S. Grenada, Panama, Panama †	29.94	760.5	76	24.4	91	nw.			1		0			0	0			clear.
S. S. Zealandia, N. 13° 49′, W. 161° 05	29.94	760.5	76	24.4	72	e.			4		5		e			mod.	e.	fine.
S. S. Muriel, Antigua, W. I.	30.08	764.0	81	27.2		e.			3		10			0	0	sm'h		overcast.
S. S. Claudius, Belize, Honduras†	30.33	770.4				nw.			5		2		nw.	0	0	short	nw.	fair.
S. S. Valencia, Curacoa, W. I†	30.04	763.0	82	27.8	71	ne.			5		2		ne.	0	0	sm'h		fine.
S. S. Belgenland, Antwerp, Belgium †	29.99	761.7	37	2.8	90	w.			4		3		nne.	0	0			fair.
S. S. Pennland, N. 50° 34′, W. 21° 22′	30.29	769.4	54	12.2	01	w.			6		7		w.	2 h'r	2 h'r	long	w.	showery.
S. S. Rhynland, N. 48° 00′, W. 42° 30′	30.39	771.9	46	7.8	84	wsw.			5		10		sw.			high	nw.	overcast.
S. S. Wuesland, Scheide River, Germany	30.07	763.8	47	8.3	70	e.			4		2		ese	0	0			clear.
S. S. Maas, N. 51° 30′, E. 4° 12′	30.00	762.0	48.9	9.4	73	ne.			2				ese.	0	0			clear.
S. S. P. Culand, N. 50° 00′, W. 30° 27′	30.18	766.6	53.8	12.1	85	w.			5		4		w.			4	w.	fair.
S. S. W. A. Scholten, N. 49° 10′, W. 28° 45′			50.0	10.0	75	wsw.			0		7		wsw.	4 h'r	4 h'r	mod.	wsw.	
S. S. Zaandam, N. 44° 40′, W. 46° 50′ *	30.03	762.7	61.5	16.4	90	s.			3		10 n		n.	4 h'r	4 h'r	2	sw.	foggy.
S. S. State of Florida, N. 50° 47′, W. 32° 23′	30.29	769.4	49	9.4		wsw.			5		6		wsw.	rain	rain	h'vy	wsw.	cloudy.
S. S. State of Nevada, N. 51° 40′, W. 33° 30′†	30.30	769.6	46	7.8		w.			7		2		wnw.	0	0	cross	w.	squally.
S. S. Thingvalla, N. 44° 38′, W. 57° 57′†	29.76	755.9	51.8	11.0		ssw.			4		8		ssw.	10 h'r	10 h'r	long	s.	covered.
S. S. Baltic, N. 49° 53′, W. 23° 45′	30.25	768.3	50	10.0	79	nw.			6		7		nw.	1 h'r	1 h'r	r'gh	w.	squally.
S. S. Celtic, Liverpool, Eng†	30.17	766.3	42	5.6	91	nne.			4		5		nw.	sh'rs	sh'rs			fair.
S. S. Lepanto, N. 52° 31′, E. 1° 50′*	30.09	764.3	46	7.8		n.			6		2		n.	0	0			clear.
S. S. Marengo, N. 45° 35′, W. 49° 20′*†	29.86	758.4				ssw.			3		10		ssw.	22 h'r	22 h'r	mod.	ssw.	foggy.
S. S. Saterno, N. 36° 58′, E. 0° 23′						wnw.			5		2		w.	0	0	r'gh	wnw.	clear.
S. S. Catherine Whiting, Barnegat, N. J†	30.10	764.5				wnw.			5				nw.	0	0	long	e.	
S. S. Norman, N. 42° 23′, W. 71° 07′	29.90	759.4				nw.			1				nw.	12 h'r	12 h'r			cloudy.
S. S. Saxon, Philadelphia, Pa *†	30.22	767.6	35	1.7		nw.			4		0							fine.
MISCELLANEOUS.																		
Bk. Adelaid, N. 35° 14′ W. 74° 26′ *†	30.17	766.3	52	11.1		wnw.			7		2		nnw.	0	0	r'gh	nw.	fair.
Bg. Alcira, Maracaybo, Venezuela	29.92	760.0	84	28.9		ene.			2		2		ene.	0	0			clear.
S. Annie, M. Law, Isuma Strait, Japan *†	30.20	767.1	50	10.0		e.			1					0	0	sm'h	se.	fine.
Bk. Anna Thormann, S. 20° 03′, E. 70° 41′*	29.89	759.2	76.1	24.6	88	e.			4		10 n		e.	0	0	mod.	e.	misty.
S. S. Antonio Lopez, Havana, Cuba, W. I.*	30.28	769.1	67.5	19.7	69	nw.			4		4			1 h'r	1 h'r			fair.
Bk. Aureola, Bristol, Eng*†	30.37	771.4	60	15.6		ne.			2		8		n.	0	0			cloudy.
Bgt. Arthur, N. 37° 06′, W. 55° 28′*†	30.10	764.5				ssw.			5				wsw.	0	0	high	sw.	
Schr. B. J. Baker, Smithville, N. C.*†	30.25	768.3				n.			4		1		nnw.					clear.
Sch. Bonny Doon, N. 40° 12′ W. 19° 00′						nne.			5		8?		n.	3 h'r	3 h'r	sm'h	w.	clear.?
S. S. Burswell, N. 26° 13′ W. 75° 19′ *†	30.18	766.0	72	22.2		nnw.			4		10		wnw.	4 h'r	4 h'r	str'ng	con.	threatening.
Bk. Champion, N. 29° 11′, W. 22° 24′			67.0	19.4		ene.			5		8		ene.	0	0	long	e.	fair.
Schr. Chas. F. Heyer, N. 24° 25′, W. 81° 35′	30.32	770.1	64	17.8	95	ne.			1	0	1 8			0	0		nw.	clear.
Schr. C. R. Flint, Cedar Keys, Fla†	30.48	774.2	40	4.4		nw.			2		2			0	0			clear.
S. Cornelius, N. 48° 24′, W. 24° 45′			54.0	12.2		w.			3		3		nw.	2 h'r	2 h'r	mod	wsw.	fair.
Bkt. David Preston, New Orleans, La*†	30.45	773.4	58	14.4		calm			0		0			0	0			
Bk. Don Quixote, Pasoeroen Roads, Java*	29.89	759.2	90	32.2		nnw.			4		4		nnw.	0	0	sm'h		clear.
Schr. Edith R. Seward, N. 36° 58′, W. 76° 24′*†	30.20	767.1	30	— 1.1		nnw.			2		3		nw.	0	0			clear.
S. E. J. Spicer, N. 39° 40′, W. 69° 06′ *†	29.92	760.0			?	w.			5		10		wsw.	24 h'r	24 h'r	long	ene.	raining.
Bk. Eliza Barss, Bermuda, W. I†	30.05	763.3				ssw.			5		5?		sw.	0	0			cloudy.†
Bk. E. L. Pettingill, N. 34° 39′, W. 126° 02′ *†	30.10	764.5	62	16.7		s.			0		10		sw.	3 h'r	3 h'r	r'gh	nw.	overcast.
Bk. Essex, Muscat, Arabia*†	30.02	762.5	78	25.6		w.			2		0					light	n.	fine.
Schr. F. E. McDonald, Belfast, Maine†	29.89	759.2				n.			1		10							
S. S. Foscolia, N. 21° 11′, W. 58° 08′						ene.			7		5		ene.	0	0	r'gh	ene.	fair.
Bk. Freya, N. 18° 48′, W. 48° 30′			82	27.8		ne.			4		1		nne.	1 h'r	1 h'r	mod.	nne.	clear.
Bg. George, Point Caledonia, N. S*†	29.62	752.3				w.			1		10			0	0	mod.		cloudy.
S. Grecian, N. 34° 10′, W. 71° 40′†	30.07	763.8	61	16.1	01	nw.			6		9		nw.	0	0	mod	nw.	cloudy.
Bk. Grey Eagle, N. 25° 57′, W. 38° 15′*†	30.20	767.1	76	24.4		ese.			5		5		sse.	0	0	long	nw.	threatening
Bk. Gronsvaer, Wellington, New Zealand†	30.27	768.8	71.0	21.7	98	nw.			5		0			0	0			fair.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		WEATHER.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Hattie G. McFarland, New York, N. Y †	30.09	764.3	28	—2.2		nw.			1		4		nw.	0	0			
Schr Hattie Weston, N. 14° 49′, W. 65° 42′ *†	30.16	766.1	84	28.9		e.			4		2		ene.	0	0	r'gh	ene.	fair.
S. Hedwig, N. 39° 39′, W. 72° 50′	30.01	762.3	36.0	2.2	96	w.			6		10		w.	0	0	4	e.	overcast.
Bk. Heinrich & Tonio, N. 48° 13′, W. 18° 18′*†	30.37	771.4	55	12.8		wsw.			3		9			5 h'r	5 h'r	long	w.	clearing
Schr. Isabel Alberto, Cedar Keys, Florida†	30.41	772.4				nw.			4		0			sli't	sli't			clear.
Schr. James Slater, N. 28° 55′, W. 69° 43′†	30.08	764.0	79	26.1		sw.			4		10		wsw.	1 h'r	1 h'r	r'gh	wsw.	threatening.
Schr. Jennie N. Huddell, Savannah, Ga†	30.36	771.1	34	1.1	90	nw.			5		0			0	0			clear.
S. S. John Hopkins, N. 39° 46′ W. 73° 30′			32	0.0		nw.			6		8		w.			long	ne.	light snow.
Schr. John L. Thomas, N. 25° 50′, W. 79° 58′*†	30.30	769.6				nnw.			6		2		nw.	0	0	con.		clear.
Bg. John Wesley, N. 28° 17′, W. 79° 57′†	30.45	773.4				nne.			4		9			0	0	r'gh	n.	cloudy.
Bk. Joseph A. Ropes, N. 19° 18′, E. 60° 10′*†	29.98	701.5	78	25.6	82	nne.			4		5		nne.			mod.		fair
Bkt. Josephine, N. 42° 14′, W. 69° 31′†	29.85	758.2	42	5.6	66	n.			3		10			24 h'r	24 h'r	r'gh	ne.	sleeting
Light House Tender, Laurel, Key West, Fla†	30.26	768.6	64	17.8		ne.			2		6		ne.	2 h'r	2 h'r			fair
Bk. Liberia, N. 8° 44′, W. 16° 21′.*..	29.98	761.5	84	28.9	83	wnw.			3		8		w.	1 h'r	1 h'r	long	sw.	
Bg. Lilian, N. 28° 55′, W. 72° 05′†	30.15	765.8	68	20.0		nw.			6		10		nnw.	¼h'r	¼h'r	r'gh	var.	rainy.
S. S. Madrid, Baltimore, Md *†	30.18	766.6	29	—1.7														
S. S. Malabar, N. 33° 32′, E. 26° 19′ *†	29.85	758.2				nw.			7		0			0	0	h'vy	nw.	clear.
Bg. Mary Gibbs, N. 39° 17′, W. 74° 00′ *†	29.91	759.7				wnw.			6					0	0	4		fair.
Bk. Matilda C. Smith, N. 29° 20′, W. 40° 40′ *†	30.30	769.6				sse.			6		7		s.			mod.	ese.	threatening.
Bg. Mattie B. Russell, N. 39° 00′ W. 72° 30′*†	30.25	768.3				wnw.			8		10			0	0			
Schr. Moravian, N. 12° 33′, W. 81° 43′†	30.13	765.3				ene.							ne.	0	0	long	n.	cloudy.
Bg. Myrtle, Boston, Mass†	29.87	758.7				wnw.			3		0			0	0			clear.
Bk. Northern Queen, N. 39° 27′, W. 49° 15′*†	30.20	767.1	72	22.2	90	sw.			6		2		sw.			mod.	sw.	fine.
Bg. O. C. Clary, N. 8° 20′. W. 57° 35′*†	29.94	760.5	82	27.8	91	ene.			4		1		ne.			short		clear.
S. Orealla, N. 10° 29′, E. 92° 04′*	29.95	760.7				ne.			2		5		ene.	0	0	sm'h		fine.
Bk. Orpheus, N. 48° 24′, W. 12° 20′	30.20	767.1	54	12.2		nw.			6		6 k		nw.	0	0	mod.	nw.	fair.
S Paramita, San Francisco, Cal†	30.06	763.5	50	10.0		calm			0					0	0			clear.
S. S. Radnorshire, N. 6° 23′, E. 76° 32′*†	29.85	758.2				ssw.			2		0			0	0	sm'h		
S. St. Francis, N. 4° 19′, W. 118° 45′†	29.93	760.2	72	22.2		se.			6		8		se.	4 h'r	4 h'r	mod.	se.	misty.
Bk. Southern Belle, Antwerp, Belgium*†	29.80	756 9	40	4.4		ne.			3					0	0			clear.
S. S. Strathleven, N. 12° 21′, E. 44° 46′	29.96	761.0	78.0	25.6	87	e.			2		2		e.			2	con.	d. clouds.
S. S. Sunbeam, N. 31° 00′, W. 30° 17′	30.54	775.7	70	21.1	80	se.			5		6		se.	½h'r	½h'r	2	ese.	d. clouds.
Bk. Truro, N. 42° 26′, W. 56° 55′*†	29.99	761.7				sw.			4–5		10		sw.	7 h'r	7 h'r	mod.	se.	misty.
U. S. F. C. S. S. FishHawk, Washington, D. C†..	30.27	768.8	34	1.1		w.			2		2		wnw.	0	0			clear.
Bk. Usko, N. 51° 23′. W. 32° 49′			53	11.7		w			5		5		w.	0	0	long	wsw.	fair.
Bk. Vincenzo Accame, N. 36° 50′, W. 21° 38′†	30.80	782.3	62.6	17		ne.			4		10		ne.	0	0	mod.	ne.	gloomy.
Schr. Walter L. Plummer, N. 24° —′. W. 74° —′*†	30.20	767.1				nw.			4		10		nnw.			mod.	nw.	
Bk. Wandering Jew, S. 33° 20′, W. 50° 38′†	30.09	764.3	71	21.7		se.			2		2		s.	0	0	long	ssw.	clear.
Bk. Warden Law S. 22° 40′, W. 70° 25′	30.14	765.5				se.			2		3		sw.	0	0	sm'h	s.	fair.
S. Wm. Woodbury, N. 39° 28′, W. 44° 50′*†..	30.45	773.4	62	16.7		sw.			4		2?		w.			long	se.	cloudy.?

International Chart I. November 30, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

SUMMARY AND REVIEW

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

NOVEMBER, 1882.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for November, 1882.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
ALGERIAN.	° ′	° ′																								
Nemours	N. 35 06	W. 1 50	0.00 m.	13	4	.....	.....	.....	.....	30.18	766.5	64.8	18.2	81.6	7	.....	.....	1	13	4	5	.....	.....	.....	.....	1	0.05	1.2
Algiers	N. 36 47	E. 3 05	0.20 p.m.	72	22	.....	.....	30.13	765.3	65.7	18.7	61.7	2	5	13	6	.....	.....	1	2	1	.....	.....	1	1.61	40.8
La Calle	N. 36 54	E. 8 26	0.42 p.m.	36	11	.....	.....	30.08	764.0	67.5	19.7	75.0	3	0	9	8	1	1	1	1	.....	.....	.....	3	5.56	141.3
Tunis	N. 36 42	E. 10 13	0.49 p.m.	46	14	.....	.....	30.09	764.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saida	N. 34 51	E. 0 10	0.09 p.m.	2844	867	.....	.....	30.21	767.4	68.5	20.3	50.8	6	7	6	6	2	1	1	1	.....	.....	.....	2	0.18	4.5
Tebessa	N. 35 24	E. 8 06	0.40 p.m.	2890	881	.....	.....	30.20	767.0	61.0	16.1	56.5	10	3	13	2	.....	.....	1	1	.....	.....	.....	1	0.19	4.9
Geriville	N. 33 45	E. 1 10	0.13 p.m.	4285	1306	.....	.....	.....	.....	63.3	17.4	25.0	2	13	6	1	1	2	3	2	.....	.....	.....	3	0.04	1.0
Laghouat	N. 33 48	E. 2 53	0.20 p.m.	2559	780	.....	.....	30.24	768.2	64.4	18.0	30.0	3	4	2	4	5	2	4	6	.....	.....	.....	1	0	0
Biskra	N. 34 51	E. 5 41	0.31 p.m.	410	125	.....	.....	30.21	767.4	69.8	21.0	40.7	8	8	1	.....	.....	.....	.....	.....	13	.....	.....	2	inap.	inap.
AUSTRALIAN.																										
Melbourne	S. 37 50	E. 144 58	9.47 p.m.	91	28	30.00	761.9	30.08	764.1	59.1	15.1	76	3	.....	1	4	9	9	3	.....	1	.....	.....	4	3.81	96.8
AUSTRO-HUNGARIAN.																										
Agram	N. 45 48	E. 15 53	1.12 p.m.	536	163	29.34	745.2	29.89	759 3	49.1	9.5	71.5	.....	.....	3	13	1	.....	8	5	.....	.....	.....	6	3.46	88.0
Cracow	N. 50 04	E. 20 00	1.28 p.m.	722	220	29.05	737.8	29.82	757.3	41.4	5.2	75.7	1	1	13	9	.....	.....	5	1	.....	.....	.....	8	2.63	66.7
Eperies	N. 48 58	E. 21 15	1.33 p.m.	820	250	28.95	735.4	29.82	757.4	38.5	3.6	81.2	5	.....	1	.....	10	.....	.....	.....	14	.....	.....	8	3.60	91.4
Gratz	N. 47 04	E. 15 28	1.10 p.m.	1171	357	28.63	727.1	29.90	759.4	44.8	7.1	77.0	.....	4	6	9	7	1	3	.....	.....	.....	.....	5	2.15	54.5
Hermannstadt	N. 45 47	E. 24 13	1.45 p.m.	1352	412	28.45	722.6	29.89	759.3	46.9	8.3	69	1	17	2	.....	2	7	.....	1	.....	.....	.....	8	1.55	39.4
Kremsmünster	N. 48 03	E. 14 08	1.04 p.m.	1260	384	28.48	723.4	29.84	758.0	42.6	5.9	79.4	.....	2	7	8	.....	1	.....	8	4	.....	.....	8	4.02	102.2
Lemberg	N. 49 50	E. 24 00	1.44 p.m.	978	298	28.83	732.2	29.84	757.8	39.9	4.4	78.2	.....	8	3	9	2	3	1	4	.....	.....	.....	7	3.35	85.1
Pola	N. 44 52	E. 13 51	1.04 p.m.	105	32	29.78	756.5	29.89	759.3	54.9	12.7	71.3	1	..	7	4	4	1	5	6	2	.....	.....	8	2.67	67.9
Szathmar	N. 47 46	E. 22 53	1.39 p.m.	430	131	29.38	746.2	29.84	757.9	45.7	7.0	72	5	1	0	9	2	7	.....	.....	.....	.....	.....	9	2.48	63.0
Szegedin	N. 46 15	E. 20 10	1.29 p.m.	256	78	29.60	751.8	29.87	758.8	48.4	9.1	70.8	2	4	2	4	11	2	.....	.....	5	.....	.....	9	2.48	63.0
Trieste	N. 45 39	E. 13 46	1.04 p.m.	85	26	29.81	757.2	29.91	759.8	52.9	11.6	71.3	1	2	1	5	2	.....	5	3	11	.....	.....	6	1.05	26.7
Vienna	N. 48 12	E. 16 22	1.14 p.m.	663	202	29.14	740.1	29.87	758.6	44.8	7.1	71.5	.....	3	10	1	1	5	3	1	6	.....	.....	6	3.41	86.5
BRITISH.																										
Aberdeen	N. 57 10	W. 2 06	0.00 m.	89	27	29.44	747.8	29.54	750.3	41.1	5.1	76.8	.....	1	10	5	9	4	1	.....	.....	.....	.....	6	2.70	68.7
Armagh	N. 54 21	W. 6 39	11.42 a.m.	207	63	29.37	746.0	29.61	752.1	42.8	6.0	87.6	1	1	3	10	9	4	1	1	.....	.....	.....	7	5.22	132.6
Bidston	N. 53 24	W. 3 04	11.56 a.m.	197	60	.....	.....	29.64	752.8	42.9	6.1	83.1	2	2	6	8	3	2	4	3	.....	.....	.....	6	.....	.....
Bolton	N. 53 35	W. 2 28	11.58 a.m.	500	152	29.10	739.1	29.64	752.8	44.0	6.7	82.6	2	3	6	7	5	2	1	4	.....	.....	.....	6	.....	.....
Bradford *d*	N. 53 48	W. 1 47	0.01 p.m.	366	111	29.22	742.2	29.61	752.1	44.0	6.7	80.1	....	5	2	11	.....	2	1	5	.....	.....	.....	8	.....	.....
Bridgetown	N. 13 04	W. 59 37	8.10 a.m.	28	9	29.89	759.2	29.92	760.0	81.2	27.3	71.3	.....	.....	.....	.....	.....	6	.....	24	.....	.....	.....	7	5.24	133.1
Cardington	N. 52 08	W. 0 27	0.06 p.m.	109	33	.....	.....	.....	.....	46.3	7.9	77.7	5	4	9	9	1	.....	1	1	.....	.....	.....	5	.....	.....
Chatham	N. 51 25	E. 0 33	0.10 p.m.	120	37	29.58	751.3	29.71	754.6	47.4	8.6	78.3	2	4	4	14	1	.....	1	1	3	.....	.....	6	.....	.....
Falmouth	N. 50 09	W. 5 04	11.48 a.m.	211	64	29.58	751.3	29.81	757.2	49.1	9.5	76.4*a*	4	4	10	6	2	2	1	1	.....	.....	.....	7	.....	.....
Fort Napier	S. 30 00	E. 31 00	2.12 p.m.	2200	671	27.61	701.3	29.83	757.7	78.5	25.8	51.7	3	.....	2	.....	2	3	16	4	.....	.....	.....	8	.....	.....
Free Town	N. 8 30	W. 13 14	11.15 a.m.	224	68	29.63	752.0	29.86	758.4	86.7	30.4	62.9	5	14	4	1	.....	.....	1	4	1	.....	.....	6	.....	.....
Gibraltar	N. 36 09	W. 5 21	11.47 a.m.	50	15	30.15	765.8	30.20	767.1	65.0	18.3	87.8	.....	7	11	.....	.....	.....	7	4	1	.....	.....	4	.....	.....
Glasgow	N. 55 53	W. 4 17	11.51 a.m.	184	56	29.34	745.2	29.55	750.6	41.4	5.2	81.4	3	1	8	5	4	3	4	2	.....	.....	.....	2	.....	.....
Greenwich	N. 51 29	0 00	0.08 p.m.	159	48	29.54	750.3	29.72	754.9	46.4	8.0	75.7	2	5	3	14	2	1	1	2	.....	.....	.....	9*i*	.....	.....
Guernsey	N. 49 27	W. 2 41	11.58 a.m.	275	84	29.53	750.0	29.83	757.7	49.6	9.8	77.9	3	9	9	3	4	.....	1	1	.....	.....	.....	7	.....	.....
Kew	N. 51 28	W. 0 19	0.07 p.m.	34	10	29.69	754.1	29.73	755.1	46.4	8.0	71.4*b*	8	7	7	10	2	.....	.....	2	.....	.....	.....	7*b*	.....	.....
Leicester	N. 52 39	W. 1 08	0.04 p.m.	245	75	29.42	747.3	29.68	753.9	45.6	7.6	75.7	1	6	3	13	1	.....	.....	5	1	.....	.....	7	.....	.....
Malta	N. 36 00	E. 14 30	1.06 p.m.	70	21	29.96	761.0	30.03	762.7	67.4	19.7	95.6	1	11	7	5	.....	2	.....	4	.....	.....	.....	6	.....	.....
Nassau	N. 25 04	W. 77 22	6.58 a.m.	44	13	30.01	762.2	30.05	763.3	75.0	23.9	71.5	3	2	.....	5	1	3	.....	16	.....	.....	.....	7	.....	.....
Uscoli	N. 52 28	W. 1 55	0.00 m.	483	147	29.17*b*	740.9*b*	29.70*b*	754.4*b*	45.1*a*	7.3*a*	75.3	6	1	7	6	5	3	.....	2	.....	.....	.....	6	.....	.....
Oxford	N. 51 46	W. 1 17	0.03 p.m.	210	64	29.49	749.0	29.72	754.9	46.2	7.9	80.6	.....	6	6	11	2	2	.....	3	.....	.....	.....	6	.....	.....
Plymouth	N. 50 22	W. 4 10	11.51 a.m.	69	21	29.72	754.9	29.79	756.7	48.5	9.2	83.3	2	11	4	6	3	1	1	2	.....	.....	.....	8	.....	.....
Sandwick Manse	N. 59 05	W. 3 20	11.54 a.m.	94	29	29.36	745.7	29.47	748.5	41.3	5.2	86.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	.....
Sentari Comet'y	N. 41 00	E. 29 03	2.04 p.m.	60	18	29.89	759.2	29.96	761.0	66.0	15.6	64.7	3	.....	.....	17	4	.....	1	5	.....	.....	.....	6	.....	.....
Sheffield	N. 53 23	W. 1 28	0.02 p.m.	260	79	29.36	745.7	29.64	752.8	45.5	7.5	82.5	1	4	1	13	5	.....	.....	6	.....	.....	.....	6	3.24	82.3
Silloth Rectory	N. 54 52	W. 3 22	11.54 a.m.	28	9	29.57	751.1	29.60	751.8	44.0	6.7	82.7	4	4	8	6	1	3	1	3	.....	.....	.....	9	4.80	121.9
Stonyhurst	N. 53 51	W. 2 28	11.58 a.m.	361	110	29.63*a*	752.6*a*	29.64*a*	752.8*a*	43.9	6.6	77.0	1	2	6	9	3	4	.....	5	.....	.....	.....	9	.....	.....
StratfieldTurgiss	N. 51 17	W. 0 53	0.04 p.m.	197	60	29.52	749.8	29.74	755.4	46.8	8.2	76.3	1	9	7	6	3	1	1	1	1	.....	.....	7	.....	.....
Truro	N. 50 16	W. 5 04	11.53 a.m.	43	13	29.74*a*	755.4*a*	29.80*a*	756.9*a*	51.5	10.8	78.9	2	9	4	11	.....	1	1	2	.....	.....	.....	8	.....	.....
Valencia	N. 51 55	W. 10 18	11.27 a.m	23	7	29.73	755.1	29.76	755.9	48.8	9.3	77.4	1	4	10	8	2	2	2	1	.....	.....	.....	7	.....	.....
CANADIAN.																										
Bathurst	N. 47 39	W. 65 43	7.45 a.m.	80	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charlottetown	N. 46 14	W. 63 10	7.55 a.m.	38	12	29.94	760.5	29.98	761.5	34.7	1.5	83.3	6	4	5	6	1	1	1	3	3	6993	10771	8	3.67	93.2
Chatham	N. 47 03	W. 65 29	7.45 a.m.	56	17	29.98	761.5	30.05	763.3	29.1	—1.6	87.8	4	8	2	8	.....	.....	1	4	3	3902	6280	0	2.18	55.4
Cornwall	N. 45 01	W. 74 43	7.09 a.m.	175	53	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dalhousie	N. 48 04	W. 66 21	7.32 a.m.	150	46	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Father Point	N. 48 31	W. 68 28	7.34 a.m.	20	6	30.05	763.3	30.07	763.8	27.8	—2.3	87.2	5	7	5	3	3	.....	1	2	4	13390	21549	9	3.00	76.2
Fort Garry	N. 49 51	W. 97 07	5.39 a.m.	754	230	29.28	743.7	30.17	766.3	17.8	—7.9	87.5	8	6	5	5	2	3	.....	1	.....	7544	12141	6	0.66	16.8
Fredericton	N. 45 57	W. 66 39	7.41 a.m.	59	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Granton	N. 43 12	W. 81 21	6.43 a.m.	1015	309	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Halifax	N. 44 39	W. 63 36	7.53 a.m.	122	37	29.87	758.7	30.03	762.7	33.4	0.8	87.4	9	6	9	4	.....	.....	1	1	.....	.....	.....	6	1.39	35.3
Hamilton	N. 43 16	W. 79 53	6.49 a.m.	338	103	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kingston	N. 44 14	W. 76 30	7.02 a.m.	307	94	29.81	757.2	30.16	766.1	31.6	—0.2	85.3	5	2	4	6	1	1	.....	10	1	4982	8018	8	2.07	52.6
Little Glace Bay	N. 46 12	W. 59 58	8.08 a.m.	34	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montreal	N. 45 31	W. 73 33	7.13 a.m.	187	57	29.93	760.2	30.14	765.5	28.5	—1.9	84.9	2	4	10	3	1	2	2	6	.....	.....	.....	6	1.75	44.4
Parry Sound	N. 45 19	W. 80 01	6.48 a.m.	635	194	29.42	747.3	30.15	765.8	30.1	—1.1	86.2	10	2	4	.....	.....	4	7	1	2	6589	10704	7	3.19	81.0
Peterboro	N. 44 17	W. 78 20	6.54 a.m.	688	210	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Dover	N. 42 47	W. 80 13	6.47 a.m.	635	194	29.45	748.0	30.17	766.3	33.3	0.7	98.6	3	1	5	5	2	1	.....	8	5	5240	8433	7	2.94	74.7
Port Stanley	N. 42 40	W. 81 13	6.43 a.m.	592	180	29.48	748.8	30.15	765.8	33.9	1.1	87.3	3	3	9	4	.....	2	5	4	.....	.....	.....	7	2.09	53.1
Quebec	N. 46 48	W. 71 12	7.23 a.m.	293	89	29.79	756.7	30.12	765.0	20.6	—3.0	83.8	3	4	6	.....	.....	.....	9	2	6	.....	.....	7	2.32	58.9
Rockliffe	N. 46 10	W. 77 48	6.57 a.m.	418	127	29.66	753.4	30.16	766.1	25.3	—3.7	84.5	3	7	4	1	1	3	5	1	5	.....	.....	7	2.54	64.5
Saint Andrews	N. 43 04	W. 81 06	6.34 a.m.	47	14	29.99	761.7	30.05	763.3	32.7	0.4	80.1	2	10	2	2	.....	2	1	10	1	.....	.....	6	1.41	35.8
Saint John, N. B.	N. 45 17	W. 66 03	7.44 a.m.	150	46	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saint Pierre	N. 46 47	W. 56 08	8.24 a.m.	?	?	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saugeen	N. 44 30	W. 81 21	6.42 a.m.	656	200	29.39	746.5	30.13	765.3	34.2	1.2	84.1	2	3	1	4	3	5	8	4	.....	8549	13758	9	2.57	65.3
Stratford	N. 43 23	W. 81 00	6.44 a.m.	1182	360	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sydney	N. 46 08	W. 60 10	8.07 a.m.	37	11	29.89	759.2	29.96	761.0	30.3	2.4	84.6	1	3	5	8	3	.....	2	6	2	6815	10967	8	5.58	141.7
Toronto	N. 43 39	W. 79 23	6.50 a.m.	350	107	29.77	756.1	30.17	766.3	33.3	0.7	81.5	9	3	8	2	2	1	1	4	.....	6904	11111	7	2.18	55.4
Windsor	N. 44 59	W. 63 58	7.53 a.m.	87	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woodstock	N. 43 08	W. 80 47	6.48 a.m.	980	299	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Yarmouth	N. 43 50	W. 66 02	7.44 a.m.	61	19	29.97	761.2	30.04	763.0	35.9	2.2	83.9	6	8	1	1	1	.....	7	4	2	6386	10277	8	1.35	34.3
Sub-Series.																										
St. Johns, N. F.	N. 47 34	W. 52 42	8.37 a.m.	230	70	29.78	756.4	30.03	762.7	36.4	2.4	.....	4	8	5	4	3	3	1	2	.....	.....	.....	7	7.00	177.8
CAPE COLONY																										
Cape St. Francis	S. 34 10	E. 24 50	1.47 p.m.	25	7	30.03	762.7	30.06	763.5	67.8	19.9	78.0	.....	.....	2	12	5	1	8	2	.....	.....	.....	6	1.29	32.8
Cape Town *a*	S. 34 02	E. 18 29	1.22 p.m	27	8	30.01	762.2	30.04	763.0	76.8	24.9	50.8	.....	2	.....	.....	14	13	.....	.....	.....	.....	.....	8	0.44	11.2

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for November, 1882.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
CHINESE. (*Sub*).	° ′	° ′																								
Tchang kia tchouang..	N. 38 17	E.116 16	7.53 p.m.	98	30	30.28	769.2	30.35	771.0	38.1	3.4	74.9	1	1	5	7	.....	2	1	7	6	.....	.....	3	0.83	21.0
Zi-Ka-Wei.....	N. 31 12	E.121 26	8.14 p.m.	23	7	30.32	770.1	30.35	770.8	49.1	9.5	75.6	10	3	4	1	.....	2	2	7	1	.....	.....	6	4.25	108.0
DANISH.																										
Copenhagen.....	N. 55 41	E. 12 36	0.58 p.m.	43	13	29.60	751.7	29.64	752.9	39.2	4.0	83.1	... ..	6	1	5	4	5	3	6	.....	.....	.....	8	.....	.....
Fanöe.....	N. 55 27	E. 8 24	0.42 p.m.	20	6	29.59	751.6	29.61	752.2	38.7	3.7	89	2	.....	3	5	4	3	4	8	1	.....	.....	7	.....	.....
Godthaab..	N. 64 11	W. 51 46	8.41 a.m.	36	11	29.67	753.7	29.72	754.8	21.0	— 6.1	85	5	2	.....	.....	6	4	.....	10	3	.....	.....	8	.....	.....
Ivigtut.....	N. 61 12	W. 48 00	8.56 a.m.	16	5	29.66	753.4	29.68	753.9	24.3	— 4.3	.....	4	2	.....	.....	1	4	.....	1	18	.....	.. ..	6	.....	.....
Jacobshavn	N. 69 13	W. 50 55	8.44 a.m.	42	13	29.72	755.0	29.77	756.2	12.4	—10.9	.....	.....	.....	.....	3	1	2	19	. ...	5	.....	.....	6	.....	.....
Stykkisholm	N. 65 05	W. 22 46	10.37 a.m.	36	11	29.47	748.4	29.51	749.5	32.4	0.2	87	.....	1	.....	1	2	3	7	15	1	.....	.....	7	.....	.....
Thorshavn.....	N. 62 02	W. 6 44	11.41 a.m.	29	9	29.43	747.4	29.46	748.3	41.4	5.2	80	2	2	.....	2	6	7	4	4	3	.....	.....	7	.....	.....
Upernavik.....	N. 72 47	W. 56 00	8.24 a.m.	39	12	29.74	755.4	29.79	756.6	10.8	—11.8	.....	6	.....	1	3	2	1	14	1	3	.....	.....	6	.....	.....
Vestervig.....	N. 56 47	E. 8 20	0.41 p.m.	82	25	29.51	749.6	29.61	752.0	37.0	2.8	89	1	.....	2	3	3	3	7	5	6	.....	.....	7	.....	.....
FRENCH.																										
Agen	N. 44 12	E. 0 38	0.11 p.m.	604	184	29.46	748.2	30.10	764.4	52.7	11.5	87.6	... .	6	7	3	2	1	.....	.....	11	.....	.....	.....	4.54	115.4
Alençon	N. 48 26	E. 0 05	0.09 p.m.	476	145	29.34	745.1	29.89	759.1	49.8	9.9	91.5	5	4	4	10	5	1	.....	1	.....	.....	.....	.....	4.10	104.2
Arras.....	N. 50 18	E. 2 46	0.19 p.m.	239	73	29.47	748.6	29.73	755.1	45.5	7.5	87.2	7	1	14	4	1	1	.....	2	.....	.....	.....	.....	6.65	168.9
Avignon	N. 43 57	E. 4 48	0.27 p.m.	65	20	29.91	759.8	29.99	761.8	54.9	12.7	68.7	5	19	.....	.....	1	2	3	.....	.....	.....	.....	.....	0.48	12.3
Bar-sur-Seine	N. 48 07	E. 4 22	0.25 p.m.	518	158	29.31	744.4	29.87	758.7	47.5	8.6	81	.....	4	6	11	5	3	.....	1	.....	.....	.....	9	5.84	148.4
Beauvais	N. 49 26	E. 2 05	0.16 p.m.	246	75	29.54	750.2	29.81	757.1	48.0	8.9	77.0	2	3	11	9	2	.....	3	1	.....	.....	.....	8	5.22	132.5
Besançon	N. 47 14	E. 6 02	0.32 p.m.	846	258	28.98	736.2	29.88	789.0	49.3	9.6	84.2	.....	.....	.....	6	19	2	2	1	.....	.....	.....	.....	9.37	238.1
Bordeaux.....	N. 44 50	E. 0 32	0.06 p.m.	243	74	29.76	755.9	30.02	762.6	54.5	12.5	70.1	1	4	8	11	1	5	.....	.....	.....	.....	.....	8	4.84	122.9
Bourges.....	N. 47 10	E. 2 26	0.17 p.m.	510	156	29.35	745.6	29.91	759.7	50.5	10.3	78.1	.....	2	6	7	3	1	1	1	9	.....	.....	.....	4.19	106.4
Brest.....	N. 48 24	W. 4 30	11.50 a.m.	210	64	29.69	754.2	29.93	760.3	52.2	11.2	82.0	5	3	12	4	2	1	2	.....	1	.....	.....	8	10.03	254.8
Caen	N. 49 11	W. 0 21	0.07 p.m.	69	21	29.73	755.2	29.81	757.1	50.4	10.2	75.9	1	2	11	9	5	2	.....	.....	.....	.....	.....	8	6.08	154.3
Châlons-sur-Marne	N. 48 57	E. 4 21	0.25 p.m.	294	90	29.48	748.8	29.80	757.0	46.9	8.3	86.4	.....	3	3	13	5	2	.....	1	3	.....	.....	7	6.53	165.8
Charleville	N. 49 46	E. 4 49	0.27 p.m.	476	145	29.25	743.0	29.77	756.2	44.4	6.9	79.5	1	5	8	7	3	2	2	2	.....	.....	.....	8	5.60	243.7
Clermont-Fd.....	N. 45 46	E. 3 05	0.20 p.m.	1273	388	28.59	726.1	29.95	760.6	52.0	11.1	63.0	1	5	5	8	5	2	1	3	.....	.....	.....	7	2.18	55.4
Cluny	N. 46 26	E. 4 39	0.27 p.m.	787	240	29.10	739.2	29.96	761.0	50.2	10.1	69.7	.....	2	12	10	5	.....	.....	1	.....	.....	.....	7	3.16	80.2
Commercy	N. 48 46	E. 5 35	0.30 p.m.	797	243	28.97	735.7	29.84	757.9	44.8	7.1	83.9	1	1	14	9	1	1	2	1	.....	.....	.....	8	12.67	321.9
Gap	N. 44 33	E. 6 05	0.32 p.m.	2424	739	27.46	697.4	29.99	761.8	46.9	8.3	63.2	5	2	1	.....	1	.....	.....	1	20	.....	.....	7	3.83	97.3
Gréasque.....	N. 43 25	E. 5 37	0.31 p.m.	1056	322	28.85	732.9	29.98	761.6	53.4	11.9	63.8	1	.....	.....	.....	3	16	7	3	.....	.....	.....	5	0.66	16.9
Grenoble.....	N. 45 12	E. 5 43	0.31 p.m.	715	218	29.21	742.0	30.00	761.9	48.2	9.0	75.3	2	5	2	4	1	6	8	2	.....	.....	.....	.....	5.18	131.5
Gueret	N. 46 10	E. 1 52	0.16 p.m.	1486	453	28.35	720.2	29.98	761.4	47.3	8.5	82.8	1	5	9	9	3	1	2	.....	.....	.....	.....	6	6.04	153.3
Lamballe	N. 48 28	W. 2 31	11.58 a.m.	252	77	29.59	751.5	29.86	758.5	50.0	10.0	83.9	.....	7	11	5	3	4	.....	.....	.....	.....	.....	6	5.19	131.9
Lescar	N. 43 20	W. 0 26	0.06 p.m.	525	160	29.49	749.1	30.06	763.4	56.3	13.5	72.4	.....	1	19	7	.....	2	.....	1	.....	.....	.....	6	10.28	261.2
Lorient.....	N. 47 45	W. 3 21	11.55 a.m.	86	26	29.84	758.0	29.95	760.6	54.5	12.5	75.3	2	5	13	6	2	.....	1	1	.....	.....	.....	8	7.33	186.2
Lyon.....	N. 45 41	E. 2 30	0.25 p.m.	981	299	28.92	734.6	29.99	751.7	48.9	9.4	71.6	4	3	4	2	9	5	2	1	.....	.....	.....	6	1.08	27.4
Mans	N. 48 01	E. 0 12	0.09 p.m.	285	87	29.57	751.0	29.87	758.6	49.6	9.8	84.9	2	4	13	6	1	1	.....	3	.....	.....	.....	.....	6.73	171.0
Marseille.....	N. 43 18	E. 5 23	0.29 p.m.	246	75	29.70	754.4	29.97	761.3	57.2	14.0	65.6	.....	12	7	5	1	1	2	.....	.....	.....	.....	.....	0.46	11.8
Mont Louis	N. 42 30	E. 2 07	0.16 p.m.	5203	1586	24.80	630.0	29.65	753.0	43.5	6.4	62.5	1	2	5	18	.. .	2	1	1	.....	.....	.....	5	3.20	81.2
Montpellier.....	N. 43 37	E. 3 53	0.24 p.m.	118	36	29.86	758.5	29.99	761.8	57.4	14.1	72.8	5	.....	.....	.....	2	13	6	3	1	.....	.....	3	0.42	10.8
Nancy	N. 48 42	E. 6 11	0.33 p.m.	725	221	28.98	736.2	29.78	756.4	45.0	7.2	79.4	1	3	2	11	11	1	.. ..	1	.....	.....	.....	.....	6.22	158.1
Nantes	N. 47 13	W. 1 33	0.02 p.m.	134	41	29.81	757.1	29.97	761.2	53.6	12.0	73.4	1	5	7	12	3	1	1	.....	.....	.....	.....	9	6.98	177.2
Perpignan	N. 42 42	E. 2 53	0.19 p.m.	105	32	29.92	760.0	30.04	762.9	59.0	15.0	57.7	4	13	3	1	2	3	2	2	.....	.....	.....	7	0.19	4.8
Pic du Midi (Sum-	N. 42 56	W. 0 08	0.08 p.m.	9380	2859	21.17	537.8	.....	.....	27.0	— 2.8	.....	.....	16	7	5	.....	.....	.....	1	1	.....	.....	4	24.72	627.9
Privas..... [mit.)	N. 44 45	E. 4 36	0.26 p.m.	997	304	28.90	734.0	29.98	761.4	50.4	10.2	70.4	10	5	2	1	10	5	.....	2	.....	.....	.....	4	0.73	18.6
Puy de Dome.....	N. 45 46	E. 2 58	0.20 p.m.	4813	1467	25.00	635.0	.....	.....	33.8	1.0	94.6	.....	3	14	12	1	.....	.....	.....	.....	.....	.....	8	12.19	309.7
Rochefort.....	N. 45 56	W. 0 58	0.04 p.m.	29	9	29.97	761.1	30.00	761.9	54.0	12.2	87.6	.....	3	6	14	4	1	.....	.....	2	.....	.....	8	26.76?	705.0?
Roche-sur-Yon	N. 46 40	W. 1 26	0.02 p.m.	198	60	29.86	755.9	29.98	761.4	52.5	11.4	82.7	.....	5	7	11	5	2	.....	.....	.....	.....	.....	6	7.38	187.4
Rodez.....	N. 44 21	E. 2 34	0.18 p.m.	2050	625	27.92	709.1	30.06	763.5	45.1	7.3	87.9	3	13	11	.....	.....	.....	1	2	.....	.....	.....	.....	4.96	126.1
Rouen..... ...	N. 49 26	E. 1 05	0.12 p.m.	39	12	29.75	755.6	29.80	756.8	49.6	9.8	77.2	3	7	7	9	2	1	1	.....	.....	.....	.....	6	6.64	168.6
Saint Lo	N. 49 06	W. 1 05	0.04 p.m.	134	41	.....	.....	.....	.....	50.4	10.2	78.6b	3	7	12	6	.....	1	1	.....	.....	.....	.....	.....	9.28	235.8
Saint Maur.....	N. 48 48	E. 2 21	0.17 p.m.	162	49	29.66	753.4	29.83	757.6	49.1	9.5	76.5	2	3	5	14	4	1	1	.....	.....	.....	.....	8	4.15	114.6
Toulouse.....	N. 43 37	E. 1 27	0.14 p.m.	636	194	29.38	746.3	30.11	764.8	52.7	11.5	78.8	2	1	12	4	.....	7	3	1	.....	.....	.....	7	3.92	99.6
Tours.....	N. 47 24	E. 0 41	0.11 p.m.	107	51	29.72	754.9	29.90	759.5	52.2	11.2	76.1	.....	3	5	17	4	.....	1	. ..	.....	.....	.....	7	6.29	159.8
Versailles.....	N. 48 48	E. 2 07	0.16 p.m.	445	136	29.33	744.9	29.82	757.4	48.2	9.0	78.4	3	6	14	5	1	1	.....	.....	.....	.....	.....	.....	4.23	107.5
GERMAN.																										
Ansbach.....	N. 49 18	E. 10 36	0.50 p.m.	1358	414	28.35	720.2	29.83	757.7	41.0	5.0	79.4	.....	2	8	12	1	4	.....	.....	3	.....	.....	8	6.09	154.7
Bamberg.....	N. 49 54	E. 10 54	0.51 p.m.	787	240	28.95	735.3	29.78	756.5	43.3	6.3	74.2	.....	1	9	11	1	2	2	.....	4	.....	.....	8	4.78	121.4
Berlin	N. 52 30	E. 13 23	1.02 p.m.	164	50	29.53	750.0	29.71	754.5	43.0	6.1	77.9	1	2	5	12	1	5	1	3	.....	.....	.....	8	3.43	87.2
Breslau.....	N. 51 07	E. 17 02	1.17 p.m.	482	147	29.26	743.3	29.79	756.6	41.4	5.2	75.1	1	2	9	5	6	2	5	.....	.....	.....	.....	8	2.57	65.2
Carlsruhe	N. 49 01	E. 8 25	0.42 p.m.	404	123	29.38	746.2	29.82	757.4	45.7	7.6	78.5	.....	2	1	24	.....	.....	2	1	.....	.....	.....	8	11.54	293.1
Cassel	N. 51 19	E. 9 28	0.46 p.m.	669	204	28.96	735.5	29.67	753.6	42.6	5.9	80.2	1	3	2	9	10	1	4	.....	.....	.....	.....	8	3.95	100.3
Frankfort on M.....	N. 50 08	E. 8 41	0.43 p.m.	338	103	29.43	747.4	29.79	756.7	44.6	7.0	80.1	1	.....	7	11	7	1	2	1	.....	.....	.....	8	5.94	150.9
Friedrichshafen....	N. 47 39	E. 9 29	0.46 p.m.	1355	413	28.43	722.2	29.89	759.2	45.0	7.2	77.7	1	.....	6	15	6	1	.....	1	.....	.....	.....	8	7.30	185.0
Hamburg	N. 53 33	E. 9 58	0.48 p.m.	85	26	29.59	751.6	29.68	753.8	40.8	4.9	86.5	2	3	1	10	5	2	5	2	.....	.....	.....	8	3.98	101.2
Kiel.....	N. 54 19	E. 10 04	0.48 p.m.	13	4	29.62	752.4	29.64	752.8	40.8	4.9	83.3	.....	2	2	8	5	2	6	4	1	.....	.....	8	3.84	97.5
Leipsic.....	N. 51 20	E. 12 24	0.58 p.m.	390	119	29.33	745.0	29.75	755.7	42.1	5.6	77.9	1	1	6	11	6	.....	2	3	.....	.....	.....	8	2.57	65.2
Magdeburg	N. 52 09	E. 11 37	0.54 p.m.	177	54	29.51	749.6	29.71	754.5	42.6	5.9	80.6	.....	1	7	4	9	1	3	3	2	.....	.....	8	1.00	40.7
Memel	N. 55 43	E. 21 07	1.32 p.m.	39	12	29.70	754.4	29.75	755.6	33.8	1.0	84.9	2	.....	4	3	1	1	6	7	7	.....	.....	8	3.06	77.8
Munich.....	N. 48 09	E. 11 34	0.54 p.m.	1732	528	28.01	711.5	29.87	758.6	43.3	6.3	70.0	3	5	7	7	1	2	4	.....	1	.....	.....	8	3.82	96.9
Neufahrwasser....	N. 54 24	E. 18 40	1.25 p.m.	16	5	29.70	754.3	29.71	754.7	38.5	3.6	81.0	.....	3	4	6	3	5	4	4	1	.....	.....	9	3.23	82.1
Neustadt, *d*..... ...	N. 49 21	E. 8 08	0.41 p.m.	479	146	29.25	743.0	29.78	756.3	45.3	7.4	85.3	.....	1	11	5	5	.....	1	2	.....	.....	.....	8	4.82	214.0
Stuttgart.....	N. 48 47	E. 9 11	0.45 p.m.	833	254	28.86	733.1	29.77	756.1	45.5	7.5	74.2	1	1	19	3	1	1	2	2	.....	.....	.....	8	5.08	129.0
Wustrow.....	N. 54 21	E. 12 24	0.58 p.m.	23	7	29.66	753.4	29.69	754.0	39.7	4.3	86.3	2	1	1	4	6	9	6	1	.....	.....	.....	9	2.52	64.0
GREEK.																										
Athens.....	N. 37 58	E. 23 44	1.43 p.m.	361	110	29.62	752.4	30.00	762.1	66.4	19.1	.....	4	1	3	9	6	.....	.....	7	.....	.....	.....	4	0.57	14.5
ITALIAN.																										
Udine.....	N. 46 04	E. 13 13	1.01 p.m.	381	116	29.50	749.4	29.92	760.0	50.2	10.1	66	1	.....	1	.....	.....	2	2	5	19	.....	.....	7	4.74	120.5
Milan	N. 45 28	E. 9 11	0.45 p.m.	482	147	29.41	747.1	29.94	760.5	48.0	8.9	73	1	7	5	7	2	3	2	3	.....	.....	.....	5	1.46	37.0
Padua.....	N. 45 24	E. 11 53	0.56 p.m.	102	31	29.80	756.9	29.91	759.8	49.6	9.8	73	9	3	4	2	3	2	1	3	3	.....	.....	7	1.91	48.6
Moncalieri.....	N. 45 00	E. 7 41	0.39 p.m.	846	258	29.00	736.7	29.92	760.0	47.8	8.8	67	1	3	3	1	3	3	13	3	.....	.....	.....	5	0.04	1.1
Genoa	N. 44 24	E. 8 55	0.44 p.m.	157	48	29.71	754.7	29.91	759.6	56.7	13.7	57	3	2	.....	3	3	9	2	7	1	.....	.....	6	2.50	64.9
Mondovi.....	N. 44 23	E. 7 48	0.39 p.m.	1824	556	27.97	710.5	29.92	759.9	46.0	7.8	58	4	5	18	.....	.....	3	.....	.....	.....	.....	.....	2	0.10	2.6
Pesaro.....	N. 43 55	E. 12 53	1.00 p.m.	46	14	29.79	750.6	29.84	757.8	54.5	12.5	69	8	8	2	6	3	1	.....	2	.....	.....	.....	7	0.60	15.2
Florence.....	N. 43 46	E. 11 15	0.53 p.m.	240	73	29.67	753.6	29.93	760.2	54.0	12.2	71	.....	3	6	12	3	1	.....	4	1	.....	.....	7	2.09	53.0
Leghorn.....	N. 43 33	E. 10 18	0.49 p.m.	79	24	29.78	756.4	29.86	758.5	58.5	14.7	68	2	4	4	10	3	1	2	4	.....	.....	.....	7	2.96	75.2
Rome	N. 41 54	E. 12 29	0.58 p.m.	164	50	29.78	756.3	29.95	760.8	59.9	15.5	64	9	2	4	8	4	.....	1	2	.....	.....	.....	6	1.45	36.9
Lecce	N. 40 22	E. 18 12	1.21 p.m.	236	72	29.72	754.9	29.97	761.3	62.1	16.7	66	7	3	2	9	2	1	3	3	.....	.....	.....	5	1.48	37.7
Cosenza	N. 39 19	E. 16 17	1.13 p.m.	840	256	29.09	738.9	30.02	762.5	58.8	14.9	73	.....	1	8	14	3	4	.....	.....	.....	.....	.....	7	6.57	166.9
Cagliari.....	N. 39 30	E. 9 00	0.45 p.m.	180	55	29.80	756.9	29.99	761.8	62.8	17.1	60	.....	17	2	.....	3	5	.....	.....	3	.....	.....	4	1.22	31.0
Palermo.....	N. 38 07	E. 13 21	1.02 p.m.	236	72	29.78	756.5	30.03	762.8	64.9	18.3	51	.....	7	6	6	.....	.....	.....	10	1	.....	.....	6	1.84	46.7
Syracuse.....	N. 37 03	E. 15 15	1.09 p.m.	72	22	29.97	761.2	30.01	762.3	64.8	18.2	63	2	2	11	6	3	1	1	2	.....	.....	.....	6	0.12	3.0
Sub-Series.																										
Naples *a*.....	N. 40 52	E. 14 15	1.05 p.m.	489	149	29.45	748.1	29.97	761.1	59.9	15.5	69.0	2	4	9	9	1	3	2	.....	.....	.....	.....	7	2.54	64.4
Stelvio.....	N. 46 32	E. 10 25	0.50 p.m.	8343	2543	21.96	557.7	.....	.....	22.8	— 5.1	77.7	.....	.....	4	14	1	6	2	3	.....	.....	.....	6	3.83	97.4
Valdobbia.....	N. 45 47	E. 7 51	0.40 p.m.	8360	2548	21.99	558.5	.....	.....	25.7	— 3.5	70.2	9	1	1	.....	1	5	10	3	.....	.....	.....	6	1.62	41.0
INDIAN.																										
Kurachee	N. 24 47	E. 67 04	4.36 p.m.	49	15	29.97	761.2	30.02	762.5	81.1	27.3	59	.....	.....	.....	9	12	.....	1	5	3	.....	.....	1	0	0
Deesa.....	N. 24 16	E. 72 14	4.57 p.m.	466	142	29.46	748.2	29.93	760.2	83.4	28.6	31	9	5	2	3	4	1	.....	6	.....	.....	.....	1	0	0
Bombay	N. 18 54	E. 72 49	5.00 p.m.	37	11	29.84	758.0	29.88	758.9	79.7	26.5	73	7	22	1	.....	.....	.....	.....	.....	.....	.....	.....	2	0.03	0.8
Poona	N. 18 28	E. 74 10	5.05 p.m.	1849	564	28.02	711.6	29.86	758.5	82.1	27.8	34	5	4	6	.....	.....	.....	.....	4	11	.....	.....	4	2.06	52.3
Trichinopoly.....	N. 10 50	E. 78 44	5.23 p.m.	275	84	29.59	751.6	29.87	758.7	80.4	26.9	76	.....	2	2	.....	1	2	6	11	6	.....	.....	7	11.29	286.8
Bellary.....	N. 15 09	E. 76 57	5.16 p.m.	1455	444	28 37	720.5	29.83	757.7	81.2	27.3	54	4	2	4	.....	1	3	7	9	.....	.....	.....	6	0.19	4.8
Belgaum	N. 15 52	E. 74 42	5.07 p.m.	2550	777	27.33	694.1	29.86	758.5	76.7	24.8	54	5	.....	1	6	.....	2	3	13	.....	.....	.....	5	0.29	7.4
Lahore.....	N. 31 34	E. 74 20	5.05 p.m.	732	223	29.23	742.5	30.00	761.9	68.5	20.3	51	.....	.....	.....	.....	.....	.....	1	.....	29	.. ..	.....	0	0	0

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		RESULT OF SIMULTANEOUS OBSERVATIONS FOR NOVEMBER, 1882.																		Average Cloudiness.	TOTAL PRECIPITATION.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	WIND.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs.	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
INDIAN.—Cont'd.	o ′	o ′																								
Roorkee	N. 29 52	E. 77 56	5.20 p.m.	887	270	29.05	737.9	29.97	761.3	70.3	21.3	49	.....	....	9	2	.....	.....	.....	1	18	.....	.....	1	0	0
Agra	N. 27 10	E. 78 05	5.20 p.m.	555	169	29.41	746.9	29.98	761.5	75.9	24.4	30	1	4	6	.....	.....	.....	2	.....	17	.....	.....	1	0	0
Nagpur	N. 21 09	E. 79 11	5.24 p.m.	1025	312	28.87	733.3	29.92	760.0	76.8	24.9	51	1	.....	.....	.....	...	1	8	3	17	.....	.....	4	4.79	121.7
Jubulpore	N. 23 09	E. 79 59	5.28 p.m.	1341	409	28.61	726.6	29.98	761.6	73.3	22.9	46	1	.....	.....	.....	.....	.....	8	11	10	.....	.....	3	1.14	29.0
Lucknow	N. 26 50	E. 81 00	5.32 p.m.	369	113	29.59	751.6	29.97	761.3	74.8	23.8	47	.....	.....	.....	.....	.....	.....	.....	.....	30	.....	.....	1	0	0
Alahabad	N. 25 26	E. 81 52	5.35 p.m.	307	94	29.65	753.0	29.97	761.2	67.8	19.9	69	1	.....	.....	.....	.....	.....	.....	1	28	.....	.....	2	0.59	15.0
Patna	N. 25 37	E. 85 08	5.49 p.m.	183	56	29.80	756.8	29.99	761.6	71.6	22.0	65	10	6	3	.....	1	.....	1	5	4	.....	.....	3	1.21	30.7
Hazaribagh	N. 24 00	E. 85 24	5.50 p.m.	2007	612	27.92	709.2	29.98	761.5	67.0	19.4	67	13	6	1	.....	.....	.....	5	4	1	.....	.....	5	0.62	15.7
Cuttack	N. 20 29	E. 85 54	5.52 p.m.	80	24	29.85	758.3	29.94	760.4	75.7	24.3	76	2	2	1	.....	.....	.....	.....	11	14	.....	.....	3	3.13	79.5
Calcutta	N. 22 33	E. 88 21	6.01 p.m.	21	6	29.92	759.9	29.94	760.4	74.4	23.6	74	19	4	.....	.....	1	1	1	3	1	.....	.....	3	1.61	40.9
Dhubri	N. 26 07	E. 89 50	6.08 p.m.	115	35	29.82	757.5	29.95	760.6	73.1	22.8	76	1	2	.....	.....	.....	.....	3	5	19	.....	.....	1	0.25	6.4
Chittagong	N. 22 21	E. 91 50	6.15 p.m.	87	26	29.84	757.9	29.93	760.2	76.1	24.5	85	.....	10	6	1	.....	.....	1	.....	12	.....	.....	3	0	0
Sibsagar	N. 26 59	E. 94 40	6.27 p.m.	333	102	29.63	752.6	29.98	761.4	70.2	21.2	84	.....	.....	.....	2	1	1	5	20	1	.....	.....	3	1.29	32.8
Zanzibar	S. 6 10	E. 39 11	2.45 p.m.	23	7	29.87	758.8	29.90	759.4	82.8	28.2	70	3	1	.....	2	6	7	7	4	.....	.....	.....	6	7.11	180.8
Jeypore	N. 26 55	E. 75 50	5.05 p.m.	1431	436	28.52	724.4	29.98	761.6	75.8	24.3	40	5	7	4	1	1	2	3	7	.....	.....	.....	1	0	0
JAPANESE.																										
Akita	N. 39 42	E. 140 07	9.28 p.m.	32	10	30.08	764.0	30.11	764.9	40.5	4.7	81.3	.....	7	5	.....	.....	.....	.....	.....	18	.....	.....	8	7.09	180.0
Awomori	N. 40 51	E. 140 45	9.31 p.m.	32	10	30.04	762.9	30.07	763.9	37.6	3.1	80.4	2	.....	13	8	7	.....	.....	.....	.....	7596	12224	8	4.57	116.1
Hakodate	N. 41 47	E. 140 44	9.31 p.m.	10	3	30.03	762.8	30.04	763.0	35.8	2.1	77.0	9	5	12	.....	1	...	1	1	2	4986	7864	6	2.17	54.9
Hiroshima	N. 34 20	E. 132 27	8.58 p.m.	14	4	.....	.....	.....	.....	49.6	9.8	82.0	20	.....	4	1	4	.....	1	.....	.....	4175	6719	4	1.99	50.4
Kanazawa	N. 36 33	E. 136 40	9.14 p.m.	95	29	30.07	763.8	30.18	766.5	46.7	8.2	84.6	1	1	1	4	4	9	10	.....	.....	458	737	8	15.10	383.2
Kioto	N. 35 01	E. 135 46	9.11 p.m.	162	49	30.00	762.0	30.18	766.6	46.3	7.9	86.8	12	5	6	2	2	.....	.....	1	2	2110	3396	4	2.84	72.2
Nagasaki	N. 32 44	E. 129 52	8.47 p.m.	189	58	30.02	762.5	30.23	767.8	52.4	11.3	76.6	8	1	1	.....	1	.....	1	12	6	2835	4563	5	1.86	47.3
Nemuro	N. 43 20	E. 145 35	9.50 p.m.	58	18	29.96	761.0	30.03	762.7	36.8	2.7	86.2	5	9	6	1	4	1	.....	.....	4	.....	.....	3	0.53	13.5
Niigata	N. 37 55	E. 139 03	9.24 p.m.	32	10	30.10	764.4	30.13	765.4	47.0	8.3	79.4	4	2	7	2	4	8	1	.....	2	8453	13603	8	6.12	155.3
Nobiru	N. 38 23	E. 141 12	9.32 p.m.	15	5	30.07	763.9	30.09	764.3	44.1	6.7	82.8	18	7	3	.....	1	1	.....	.....	.....	7315	11773	6	1.02	25.9
Osaka	N. 34 42	E. 135 30	9.10 p.m.	13	4	30.16	766.0	30.17	766.4	49.0	9.5	80.9	11	1	3	.....	4	1	1	9	.....	5551	8934	4	3.16	80.0
Supporo	N. 43 04	E. 141 23	9.33 p.m.	60	18	.....	.....	.....	.....	32.4	0.2	76.3	.....	5	7	2	9	5	.....	.....	2	2857	4597	6	1.17	29.4
Tokei	N. 35 41	E. 139 46	9.27 p.m.	69	21	30.04	763.1	30.03	762.8	47.1	8.4	83.1	15	2	3	.....	1	.....	4	3	2	3837	6176	5	3.92	99.1
Wakayama	N. 34 14	E. 135 09	9.09 p.m.	48	15	30.12	765.1	30.18	766.6	51.3	10.7	76.6	7	3	.....	.....	1	.....	8	10	1	4068	6547	5	4.02	102.0
MAURITIUS.																										
Mauritius	S. 20 06	E. 57 33	3.58 p.m.	181	55	29.84	757.9	30.03	762.7	78.3	25.7	61.8	2	1	.....	.....	.....	.....	8	19	.....	.....	.....	6	0.74	18.8
MEXICAN.																										
Guanajuato	N. 21 01	W. 100 48	5.24 a.m.	6759	2060	23.72	602.5	30.08	764.0	51.4	10.8	84	1	3	2	9	.....	6	4	4	1	.....	.....	2	0	0
Leon	N. 21 07	W. 101 35	5.22 a.m.	5901	1799	24.38	619 2	30.21	767.3	47.1	8.4	86	2	11	.....	1	.....	4	1	11	.....	.....	.....	3	0	0
Muzatlan	N. 23 11	W. 106 17	5.03 a.m.	249	76	29.73	755.3	30.01	762.0	70.7	21.5	79	1	10	.....	.....	.....	2	4	13	.....	.....	.....	2	Inap.	Inap.
Mexico	N. 19 26	W. 99 00	5.32 a.m.	7490	2283	23.16	588.3	30.31	770.0	45.7	7.6	77	1	3	2	1	.....	.....	.....	23	.....	.....	.....	2	0.02	0.6
Morelia	N. 19 42	W. 101 06	5.22 a.m.	6247	1940	24.29	617.0	30.23	767.8	50.7	10.4	69	3	.....	.....	1	.....	4	6	5	11	.....	.....	2	0.20	5.2
Pabellon	N. 22 04	W. 102 04	5.20 a.m.	6312	1924	23.98	609.1	30.07	763.7	49.3	9.6	74	8	3	6	.....	.....	.....	.....	1	.....	12	.....	0	Inap.	Inap.
Puebla	N. 19 02	W. 98 03	5.36 a.m.	7113	2168	23.42	594 9	30.32	770.2	40.7	3.9	71	.....	3	.....	.....	.....	.....	.....	.....	27	.....	.....	1	Inap.	Inap.
Zacatecas	N. 22 44	W. 102 20	5.18 a.m.	8100	2469	22.62	574.4	30.33	770.4	47.7	8.7	74	1	3	3	10	.....	4	5	4	.....	.....	.....	3	0	0
NETHERLANDS.																										
Flushing	N. 51 24	E. 3 35	0.22 p.m.	0	0	29.69	754.2	29.69	754.2	46.0	7.8	.....	2	1	7	9	5	4	1	1	.....	.....	.....	.....	3.75	95.2
Groningen	N. 53 12	E. 6 34	0.34 p.m.	?	?	29.59	751.5	29.64	752.9	41.9	5.5	.....	4	1	4	10	5	1	4	1	.....	.....	.....	.....	3.55	90.2
Helder	N. 52 58	E. 4 45	0.27 p.m.	0	0	29.63	752.6	29.63	752.6	44.1	6.7	.....	...	3	6	9	4	1	3	4	.....	.....	.....	.....	4.70	119.3
Hellevoetsluis	N. 51.49	E. 4 08	0.25 p.m.	0	0	29.67	753.6	29.67	753.6	44.6	7.0	80.1	1	1	9	9	1	2	2	4	1	.....	.....	.....	2.48	63.1
Utrecht	N. 52 05	E. 5 07	0.29 p.m.	43	13	29.97	761.2	30.02	762.4	44.6	7.0	80.6	2	2	4	12	3	1	3	2	.....	.....	.....	7	3.63	92.1
NORWEGIAN.																										
Bergen	N. 60 24	E. 5 20	0.29 p.m.	56	17	29.51	749.6	29.58	751.2	38.7	3.7	64.2	.....	1	.....	3	7	7	8	.....	4	.....	.....	7	3.70	94.0
Brono	N. 65 28	E. 12 14	0.57 p.m.	34	10	29.67	753.6	29.71	754.6	31.8	—0.1	63.8	.....	.....	.....	1	.....	9	10	4	6	.....	.....	4	1.27	32.2
Christiania	N. 59 55	E. 10 45	0.51 p.m.	134	41	29.55	750.6	29.71	754.5	31.6	—0.2	77.5	5	4	3	.....	2	1	5	10	.....	.....	.....	8	1.87	47.5
Gjæsvær	N. 71 07	E. 25 22	1.49 p.m.	23	7	29.79	756.6	29.81	757.2	27.1	—2.7	.....	1	1	...	1	5	7	6	3	6	.....	.....	7	.....	.....
Lodingen	N. 68 24	E. 16 01	1.12 p.m.	43	13	29.71	754.7	29.76	755.9	31.5	—0.3	68.2	8	.....	1	3	3	2	4	4	5	.....	.....	5	0.54	13.7
PORTUGUESE.																										
Angra	N. 38 39	W. 27 14	10.19 a.m.	144	44	30.12	765.0	30.27	768.9	64.4	18.0	80.0	1	2	6	2	3	7	7	.....	2	.....	.....	4	3.22	81.7
Campo Major	N. 39 02	W. 6 59	11.40 a.m.	945	288	29.21	741.8	30.21	767.2	61.3	16.3	58.8	2	.....	4	11	3	1	3	5	1	.....	.....	5	0.65	16.5
Funchal	N. 32 38	W. 16 55	11.00 a.m.	82	25	30.15	765.7	30.23	767.9	69.4	20.8	56.2	.....	.....	1	8	1	6	10	4	.....	.....	.....	3	0.36	9.2
Lisbon	N. 38 42	W. 9 08	11.31 a.m.	335	102	29.92	759.9	30.28	769.1	59.4	15.2	69.0	14	1	1	3	4	1	.....	6	.....	.....	.....	6	1.22	30.9
Ponta Delgada	N. 37 45	W. 25 41	10.25 a.m.	66	20	30.24	768.2	30.32	770.0	66.7	19.3	68.8	2	.....	2	4	4	4	6	3	5	.....	.....	4	1.26	32.1
St. Paulde Loanda	S. 8 49	E. 13 07	1.00 p.m.	193	59	29.71	754.6	29.91	759.7	76.5	24.7	86.1	.....	3	14	11	.....	1	.....	1	.....	.....	.....	6	0.31	7.8
Serra da Estrella	N. 40 25	W. 7 35	11.37 a.m.	4728	1441	25.40	645.1	30.21	767.2	43.3	6.3	78.8	3	9	8	3	1	5	.....	1	.....	.....	.....	6	24.64	625.8
RUSSIAN.																										
Akmolinski	N. 51 12	E. 71 23	4.54 p.m.	843?	306?	29.14	740.1	30.28	769.2	25.0	—3.9	83.5	.....	1	3	10	4	5	5	.....	2	.....	.....	6	0.06	1.4
Archangel	N. 64 33	E. 40 32	2.50 p.m.	16	5	29.89	759.2	29.91	759.7	11.3	—11.5	86.8	3	2	1	1	3	3	9	4	4	.....	.....	9	0.96	24.3
Astrakhan	N. 46 21	E. 48 02	3.20 p.m.	68	21	30.18	760.5	30.10	764.4	48.4	9.1	69.1	.....	4	4	3	5	12	.....	1	1	.....	.....	7	0.06	1.4
Barnaul	N. 53 20	E. 83 47	5.43 p.m.	459?	140?	29.89	759.1	30.43	773.0	14.5	—9.7	81.8	3	.....	4	11	.....	.....	.....	2	10	.....	.....	6	1.87	47.4
Dorpat	N. 58 23	E. 26 43	1.55 p.m.	223	68	29.54	750.3	29.80	756.8	25.7	—3.5	95.3	3	3	4	4	2	7	3	2	2	.....	.....	9	2.46	62.6
Ekaterinburg	N. 56 49	E. 60 38	4.10 p.m.	894?	272?	29.07	738.4	30.09	764.3	23.5	—4.7	85.3	.....	1	5	4	5	8	1	1	5	.....	.....	10	1.61	40.9
Kasan	N. 55 47	E. 49 08	3.24 p.m.	249	76	29.60	751.9	29.89	759.1	28.9	—1.7	85.7	4	1	1	4	9	6	1	2	2	.....	.....	10	4.24	107.7
Kertch	N. 45 21	E. 36 29	2.34 p.m.	18?	6?	29.88	758.8	29.89	759 3	53.8	12.1	83.8	.....	3	.....	.....	2	5	1	.....	19	.....	.....	6	0.57	14.4
Kieff	N. 50 27	E. 30 30	2.10 p.m.	600	183	29.15	740.5	29.81	757.2	35.1	1.7	84.8	4	7	6	2	8	.....	2	1	.....	.....	.....	9	.....	.....
Lugan	N. 48 35	E. 39 20	2.45 p.m.	188?	57?	29.69	754.0	29.89	759.3	45.3	7.4	73.7	.....	2	7	10	7	3	1	.....	.....	.....	.....	8	1.29	32.8
Moscow	N. 55 46	E. 37 40	2.39 p.m.	448	136	29.32	744.7	29.82	757.5	27.3	—2.6	82.7	4	3	.....	3	5	2	2	2	9	.....	.....	9	1.80	48.1
Nikolaiev	N. 46 58	E. 31 58	2.16 p.m.	62	19	29.82	757.5	29.89	759.3	48.0	8.9	83.6	4	2	3	8	6	.....	1	2	4	.....	.....	6	1.65	42.0
Pekin	N. 39 57	E. 116 28	7.54 p.m.	123?	38?	30.20	767.0	30.34	770.6	37.8	3.2	61.3	1	5	.....	4	.....	2	.....	.....	18	.....	.....	2	0.72	18.3
St. Petersburg	N. 59 56	E. 30 16	2.09 p.m.	15	5	29.79	756.6	29.80	757.0	23.5	—4.7	84.1	4	3	2	4	4	5	4	4	.....	.....	.....	9	1.28	32.6
Semipalatinsk	N. 50 24	E. 80 13	5.29 p.m.	607?	185?	29.78	756.5	30.50	774.6	20.1	—6.6	81.8	3	4	3	2	4	3	8	2	1	.....	.....	5	0.18	4.5
Tashkend	N. 41 19	E. 69 16	4.45 p.m.	1493?	455?	28.64	727.4	30.24	768.0	51.1	10.6	51.2	1	.....	.....	.....	.....	.....	.....	.....	29	.....	.....	2	0	0
Tiflis	N. 41 43	E. 44 47	3.07 p.m.	1343	409	28.69	728.7	30.11	764.7	58.3	14.6	52.1	4	10	1	.....	1	5	1	.....	8	.....	.....	4	0.01	0.2
Vladivostock	N. 43 09	E. 132 00	8.56 p.m.	59?	18?	30.09	764.2	30.15	765.9	27.5	—2.5	72.5	4	10	.....	2	1	1	3	5	.....	.....	.....	2	2.44	62.0
Warsaw	N. 52 13	E. 21 02	1.32 p.m.	392	119	29.35	745.5	29.79	756.6	37.8	3.2	82.3	3	2	9	7	4	2	2	.....	1	.....	.....	8	.....	.....
Wilna	N. 54 41	E. 25 18	1.49 p.m.	388	118	29.36	745.7	29.79	756.7	33.4	0.8	89.2	.....	1	2	9	5	4	4	5	.....	.....	.....	9	2.24	56.8
Yeniseisk	N. 58 27	E. 92 06	6.16 p.m.	262?	80?	30.15	765.8	30.47	774.0	3.7	—15.7	81.8	1	2	9	3	.....	1	8	1	5	.....	.....	6	0.27	6.9
SCOTTISH.																										
Monach Light H.	N. 57 31	W. 7 42	11.37 a.m.	150	46	.....	.....	29.47	748.5	47.0	8.3	91.9	4	5	3	5	8	5	.....	.....	.....	.....	.....	9	6.60	167.6
North Unst	N. 60 51	W. 0 53	0.04 p.m	230	70	.....	.....	29.39	746.5	.....	.....	.....	2	2	4	5	5	5	2	5	.....	.....	.....	7	.....	.....
SPANISH.																										
Barcelona	N. 41 23	E. 2 11	0.16 p.m.	98	30	29.91	759.8	30.02	762.5	60.8	16.0	62.3	.....	4	9	9	2	1	3	2	.....	1723	3273	3	Inap.	Inap.
Bilbao	N. 43 15	W. 2 59	11.56 a.m.	52	16	30.07	763.7	30.13	765.2	59.2	15.1	72	.....	20	1	2	1	6	.....	.....	.....	2735	4401	7	8.27	210.1
Burgos	N. 42 20	W. 3 46	11.53 a.m.	2821	860	27.19	690.6	30.21	767.3	48.4	9.1	76	4	4	7	13	2	.....	.....	.....	.....	5133	8261	6	1.35	34.2
Madrid	N. 40 25	W. 3 42	11.53 a.m.	2152	656	27.94	709.7	30.19	766.9	54.3	12.4	64.2	.....	4	3	7	2	3	.....	3	8	5097	8213	5	0.34	8.5
Murcia	N. 37 59	W. 1 10	0.03 p.m.	141	43	29.98	761.5	30.11	764.9	59.5	15.3	60.0	1	9	2	9	4	1	2	2	.....	1389	2230	5	0.09	2.4
Oviedo	N. 43 23	W. 5 49	11.45 a.m.	800	244	29.28	743.6	30.14	765.5	54.3	12.4	82	.....	.....	.....	.....	2	10	16	1	.....	3006	5804	10	5.37	136.5
Santiago	N. 42 53	W. 8 28	11.34 a.m.	863	263	29.26	743.1	30.16	766.1	54.7	12.6	84.0	4	3	5	8	2	2	1	1	4	5812	9352	9	6.47	164.4
Sub-Series.																										
Manilla	N. 14 35	E. 120 56	8.12 p.m.	54	16	29.85	758.3	29.91	759.7	78.9	26.1	82.1	10	.....	.....	.....	3	2	6	9	.....	.....	.....	6	7.23	183.6
San Fernando	N. 36 28	W. 6 13	11.43 a.m.	95	29	30.13	765.2	30.22	767.5	63.6	17.6	59	8	2	7	.....	1	.....	3	3	6	.....	.....	3	0	0
San Juan de Porto Rico	N. 18 30	W. 66 10	7.44 a.m.	82	25	29.88	758.9	29.97	761.2	77.5	25.3	89	4	1	3	2	.....	3	.....	1	16	.....	.....	4	6.63	168.5
Tuguegarao	N. 17 37	E. 121 30	8.15 p.m.	125	38	29.85	758.1	29.98	761.5	75.6	24.2	90.7	12	9	.....	2	1	2	1	.....	3	.....	.....	6	2.73	69.4
SWEDISH.																										
Haparanda	N. 65 47	E. 24 03	1.44 p.m.	29	9	29.89	759.3	29.93	760.3	14.5	—9.7	96	12	2	.....	1	2	2	2	6	3	.....	.....	7	0.48	12.3
Umea	N. 63 50	E. 20 17	1.29 p.m.	39	12	29.80	757.0	29.85	758.3	21.9	—5.6	89	3	3	.....	1	3	3	2	6	9	.....	.....	8	2.15	54.5
Hernosand	N. 62 32	E. 17 57	1.20 p.m.	46	14	29.74	755.3	29.79	756.7	28.6	—1.9	86	7	1	.....	1	1	2	2	8	8	.....	.....	8	4.26	108.3
Stockholm	N. 59 20	E. 18 04	1.20 p.m.	144	44	29.53	750.1	29.71	754.6	32.7	0.4	83	7	.....	.....	3	1	3	3	8	4	1	.....	8	2.26	57.3
Wisby	N. 57 39	E. 18 19	1.20 p.m.	52	16	29.63	752.6	29.69	754.1	36.9	2.7	82	1	1	4	3	1	7	6	7	.....	.....	.....	7	3.07	78 0

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for November, 1882.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.		Inch.	Mill.
Sub-Series.	° ′	° ′																								
Upsala	N. 59 51	E. 17 37	1.19 p.m.	79	24	29.63	752.5	29.71	754.7	30.6	—0.8	91	5	7	4	1	1	4	4	4	.....	.....	.....	8	1.94	49.2
Swiss.																										
Geneva	N. 46 12	E. 6 08	0.33 p.m.	1338	408	28.54	724.9	29.98	761.6	48.2	9.0	68.5	4	3	.....	6	14	1	2	.....	.....	.....	.....	7	5.04	128.0
TURKISH.																										
Constantinople	N. 41 00	E. 28 59	2.04 p.m.	230	70	.....	.....	30.01	762.2	58.6	14.8	64	3	2	1	12	3	2	3	4	.....	.....	.....	6	4.68	118.9
Valona	N. 40 27	E. 19 27	1.25 p.m.	105	32	.....	.....	30.02	762.5	61.7	16.5	.....	.....	7	1	4	12	5	1	.....	.....	.....	.....	6	5.16	131.0
Sub-Series.																										
Beirut	N. 33 54	E. 35 28	2.30 p.m.	111	34	.....	.....	30.01	762.3	71.4	21.9	66.9	8	6	7	4	.....	1	.....	2	2	.....	.....	4	3.10	78.7
UNITED STATES.																										
Albany	N. 42 39	W. 73 45	7.13 a.m.	75	23	30.10	764.5	30.18	766.6	38.0	3.3	67.5	12	4	2	2	5	2	....	2	1	3597	5889	6	0.97	24.6
Alpena	N. 45 05	W. 83 30	6.34 a.m.	609	185	29.46	748.3	30.16	766.1	36.3	0.9	80.0	4	4	10	4	1	5	1	1	.....	6503	10562	8	4.27	108.5
Apache, Fort	N. 33 48	W. 109 57	4.48 a.m.	5050	1539	25.09	637.3	30.19	766.8	30.4	—0.9	65.5	3	.....	1	.....	1	2	8	15	.....	4098	6595	4	2.34	59.4
Assinnaboine, Ft.	N. 48 32	W. 109 42	4.49 a.m.	2710	826	27.25	692.1	30.23	767.8	24.7	—4.1	62.8	1	1	1	19	2	1	1	3	1	7550	12150	4	0.16	4.1
Atlanta	N. 33 45	W. 84 23	6.31 a.m.	1131	345	29.00	736.6	30.22	767.6	44.7	7.1	78.1	7	3	7	2	2	1	1	7	.....	6797	10939	5	4.22	107.2
Atlantic City	N. 39 22	W. 74 25	7.10 a.m.	13	4	30.15	765.8	30.16	766.1	38.9	3.8	81.7	12	6	4	4	3	.....	.....	1	.....	7071	11379	6	1.67	42.4
Augusta	N. 33 28	W. 81 54	6.40 a.m.	183	56	30.03	762.7	30.23	767.8	46.1	7.8	83.2	1	8	1	1	.....	.....	1	7	11	2903	4767	5	3.86	98.0
Baltimore	N. 39 18	W. 76 37	7.02 a.m.	45	14	30.17	766.3	30.22	767.6	40.8	4.9	73.5	6	6	3	.....	1	1	.....	9	4	3542	5700	5	0.65	16.5
Barnegat	N. 39 46	W. 74 06	7.12 a.m.	20	6	30.13	765.3	30.15	765.8	40.9	4.9	83.9	8	7	5	3	.....	.....	3	4	.....	10635	17115	7	2.32	58.9
Behring Id.	N. 55 12	E. 165 55	1.04 a.m.	20	6	29.41	747.0	29.43	747.5	28.8	—1.8	.....	2	8	1	8	1	3	5	2	.....	11049	17781	7	2.23	56.6
Bennett, Fort	N. 44 43	W. 100 39	5.26 a.m.	1510	457	28.47	723.1	30.16	766 1	24.9	—3.9	83.2	.....	14	.....	.....	.....	7	.....	2	7	6130	9875	4	0.50	12.7
Benton, Fort	N. 47 50	W. 110 40	4.45 a.m.	2700	823	27.30	693.4	30.26	768.6	24.6	—4.1	68.8	2	.....	.....	9	.....	.....	.....	2	1	4380	7049	4	0.39	9.9
Bismarck	N. 46 47	W. 100 38	5.26 a.m.	1694	516	28.29	718.6	30.21	767.3	23.3	—4.8	84.6	2	10	2	2	2	5	4	2	1	6270	10090	6	0.46	11.7
Block Id	N. 41 10	W. 71 36	7.22 a.m.	27	8	30.09	764.3	30.12	765.0	40.8	4.9	79.5	12	4	2	3	.....	.....	2	6	1	13220	21275	6	2.26	57.4
Boise City	N. 43 37	W. 116 08	4.24 a.m.	2750	838	27.35	694.7	30.29	769.4	27.4	—2.6	89.0	5	10	6	.....	1	1	1	3	3	2601	4186	5	0.08	2.0
Boston	N. 42 21	W. 71 04	7.24 a.m.	142	43	29.97	761.2	30.13	765.3	35.1	1.7	75.1	4	13	6	4	1	1	.....	1	.....	7318	11777	6	1.20	30.5
Brownsville	N. 25 53	W. 97 26	5.38 a.m.	43	13	30.06	763.5	30.12	765.0	61.3	16.3	86.6	12	.....	.....	1	6	2	.....	.....	9	5272	8483	4	3.28	83.3
Buffalo	N. 42 53	W. 78 53	6.52 a.m.	696	212	29.39	746.5	30.17	766.3	35.8	2.1	80.8	2	2	6	6	3	2	3	6	.....	6771	10897	7	3.73	94.7
Buford, Fort	N. 48 00	W. 103 56	5.12 a.m.	1900	579	28.06	712.7	30.26	768.6	22.7	—5.2	83.1	2	3	10	3	5	3	3	1	.....	6030	9704	4	0.29	7.4
Burlington	N. 44 29	W. 73 13	7.15 a.m.	268	82	29.86	758.4	30.17	766.3	33.5	0.8	73.5	9	2	2	1	9	.....	4	3	.....	5958	9588	6	1.47	37.3
Cairo	N. 37 00	W. 89 10	6.11 a.m.	377	115	29.82	757.4	30.24	768.1	44.9	7.2	84.1	7	3	3	5	4	1	.....	6	1	5882	9466	6	5.96	151.4
Campe	N. 32 22	W. 116 08	4.22 a.m.	2500	762	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Henry	N. 36 56	W. 76 00	7.04 a.m.	16	5	30.16	766.1	30.18	766.6	47.3	8.5	76.8	12	5	.....	6	5	.....	.....	2	.....	10498	16895	6	2.60	66.0
Cape May	N. 38 56	W. 74 58	7.08 a.m.	27	8	30.14	765.5	30.17	766.3	44.7	7.1	72.4	14	5	3	3	3	.....	.....	2	.....	12263	19735	5	1.88	47.8
Cape Mendocino *a*	N. 40 26	W. 124 24	3.50 a.m.	637	194	29.26	743.2	29.94	760.5	48.4	9.1	77.9	3	6	.....	.....	.....	18	1	.....	1	.....	.....	5	2.42	61.5
Cedar Keys	N. 29 08	W. 83 02	6.36 a.m.	22	7	30.12	765.0	30.14	765.5	57.5	14.2	85.8	11	5	.....	.....	.....	1	3	10	.....	7098	11423	3	4.40	111.8
Champaign	N. 40 08	W. 88 14	6.15 a.m.	767	234	29.32	744.7	30.18	766.6	36.7	2.6	70.0	2	10	1	4	5	2	2	4	.....	7709	12406	6	2.37	60.2
Charleston	N. 32 47	W. 79 56	6.48 a.m.	52	16	30.11	764.8	30.17	766.3	50.7	10.4	83.2	9	5	1	1	.....	1	1	9	3	5967	9603	5	3.54	89.9
Charlotte	N. 35 13	W. 80 51	6.44 a.m.	808	246	29.31	744.5	30.19	766.8	42.3	5.7	80.1	6	2	1	7	1	1	1	10	1	3528	5678	5	1.58	40.1
Chattanooga	N. 35 04	W. 85 15	6.27 a.m.	783	239	29.38	746.2	30.23	767.8	44.0	7.0	82.4	4	3	4	2	6	.....	1	5	5	3694	5946	5	3.31	84.1
Cheyenne	N. 41 08	W. 104 48	5.09 a.m.	6089	1856	24.08	611.6	30.29	769.4	24.2	—4.3	51.8	4	16	6	3	.....	.....	.....	1	.....	6849	11022	2	0.06	1.5
Chicago	N. 41 52	W. 87 38	6.18 a.m.	661	201	29.42	747.3	30.16	766.1	39.3	4.1	80.2	.....	2	7	4	3	7	2	5	.....	6095	11257	7	1.48	37.6
Chincoteague	N. 37 55	W. 75 23	7.06 a.m.	18	5	30.15	765.8	30.17	766.3	43.1	6.2	82.9	9	9	.....	1	5	.....	1	4	1	9715	15634	6	1.30	33.0
Cincinnati	N. 39 06	W. 84 30	5.30 a.m.	620	189	29.52	749.8	30.22	767.6	41.9	5.5	83.1	4	2	4	4	3	3	4	6	.....	3953	6302	7	1.57	39.9
Cleveland	N. 41 30	W. 81 42	6.41 a.m.	690	210	29.42	747.3	30.19	766.8	37.1	2.8	80.9	.....	1	5	2	8	9	2	3	.....	6891	11090	9	2.00	50.8
Coleman City	N. 31 53	W. 99 18	5.31 a.m.	1709	521	28.35	720.1	30.24	768.1	44.7	7.1	87.5	12	2	.....	5	6	1	.....	3	1	6484	10435	6	3.76	95.5
Columbus	N. 39 58	W. 83 00	6.36 a.m.	805	245	29.30	744.2	30.19	766.8	38.2	3.4	78.6	3	3	6	3	5	3	1	6	.....	5205	8376	7	2.05	52.1
Concho, Fort	N. 31 25	W. 100 24	5.26 a.m.	1900	579	28.22	716.8	30.23	767.8	45.7	7.6	82.5	5	2	1	2	5	2	.....	4	9	5543	8920	7	2.77	70.4
Custer, Fort	N. 45 42	W. 107 34	4.58 a.m.	3040	927	26.95	684.5	30.27	768 8	22.5	—5.3	76.3	2	2	3	2	4	3	10	2	2	3609*e*	5808*e*	4	0.15	3.8
Davenport	N. 41 30	W. 90 38	6.06 a.m.	615	187	29.49	749.0	30.18	766.6	37.7	3.2	76.8	2	5	5	5	1	3	2	7	.....	5959	9590	6	1.49	37.8
Davis, Fort	N. 30 38	W. 103 56	5.12 a.m.	4940	1506	25.28	642.1	30.18	766.6	42.0	5.6	70.2	6	3	.....	3	2	3	.....	2	11	.....	.....	4	0.62	15.7
Dayton	N. 46 19	W. 117 56	4.16 a.m.	1660	506	28.43	722.1	30.21	767.3	32.1	0.1	85.4	4	.....	2	14	3	.....	.....	6	1	3282	5282	5	2.61	66.3
Deadwood	N. 44 23	W. 103 43	5.13 a.m.	4600	1402	25.39	644.9	30.22	767.6	28.5	—1.9	79.1	2	1	1	2	1	4	5	4	10	2301	3705	3	1.35	34.3
Del. Breakwater	N. 38 48	W. 75 10	7.07 a.m.	20	6	30.16	766.1	30.18	766.6	43.4	6.3	85.0	5	6	3	4	3	.....	.....	9	.....	13583	21859	6	1.18	30.0
Denison	N. 33 48	W. 96 32	5.42 a.m.	767	234	29.38	746.2	30.22	767.6	47.2	8.4	83.3	8	5	1	2	9	.....	1	3	1	5103	8309	6	4.94	125.5
Denver	N. 39 45	W. 105 00	5.08 a.m.	5294	1614	24.81	630.2	30.31	769.9	29.8	—1.2	62.0	3	2	1	.....	18	3	.....	3	.....	3300	5320	2	0.71	18.0
Des Moines	N. 41 35	W. 93 37	5.54 a.m.	849	259	29.25	742.9	30.20	767.1	34.4	1.3	73.7	7	9	1	2	3	3	1	4	.....	4917	7913	5	2.81	71.4
Detroit	N. 42 20	W. 83 03	6.36 a.m.	661	201	29.44	747.8	30.18	766.6	40.6	4.8	77.7	4	.....	8	5	4	4	3	1	1	7123	11463	7	1.66	42.2
Dodge City	N. 37 45	W. 100 00	5.28 a.m.	2512	766	27.54	699.5	30.28	769.1	29.6	—1.3	75.4	10	6	3	3	6	2	.....	.....	.....	6462*b*	10399*b*	2	0.11	2.8
Dubuque	N. 42 30	W. 90 44	6.05 a.m.	665	203	29.42	747.3	30.17	766.3	35.0	1.7	79.4	4	6	4	2	5	2	.....	1	6	3109	5002	6	1.55	39.4
Duluth	N. 46 48	W. 92 06	6.00 a.m.	644	184	29.37	740.0	30.16	766.1	31.7	—0.2	79.6	2	5	7	6	4	.....	3	3	.....	6680	10750	7	1.66	42.2
Eagle Pass	N. 28 44	W. 100 29	5.26 a.m.	780	238	29.37	746.0	30.20	767.1	54.3	12.4	78.8	1	11	.....	.....	1	7	1	1	8	3762	6054	6	0.71	18.0
Eagle Rock	N. 43 32	W. 111 55	4.40 a.m.	4950	1415	25.41	645.4	30.27	768.8	11.0	—11.7	76.8	22	.....	2	4	.....	.....	.....	2	.....	4702	7567	1	0.49	12.4
Eastport	N. 44 54	W. 66 59	7.40 a.m.	61	18	29.99	761.7	30.06	763.5	34.2	1.2	78.0	9	4	6	3	.....	2	2	4	.....	9238	14867	7	1.47	37.3
Elliott, Fort *a*	N. 35 30	W. 100 21	5.27 a.m.	2650	808	27.36	694.9	30.29	769.4	34.2	1.2	64.2	6	6	2	2	1	4	.....	2	6	6111*b*	9834*b*	4	0.90	24.4
El Paso	N. 31 47	W. 106 30	5.02 a.m.	3760	1146	26.36	669.5	30.20	767.1	40.8	4.9	80.2	.....	2	12	2	.....	1	4	3	6	2873	4624	2	1.46	37.1
Erie	N. 42 07	W. 80 05	6.48 a.m.	681	208	29.42	747.3	30.18	766.6	38.8	3.8	74.5	4	2	1	5	11	4	3	.....	.....	6248	10055	8	3.42	86.9
Escanaba	N. 45 48	W. 87 05	6.20 a.m.	612	186	29.45	748.0	30.15	765.8	33.0	0.6	84.3	1	8	4	2	2	1	1	3	8	4495	7234	8	2.16	54.9
Fredericksburg	N. 30 17	W. 98 52	5.32 a.m.	1700	518	28.40	721.3	30.22	767.6	52.9	11.6	85.5	8	3	3	7	3	.....	1	2	3	5226	8410	6	2.40	61.0
Galveston	N. 29 18	W. 94 47	5.49 a.m.	48	15	30.09	764.3	30.14	765.5	62.0	16.7	82.9	7	1	1	1	11	2	3	4	.....	10753	17305	6	2.20	55.9
Grand Haven	N. 43 05	W. 86 18	6.25 a.m.	620	189	29.44	747.8	30.14	765.5	37.6	3.1	79.7	2	1	4	2	3	4	7	7	.....	7043	12300	7	2.49	63.2
Grant, Fort	N. 32 39	W. 109 57	4.48 a.m.	4860	1481	25.29	642.4	30.13	765.3	43.2	6.2	58.2	5	2	.....	.....	1	3	6	11	2	4300	7017	4	0.79	20.1
Hatteras	N. 35 15	W. 75 40	7.05 a.m.	19	6	30.14	765.5	30.16	766 1	50.7	10.4	83.5	8	3	1	3	.....	.....	.....	15	.....	12406	19965	5	4.29	109.0
Helena	N. 46 34	W. 112 04	4.40 a.m.	4100	1250	25.88	657.3	30.26	768.6	26.1	—3.3	74.9	2	.....	1	10	.....	.....	.....	.....	17	3143	5058	3	0.15	3.8
Henrietta	N. 33 46	W. 98 12	5.35 a.m.	980	300	29.17	740.9	30.21	767.3	43.4	6.3	85.3	10	4	.....	.....	6	4	1	3	2	6067	9764	6	1.79	45.5
Huron	N. 44 21	W. 98 09	5.35 a.m.	1305	398	28.72	729.5	30.20	767.1	26.4	—3.1	74.4	2	17	2	.....	.....	7	2	.....	.....	7606	12240	5	0.61	15.5
Indianapolis	N. 39 46	W. 86 10	6.23 a.m.	753	229	29.34	745.2	30.18	766.6	39.4	4.1	79.8	1	3	4	5	3	5	1	7	1	3623	5830	6	2.50	63.5
Indianola	N. 28 32	W. 96 31	5.42 a.m.	26	8	30.10	764.5	30.14	765.5	61.1	16.2	82.6	7	4	1	1	5	5	3	2	2	10087	16233	5	3.98	101.1
Jacksboro *a*	N. 33 12	W. 98 10	5.35 a.m.	1120	341	28.99	736.3	30.21	767.3	46.6	8.1	69.6	10	3	1	2	4	3	.....	3	3	4329	6967	4	2.66	67.6
Jacksonville	N. 30 20	W. 81 39	6.42 a.m.	43	13	30.10	764.5	30.16	766.1	55.3	12.9	85.4	4	9	2	1	.....	.....	1	4	9	3250	5230	4	5.70	144.8
Keogh, Fort	N. 46 22	W. 105 56	5.04 a.m.	2372	723	27.60	701.0	30.27	768.8	25.4	—3.7	76.8	2	5	8	7	1	2	1	4	.....	5032	8098	5	0.19	4.8
Keokuk	N. 40 22	W. 91 26	6.02 a.m.	618	188	29.48	748.8	30.17	766.3	38.4	3.6	81.1	4	4	6	3	2	2	1	3	5	2898	4664	6	2.25	57.1
Key West	N. 24 34	W. 81 49	6.41 a.m.	20	6	30.03	762.7	30.05	763.3	71.7	22.1	80.6	5	6	1	5	1	.....	1	1	.....	8976	14445	4	2.94	74.7
Kittyhawk	N. 36 00	W. 75 42	7.05 a.m.	22	7	30.16	766.1	30.16	766.6	48.2	9.0	79.7	8	1	1	.....	2	1	1	16	.....	12991	20907	5	4.94	125.5
Knoxville	N. 35 56	W. 83 58	6.32 a.m.	980	299	29.16	740.7	30.23	767.8	42.0	5.6	86.6	4	2	3	2	1	.....	3	11	4	3566	5740	7	4.94	125.5
La Crosse	N. 43 49	W. 91 15	6.03 a.m.	725	221	29.33	745.0	30.15	765.8	34.0	1.1	76.8	7	6	4	1	8	3	.....	.....	1	5338	8590	7	2.08	52.8
Leavenworth	N. 39 19	W. 94 57	5.48 a.m.	842	256	29.28	743.7	30.22	767.6	38.4	3.6	82.2	6	6	3	.....	7	1	1	2	4	4765	7668	5	1.87	47.5
Lewiston	N. 46 28	W. 117 05	4.20 a.m.	780	238	29.38	740.2	30.25	768.3	33.6	0.9	81.4	.....	.....	2	.....	4	2	1	14	5	2177	3504	6	1.27	32.3
Little Rock	N. 34 45	W. 92 00	6.00 a.m.	298	91	29.87	758.7	30.20	767.1	48.3	9.1	86.8	2	7	2	2	5	.....	1	4	7	3979	6404	5	6.17	156.7
Los Angeles	N. 34 03	W. 118 15	4.15 a.m.	371	113	29.69	754.1	30.09	764.3	49.2	9.6	71.6	4	.....	5	.....	.....	2	3	16	.....	3922	6312	4	1.82	46.2
Louisville	N. 38 15	W. 85 45	6.25 a.m.	530	162	29.58	751.3	30.18	766.6	43.6	6.4	78.5	6	3	5	4	8	1	.....	3	.....	5605	9020	5	2.67	67.8
Lynchburg	N. 37 25	W. 79 09	6.52 a.m.	652	199	29.49	749.0	30.21	767.3	40.7	4.8	72.1	1	4	2	3	2	.....	1	7	10	2111	3397	8	3.98	101.1
Mackinaw City	N. 45 47	W. 84 39	6.30 a.m.	605	184	29.46	748.3	30.15	765.8	35.4	1.9	81.8	.....	8	1	6	5	4	3	2	1	8415	13542	5	0.81	20.6
Macon, Fort	N. 34 42	W. 76 40	7.01 a.m.	11	3	30.14	765.5	30.16	766.1	48.7	9.3	89.0	10	8	1	2	.....	.....	2	7	.....	9694	15601	5	4.95	125.7
Madison	N. 43 05	W. 89 24	6.10 a.m.	949	289	29.09	738.9	30.16	766.1	35.4	1.9	86.8	3	6	4	3	6	5	1	2	.....	6894	11095	7	2.62	66.5
Maginnis Fort	N. 47 12	W. 109 10	4.51 a.m.	4340	1324	25.60	650.2	30.11	764.8	27.9	—2.3	59.0	2	11	12	.....	1	1	.....	4	.....	9608	15462	4	0.40	10.2
McKavett, Fort *e*	N. 30 48	W. 100 07	5.28 a.m.	2240	683	27.87	707.9	30.25	768.3	49.5	9.7	82.6	4	3	.....	4	9	1	.....	4	.....	5442	8758	5	3.55	90.2
Marquette	N. 46 34	W. 87 24	6.18 a.m.	673	205	29.37	746.0	30.14	765.5	33.0	0.6	79.5	.....	5	9	2	4	3	.....	4	3	5898	9492	6	1.61	40.9
Memphis	N. 35 09	W. 90 03	6.08 a.m.	321	98	29.86	758.4	30.21	767.3	47.6	8.7	87.7	5	2	2	2	4	6	1	3	5	3460	5568	8	6.65	168.9
Milwaukee	N. 43 02	W. 87 54	6.16 a.m.	697	212	29.36	745.7	30.15	765.8	37.5	3.1	82.1	4	3	8	3	6	2	.....	2	2	8058	12968	6	2.05	52.1
Missoula, Fort	N. 46 50	W. 114 07	4.32 a.m.	3140	957	26.87	682.5	30.28	769.1	24.1	—4.4	61.7	3	4	3	3	.....	1	.....	4	12	1885	3034	8	0.64	16.8
Mobile	N. 30 41	W. 88 02	6.16 a.m.	41	12	30.13	765.3	30.17	766.3	53.0	11.7	85.5	12	5	2	1	.....	3	1	6	.....	3863	6217	4	2.67	67.8
Montgomery	N. 32 23	W. 86 18	6.23 a.m.	219	66	29.96	761.0	30.20	767.1	48.1	8.9	86.8	2	5	2	1	.....	1	5	7	7	3286	5288	5	1.91	48.5
Moorhead	N. 46 52	W. 96 44	5.41 a.m.	923	281	29.10	739.1	30.16	766.1	21.4	—5.9	84.3	7	2	4	1	6	5	2	2	1	7786	12530	6	2.54	64.5
Morgantown	N. 39 40	W. 79 50	6.49 a.m.	963	293	29.16	740.7	30.22	767.6	39.9	4.4	80.4	.....	1	3	4	.....	1	2	4	15	3496	5626	5	2.28	57.9
Mt. Washington	N. 44 16	W. 71 18	7.23 a.m.	6279	1914	23.63	600.2	30.19	766.8	16.4	—8.7	78.8	2	18	2	3	.....	1	.....	4	.....	21708	34935	4	3.25	82.5
Nashville	N. 36 10	W. 86 47	6.21 a.m.	507	154	29.60	751.8	30.20	767.1	44.6	7.0	83.8	7	2	4	1	6	5	2	2	1	4501	7243	7	3.57	90.7

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea		Result of Simultaneous Observations for November, 1882.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.					
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.		Inch.	Mill.
U. S.—Continued.	° ′	° ′																						0 to 10		
New Haven	N. 41 18	W. 72 56	7.16 a.m.	107	32	30.04	763.0	30.16	766.1	34.0	1.1	79.2	11	7	2	5	.....	.....	.....	4	1	5382	8661	5	1.31	33.3
New London	N. 41 21	W. 72 05	7.20 a.m.	47	14	30.11	764.8	30.16	766.1	37.1	2.8	76.5	7	6	1	2	1	.....	.....	3	10	4482	7213	5	1.76	44.7
New Orleans	N. 29 58	W. 90 04	6.08 a.m.	52	16	30.10	764.5	30.16	766.1	59.0	15.0	79.0	8	1	1	.....	1	7	6	5	1	5790	9318	5	1.98	50.3
Newport	N. 41 29	W. 71 19	7.23 a.m.	44	13	30.08	764.0	30.13	765.3	38.6	3.7	80.1	12	6	5	6	.....	.....	.....	1	.....	7149	11505	6	1.58	40.1
New York	N. 40 43	W. 74 00	7.12 a.m.	164	50	30.00	762.0	30.18	766.6	38.9	3.8	81.7	5	3	8	5	3	.....	1	5	.....	5688	9154	6	1.80	45.7
Norfolk	N. 36 51	W. 76 17	7.03 a.m.	30	9	30.16	766.1	30.19	766.8	45.9	7.7	80.6	9	4	2	3	4	.....	1	5	2	5466	8797	5	1.88	47.8
North Platte	N. 41 08	W. 100 45	5.25 a.m.	2841	866	27.20	690.9	30.28	769.1	25.6	—3.6	72.6	3	4	7	.....	2	1	.....	1	12	6207	9989	2	0.01	0.3
Olympia a	N. 47 03	W. 122 53	3.57 a.m.	36	11	30.06	763.5	30.10	764.5	38.5	3.6	84.8	4	1	2	1	8	.....	3	3	7	2289	3700	7	5.77	146.6
Omaha	N. 41 16	W. 95 56	5.44 a.m.	1113	339	28.99	736.3	30.23	767.8	34.0	1.1	75.2	9	4	5	3	4	3	.....	1	1	6576	10583	2	2.05	52.1
Oswego	N. 43 29	W. 76 35	7.02 a.m.	304	93	29.83	757.7	30.17	766.3	37.5	3.1	70.5	2	3	.....	3	8	7	4	3	.....	6420	10316	7	2.40	61.0
Palestine	N. 31 45	W. 95 40	5.45 a.m.	523	162	29.63	752.6	30.20	767.1	51.9	11.1	83.8	5	6	.....	6	6	.....	2	5	.....	6339	10185	6	8.63	219.2
Pensacola	N. 30 25	W. 87 13	6.19 a.m.	30	9	30.14	765.5	30.17	766.3	53.8	12.1	83.0	6	6	.....	1	2	3	1	11	.....	5346	8603	5	4.16	105.7
Philadelphia	N. 39 57	W. 75 09	7.07 a.m.	92	28	30.10	764.5	30.20	767.1	40.9	4.9	73.0	4	7	2	6	.....	.....	.....	7	4	4984	8021	5	0.99	25.1
Pike's Peak	N. 38 50	W. 105 02	5.08 a.m.	14134	4308	17.75	450.8	30.41	772.4	10.9	—11.7	77.6	2	3	14	4	.....	.....	.....	5	2	15302	24626	2	0.22	5.6
Ploche	N. 37 56	W. 114 26	4.30 a.m.	6110	1862	24.08	611.6	30.22	767.6	30.0	—1.1	61.6	4	12	1	2	9	1	.....	.....	1	4914	7890	2	0.71	18.0
Pittsburg	N. 40 32	W. 80 02	6.48 a.m.	762	232	29.35	745.5	30.20	767.1	39.0	3.9	75.2	3	6	4	4	4	1	4	4	.....	4207	6770	7	2.07	52.6
Poplar River	N. 48 08	W. 105 10	5.07 a.m.	2030	619	27.92	709.2	30.23	767.8	.....	.....	.....	.....	20	4	5	.....	.....	.....	1	.....	.....	.....	3	0.48	12.2
Port Eads	N. 29 09	W. 89 15	6.11 a.m.	7	2	30.14	765.5	30.15	765.8	62.8	17.1	83.6	6	3	.....	.....	1	8	5	7	.....	10062	16193	8	2.05	52.1
Port Huron	N. 43 00	W. 82 26	6.38 a.m.	633	193	29.46	748.3	30.18	766.6	34.7	1.5	90.3	.....	3	3	5	5	2	5	3	4	5864	9240	8	2.23	56.6
Portland, Maine	N. 43 39	W. 70 15	7.27 a.m.	45	14	30.05	763.3	30.10	764.5	36.8	2.7	72.6	11	7	5	1	1	.....	.....	5	.....	6878	11069	5	0.93	23.6
Portland, Oregon	N. 45 32	W. 122 43	3.57 a.m.	67	20	30.06	763.5	30.13	765.3	40.0	4.4	84.0	1	7	2	.....	7	3	4	.....	6	3086	4966	6	7.11	180.6
Portsmouth	N. 35 02	W. 76 04	7.04 a.m.	40	12	.....	.....	.....	.....	51.4	10.8	84.8	5	2	1	3	1	.....	.....	16	2	13299a	21402a	5	4.13	104.9
Prescott	N. 34 33	W. 112 28	4.38 a.m.	5340	1628	24.81	630.2	30.15	765.8	31.6	—0.2	78.6	1	1	3	10	10	.....	1	3	1	3555	5721	3	1.55	39.4
Provincetown	N. 42 03	W. 70 11	7.27 a.m.	26	8	30.07	763.8	30.10	764.5	41.1	5.1	77.4	10	6	3	2	3	.....	.....	4	2	8087	13015	6	3.69	93.7
Punta Rassa	N. 26 29	W. 82 01	6.40 a.m.	13	4	30.07	763.8	30.08	764.0	63.1	17.3	82.1	13	2	.....	.....	2	2	.....	11	.....	6978	11230	3	1.04	26.4
Red Bluff a	N. 40 10	W. 122 15	3.59 a.m.	350	106	29.70	754.4	30.11	764.8	45.0	7.2	87.5	5	5	1	.....	.....	2	1	.....	1	2043	3288	4	5.07	128.8
Rochester	N. 43 08	W. 77 42	6.57 a.m.	621	189	29.49	749.0	30.19	766.8	34.0	1.1	81.1	4	1	5	9	7	1	1	1	.....	7307	11759	9	2.01	51.1
Roseburg	N. 43 13	W. 123 20	3.55 a.m.	511	156	29.56	750.8	30.12	765.0	38.2	3.4	85.9	4	4	.....	2	3	3	5	3	6	1568	2523	7	1.15	29.2
Sacramento	N. 38 35	W. 121 30	4.02 a.m.	65	20	30.04	763.0	30.12	765.0	44.2	6.8	85.8	3	6	3	2	1	10	1	.....	4	3411	5473	3	3.22	81.8
Saint Louis	N. 38 38	W. 90 12	6.07 a.m.	568	173	29.59	751.6	30.22	767.6	40.5	4.7	94.7	3	8	5	.....	8	2	.....	4	.....	7281	11717	6	3.24	82.3
Saint Paul	N. 44 58	W. 93 03	5.56 a.m.	811	247	29.22	742.2	30.14	765.5	30.8	—0.7	83.0	4	7	4	3	2	5	2	2	1	6189	9960	6	1.61	40.9
Saint Vincent	N. 48 56	W. 97 14	5.39 a.m.	804	245	29.24	742.7	30.17	766.3	20.0	—6.7	87.9	7	9	1	2	2	7	.....	2	.....	6827	10971	5	1.02	25.9
Salt Lake City	N. 40 46	W. 111 54	4.40 a.m.	4348	1325	25.76	654.3	30.33	770.4	30.4	—0.9	53.0	1	.....	1	.....	.....	6	4	3	15	2613	4189	3	0.54	13.7
San Antonio	N. 29 25	W. 98 25	5.34 a.m.	673	205	29.45	748.0	30.17	766.3	55.0	12.8	80.3	9	5	.....	.....	.....	3	5	2	6	3878	6241	7	1.12	28.4
San Diego	N. 32 43	W. 117 10	4.19 a.m.	67	20	29.99	761.7	30.06	763.5	51.5	10.8	74.5	2	3	3	.....	1	.....	5	13	3	3875	6236	4	0.39	9.9
Sandusky	N. 41 25	W. 82 40	6.37 a.m.	639	195	29.46	748.3	30.18	766.6	39.4	4.1	78.0	.....	3	7	8	4	2	1	5	.....	9836	15813	7	2.92	74.2
Sandy Hook	N. 40 28	W. 74 00	7.12 a.m.	28	8	30.15	765.8	30.18	766.6	40.8	4.9	79.1	5	4	4	4	3	1	.....	9	.....	10944	17612	7	1.51	38.4
San Francisco a	N. 37 48	W. 122 26	3.58 a.m.	60	18	30.05	763.3	30.12	765.0	50.0	10.0	84.0	3	1	8	4	3	6	2	2	.....	4302	7020	5	4.18	106.2
Santa Fé	N. 35 41	W. 105 57	5.04 a.m.	7106	2166	23.28	591.3	30.32	770.1	33.2	0.7	55.4	4	2	.....	2	1	2	6	10	3	5443	8759	3	0.90	22.9
Savannah	N. 32 05	W. 81 05	6.44 a.m.	87	26	30.09	764.3	30.18	766.6	50.4	10.2	75.1	13	6	2	3	.....	2	1	3	.....	5326	8555	4	1.63	41.4
Shaw, Fort	N. 47 31	W. 111 48	4.41 a.m.	3550	1082	26.44	671.6	30.26	768.6	26.8	—2.9	68.9	1	.....	11	12	.....	1	.....	4	1	8098	13032	4	0.30	7.6
Shreveport	N. 32 30	W. 93 40	5.53 a.m.	227	69	29.93	760.2	30.18	766.6	50.9	10.5	89.2	7	5	.....	1	4	3	1	7	2	4210	6759	7	8.62	218.9
Sill, Fort	N. 34 40	W. 98 23	5.34 a.m.	1200	366	28.93	734.8	30.24	768.1	42.0	5.6	73.6	11	7	.....	1	6	3	.....	2	.....	6622	10641	5	2.01	51.1
Silver City	N. 32 46	W. 108 14	4.55 a.m.	5890	1795	24.34	618.2	30.15	766.6	35.9	2.2	73.3	1	6	2	4	1	4	.....	1	11	1941	3124	4	1.37	34.8
Sitka	N. 57 03	W. 135 19	3.07 a.m.	63	19	29.74	755.4	29.80	756.9	39.0	3.9	72.8	1	1	.....	1	.....	4	15	8	.....	8790	14146	8	11.47	291.3
Smith, Fort	N. 35 22	W. 94 24	5.50 a.m.	449	137	29.72	754.9	30.20	767.1	45.7	7.6	82.4	1	3	5	1	2	.....	12	3	3	3637	5853	6	2.21	56.1
Smithville	N. 33 55	W. 78 01	6.56 a.m.	34	10	30.12	765.0	30.16	766.1	46.2	7.9	83.7	17	4	1	2	.....	.....	2	4	.....	6401	10301	4	2.50	63.5
Spokane Falls	N. 47 40	W. 117 25	4.18 a.m.	1910?	582?	28.13	714.5	30.21	767.3	29.7	—1.3	82.7	2	4	2	5	3	.....	1	11	2	2660	4281	7	2.44	62.0
Springfield, Ill	N. 39 48	W. 89 39	6.10 a.m.	644	196	29.48	748.8	30.20	767.1	40.0	4.4	77.5	2	7	4	2	8	1	2	4	.....	5926	9537	6	2.60	66.0
Springfield, Mass	N. 42 05	W. 72 35	7.18 a.m.	120	37	30.03	762.7	30.17	766.3	34.4	1.3	71.6	13	1	5	1	2	1	.....	.....	7	.....	.....	5	1.26	32.0
Springfield, Mo	N. 37 12	W. 93 18	5.55 a.m.	1351	412	28.72	729.5	30.23	767.8	40.9	4.9	83.6	4	8	.....	1	9	4	1	3	.....	6331	10172	6	6.30	160.0
Starkville	N. 33 35	W. 88 49	6.13 a.m.	455	123	29.71	754.6	30.21	767.3	48.8	9.3	84.6	6	8	:	.....	5	6	2	2	.....	5903	9500	5	7.43	188.7
Stevenson, Fort	N. 47 35	W. 101 28	5.22 a.m.	1750	534	28.24	717.3	30.21	767.3	22.3	—5.4	87.1	3	10	2	1	.....	1	9	4	.....	6519	10470	5	0.74	18.8
Stockton	N. 30 53	W. 102 53	5.16 a.m.	3010	917	27.11	688.6	30.23	767.8	42.5	5.8	80.5	.....	6	1	10	6	1	2	3	1	4283	6893	4	1.31	33.3
Thatcher's Island	N. 42 38	W. 70 34	7.26 a.m.	48	15	30.07	763.8	30.12	765.0	38.9	3.8	77.5	6	9	3	4	.....	1	.....	6	1	11744	18900	5	2.46	62.5
Thomas, Camp	N. 33 04	W. 110 02	4.48 a.m.	2710	826	27.32	693.9	30.16	766.1	41.0	5.0	74.8	1	4	1	2	3	3	6	2	8	.....	.....	5	0.77	19.6
Toledo	N. 41 40	W. 83 34	6.34 a.m.	651	198	29.44	747.8	30.17	766.3	38.6	3.7	74.9	6	1	3	9	5	3	2	.....	1	6522	10496	7	2.72	69.1
Tucson	N. 32 14	W. 110 53	4.45 a.m.	2369	722	27.61	701.3	30.07	763.8	47.3	8.5	65.9	.....	.....	.....	.....	10	10	1	.....	9	2461	3960	3	1.12	28.4
Umatilla	N. 45 55	W. 119 20	4.11 a.m.	340	103	29.87	758.7	30.25	768.3	32.9	0.5	85.9	2	1	2	6	2	9	5	1	2	3460	5568	6	0.81	20.6
Verde, Fort	N. 34 33	W. 111 52	4.40 a.m.	?		.....	.....	.....	.....	36.9	2.7	67.9	10	9	3	2	1	3	.....	2	.....	.....	.....	4	1.73	43.9
Vicksburg	N. 32 22	W. 90 53	6.04 a.m.	244	74	29.93	760.2	30.20	767.1	51.1	10.6	87.6	4	5	1	.....	2	9	2	4	3	4483	7213	6	4.37	111.0
Visalia	N. 36 20	W. 119 17	4.11 a.m.	348	106	29.74	755.4	30.12	765.0	40.1	4.5	90.2	1	3	3	1	.....	10	5	1	6	1530	2462	2	0.83	21.1
Washakie, Fort	N. 42 59	W. 108 43	4.53 a.m.	5580	1702	24.54	623.3	30.28	769.1	12.2	—11.0	76.6	1	5	11	4	.....	2	1	.....	6	2753	4430	3	0.69	17.5
Washington, D. C.	N. 38 54	W. 77 02	7.00 a.m.	106	32	30.11	764.8	30.23	767.8	38.7	3.7	80.1	8	5	1	1	2	.....	1	4	8	2857	4598	5	1.33	33.8
W. Las Animas	N. 38 04	W. 103 07	5.16 a.m.	3905	1190	26.15	664.2	30.27	768.8	19.7	—6.8	70.6	1	14	8	1	1	.....	2	3	.....	5006	8056	3	0.01	0.3
Williamsport	N. 41 15	W. 77 03	7.00 a.m.	561	171	29.58	751.3	30.21	767.3	30.4	2.4	78.7	2	5	5	.....	.....	2	2	5	9	2645	4257	7	1.31	33.3
Wilmington	N. 34 14	W. 77 57	6.56 a.m.	52	16	30.12	765.0	30.18	766.6	46.9	8.3	81.6	10	3	.....	2	1	1	1	9	3	4564	7345	5	2.78	70.6
Winnemucca	N. 40 59	W. 117 43	4.17 a.m.	4327	1319	25.71	653.0	30.24	768.1	26.1	—3.3	74.8	.....	.....	.....	.....	4	.....	4	20	2	4965	7990	3	0.50	12.7
Yankton	N. 42 54	W. 97 28	5.38 a.m.	1228	374	28.82	732.0	30.20	767.1	29.5	—1.4	72.5	3	7	5	2	1	2	2	1	7	4763	7665	3	0.31	7.9
Yuma	N. 32 45	W. 114 36	4.30 a.m.	141	43	29.88	758.9	30.03	762.7	51.6	10.9	57.8	7	1	3	2	.....	1	3	10	3	3576	6044	4	0.09	2.3
Sub-Series.																										
Bogota	N. 4 36	W. 74 14	7.11 a.m.	8655	2638	22.01	559.0	.....	.....	55.0	12.8	77	2	2	6	2	2	2	2	2	10	2040	3283	6	5.58	141.7
Havana	N. 23 09	W. 82 22	6.39 a.m.	50	15	29.95	760.7	30.02	762.5	69.6	20.9	83.2	5	1	1	.....	2	8	11	1	1	5071	8161	5	1.70	43.2
Kingston	N. 18 58	W. 76 48	7.01 a.m.	10	3	29.97	761.2	29.98	761.5	73.0	22.8	83.3	19	1	.....	.....	.....	.....	.....	.....	10	2012	3222	4	1.29	32.8
Navassa	N. 19 25	W. 75 03	7.43 a.m.	77	23	29.85	758.2	29.93	760.2	78.5	25.8	95	.....	.....	.....	.....	.....	.....	2	28	.....	.....	.....	7	8.36	212.3
Paramaribo	N. 5 50	W. 55 13	8.27 a.m.	6	2	29.98	761.5	29.98	761.5	79.3	26.3	84.2	.....	.....	.....	.....	1	14	15	.....	.....	.....	.....	7	3.26	82.8
Puerto Berrio	N. 6 22	W. 74 28	7.10 a.m.	542	165	29.37	746.0	29.93	760.2	77.4	25.2	89	3	.....	.....	1	.....	.....	.....	26	.....	.....	.....	9	6.28	159.5
Rivas	N. 11 26	W. 85 47	6.25 a.m.	150	46	.....	.....	.....	.....	75.1	23.9	95.0	.....	2	.....	1	1	.....	2	24	.....	.....	.....	4	4.20	106.7
Santiago de Cuba	N. 19 55	W. 75 50	7.04 a.m.	21	6	29.97	761.2	29.99	761.7	74.9	23.8	79.1	16	2	.....	.....	.....	.....	.....	2	10	.....	.....	4	2.24	56.9
St. Paul, Alaska c	N. 57 47	W. 152 21	1.59 a.m.	54	16	29.52	749.8	29.58	751.3	32.4	0.2	84.1	8	1	1	2	2	9	.....	.....	4	.....	.....	7	8.53	216.7
St. Thomas	N. 18 20	W. 64 56	7.48 a.m.	131	40	29.88	758.9	30.00	762.0	78.7	25.9	79.7	7	1	.....	2	.....	4	14	2	.....	1497	2409	5	3.92	99.6
York Factory	N. 57 02	W. 92 26	5.58 a.m.	55	17	29.98	761.5	30.04	763.0	11.2	—11.6	89.3	5	7	1	8	3	.....	1	5	.....	11440	18410	5	2.33	59.2

OCEAN SQUARE DATA FOR NOVEMBER, 1882.

Location of Centre of each Square.	Barometer.		Temperature.		Wind Frequency.										Wind force 0–10.
	Inch.	Mill.	Fah.	Cent.	N.	NW.	W.	SW.	S.	SE.	E.	NE.	Calm.	Blank.	
° °															
N. 12.5 W. 22.5	30.01	762.2	81.6	27.6							5	25			1.2
12.5 27.5	30.01	762.2	81.3	27.4						1	7	21		1	1.2
12.5 32.5	30.00	762.0	81.2	27.3						6	8	11		5	1.2
12.5 37.5	29.99	761.7	80.9	27.2						9	10	4		7	1.6
12.5 42.5	29.98	761.5	80.8	27.1					1	8	9	1		11	1.9
12.5 52.5	29.97	761.2	80.6	27.0						12	7	4		7	2.3
17.5 22.5	30.07	763.8	80.0	26.7							5	25			1.2
17.5 27.5	30.07	763.8	79.9	26.6							10	20			1.4
17.5 32.5	30.05	763.3	79.2	26.2						7	13	6		4	1.4
17.5 37.5	30.07	763.8	79.2	26.2						10	11	4		5	1.5
17.5 42.5	30.02	762.5	79.5	26.4				1	2	12	5	2		8	1.8
17.5 47.5	29.99	761.7	79.7	26.5					4	11	6	1		8	1.8
17.5 52.5	30.01	762.2	79.5	26.4			1	1	5	11	8	2		2	1.6
17.5 57.5	29.97	761.2	80.1	26.7	1	1	10		2	12	1	2		1	1.8
22.5 22.5	30.12	765.0	77.2	25.1				1	1	1	10	17			2.0
22.5 27.5	30.12	765.0	77.2	25.1			14	2		8		6			2.1
22.5 32.5	30.13	765.3	77.1	25.1				2		15	10	1		2	2.3
22.5 37.5	30.07	763.8	76.9	24.9		1	1	1	1	19	3			4	1.8
22.5 42.5	30.05	763.3	77.2	25.1	1	1			6	15	1	1		5	1.8
22.5 47.5	30.02	762.5	77.0	25.0				3	8	11	3			5	1.9
22.5 52.5	30.01	762.2	77.2	25.1				5	6	9	5	3		2	1.6
22.5 57.5	30.00	762.0	77.7	25.4		3	1	1	4	5	5	9		2	1.4
22.5 62.5	29.99	761.7	78.2	25.7	5	3		3	1	7	3	8			2.0
22.5 67.5	30.00	762.0	77.0	25.0	6	3		3	1	2	3	12			2.1
22.5 72.5	30.02	762.5	76.0	24.4	7	1		3	1	3		15			2.7
27.5 22.5	30.18	766.6	73.3	22.9				1	1	3	11	14			2.2
27.5 27.5	30.17	766.3	73.6	23.1	1		10	1	3	8		7			2.3
27.5 32.5	30.15	765.8	73.7	23.2			1	2	2	14	8	1		2	2.6
27.5 37.5	30.11	764.8	74.1	23.4		1	1	2	6	15	3			2	2.4
27.5 42.5	30.07	763.8	73.9	23.3		3		2	11	8	2			4	2.1
27.5 47.5	30.02	762.5	73.4	23.0	1	3		5	9	7				5	2.2
27.5 52.5	30.00	762.0	73.4	23.0		1		7	8	6	3	3		2	1.6
27.5 57.5	29.99	761.7	73.2	22.9	1	4	1	1	7	4	2	8		2	1.6
27.5 62.5	30.00	762.0	73.3	22.9	8	6		4	2	1	2	7			2.3
27.5 67.5	30 01	762.2	72.7	22.6	11	4		3	2	1	2	7			2.5
27.5 72.5	30.05	763.3	71.5	21.9	7	4		2	1		2	14			2.9
27.5 77.5	30.09	764.3	68.8	20.4	9	5			1		1	14			2.9
32.5 12.5	30.23	767.8	68.6	20.3	2	1		1	1	2	2	21			1.7
32.5 17.5	30.24	768.1	69.5	20.8	1	1		1	2	2	6	17			1.5
32.5 22.5	30.24	768.1	70.4	21.3	1			2	2	2	9	14			2.5
32.5 27.5	30.23	767.8	70.8	21.6				3	2	12	8	5			2.2
32.5 32.5	30.19	766.8	71.1	21.7			1	2	6	11	7	2		1	3.0
32.5 37.5	30.12	765.0	71.1	21.7		3		1	15	7	3			1	2.7
32.5 42.5	30.07	763.8	70.9	21.6	1	2		2	15	6	2			2	2.5
32.5 47.5	30.00	762.0	70.2	21.2	3			8	8	7	1	2		1	2.1
32.5 52.5	29.99	761.7	69.8	21.0	3		1	9	6	5	1	5			2.6
32.5 57.5	29.97	761.2	69.3	20.7	2	8		5	3	3	1	8			2.7
32.5 62.5	29.97	761.2	68.9	20.4	9	7		4	3	3	1	3			2.3
32.5 67.5	30.00	762.0	67.7	19.8	10	8			2	2	2	6			3.3
32.5 72.5	30.06	763.5	64.7	18.2	16	3	1	1	1	1	1	6			3.3
32.5 77.5	30.14	765.5	56.3	13.5	9	3		1	1		1	15			2.9
37.5 12.5	30.26	768.6	62.8	17.1	7	5	2	4	2			10			2.7
37.5 17.5	30.28	769.1	64.6	18.1	6	3	4	6	1			10			2.9
37.5 22.5	30.30	769.6	65.7	18.7	3	5	1	5	4	2	3	7			2.3
37.5 27.5	30.27	768.8	65.9	18.8	2	4	2	6	5	6	4	1			1.9
37.5 32.5	30.21	767.3	66.2	19.0	1	3		8	13	4		1			2.8
37.5 37.5	30.13	765.3	65.9	18.8	4	2	1	4	16	1	2				2.9
37.5 42.5	30.05	763.3	64.5	18.1	4	2		10	10	3		1			2.9
37.5 47.5	30.00	762.0	63.3	17.4	2	1		9	10	2		6			3.1
37.5 52.5	29.95	760.7	62.2	16.8	2	1	1	7	6	3	2	8			3.4
37.5 57.5	29.95	760.7	60.6	15.9	6	6		5	2	3		8			4.1
37.5 62.5	29.98	761.5	58.7	14.8	7	7	1	2	2	1	1	9			3.7
37.5 67.5	30.03	762.7	55.6	13.1	10	7		1	3	1		8			3.9
37.5 72.5	30.12	765.0	49.5	9.7	14	3		3	1			9			3.0
42.5 12.5	30.18	766.6	59.4	15.2	3	13	6	5	1			2			3.5
42.5 17.5	30.19	766.8	60.2	15.7	2	11	9	3	1		1	3			3.5
42.5 22.5	30.22	767.6	61.0	16.1	2	9	8	6	3			2			2.9
42.5 27.5	30.20	767.1	61.5	16.4	1	6	4	10	7	1		1			3.2
42.5 32.5	30.13	765.3	61.3	16.3	1	5	3	9	9	2		1			3.5
42.5 37.5	30.09	764.3	61.7	16.5	3	3	4	6	10	2		2			3.4
42.5 42.5	30.05	763.3	59.0	15.0	2	4	1	10	6	4		3			3.4
42.5 47.5	30.00	762.0	56.0	13.3	3	2	3	6	6	3	1	6			3.5
42.5 52.5	29.93	760.2	53.7	12.1	3	3	1	8	4	1	2	8			3.8
42.5 57.5	29.94	760.5	51.3	10.7	3	8		3	3	2	2	9			3.9
42.5 62.5	29.99	761.7	48.1	8.9	4	9	1	5		2	1	8			3.1
42.5 67.5	30.06	763.5	44.5	6.9	10	8		2	2			8			3.1
47.5 12.5	29.97	761.2	53.6	12.0	2	13	9	4		1		1			4.5
47.5 17.5	30.01	762.2	54.0	12.2	4	9	14	1			1	1			4.1
47.5 22.5	30.05	763.3	54.4	12.4	1	8	11		1	6	2	1			4.1
47.5 27.5	30.05	763.3	54.0	12.2	2	9	7	2	6	1	2	1			4.2
47.5 32.5	30.02	762.5	54.0	12.2	2	5	3	12	3	1	1	3			4.1
47.5 37.5	30.00	760.2	52.3	11.3	2	7	2	9	5	3		2			4.0
47.5 42.5	29.98	761.5	48.9	9.4	3	7	2	6	6	3		3			3.7
47.5 47.5	29.93	760.2	44.2	6.8	5	6	1	4	7	5		2			3.5
52.5 12.5	29.79	756.7	50.0	10.0	3	14	8	5							4.3
52.5 17.5	29.84	757.9	50.2	10.1	1	15	9	3				2			4.4
52.5 22.5	29.91	759.7	50.1	10.1	2	16	5	6				1			4.0
52.5 27.5	29.92	760.0	49.2	9.6	2	12	6	7	1			2			3.9
52.5 32.5	29.91	759.7	47.7	8.7	2	9	3	7	4	1		4			3.8
52.5 37.5	29.88	758.9	46.1	7.8	3	10	3	6	3	4		1			3.3
52.5 42.5	29.87	758.7	42.5	5.8	3	13	5	3	6						3.3
52.5 47.5	29.86	758.4	38.2	3.4	3	11	3	1	1	8	2	1			3.1
57.5 12.5	29.54	750.3	43.7	6.5	7	10	1	7	2		1	2			4.2
57.5 17.5	29.59	751.6	42.3	5.7	7	11	2	2	2		4	2			4.2
57.5 22.5	29.66	753.4	40.8	4.9	4	15	4	4	1	1		1			3.6
57.5 27.5	29.66	753.4	39.3	4.1	3	14	3	5	1		1	3			3.2
57.5 32.5	29.70	754.4	37.3	2.9	6	10	2	5	3	3		1			3.3
57.5 37.5	29.73	755.1	35.5	1.9	6	8	2	7	2	4		1			3.0
57.5 42.5	29.72	754.9	32.9	0.5	6	8		6	1	7	1	1			2.9
57.5 47.5	29.74	755.4	29.5	— 1.4	8	7	2	1	2	4	3	3			2.6

NOTE.—See General Remarks.

BEHRING ISLAND, BEHRING SEA.

DATE.	Barometer. Corrected for instrumental error and temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative Humidity	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount.		Clouds. Direction.		Rainfall or melted snow in past 24 hours.		Weather.
												Upper.	Lower.	Up'er	Lo'er			
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles per hour	Metrs per sec.	0–10	0–10	0–10	From	From	Inch.	Mill.	
1882.																		
October 1	29.23	742.4	29.25	742.9	45.1	7.3		n.	17	7.6		0	8 n.		n.	0.01	0.3	cloudy.
2	29.53	750.0	29.55	750.6	42.5	5.8		nw.	10	7.2			10 n.		nw.	0.12	3.0	cloudy.
3	29.28	743.7	29.30	744.2	41.2	5.1		n.	11	4.9			10 n.		n.	0.09	2.3	cloudy.
4	29.08	738.6	29.10	739.1	45.0	7.2		n.	22	9.8			10 n.			0.27	6.9	cloudy.
5	29.23	742.4	29.25	742.9	43.5	6.4		ne.	6	2.7		0	3 k.			0.15	3.8	clear.
6	29.57	751.1	29.59	751.6	44.0	6.7		ne.	14	6.3		0	4 k.			0.15	3.8	fair.
7	29.70	754.4	29.72	754.9	42.2	5.7		ne.	4	1.8			10 n.			0.09	2.3	cloudy.
8	29.71	754.6	29.73	755.1	39.2	4.0		n.	14	6.3			10 n.			0.02	0.5	cloudy.
9	29.71	754.6	29.73	755.1	39.0	3.9		n.	20	8.9			10 n.			0	0	cloudy.
10	29.72	754.9	29.74	755.4	39.2	4.0		nw.	10	4.5		0	1 s.			0.02	0.5	clear.
11	29.21	741.9	29.23	742.4	46.2	7.9		e.	20	8.9			10 n.			0.28	7.1	cloudy.
12	28 77	730.7	28.79	731.3	38.0	3.3		ne.	6	2.7		0	2 k.			0.37	6.9	clear.
13	29.27	743.4	29.29	744.0	39.9	4.4		nw.	18	8.0			10 n.			0.20	5.1	cloudy.
14	29.40	746.7	29.42	747.3	38.2	3.4		calm	0	0		0	4 k.			0.16	4.1	fair.
15	29.64	752.8	29.66	753.4	39.3	4.1		n.	20	8.9			10 n.		n.	0.05	1.3	cloudy.
16	29.75	755.6	29.77	756.1	37.7	3.2		e.	7	3.1			10 n.			0.02	0.5	cloudy.
17	29.64	752.8	29.66	753.4	43.3	6.3		w.	25	11.2		0	9 n.		w.	0.14	3.6	cloudy.
18	29.74	755.4	29.76	755.9	33.6	0.9		e.	7	3.1			10 n.			0.01	0.3	cloudy.
19	29.74	755.4	29.76	755.9	37.9	3.3		n.	26	11.6			10 n.		n.	0.29	7.4	cloudy.
20	30.03	762.7	30.05	763.3	33.8	1.0		calm	0	0			10 n.			0	0	cloudy.
21	30.14	765.5	30.16	766.1	37.8	3.2		sw.	15	6.7		0	4 s.			inap.	inap.	fair.
22	29.74	755.4	29.76	755.9	41.1	5.1		w.	15	6.7		0	1 s.			0.03	0.8	clear.
23	30.03	762.7	30.05	763.3	36.6	2.6		w.	10	4.5		0	0			0	0	clear.
24	29.89	759.2	29.91	759.7	32.0	0.0		n.	17	7.6		0	7 n.		n.	0	0	fair.
25	29.57	751.1	29.59	751.6	32.4	0.2		ne.	15	6.7			10 n.			0.02	0.5	cloudy.
26	29.78	756.4	29.80	756.9	29.7	— 1.3		n.	20	8.9			10 n.		n.	0.17	4.3	cloudy.
27	29.98	761.5	30.00	762.0	35.4	1.9		sw.	12	5.4		1 k.	9 n.		sw.	inap.	inap.	cloudy.
28	30.12	765.0	30.14	765.5	19.2	— 7.1		e.	3	1.3		0	0			0	0	clear.
29	29.86	758.4	29.88	758.9	42.8	6.0		sw.	40	17.9			10 n.		sw.	0	0	cloudy.
30	29.87	758.7	29.89	759.2	43.7	6.5		sw.	27	12.1			10 n.			0.20	5.1	cloudy.
31	30.23	767.8	30.25	768.3	28.5	— 1.9		n.	27	22.1			10 n.			0.53	13.5	cloudy.
Mean	29.65	753.1	29.67	753.6	38.3	3.5						8				3.29	83.6	
November 1	30.55	776.0	30.57	776.5	27.8	— 2.3		e.	10	4.5			10 n.			0	0	cloudy.
2	30.52	775.2	30.54	775.7	34.1	1.2		e.	4	1.8			10 n.			0	0	cloudy.
3	29.98	761.5	30.00	762.0	37.0	2.8		e.	5	2.2			10 n.			0.21	5.3	cloudy.
4	30.13	765.3	30.15	765.8	35.1	1.7		n.	7	3.1		0	2 k.		n.	0.14	3.6	clear.
5	29.34	745.2	29.36	745.7	40.1	4.5		sw.	25	11.2		0	3 k.		sw.	0.08	2.0	clear.
6	29.18	741.2	29.20	741.7	38.5	3.6		w.	26	11.6		0	1 s.			0.06	1.5	clear.
7	29.13	739.9	29.15	740.4	40.3	4.6		sw.	26	11.6			10 n.			0.19	4.8	cloudy.
8	29.09	738.9	29.11	739.4	31.1	— 0.5		sw.	12	5.4		0	9 n.		sw.	0.07	1.5	cloudy.
9	29.13	739.9	29.15	740.4	32.8	0.4		sw.	17	7.6		0	9 n.		sw.	inap.	inap.	cloudy.
10	29.10	739.1	29.12	739.6	22.3	— 5.4		e.	6	2.7		0	1 s.			0.03	0.8	clear.
11	29.44	747.8	29.46	748.3	29.7	— 1.3		nw.	20	8.9		0	2 s.			0.01	0.3	clear.
12	29.45	748.0	29.47	748.5	18.3	— 7.6		nw.	17	7.6			10 n.			inap.	inap.	cloudy.
13	29.39	746.5	29.41	747 0	26.8	— 2.9		ne.	14	6.3		0	4 k.		ne.	0.01	0.3	fair.
14	29.58	751.3	29.60	751.8	22.1	— 5.5		n.	7	3.1			10 n.			inap.	inap.	cloudy.
15	29.41	747.0	29.43	747.5	13.5	—10.3		se.	2	0.9		0	2 s.			0.05	1.3	clear.
16	29.34	745.2	29.36	745.7	26.7	— 2.9		nw.	23	10.3		0	4 k.		nw.	0	0	fair.
17	29.34	745.2	29.36	745.7	26.4	— 3.1		sw.	10	4.5		0	8 n.		sw.	0	0	cloudy.
18	29.50	749.3	29.52	749.8	22.1	— 5.5		nw.	14	6.3		0	8 n.		nw.	0.04	1.0	cloudy.
19	29.51	749.5	29.53	750.0	16.4	— 8.7		sw.	5	2.2		0	4 k.		sw.	0.01	0.3	fair.
20	28.94	735.1	28.96	735.6	30.4	— 0.9		ne.	22	9.8			10 n.			0.04	1.0	cloudy.
21	28.94	735.1	28.96	735.6	27.1	— 2.7		nw.	39	17.4			10 n.			0.04	1.0	cloudy.
22	29.02	752.3	29.04	752.8	27.1	— 2.7		nw.	26	11.6			10 n.		nw.	0	0	cloudy.
23	29.86	758.4	29.88	758.9	21.0	— 6.1		e.	11	4.9		0	1 s.			0	0	clear.
24	28.72	729.5	28.74	730.0	37.1	2.8		s.	30	13.4		0	9 n.		s.	0.73	18.5	cloudy.
25	29.35	745.5	29.37	746.0	33.8	1.0		sw.	18	8.0			10 n.		sw.	0.10	2.5	cloudy.
26	28.34	719.8	28.36	720.3	34.0	1.1		nw.	15	6.7			10 n.		nw.	0.03	0.8	cloudy.
27	29.31	744.5	29.33	745.0	24.0	— 4.4		se.	2	0.9		0	1 s.			0.06	1.5	clear.
28	29.04	737.6	29.06	738.1	25.9	— 3.4		nw.	38	17.0			10 n.			0.04	1.0	cloudy.
29	29.74	755.4	29.76	755.9	27.9	— 2.3		sw.	15	6.7		0	7 n.			0	0	fair.
30	29.35	745.5	29.37	746.0	35.2	1.8		se.	15	6.7			10 n.			0.04	1.0	cloudy.
Mean	29.41	747.0	29.43	747.5	28.8	— 1.8						7				1.97	50.0	
December 1	29.02	737.1	29.04	737.6	35.1	1.7		se.	14	6.3			10 n.			0.14	3.6	cloudy.
2	29.72	754.9	29.74	755.4	29.5	— 1.4		nw.	20	8.9		0	1 k.		nw.	0.01	0.3	clear.
3	29.88	758.9	29.90	759.4	34.2	1.2		s.	20	8.9			10 n.			0	0	cloudy.
4	29.40	746.7	29.42	747.3	32.9	0.5		sw.	19	8.5			10 n.			0.15	3.8	cloudy.
5	29.40	746.7	29.42	747.3	31.2	— 0.4		sw.	12	5.4		0	9 n.			0.03	0.8	cloudy.
6	29.40	746.7	29.42	747.3	27.5	— 2.5		sw.	22	9.8		0	4 k.			0.02	0.5	fair.
7	29.81	757.2	29.83	757.7	26.2	— 3.2		w.	9	4.0		0	0			0.01	0.3	clear.
8	29.92	760.0	29.94	760.5	26.2	— 3.2		s.	7	3.1			10 n.			0.03	0.8	cloudy.
9	28.72	729.5	28.74	730.0	32.7	0.4		ne.	54	24.2			10 n.			0.03	0.8	cloudy.
10	28.96	735.6	28.98	736.1	29.5	— 1.4		s.	29	13.0		0	4 n.			0.20	5.1	fair.
11	29.25	742 9	29.27	743.4	31.3	— 0.4		se.	5	2.2		0	8 n.			0.08	2.0	cloudy.
12	29.35	745.5	29.37	746.0	33.7	0.9		e.	21	9.4			10 n.			0.04	1.0	cloudy.
13	29.63	752.6	29.65	753.1	36.1	2.3		e.	16	7.2			10 n.			0.38	9.7	cloudy.
14	29.89	759.2	29.91	759.7	33.8	1.0		e.	7	3.1			10 n.			0.01	0.3	cloudy.

NOTE.—The above observations, taken at 7 a. m., Washington time, were received too late for publication in the DAILY BULLETIN, and are given here in full from date of last published report (September 30, 1882). For continuation of this station, see United States series, DAILY BULLETIN.

REVIEW.

INTERNATIONAL METEOROLOGY.

[*Pressure expressed in inches and millimetres; temperature in degrees, Fahrenheit and Centigrade.*]

The following descriptions refer to chart ii. for the months of September and October, 1882, which chart was issued with the SUMMARY for those months. The chart for November, 1882, issued with the present SUMMARY, is also described herein. These charts continue the series of international charts begun in January, 1877, and exhibit the mean pressure, mean temperature, and prevailing direction of the wind over the northern hemisphere, as determined from one observation taken simultaneously each day at 7 a. m. Washington, or 0 h. 8 m. Greenwich, mean time.

For the description of these charts much valuable information has been obtained from the "Monatliche Uebersicht der Witterung," published by Professor Dr. G. Neumayer, director of the German Marine Observatory, at Hamburg, Germany.

For the month of September, 1882, the areas of barometric minima are found over the Atlantic ocean north of 60° north latitude, and in British India, respectively. In the former region, which comprises Iceland and southern Greenland, the mean atmospheric pressure ranges from 29.6 (751.8) at Stykkisholm, to 29.65 (753.1) at Godthaab and 29.69 (754.1) at Ivigtut. In the latter region (British India), the means range from 29.65 (753.1) in the Punjab to 29.69 (754.1) at stations on the western shore of the Bay of Bengal. In southern India, and at stations on the shores of the Arabian sea, the mean pressure ranges from 29.75 (755.6) to 29.8 (756.9). In the British Isles, Norway, and that part of Europe lying between 3° and 15° east longitude, the mean pressure ranges from 29.8 (756.9) to 29.9 (759.4). In the western part of France and in the southern peninsulas, it ranges from 29.92 (760.0) to 30.09 (764.3). From E. 15° to the Ural mountains the barometric means range from 29.95 (760.9) to 30.1 (764.9), the pressure being greatest in the vicinity of Moscow, Russia. In the United States, the area of barometric minima is situated in the southwestern part of the country between N. 30° and 40°, and W. 109° and 116°, and is indicated by the isobar for 29.9 (759.4).

The most marked area of high pressures is that which occupies the Atlantic ocean, its centre being over the Azores, where the mean pressure is 30.29 (769.4). The isobar for 30.2 (767.1) extends from W. 18° to W. 40°, and from N. 30° to N. 44°. Other areas of high pressures, indicated by the isobar for 30.1 (764.5), are situated as follows: one in Russia, with its centre near Moscow, where the mean pressure is 30.12 (765.0); two in the United States east of the ninety-fifth meridian; and one in western Canada and the northern part of the lake region.

Compared with the preceding month (August, 1882), there has been a slight but general increase of pressure throughout the United States, except in Florida, where there has been a decrease of about .04 inch. In western and central Europe there has been a slight decrease of pressure, but in the Scandinavian and Danish peninsulas and in Russia there has been a decided change, the increase of pressure averaging .2 inch. Throughout the continent of Asia there has been an increase of pressure. Over the Atlantic ocean the distribution of pressure differs but slightly from that of the preceding month.

Compared with the corresponding month of previous years, the mean atmospheric pressure over the United States was generally above the normal, except on the north Pacific coast and in Florida; in these districts there were slight deficiencies.

In Europe the mean pressure was normal, or below the normal, except in Russia and in the Scandinavian peninsula, where it was above normal.

The following table gives the mean pressure and the mean temperature, with corresponding departures, for the month of September, 1882, in the several countries of the eastern hemisphere, compared with the means as determined from observations taken during the years 1877, 1878, 1879, 1880, and 1881:

Countries.	Mean pressure.			Mean temperature.		
	Sept., 1877, 1878, 1879, 1880, 1881.	Sept., 1882.	Departure.	Sept., 1877, 1878, 1879, 1880, 1881.	Sept., 1882.	Departure.
				°	°	°
Algeria	30.02	30.02	normal	82.1	79.6	— 2.5
Austria	29.97	29.90	—0.07	65.9	66.4	+ 0.5
British Isles	29.98	29.85	—0.13	57.7	58.6	+ 0.9
Denmark	29.92	29.87	—0.05	58.7	61.1	+ 2.4
France	30.02	29.92	—0.10	67.9	63.4	— 4.5
Germany	30.00	29.89	—0.11	63.5	62.5	— 1.0
India	29.70	29.70	normal	82.8	83.6	+ 0.8
Italy	29.98	29.91	—0.07	74.5	71.3	— 3.2
Norway	29.84	29.86	+0.02	56.3	59.0	+ 2.7
Portugal	30.03	30.05	+0.02	75.1	70.7	— 4.4
Russia	29.97	30.04	+0.07	61.8	66.2	+ 4.4
Spain*	30.03	29.99	—0.04	75.2	67.0	— 8.2
Sweden	29.90	29.97	+0.07	55.8	58.4	+ 2.6

* Mean for four years only.

The accompanying table shows the deviations in pressure and temperature at isolated stations during the month of September, 1882, as compared with the means of five years:

Stations.	Mean pressure.			Mean temperature.		
	Sept., 1877, 1878, 1879, 1880, 1881.	Sept., 1882.	Departure.	Sept., 1877, 1878, 1879, 1880, 1881.	Sept., 1882.	Departure.
				°	°	°
Gibraltar*	30.02	30.05	+ 0.03	76.2	72.8	— 3.4
Malta, Mediterranean Sea	29.96	29.95	— 0.01	81.9	80.2	— 1.7
Sandwick Manse, Orkney Islands	29.94	29.80	— 0.04	54.1	53.9	— 0.2
Bridgetown, Barbadoes*	29.94	29.98	+ 0.04	82.6	84.0	+ 1.4
Cape Town, Cape Good Hope	30.13	30.13	normal	65.4	67.5	+ 2.1
Fort Napier, Natal, South Africa*	29.95	29.90	— 0.05	73.2	74.8	+ 1.6
Free Town, Sierra Leone	29.90	29.90	normal	82.5	80.4	— 2.1
Mauritius, Indian Ocean	30.16	30.14	— 0.02	72.9	72.7	— 0.2
Melbourne, New South Wales	30.03	29.94	— 0.09	52.5	53.2	+ 0.7
Nassau, Bahamas	29.98	30.07	+ 0.09	83.1	83.2	+ 0.1
Godthaab, Greenland	29.72	29.65	— 0.07	37.7	37.0	— 0.7
Stykkisholm, Iceland	29.65	29.60	— 0.05	46.1	44.1	— 2.0
Thorshavn, Färöe Islands	29.78	29.77	— 0.01	51.3	50.5	— 0.8
Zi-Ka-Wei, China	29.94	29.96	+ 0.02	70.8	72.0	+ 1.2
Athens, Greece	29.90	29.95	— 0.01	82.5	84.4	+ 1.9
Cagliari, Sardinia, Italy	29.95	29.91	— 0.04	78.8	75.7	— 3.1
Tokei, Japan	29.95	29.98	+ 0.03	70.6	68.3	— 2.3
Angra, Azores	30.15	.....	.....	70.3	71.8	+ 1.5
Funchal, Madeira Islands	30.11	30.19	+ 0.08	75.7	73.2	— 2.5
Ponta Delgado, Azores	30.17	30.29	+ 0.12	73.6	73.8	+ 0.2
Archangel, Russia	29.91	30.00	+ 0.09	50.0	52.9	+ 2.9
Tiflis, Russia	29.94	29.96	+ 0.02	76.1	74.7	— 1.4
Astrakhan, Russia	30.03	30.03	normal	69.1	73.4	+ 4.3
Ekaterinburg, Russia	29.92	29.92	normal	52.0	53.2	+ 1.2
Tashkend, Toorkistan, Asia	29.97	29.89	— 0.08	69.6	72.5	+ 2.9
Barnaul, Siberia, Asia	29.90	29.94	+ 0.04	55.5	55.8	+ 0.3
Yeniseisk, Siberia, Asia	29.93	30.07	+ 0.14	47.2	47.3	+ 0.1
Pekin, China	29.97	29.99	+ 0.02	67.7	67.3	— 0.4
Nikolaevsk on the Amoor, Asia	.....	.....	.....	.....	.....	.....
San Juan de Puerto Rico, W. I.	29.97	29.99	+ 0.02	81.5	80.2	— 1.3
Beirut, Turkey in Asia	29.86	29.91	+ 0.05	85.0	85.8	+ 0.8
Mexico, Mexico	.....	.....	.....	.....	.....	.....
Havana, Cuba, W. I.	29.97	29.96	— 0.01	81.0	79.2	— 1.8
Paramaribo, D. Guiana, S. A	30.04	30.01	— 0.03	81.9	80.6	— 1.3
York Factory, B. A	29.96	30.01	+ 0.05	36.4	39.2	+ 2.8

* Mean for four years only.

In the United States the mean temperature of the air was normal, or below the normal, over the country south of the thirty-eighth parallel; north of that parallel the means were slightly in excess of the normal. In that portion of Europe lying south of 50° north latitude, the mean temperature of the air was below the normal. North of the above latitude it was above the average. In British India the temperature was 0°.8 above the five years' mean. The highest mean temperature reported was 90°.6 Fahr. (32°.6 Cent.) at Agra, and the lowest was 70°.7 Fahr. (21°.5 Cent.) at Belgaum.

The following are some of the extreme mean temperatures reported at isolated stations during the month:

Highest.	Fahr.	Cent.	Lowest.	Fahr.	Cent.
	°	°		°	°
Beirut, Syria	85.2	29.9	Godthaab, Greenland	37.0	2.8
Athens, Greece	84.4	29.1	York Factory, B. A	39.2	4.0
Bridgetown, Barbadoes	84.0	28.9	Ivigtut, Greenland	40.5	4.7
Nassau, Bahamas	83.2	28.4	Stykkisholm, Iceland	44.1	6.7
Saint Thomas, W. I	82.0	27.8	Yeniseisk, Siberia	47.3	8.5

In the United States east of the hundredth meridian and south of N. 38°, the prevailing winds were northerly and north-

easterly. North of N. 38° they were westerly and southwesterly. West of the hundredth meridian they were southerly and westerly. In Canada the winds were mostly northerly and northeasterly. Over the Atlantic ocean the winds were as follows: from the coast of the United States eastward to W. 60°, northeasterly; from W. 60° to W. 25°, and between N. 20° and 45°, southerly and southeasterly; from W. 25° to the European coasts, northerly and northwesterly. North of 45° north latitude the winds were mostly westerly and northwesterly. In Europe the prevailing winds were southerly, southwesterly, and westerly, over the countries west of 10° east longitude, and easterly and southeasterly over the districts east of that meridian. In British India the winds were from southwest to northwest. In China they were easterly, and in Japan they were mostly northerly.

The rainfall during the month of September, 1882, was less than the average in that portion of the United States lying between N. 36° and 48° and W. 80° and 100°. It was also below the average in the south Atlantic and east Gulf states and in Florida. In New England, the middle Atlantic, and west Gulf states, it was in excess of the average. In southern Europe the rainfall was considerably in excess of the average, and caused disastrous floods in northern Italy and the Tyrol, the damage to property being estimated at two millions of florins. In northern Europe the rainfall was below the average.

For the month of October, 1882, the region of least pressure is indicated by the isobar for 29.5 (749.3), which encloses southern Greenland and the Atlantic ocean southward to N. 56° and eastward to W. 25°. The barometric gradient gradually increases to the southward and eastward until the isobar for 30.0 (762.0) is reached; that isobar extends from the Gulf of Saint Lawrence eastward along the forty-third parallel to the southern peninsulas of Europe and thence northward through Austro-Hungary, Germany, and Denmark. In the North American continent the pressure is least in the extreme northwestern part of the United States and in British America, the means ranging from 29.85 (758.2) to 29.9 (759.4). In British India the means range from 29.75 (755.6) in the northern districts to 29.8 (756.9) in the south. In China and Japan the mean pressure ranges from 29.9 (759.4) in the south to 30.1 (764.5) in the north.

The areas of barometric maxima appear in eastern Europe, Asia, and in the United States of North America, respectively. The first of these covers European Russia, and extends from the Gulf of Bothnia southeastward to the Caspian sea. In this region the mean pressure ranges from 30.23 (767.8) in the southern part of the area, to 30.27 (768.8) in the northwestern districts. In Asia the region of greatest pressures is in southwestern Siberia, the mean pressure at Semipalatinsk, being 30.23 (767.8). In other parts of Siberia the mean pressure is above 30.1 (764.5). The third area of high pressures, that of the United States, is indicated by the isobar for 30.1 (764.5), and extends from southwest to northeast over that part of the country lying between W. 88° and the Atlantic. The southwestern limit of this area is in Tennessee, and its northeastern limit is in Maine. The high area of the Atlantic ocean is indicated by the isobar for 30.1 (764.5), its northern limit being a little north of the Azores.

Compared with the preceding month (September, 1882), there has been no material change in the position of the areas of absolute minima, but the atmospheric pressure has decreased about .2 inch in the depression over Greenland, while it has increased in that situated in British India. The decrease of pressure above referred to has extended southward over the Atlantic to the Azores, where it is about .15 inch, and from W. 50° eastward to the European coast. In the United States there has been a slight decrease of pressure over the country west of the eighty-fifth meridian, except in California, Arizona, and New Mexico, where the pressure has slightly increased. In eastern Canada and in the Atlantic coast states there has been no material change in pressure. In Europe there has been an increase of pressure in all parts of the continent, except in France and in the British Isles, the increase being greatest in Russia and in the Scandinavian peninsula. In Asia there has been a general increase of pressure.

Compared with the corresponding month of previous years, the mean atmospheric pressure in the United States was everywhere below the normal, except in northern New England, the departures being greatest in the northwestern sections of the country. In Canada the mean pressure was above the normal. In Europe the mean atmospheric pressure was above the normal in the northern and eastern parts of the continent; it was normal in the southern districts, and below the normal in France and in the British Isles.

The following table gives the mean pressure and mean temperature, with corresponding departures, for the month of October, 1882, in the several countries of the eastern hemisphere, compared with the means as determined from observations taken during the years 1877, 1878, 1879, 1880, and 1881:

Countries.	Mean pressure.			Mean temperature.		
	Oct., 1877, 1878, 1879, 1880, 1881.	Oct., 1882.	Departure.	Oct., 1877, 1878, 1879, 1880, 1881.	Oct., 1882.	Departure.
				°	°	°
Algeria	30.07	30.09	+0.02	71.8	75.6	+ 3.8
Austria	29.99	30.00	+0.01	56.8	56.0	− 0.8
British Isles	29.93	29.82	−0.11	52.3	53.9	+ 1.6
Denmark	29.88	29.97	+0.09	48.8	50.8	+ 2.0
France	29.99	29.90	−0.09	62.5	58.3	− 4.2
Germany	29.97	29.98	+0.01	59.7	62.9	+ 3.2
India	29.83	29.79	−0.04	81.0	82.4	+ 1.4
Italy	29.98	29.98	normal	64.9	65.4	+ 0.5
Norway	29.78	30.02	+0.24	45.0	47.8	+ 2.8
Portugal	30.04	30.09	+0.05	67.2	66.2	− 1.0
Russia	29.98	30.18	+0.20	49.2	45.5	− 3.7
Spain*	29.98	30.03	+0.05	66.8	62.6	− 4.2
Sweden	29.81	30.16	+0.35	41.8	45.9	+ 4.1

*Mean for four years only.

The accompanying table shows the deviations in pressure and temperature at isolated stations during the month of October, 1882, as compared with the means for five years:

Stations.	Mean pressure.			Mean temperature.		
	Oct., 1877, 1878, 1879, 1880, 1881.	Oct., 1882.	Departure.	Oct., 1877, 1878, 1879, 1880, 1881.	Oct., 1882.	Departure.
				°	°	°
Gibraltar	30.03	30.09	+0.06	70.2	69.3	− 0.9
Malta, Mediterranean Sea	29.98	30.03	+0.05	73.7	75.6	+ 1.9
Sandwick Manse, Orkney Islands	29.80	29.83	+0.03	47.9	50.8	+ 2.9
Bridgetown, Barbadoes*	29.93	29.95	+0.02	82.3	82.7	+ 0.4
Cape Town, Cape Good Hope	30.05	30.06	+0.01	70.7	70.4	− 0.3
Fort Napier, Natal, South Africa	29.87	29.86	−0.01	73.0	74.0	+ 1.0
Free Town, Sierra Leone	29.91	29.89	−0.02	84.3	81.9	− 2.4
Mauritius, Indian Ocean	30.11	30.10	−0.01	74.9	76.2	+ 1.3
Melbourne, New South Wales	29.99	29.96	−0.03	54.6	54.8	+ 0.2
Nassau, Bahamas	30.00	29.98	−0.02	79.7	80.5	+ 0.8
Godthaab, Greenland	29.73	29.54	−0.19	31.0	25.9	− 5.1
Stykkisholm, Iceland	29.78	29.52	−0.26	38.8	44.8	+ 6.0
Thorshavn, Faröe Islands	29.70	29.82	+0.06	45.2	48.7	+ 3.5
Zi-Ka-Wei, China	30.16	30.09	−0.07	60.2	64.2	+ 4.0
Athens, Greece	30.01	30.07	+0.06	72.2	72.9	+ 0.7
Cagliari, Sardinia, Italy	29.95	29.95	normal	70.9	71.2	+ 0.3
Tokei, Japan	30.06	30.09	+0.03	57.8	57.8	normal
Angra, Azores	30.06	.....	.....	66.5	67.3	+ 0.8
Funchal, Madeira Islands	30.10	30.15	+0.05	73.2	72.3	− 0.9
Ponta Delgado, Azores	30.07	30.15	+0.08	69.5	69.8	+ 0.3
Archangel, Russia	29.77	30.19	+0.42	38.5	35.4	− 3.1
Tiflis, Russia	30.09	30.14	+0.05	66.5	58.8	− 7.7
Astrakhan, Russia	30.13	30.23	+0.10	57.0	48.7	− 8.9
Ekaterinburg, Russia	30.01	30.10	+0.09	38.7	28.2	−10.5
Tashkend, Toorkistan, Asia	30.22	30.17	−0.05	55.0	54.0	− 1.0
Barnaul, Siberia, Asia	30.17	30.13	−0.04	39.4	28.2	−11.2
Yeniseisk, Siberia, Asia	30.10	30.13	+0.03	30.6	21.0	− 8.7
Pekin, China	30.16	30.13	−0.03	53.0	56.5	+ 3.5
Nikolaievsk on the Amoor, Asia	.....	.....	.....	.....	.....	.....
San Juan de Puerto Rico, W. I.	29.95	29.97	+0.02	81.1	79.5	− 1.6
Beirut, Turkey in Asia	29.94	29.98	+0.04	79.4	77.7	− 1.7
Mexico, Mexico	30.22	30.15	−0.07	53.8	52.0	− 1.8
Havana, Cuba, W. I.	29.98	29.91	−0.07	78.7	77.3	− 1.4
Paramaribo, D. Guiana, S. A.	29.99	30.01	+0.02	81.0	79.8	− 1.2
York Factory, B. A.	29.96	29.93	−0.03	22.0	29.7	+ 7.7

*Means for four years only.

In the United States the mean temperature of the air averaged about 3° above the normal in the country east of the hundredth meridian. West of that meridian the temperature was about 2°.5 below the normal. In Canada it was above

the normal. In Europe the mean temperature of the air was above the normal in the northern parts of the continent, but was below the normal in the southwestern sections and in Russia. In Siberia the temperature was much below the normal. In British India it was 1°.4 above the five-year mean. The highest mean temperature reported was 93°.3 Fahr. (34°.1 Cent.) at Deesa, and the lowest was 74°.2 Fahr. (23°.4 Cent.) at Belgaum.

The following are some of the extreme mean temperatures reported at isolated stations during the month:

Highest.	Fahr.	Cent.	Lowest.	Fahr.	Cent.
	°	°		°	°
Bridgetown, Barbadoes	82.7	28.2	Yeniseisk, Siberia	21.9	−5.6
Freetown, Africa	81.9	27.7	Godthaab, Greenland	25.9	−3.4
Saint Thomas, W. I	81.2	27.3	Akmolinski, Siberia	26.8	−2.9
Nassau, Bahamas, W. I	89.5	26.9	Barnaul, Siberia	28.2	−2.1
			York Factory, B. A	29.7	−1.3

In the United States the prevailing winds were northerly and northeasterly in New England, and the country east of the Ohio and Mississippi rivers. West of this limit the winds were mostly southerly and westerly. In Canada they were southwesterly, westerly, and northwesterly. Over the north Atlantic ocean the winds were northeasterly, from the coast of the United States eastward to W. 70°; from W. 70° to W. 50° and between 20° and 40° north latitude, they were easterly and southeasterly; from W. 50° to W. 20°, and between N. 20° and 35°, they were northeasterly. North of 35° north latitude, and from W. 50° to the European coasts, the winds were mostly northwesterly, except off the British coasts, where they were southerly and southwesterly. South of N. 20°, northeasterly winds prevailed. In northern, eastern, and central Europe, the winds were easterly, southeasterly, and southerly; in western Europe they were southwesterly. In China and Japan the winds were from north to east.

The rainfall during the month of October, 1882, was below the average in New England, the middle Atlantic and east Gulf states. There were also deficiencies in Tennessee, the Ohio valley, and the lower lake region. Elsewhere the rainfall was in excess of the average, particularly so in California, where the excess amounted to 6.0 inches. In northeastern Europe the rainfall was below the average, but in all other sections it was above the average, especially in the southern districts, causing a continuation of the disastrous floods which began in September in upper Italy and the Tyrol. Severe floods also occurred in southern France and in England during the last decade of the month.

The following description refers to chart ii. for November, 1882, issued herewith:

The region of barometric minima, which is enclosed by the isobar for 29.5 (749.3), comprises eastern Iceland, northern Scotland, and the Färöe and Shetland islands, the lowest mean pressure reported being 29.39 (746.5) at North Unst, Shetlands. In the British Isles and that part of Europe lying north of 50° north latitude, and west of 30° east longitude, the mean pressure ranges from 29.6 (751.8) to 29.8 (756.9). In eastern Russia and the rest of Europe, excepting the Iberian peninsula, the means range from 29.8 (759.9) to 30.0 (762.0).

Three areas of barometric maxima are shown on the chart, situated, respectively, in the United States of North America, over the Atlantic ocean, and in Asia. The first occupies the Rocky mountain regions of the United States, and is inclosed by the isobar for 30.3 (769.6). From the extreme northwest southeastward to Texas and the country south of N. 40° and east of W. 90° the means range from 30.2 (767.1) to 30.28 (769.1). In the lake region and on the Pacific and Atlantic coasts the mean pressure ranges from 30.1 (764.5) to 30.18 (766.6). In New England and in Canada it ranges from 29.95 (760.7) to 30.05 (763.3). The second area of high pressures, above referred to, occupies the Azores, where the mean atmospheric pressure is 30.3 (769.6). The isobar for 30.2 (767.1) extends from W. 34° eastward to Portugal and western Spain, while that for 30.1 (764.5) stretches from W. 38° eastward along the forty-fifth parallel, covering the southern part of the Bay of Biscay, eastern Spain, and the southwestern part of the Mediterranean. The third area, that of Asia, is indicated by the isobar for 30.4 (772.1), and occupies that part of Siberia lying between N. 60° and 45° and E. 80° and 100°. In the eastern and northeastern parts of China the pressure ranges from 30.2 (767.1) to 30.35 (770.9). In British India it ranges from 29.85 (758.2) to 30.0 (762.0), and in Japan from 30.05 (763.3), at eastern stations, to 30.2 (767.1) in the west.

Compared with the preceding month, (October, 1882,) the area of least pressure has moved eastward, causing a decrease of pressure averaging .23 inch over the whole of Europe, except France and the Iberian peninsula, where there has been an increase of about .15 inch. In the United States there has been an increase of pressure throughout the entire country, except New England, where there was a slight decrease. There has also been a slight decrease in the Maritime Provinces of Canada, but the pressure has increased in the western provinces of the Dominion. Over the Atlantic ocean, south of N. 55°, the atmospheric pressure is greater than that of the preceding month; north of the above-mentioned parallel no material change has taken place. In all parts of Asia there has been a decided increase of pressure.

Compared with the corresponding month of previous years, the mean atmospheric pressure in November, 1882, was, in the United States, above the normal in the lake region and from the Mississippi river westward to the Rocky mountains. On the Pacific coast, and from New England southwestward to the Mississippi river, it was normal or slightly below the normal. In Europe the pressure was considerably below the normal in all districts except the Scandinavian and Iberian peninsulas.

The accompanying table shows the deviations in pressure and temperature at isolated stations during November, 1882, as compared with the means of five years:

Stations.	Mean pressure.			Mean temperature.		
	Nov., 1877, 1878, 1879, 1880, 1881.	Nov., 1882.	Departure.	Nov., 1877, 1878, 1879, 1880, 1881.	Nov., 1882.	Departure.
				°	°	°
Gibraltar	30.08	30.20	+0.12	*65.1	65.0	− 0.1
Malta, Mediterranean Sea	30.03	30.03	normal	68.1	67.4	− 0.7
Sandwick Manse, Orkney Islands	29.70	29.47	−0.23	43.3	41.3	− 2.0
Bridgetown, Barbadoes	.....	.....	.....	.....	.....	.....
Cape Town, Cape Good Hope	30.01	30.04	+0.03	73.2	76.8	+ 3.6
Fort Napier, Natal, South Africa	29.80	29.83	+0.03	75.2	78.5	+ 3.3
Free Town, Sierra Leone	29.91	29.86	−0.05	85.1	86.7	+ 1.6
Mauritius, Indian Ocean	30.03	30.03	normal	77.5	78.3	+ 0.8
Melbourne, New South Wales	29.91	30.08	+0.17	56.5	59.1	+ 2.6
Nassau, Bahamas	30.66	30.65	−0.01	76.2	75.0	− 1.2
Godthaab, Greenland	29.61	29.72	+0.11	26.5	21.0	− 5.5
Stykkisholm, Iceland	29.61	29.51	−0.10	32.3	32.4	+ 0.1
Thorshavn, Färöe Islands	29.63	29.46	−0.17	40.8	41.4	+ 0.6
Zi-Ka-Wei, China	30.28	30.35	+0.07	53.2	49.1	− 4.1
Athens, Greece	30.08	30.00	−0.08	62.8	66.4	+ 3.6
Cagliari, Sardinia, Italy	30.01	29.99	−0.02	64.3	62.8	− 1.5
Tokei, Japan	30.07	30.03	−0.04	47.8	47.1	− 0.7
Angra, Azores	30.10	30.27	+0.17	62.3	64.4	+ 2.1
Funchal, Madeira Islands	30.11	30.23	+0.12	69.7	69.4	− 0.3
Ponta Delgado, Azores	30.13	30.32	+0.19	64.7	66.7	+ 2.0
Archangel, Russia	29.68	29.91	+0.23	24.0	11.3	−13.3
Tiflis, Russia	30.25	30.11	−0.14	54.7	58.3	+ 3.6
Astrakhan, Russia	30.23	30.10	−0.13	41.7	48.4	+ 0.7
Ekaterinburg, Russia	30.02	30.09	+0.07	23.8	23.5	− 0.3
Tashkend, Toorkistan, Asia	30.35	30.24	−0.11	43.0	51.1	+ 8.1
Barnaul, Siberia, Asia	30.27	30.43	+0.16	21.3	14.5	− 6.8
Yeniseisk, Siberia, Asia	30.26	30.47	+0.21	12.2	3.7	− 8.5
Pekin, China	30.29	30.34	+0.05	37.2	37.8	+ 0.6
Nikolaievsk on the Amoor, Asia	.....	.....	.....	13.1	.....	.....
San Juan de Puerto Rico, W. I	29.97	29.97	normal	78.8	77.5	− 1.3
Beirut, Turkey in Asia	30.03	30.01	−0.02	72.3	71.4	− 0.9
Mexico, Mexico	30.31	30.31	normal	49.6	45.7	− 3.9
Havana, Cuba, W. I	30.02	30.02	normal	74.2	69.6	− 4.6
Paramaribo, D. Guiana, S. A	29.96	29.98	+0.02	82.0	79.3	− 2.7
York Factory, B. A	30.00	30.04	+0.04	0.8	11.2	+10.4

*Mean for four years only.

The following table gives the mean pressure and mean temperature, with corresponding departures, for the month of November, 1882, in the several countries of the eastern hemisphere, compared with the means as determined from observations taken during the years 1877, 1878, 1879, 1880, and 1881:

Countries.	Mean pressure.			Mean temperature.		
	Nov., 1877, 1878, 1879, 1880, 1881.	Nov., 1882.	Departure.	Nov., 1877, 1878, 1879, 1880, 1881.	Nov., 1882.	Departure.
				°	°	°
Algeria	30.11	30.18	+0.07	63.5	66.0	+ 2.5
Austria	30.05	29.86	−0.19	43.7	45.8	+ 2.1
British Isles	29.88	29.69	−0.19	46.0	45.8	− 0.2
Denmark	29.80	29.62	−0.18	41.7	38.0	− 3.7
France	30.01	29.93	−0.08	48.2	50.6	+ 2.4
Germany	29.95	29.76	−0.19	42.3	42.2	− 0.1
India	29.94	29.94	normal	74.6	75.3	+ 0.7
Italy	30.04	29.94	−0.10	55.8	55.6	− 0.2
Norway	29.71	29.71	normal	41.6	32.1	− 9.5
Portugal	30.09	30.24	+0.15	58.2	60.3	+ 2.1
Russia	29.98	29.84	−0.14	37.7	35.9	− 1.8
Spain[a]	30.07	30.15	+0.08	58.1	56.8	− 1.3
Sweden	29.72	29.78	+0.06	32.8	27.5	− 5.3

[a] Mean for four years only.

The mean temperature of the air in the United States was below the normal in the Atlantic coast states and in the states west of the Rocky mountains. In the country situated between these limits the temperature was from 1° to 5° above the normal. In Canada it was about normal. In Europe the mean temperature was below the normal in the northern districts, the greatest departure occurring in the Scandinavian peninsula. In the districts south of 48° north latitude, the temperature was normal or slightly above. In British India it was 0.7 above the five-year average. The highest mean temperature reported was 83°.4 Fahr. (28°.6 Cent.) at Deesa, and the lowest was 67°.0 Fahr. (19°.4 Cent.) at Hazaribagh.

The following are some of the extreme mean temperatures reported at isolated stations during the month:

Highest.	Fahr.	Cent.	Lowest.	Fahr.	Cent.
	°	°		°	°
Freetown, Africa	86.7	30.4	Yeniseisk, Siberia	3.7	−15.7
Zanzibar, Africa	82.8	28.2	Upernavik, Greenland	10.8	−11.8
Bridgetown, Barbadoes	81.2	27.3	York Factory, B. A	11.2	−11.6
Paramaribo, S. A	79.3	26.3	Archangel, Russia	11.3	−11.5
Manila, Philippine Islands	78.9	26.1	Jacobshavn, Greenland	12.4	−10.9
			Barnaul, Siberia	14.5	−9.7

The prevailing winds in the United States and Canada were southwesterly, westerly, northwesterly, and northerly. Over the north Atlantic the winds were northerly and northeasterly from the United States eastward to W. 50°; from W. 50° to W. 25° and between N. 20° and 50° they were southerly and southeasterly; from W. 25° to the coasts of Portugal and Africa they were northeasterly. In the Bay of Biscay and over the ocean north of N. 60° they were westerly and northwesterly. In Europe the winds were mostly westerly and southwesterly, except in the Scandinavian peninsula and in Russia, where they were from south to east.

In the United States the rainfall for November, 1882, was below the average in all districts east of the Rocky mountains, except in Florida and the west Gulf states; the districts of greatest deficiency were the New England and middle Atlantic states. West of the Rocky mountains the rainfall was in excess of the average, except in the north Pacific region, where there was a deficiency of 2.38 inches. In Canada the rainfall was below the average. In Europe the rainfall was largely in excess of the average, especially in the southern districts, where four times the average amount of rain fell. Heavy floods occurred in Germany, France, and Hungary, the most disastrous being the overflow of the Rhine. The floods were also severe in France; much property was destroyed, and many persons were rendered destitute.

GENERAL REMARKS.

All data which appear in the DAILY BULLETIN OF SIMULTANEOUS METEOROLOGICAL OBSERVATIONS are copied from the regular exchanges of this office. The barometer readings for land stations, in the first and second columns are reduced to freezing and their respective standards; those in the third and fourth columns to sea-level. When necessary, corrections for instrumental error, temperature, and reduction to sea-level are always applied, while those for instrumental error, only when such corrections can be ascertained with close approximation, as by comparison when vessels are at or near land stations. Relative humidity generally requires computation from the hygrometrical observations. When rain has fallen, but neither the amount nor duration is recorded, the word "blank" is published in the rainfall column. The weather is generally published as given. The following symbols and abbreviations are common to all series, viz: †, aneroid; *, instrumental error not known; c, cirrus; k, cumulus; s, stratus; n, nimbus; d, scud; f, fracto; p, pallio; hz, haze; fg, fog; sk, smoke; inap, inappreciable; d. clouds, detached clouds. The movement of the air is published as given on the originals, when indicated by velocity in miles per hour, in meters per second, or by force, all variations of the latter being reduced to the common scale of 0 to 10. Those stations reporting the movement in pounds pressure per square foot are reduced to force on the common scale, and those in kilometers per hour, to meters per second and miles per hour. The distinction between upper and lower clouds is carefully made in the United States and a portion of the Canadian series, and the various formations are indicated by the letters above given and their combinations. In the MONTHLY SUMMARY OF INTERNATIONAL SIMULTANEOUS METEOROLOGICAL OBSERVATIONS the position of stations (latitude and longitude) are obtained from Keith Johnson's "Index Geographicus," except where more exact information is furnished. The elevation of stations are obtained either from the annual, semi-annual, and monthly publications of the various meteorological bureaus here represented, or from the original forms, upon which are entered the daily observations. In the United States series the elevations are computed from the latest surveys, and are carefully revised each month, in order to note any change in the elevation of the barometer-cistern at any station. It is believed for the most part that, throughout the European and other series, the elevations as given represent the height of the barometer-cistern above sea-level; at least, this should be the case. The local time, where omitted or not given correctly in the originals, is carefully computed at this office. A letter placed opposite the name of a station or some portion of the data credited thereto, indicates that a certain number of observations are missing, corresponding to the relative position in the alphabet of the letter so used.

INTERNATIONAL CHARTS ACCOMPANYING DAILY BULLETIN AND MONTHLY SUMMARY.

International chart i. shows isobars and isotherms charted from data as appearing in the INTERNATIONAL BULLETIN of same date, as reported by the several observers. Isobars, in continuous lines, exhibit atmospheric pressure at sea-level in English inches; isotherms, in dotted lines, exhibit temperature of the air in degrees, Fahrenheit, similarly charted.

International chart ii. (monthly mean chart), showing mean pressure at sea-level in English inches, mean temperature in degrees, Fahrenheit, mean force and prevailing direction of wind at 7 a. m., Washington mean time.

International chart iii. shows tracks of centres of low barometer. The Arabic numerals show location of the centres of low barometer at 7 a. m., Washington mean time, of that date.

In the above charts, broken lines indicate that the lines so drawn are doubtful.

Arrows show direction of, and fly with, the wind. Force is shown as follows:

Symbols.	Force.	Velocity.	
		Miles per hour.	Metres per second.
○	0	0	0
→	1, 2	0 to 9	0 to 4
→	3, 4	9.1 to 22.5	4.1 to 10.1
→	5, 6	22.6 to 40.5	10.1 to 18.2
→	7, 8	40.6 to 67.5	18.1 to 30.2
→	9, 10	67.6 up.	30.2 and over.

The following remarks relate to the individual peculiarities in the *methods* of recording and the *times* of taking the international simultaneous meteorological observations, under the auspices of the various meteorological bureaus:

ALGERIAN SERIES (furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria).—The originals give the barometer in millimetres reduced to sea-level; temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The rainfall is measured at 7 a. m., local time, and the amount indicated in millimetres.

AUSTRALIAN SERIES (furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W.).—At Melbourne the conversions are published as given in the originals. The movement of the air is indicated by velocity in miles per hour.

AUSTRO-HUNGARIAN SERIES (furnished by co-operation of Prof. Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. At the following stations rainfall is measured at local time: Lemburg, 7 p. m.; Vienna, 2 p. m.; Trieste, 7 a. m. The weather is given by the Vienna symbols or in general terms.

BRITISH SERIES (furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers).—In general the originals do not give rainfall or distinction between upper and lower clouds. Relative humidity, except for Bradford and Silloth

Rectory, is not given on the originals, but is computed from hygrometrical observations. At Cardington, Oxford, and Sandwick Manse the barometers are given as read off. At Greenwich the movement of the air is indicated by pounds pressure per square foot. At the following stations rainfall is measured at local time: Bradford, 9 a. m., and Aberdeen, 10 a. m. The wind direction is given to 32 points and weather by the Beaufort notation.

CANADIAN SERIES (furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers).—The originals give the barometer reduced to sea-level in English inches and the temperature in Fahrenheit. Meteorological reports from stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES (furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers).—At Cape Town the barometer is given on the original as corrected for temperature only. Upper and lower clouds are given on a scale of 0 to 10, and the kind occasionally indicated by abbreviating Poëy's classification.

CHINESE SERIES (furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei).—At Zi-Ka-Wei the originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is given in metres per second and the direction to 16 points. The kind of clouds is occasionally given, and the degree of cloudiness on the scale of 0 to 10; distinction between upper and lower clouds is sometimes made. The weather is given in general (French) terms. The rainfall is given in millimetres and measured at the moment of simultaneous observation. Tchang-kia-tchouang, the original gives barometer in millimetres reduced to sea-level, temperature in Centigrade, velocity in kilometres for past 3 hours 53 minutes, clouds on scale of 0–10, no distinction between upper and lower.

DANISH SERIES (furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen).—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6. The weather is occasionally given by the Vienna symbols, but it is not certain that they always refer to the moment of simultaneous observations, except at Copenhagen. No distinction is made between upper and lower clouds, and the direction of movement, together with the rainfall, is entirely omitted.

FRENCH SERIES (furnished by co-operation of the Central Meteorological Office of France, Professor E. Mascart, Director, and respective observers).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in metres per second for Mont Louis and Perpignan. In general the rainfall is measured at 9 a. m., local time. The direction of upper and lower clouds is given, but no distinction is made as to kind. The degree of cloudiness is given on a scale of 0 to 4 at Clermont-Ferrand and Puy de Dome, while at other stations the scale of 0 to 10 is employed, or general weather terms, from which the amount of cloudiness is inferred. The weather is given in general terms, except occasionally by the Vienna symbols at Mont Louis and Perpignan. At Besançon the observations are taken at at midday instead instead of 0.32 p. m.

GERMAN SERIES (furnished by co-operation of Prof. Dr. G. Neumeyer, Director of the German Marine Observatory at Hamburg).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The kind of clouds is occasionally given, but no distinction is made between upper and lower; the amount is given on a scale of 0 to 10, but the kind is rarely given. The weather is given in Vienna symbols or in general terms. At Berlin observations are taken at 2 p. m., instead of 1.02 p. m.

GREEK SERIES (furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens).—The originals give the barometer corrected for temperature only and the thermometer in Centigrade. Hygrometrical observations are not given. The kind of clouds is occasionally given, and the amount is inferred from the general weather terms. The movement of the air is indicated by force on a scale of 0 to 10.

INDIAN SERIES (furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta).—The barometric observations refer to the Calcutta standard, which requires a correction of —0.011 inch, or 0.28 mm., as compared with the Kew standard. The wind-velocity given is the average rate of wind since the observation of the preceding day. All conversions are published as given in the originals where the data are recorded to an additional decimal. The weather is given by the Beaufort notation, Vienna symbols, or special symbols.

ITALIAN SERIES (by authority of the Minister of Agriculture, Industry, and Commerce—furnished by co-operation of Professor P. Tacchini, Director of the Central Meteorological Office at Rome, and respective observers).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometres per hour, or by force on a scale of 0 to 4, as at Mondovi, Florence, and Cagliari. No distinction is made between upper and lower clouds, and the amount is given on a scale of 0 to 10.

JAPANESE SERIES (furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei).—The rainfall is measured at 9.30 a. m., local time, and the conversions are all published as given in the originals. Distinction is generally made between upper and lower clouds, and the amount is given on a scale of 0 to 10. The weather is given in general terms.

MAURITIUS SERIES (furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius).—All conversions are published as given in the originals. The direction of the wind is given to 64 points, and the rainfall is measured at 9.30 a. m., local time.

MEXICAN SERIES (by authority of the Secretary of Public Works—furnished by co-operation of Señor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers).—All conversions are published as given in the originals, but when an evident mistake has been made, the data is queried at this office. The kind of clouds is given, and also the direction and amount of both upper and lower. The degree of cloudiness is indicated on a scale of 0 to 10. Rainfall is generally measured at 6 a. m., local time.

NETHERLANDS SERIES (furnished by co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht).—The originals give the barometer in millimetres reduced to sea-level and the temperatures in Centigrade. The movement of the air is indicated by pressure in kilograms per square metre, except at Hellevoetsluis, which gives force on a scale of 0 to 12. The humidity is not given on the originals, but for two stations it is computed from the hygrometrical observations. The weather is only given for Utrecht, from which the amount of cloudiness at that station is inferred.

NORWEGIAN SERIES (furnished by co-operation of Professor H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiana).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade The movement of the air is indicated by velocity in metres per second or by force on a scale of 0 to 6. The weather is occasionally given by Vienna symbols. At Bergen observations upon the weather and degree of cloudiness are made at 2 p. m., local time. At Brono the observations are taken at 2 p. m., instead of 12.57 p. m.

PORTUGUESE SERIES (furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon).—In the originals the barometer is given in millimetres and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometres per hour. The weather is occasionally given by the Vienna symbols. The rainfall is measured at noon each day.

RUSSIAN SERIES (furnished by co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. At Astrakhan the barometer-cistern is below sea-level. The movement of the air is indicated by velocity in meters per second. No distinction is made between upper and lower clouds; the amount is given on a scale of 0 to 10, and the kind occasionally. The weather is occasionally given by the Vienna symbols.

SCOTTISH SERIES (furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers).—The originals give the barometer as read off and the movement of the air is indicated by force on a scale of 0 to 6. Distinction is made between upper and lower clouds as to degree, and the amount of cloudiness is given on a scale of 0 to 10. The direction of upper clouds is given separately. The rainfall, temperature, and humidity are not given at North Unst. The wind direction is given to 32 points.

SPANISH SERIES (furnished by co-operation of the Royal Observatory at Madrid, and respective observers).—The movement of the air, except for sub-series, is given in kilometres per hour. The kind of clouds is occasionally given, and the degree of cloudiness on a scale of 0 to 10. The rainfall at San Juan is measured at 4 p. m., local time, and at San Fernando at midnight. The weather is given in general (Spanish) terms.

SWEDISH SERIES (furnished by co-operation of Professor R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Professor H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in metres per second for Upsala. The kind of clouds is not given, but the degree of cloudiness is indicated on a scale of 0 to 10. The rainfall is measured at 8 a. m., local time, and the weather is occasionally given by the Vienna symbols.

SWISS SERIES (furnished by co-operation of Professor E. Plantamour, Director of the Observatory at Geneva).—The originals give the barometer in millimetres, corrected for temperature only, and the thermometer in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10.

TURKISH SERIES (furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Professor C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut).—The originals give the barometer in millimetres reduced to sea-level. The temperature is given in Centigrade. The movement of the air is indicated by force on a scale of 0 to 7 for Valona, and on a scale of 0 to 12 for Beirut. At Constantinople the velocity is given in meters per second. The kind of clouds is not given, but the amount is indicated on a scale of 0 to 10, except at Valona, at which station it is inferred from the general weather terms.

UNITED STATES SERIES (by authority of the Secretary of War—furnished by co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army).

UNITED STATES SUB-SERIES (furnished by co-operation of the respective observers).—The originals generally give the barometer reduced to sea-level

and the temperature in Fahrenheit. At Bogota and Navassa the barometer is corrected for temperature only; at Puerto Berrio, is given as read off, and at Rivas is omitted. The movement of the air is generally indicated by velocity in miles per hour, except on a scale of 0 to 10 for Bogota, Paramaribo, and Rivas, and 0 to 12 for Puerto Berrio. The wind direction is generally given to 16 points, except 8 points for Bogota and 32 points for Rivas. At Rivas the humidity is obtained by readings from Saussure's hygrometer.

BRITISH NAVAL SERIES (furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary).—The originals give the barometer as read off. The wind direction is given to 32 points. The movement of the air is indicated by force on a scale of 0 to 12. The distinction between upper and lower clouds is made, as to direction, but not as to amount. The height of the sea-disturbance is given on a scale of 0 to 9, and the weather by the Beaufort notation. The direction of movement of wind, clouds, and sea is compass direction, corrected only for deviation caused by the iron in the ship, while the correction for magnetic variation is applied at this office. The humidity is not given, but is computed from the hygrometrical observations.

PORTUGUESE NAVAL SERIES (furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon).—The originals give the barometer in millimetres, corrected for temperature only, and the thermometer in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The humidity is not given, but is computed from the hygrometrical observations. The kind of clouds is not given, but the amount is indicated on a scale of 0 to 10; the direction of movement is given without distinction between the upper and lower. The height of sea disturbance is given on a scale of 0 to 9 and the weather by the Beaufort notation. The rainfall is not measured, but the duration is generally given inhours and minutes.

SWEDISH NAVAL SERIES (furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm).—The originals give the barometer as read off. The movement of the air is indicated by force on a scale of 0 to 12, and the direction is corrected for magnetic variation at this office. The humidity is not given, but is computed from the hygrometrical observations. The rainfall is omitted. The height of the sea-swell is given on a scale of 0 to 9 and the weather by the Beaufort notation.

UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy—furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation).—The originals give the barometer as read off. The humidity is not given, but is computed from the hygrometrical observations. The sea-swell and weather are given in general terms. The direction of the wind is compass direction, corrected for variation.

MERCHANT-MARINE SERIES (furnished by co-operation of the owners, agents, &c., of the respective lines and vessels).—Same as U. S. Naval.

OCEAN SQUARES.—The table of ocean square data shows (1) the location of the centres of squares whose sides extend 5° each in latitude and longitude, (2) the number of days for which observations are at hand within the respective squares, and the total number of simultaneous observations reported on those days, (3) the monthly mean pressure and temperature of the air, and the mean force and total frequency of the wind at 7 a. m., Washington time, computed for the centre of each square from daily readings as obtained by interpolation between the isobars and isotherms of the daily international simultaneous weather maps.

ERRATA.

MONTHLY SUMMARY, July, 1882, in the table showing the deviation in pressure and temperature at isolated stations during November, 1881, page 9, the following corrections should be made, viz.: Tashkend, mean temperature (1st column), for 13°.8 read 42°.8; Barnaul, for 42°.8 read 22°.0; Yeniseisk, for 22.0 read 13°.8.

MONTHLY SUMMARY, October, 1882, page 2, French, Lamballe, reduced barometer 29.77 inches, 756.2 mm., should read 29.84 inches, 758.0 mm.; page 13, 2d column, 27th line, for Norwegian, read Netherlands.

DAILY BULLETIN, November 7, 1882, page 1, British, Aberdeen, rainfall 0.270 inches, should read 0.200; page 2, French, Lorient, actual barometer 29.99 inches, should read 29.89.

10th, page 3, Italian sub-series, Naples, actual barometer 29.38 inches, should read 29.28; Japanese, Akita, actual barometer 30.28 inches, should read 30.38.

16th, page 3, Swedish, Haparanda and Umea, actual barometer 30.60 and 30.39 inches, should read 30.39 and 30.30 inches, respectively.

20th, page 5, Springfield, Mass., reduced barometer 765.2 mm., should read 762.0 mm.

22d, page 7, s.s. Nessmore, longitude W. 33° 58′, should read W. 34° 58′.

26th, page 2, French, Gréasque, reduced barometer 30.61 inches, 777.6 mm., should read 29.83 inches, 757. 6 mm.; page 5, Port Eads, reduced barometer 764.8 mm., should read 764.0 mm.

29th, page 8, bk. Joseph A. Ropes, latitude S., should read N.

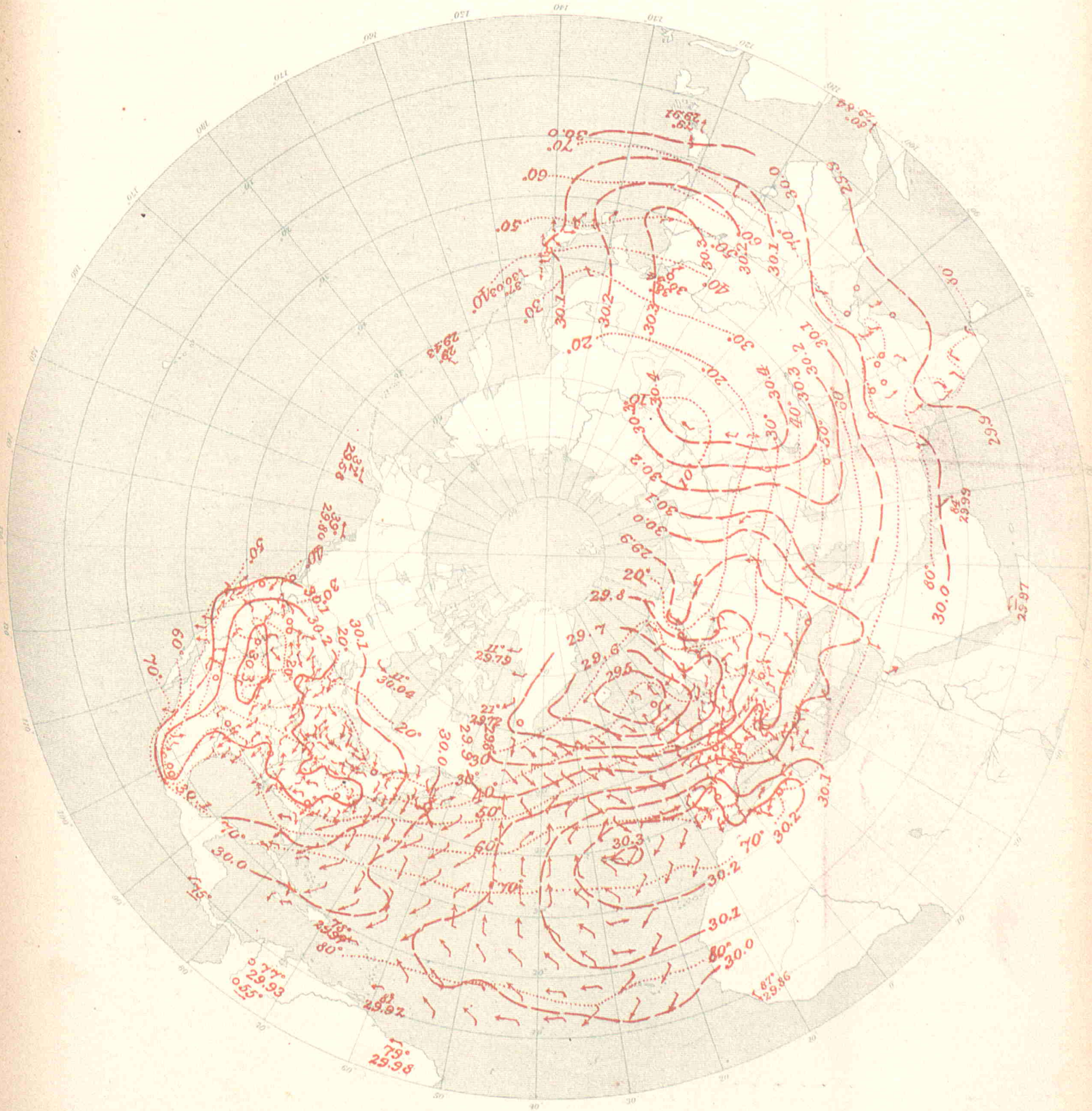
PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,

Brig. & Bvt. Maj. Gen'l,

Chief Signal Officer, U. S. A.

International Chart II. November, 1882. Isobars, Isotherms, and Winds.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

WAR DEPARTMENT,
OFFICE OF THE CHIEF SIGNAL OFFICER OF THE ARMY OF THE UNITED STATES.

BULLETIN

OF

INTERNATIONAL METEOROLOGY

FOR THE MONTH OF DECEMBER, 1882.

PRINTED FOR EXCHANGE WITH CO-OPERATING OBSERVERS.

WASHINGTON, D. C.:
JANUARY, 1884.

012

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 1, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.14	765.6	60.4	15.8	79	n.	.....	.....	1	.....	2	.....	.....	0	0	fair	Malaterre.
Algiers	.....	.....	29.99	761.7	57.2	14.0	49	sw.	.....	.....	3	.....	6	.....	.....	0.169	4.3	cloudy	Thève.
La Calle	.....	.....	29.86	758.5	51.4	10.8	89	w.	.....	.....	4	.....	4	.....	.....	1.240	31.5	cloudy	Fonfréde.
Tunis	.....	.....	29.82	757.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.13	765.2	55.4	13.0	71	ese.	.....	.....	2	.....	0	.....	.....	0	0	clear	Pérès.
Tebessa	.....	.....	29.92	760.0	46.8	8.2	81	w.	.....	.....	2	.....	2	.....	.....	0.039	1.0	fair	Dognon.
Geriville	.....	.....	.....	.....	48.6	9.2	44	nnw.	.....	.....	4	.....	0	.....	.....	0	0	clear	Lonchamp.
Laghouat	.....	.....	29.96	761.0	52.5	11.4	29	nw.	.....	.....	5	.....	1	.....	.....	0	0	very fair	Abraham.
Biskra	.....	.....	30.00	762.1	62.2	16.8	30	nnw.	.....	.....	6	.....	6	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	30.08	764.0	30.17	766.3	60.2	15.7	67	sse.	8	3.6	.....	.....	1	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.22	742.2	29.79	756.7	33.4	0.8	92	ne.	.....	.....	2	.....	10	.....	.....	0.047	1.2	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.13	739.9	29.93	760.3	30.2	— 1.0	92	e.	12.5	5.6	.....	.....	10	.....	.....	0.004	0.1	.....	Dr. Wierzbiski.
Eperies	28.99	736.3	29.91	759.7	34.2	1.2	85	calm	.....	.....	0	.....	10	.....	.....	0.177	4.5	.....	Julius Mikolik.
Gratz	28.58	725 9	29.88	758.9	31.3	— 0.4	96	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.40	721.3	29.87	758.7	37.4	3.0	69	sse.	.....	.....	4	.....	0	.....	.....	0.047	1.2	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.45	722.7	29.86	758.5	27.0	— 2.8	90	calm	.....	.....	0	.....	10	.....	.....	0.244	6.2	gloomy	The Staff.
Lemberg	28.98	736.0	30.02	762.6	25.7	— 3.5	83	e.	.....	.....	3	.....	10	.....	.....	0.024	0.6	.....	Dr. T. Stanecki.
Pola	29.46	748.2	29.57	751.1	37.6	3.1	81	ne.	.....	.....	3	.....	10	.....	.....	0.260	6.6	.....	I. R. Hydrographic Office.
Szathmar	29.37	746.1	29.84	757.9	40.6	4.8	73	s.	.....	.....	2	.....	10	.....	.....	0.157	4.0	.....	Joseph Midlinszky, S. J.
Szegedin	29.51	749.6	29.80	757.0	36.7	2.6	82	ne.	.....	.....	2	.....	6	.....	.....	0.236	6.0	.....	Karl Stancel.
Trieste	29.55	750.5	29.65	753.1	34.3	1.3	80	ne.	.....	.....	4	.....	10	.....	.....	0	0	.....	Royal Academy.
Vienna	29.15	740.5	29.91	759.6	26.8	— 2.9	98	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.88	758.9	29.98	761.5	34.5	1.4	74	wnw.	5	2.2	.....	.....	6	.....	.....	0.120	3.0	misty	W. Boswell
Armagh, Observatory	29.64	752.8	29.88	758.9	37.8	3.2	92	nw.	2	0.9	.....	.....	10	.....	.....	.....	.....	raining	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.90	759.4	35.2	1.8	90	ese.	16	7.2	.....	.....	9	.....	.....	.....	.....	misty	John Harnup.
Bolton, Sharples	29.38	746.2	29.92	760.0	36.7	2.6	78	sse.	3	1.3	.....	.....	10	.....	.....	.....	.....	foggy	Thomas Mackereth.
Bradford, Yorkshire	29.52	749.8	29.92	760.0	34.3	1.3	83	ne.	.....	.....	2	.....	10	.....	.....	0	0	overcast	McLandsborough & Preston.
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	83.0	28.3	67	ne.	.....	.....	2	.....	6	.....	.....	.....	.....	gloomy	Corpl. J. Surgeuor, A. H. C.
Cardington	.....	.....	.....	.....	31.4	— 0.3	100	w.	.....	.....	0.2	.....	10	.....	.....	.....	.....	dense fog	John McLaren.
Chatham, School M. E.	29.81	757.2	29.95	760 7	32.6	0.4	90	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.46	748.3	29.69	754 1	48.1	8.9	96	sse.	.....	.....	2	.....	9	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.66	702.6	29.81	757.2	78.0	25.6	61	se.	.....	.....	1	.....	5	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.62	752 3	29.85	758.2	88.0	31.1	66	ne.	.....	.....	1	.....	5	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.11	764.8	30.17	766.3	56.0	13.3	92	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.73	755.1	29.94	760.5	36.1	2.3	77	ene.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.77	756.1	29.95	760.7	31.8	— 0.1	96	ene.	.....	.....	1	.....	10	.....	.....	.....	.....	foggy	The Staff.
Guernsey	29.57	751.1	29.88	758.9	41	5.0	91	s.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	29.91	759 7	29.95	760.7	32.6	0.3	90	n.	2	0.9	.....	.....	.....	.....	.....	.....	.....	foggy	The Staff.
Leicester, Museum	29.68	753.9	29.94	760.5	29.8	— 1.2	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.70	754.4	29.77	756.1	59.0	15.0	96	w.	.....	.....	3	.....	7	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.30	769 0	30.35	770.9	67.0	19.4	60	ne.	.....	.....	3	.....	7	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.39	746.5	29.94	760.5	31.4	— 0.3	96	ene.	.....	.....	2	.....	5	.....	.....	.....	.....	foggy	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.70	754.4	29.93	760.2	29.0	— 1.7	96	ne.	.....	.....	1	.....	.....	.....	.....	.....	.....	foggy	The Staff.
Plymouth	29.70	754.4	29.78	756.4	44.0	6.7	92	s.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	John Merrifield.
Sandwick Manse, Orkneys	29.85	758.2	29.96	761.0	36.8	2.7	83	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty	Rev. C. Clouston, L.L.D.
Scutari Cemetery, Turkey	29.81	757.2	29.88	758.9	55.0	12 8	68	e.	.....	.....	1	.....	9	.....	.....	.....	.....	gloomy	W. H. Lyne.
Sheffield	29.67	753.6	29.96	761.0	33.4	0.8	95	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy	W. F. Cooper.
Silloth Rectory	29.89	759.2	29.92	760.0	33.8	1.0	81	e.	.....	.....	2	.....	6	.....	.....	0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.94	760.5	32.4	0.2	94	nne.	7	3.1	.....	.....	10	.....	.....	.....	.....	d. clouds	I. New.
Stratfield Turgiss	29.70	754.4	29.93	760.2	31.3	— 0.4	95	sw.	.....	.....	1	.....	9	.....	.....	.....	.....	foggy	Rev. C. H. Griffith, F. M. S.
Truro, Royal Institution	29.61	752.1	29.86	753.4	50	10.0	86	se.	.....	.....	6	.....	8	.....	.....	.....	.....	gloomy	W. Newcombe.
Valencia, Observatory	29.94	760.5	29.96	761.0	47.1	8.4	70	nw.	19	8.5	.....	.....	6	.....	.....	.....	.....	d. clouds	The Met'g'l Office.
Canadian.																			
Bathurst, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson
Charlottetown, P. E. Island	29.86	758.4	29.90	759.4	20	— 6.7	84	w.	5	2.2	.....	5 cs	5 s	sw.	.....	0.470	11.9	fair	H. J. Cundall, C. E
Chatham, N. B*	29.82	757.4	29.89	759.2	16	— 8.9	91	sw.	5	2.2	.....	.....	10 n	.....	sw.	0.14	3.6	cloudy	G. A. Blair.
Father Point, Quebec*	29.77	756.1	29.79	756.7	14	—10.0	100	sw.	10	4.5	.....	.....	10 n	.....	calm	0.20	5.1	threatening	J. McWilliams.
Fort Garry, Manitoba*	29.27	743 4	30.17	766.3	10	—12.2	80	n.	13	5.8	.....	.....	10 n	.....	.....	0	0	cloudy	James Stewart.
Halifax, N. S*	29.83	757.7	29.97	761.2	28	— 2.2	88	w.	1	0.4	.....	.....	10 k	.....	w.	inap.	inap.	light rain	A. Allison.
Kingston, Ontario*	29.42	747.3	29.76	755.9	34	1.1	88	w.	11	4.9	.....	.....	10 n	.....	sw.	0.39	9.9	light snow	A. P. Knight, M. A
Montreal, Quebec*	29.48	748.8	29.70	754.4	24	— 4.4	96	s.	14	6.3	.....	.....	10 n	.....	.....	0.05	1.3	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.10	739.1	29.83	757.7	23	— 5.0	73	n.	12	5.4	.....	2 k	2 ks	w.	w.	0.55	14.0	fair	Rev. R. Mosley.
Port Dover, Ontario	29.23	742.4	29.94	760.5	33	0.6	100	sw.	20	8.9	.....	.....	10 n	.....	sw.	0.03	0.8	threatening	H. Morgan.
Port Stanley, Ontario	29.31	744.5	29.98	761.5	33	0.6	88	w.	28	12.5	.....	.....	10 n	.....	w.	0.10	2.5	cloudy	M. Payne.
Quebec, Quebec*	29.45	748.0	29.79	756.7	15	— 9.4	100	e.	.....	.....	1	.....	10 n	.....	.....	0.06	1.5	heavy snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.24	742.7	29.71	754.6	25	— 3.9	80	nw.	5	2.2	.....	.....	8 cs	.....	nw.	0.17	4.3	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.10	739.1	29.84	757.9	33	0.6	92	nw.	11	4.9	.....	.....	10 s	.....	.....	0.04	1.0	light snow	.....
St. Andrews, N. B	29.81	757.2	29.83	757.7	20	— 6.7	78	w.	5	2.2	.....	.....	8 k	.....	.....	0.20	5.1	fair	.....
Sydney, C. B*	29.86	758.4	29.92	760.0	32	0.0	78	sw.	17	7.6	.....	0	4 ks	.....	w.	0	0	fair	T. C. Hill, C. E
Toronto, Ontario*	29.46	748.3	29.86	758.4	32	0.0	85	w.	28	12.5	.....	.....	10 ks	.....	w.	0.02	0.5	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.87	758.7	29.94	760.5	32	0.0	92	w.	16	7.2	.....	.....	10 s	.....	w.	0.04	1.0	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.41	721.6	29.87	758.7	32.0	0.0	100	wnw.	.....	.....	8	.....	10 s	.....	wnw.	0.275	7.0	snowing	Wm. Wylie.
St. Johns, Newfoundland	29.71	754.6	29.95	760.7	39	3.9	91	sw.	3	1.3	.....	.....	10	.....	.....	0.10	2.5	overcast	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.98	761.5	30.01	762.2	73.0	22.8	84	e.	9.3	4.2	.....	6 cs	10	.....	.....	0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
												Upper	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.61	625.1	.....	.....	25.9	— 3.4	.....	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	29.76	755.9	29.87	758.7	41.4	5.2	65	sw.	7.4	3.4	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.07	763.7	30.09	764.3	47.7	8.7	88	s.	4.0	1.8	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S. J.
DANISH.																			
Copenhagen	29.99	761.8	30.04	763.0	32.4	0.2	98	se.	25	11	.....	.....	10	.....	.....	.....	.....	snowing	Oversergent Fischer.
Fanoe	29.95	760.8	29.97	761.3	31.8	— 0.1	92	sse.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.46	748.2	29.50	749.3	22.6	— 5.2	93	ne.	.....	.....	4	.....	4	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.39	746.4	29.41	746.9	24.3	— 4.3	.....	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.66	753.4	29.71	754.6	14.0	—10.0	.....	e.	.....	.....	4	.....	6	.....	.....	.....	.....	snowing	
Stykkisholm, Iceland	29.56	750.8	29.60	751.9	36.7	2.6	79	ne.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.91	759.6	29.94	760.5	39.0	3.9	84	ese.	11	5	.....	.....	10	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.89	759.2	29.98	761.6	31.8	— 0.1	100	e.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	Loerer Oesterboi.
Upernavik, Greenland	29.79	756.6	29.83	757.8	— 6.5	—21.4	.....	e.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.29	743.9	29.96	760.9	38.8	3.8	80	calm	.....	.....	0	ck	0	.....	.....	0	0	.....	M. Labroue, Directo
Alençon, Normal School	29.47	748.5	30.02	762.5	33.4	0.8	96	w.	.....	.....	1	.....	fg	.....	.....	0.008	0.2	dense fog	M. Nicot, Director.
Arras, Engineer School	29.67	753.6	29.94	760.4	31.5	— 0.3	.....	s.	.....	.....	1	.....	10	.....	.....	0	0	foggy	M. Fénéon, Command't.
Avignon, Normal School	29.71	754.7	29.79	756.7	40.1	4.5	65	n.	.....	.....	6	.....	0	.....	.....	0	0	clear	M. Giraud, Director
Bar-sur-Seine	29.42	747.2	30.00	762 0	31.1	— 0.5	92	ne.	.....	.....	1	.....	10	.....	.....	0.067	1.7	covered	M. Saillard, Director
Beauvais, Normal School	29.71	754 5	29.98	761.6	35.4	1.9	96	n.	.....	.....	1	.....	10	.....	.....	0	0	foggy	M. Frère Eugène Marié
Besançon, Normal School	29.00	736.6	29.94	760.5	31.6	— 0.2	96	nne.	.....	.....	1	.....	11	.....	n.	0.126	3.2	.....	M. Gobin, Director.
Bordeaux, Observatory	29.66	753.3	29.93	760.1	40.6	4.8	69	se.	.....	.....	1	.....	10	.....	.....	0.004	0.1	covered	M. Rayet, Director.
Bourges, Normal School	29.42	747.3	30.00	761.9	33.4	0.8	85	w.	.....	.....	1	.....	k	.....	w.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.63	752.7	29.87	758.9	42.8	6.0	94	ne.	.....	.....	1	.....	10	.....	ne.	c.472	12.0	.....	M. de Kermarée, Dir.
Caen, Normal School	29.83	757.6	29.90	759.5	37.6	3.1	76	.....	.....	.....	.....	.....	10	.....	.....	0	0	covered	M. Berson, Director
Châlons-sur-Marne, N.Sch'l	29.72	755.0	30.06	763.5	38.2	— 2.1	96	nw.	.....	.....	2	.....	10	.....	.....	0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.43	747.4	29.97	761.1	29.8	— 1.2	68	ne.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.56	725.3	29.96	760.9	37.0	2.8	59	nnw.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.10	739.0	29.97	761.2	33.8	1	76	n.	.....	.....	1	.....	10	n.	n.	0.35	9.	.....	M. de Villemontée, Dir
Commercy, Normal School	29.09	738.9	29.99	761.7	30.4	— 0.9	90	nw.	.....	.....	1	.....	n	nw.	nw.	0	0	.....	Dr. Coulet, Director.
Gap, Normal School	27.19	690.7	29.81	757.1	32.4	0.2	.....	n.	.....	.....	3	.....	1	.....	s.	0	0	.....	M. Jeanginard, Director.
Gréasque, du Rhone	28.56	725.5	29.72	754.8	38.8	3.8	70	nw.	.....	.....	3	.....	1	.....	nw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.09	738.8	29.89	759.2	34.0	1.1	81	nw.	.....	.....	4	.....	kn	.....	ne.	0	0	.....	M. Ablard, Director.
Guéret	28.34	719 8	29.99	761.7	33.8	1	65	sw.	.....	.....	2	.....	2 s	.....	n.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.56	750.8	29.84	757.8	37.8	3.2	97	se.	.....	.....	2	.....	10	.....	se.	.....	.....	raining	M. Olliffrault, Director
Lescar, Normal School	29.31	744.4	29.87	758.8	48.9	9.4	71	w.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.75	755.6	29.85	758.2	46.4	8.0	86	se.	.....	.....	1	.....	10	.....	.....	0.547	13.9	raining	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.87	733.2	29.97	761.2	32.0	0.0	78	n.	.....	.....	2	.....	10	.....	n.	0.118	3.0	hazy	M. André, Director.
Mans, Normal School	29.64	752.9	29.97	761.1	34.2	1.2	96	n.	.....	.....	1	.....	10	.....	.....	0	0	foggy	M. Piboën, Director
Marseille, Observatory	29.48	748 7	29.75	755.6	41.9	5.5	71	nw.	.....	.....	3	.....	1	.....	nw.	0	0	.....	M. Stephan, Director
Mt. Louis	24.56	623.9	29.41	746.9	29.3	— 1.5	43	sw.	9.4	4.2	.....	.....	7	w.	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.69	754.0	29.85	758.3	46.2	7.9	43	nnw.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.10	739.1	29.92	759.9	32.4	0.2	66	nnw.	.....	.....	1	ck	0	.....	.....	0.055	1.4	.....	M. Hasse, Director.
Nantes, Observatory	29.79	756.7	29.95	760.8	41.0	5	74	se.	.....	.....	1-2	.....	10 n	.....	.....	0.028	0.7	.....	M. Larocque, Director.
Perpignan, Observatory	29.82	757.3	29.93	760.2	46.9	8.3	46	nw.	13.0	5.8	.....	.....	3	nnw.	nw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.94	532.0	.....	.....	12 6	—10.8	.....	nw.	.....	.....	1	.....	.....	.....	nw.	0.945	24.0	.....	M. Vaussenat.
Privas, Normal School	28.79	731.3	29.90	759.4	35.2	1.8	70	n.	.....	.....	1	.....	2 s	s.	n.	0	0	slightly cl'dy	M. Tailleu.
Puy de Dôme Obs'y, Summit	24.89	632.3	.....	.....	16.5	— 8.6	94	nne.	.....	.....	2	.....	0	.....	.....	0.492	12.5	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	29.89	759.2	29.92	760.0	40.3	4.6	83	se.	.....	.....	2	.....	10	.....	nw.	0.12	3.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.70	754.4	29.93	760.1	37.8	3.2	90	se.	.....	.....	1	.....	10	.....	.....	0	0	foggy	M. Brotier, Director.
Rodez, Normal School	27.80	706.1	30.04	762.9	32.0	0.0	82	s.	.....	.....	1	.....	1	.....	s.	0	0	clear	M. Seger, Director.
Rouen, Normal School	29.89	759.3	29.94	760.5	35.2	1.8	96	n.	.....	.....	1	.....	10	.....	n.	0.004	0.1	foggy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	40.6	4.8	74	sw.	.....	.....	1	.....	10	sw.	.....	0.358	9.1	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.81	757.1	29.97	761.3	31.6	— 0.2	98	nw.	.....	.....	1	.....	10	.....	.....	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.27	743.5	30.00	761.9	40.3	4.6	65	n.	.....	.....	1	.....	5	nw.	.....	0.031	0.8	cloudy	M. Bailland, Director
Tours	29.78	756.5	29.96	761.0	36.7	2.6	96	n.	.....	.....	1	.....	fg	.....	.....	0.016	0.4	dense fog	M. de Tastes.
Versailles, Observatory	29.47	748.4	29.96	760.9	32.7	0.4	100	n.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dr. A. Périgny, Director.
Sub-series.																			
St. Martin du Hinx	29.80	756.8	29.95	760.6	48.4	9.1	81	s.	4.0	1.8	.....	.....	10 k	.....	sw.	0.063	1.6	hazy	M. Cartier, Director.
GERMAN.																			
Ansbach	28 37	720.6	29.89	759.1	29.1	— 1.6	84	e.	.....	.....	2	.....	10	e.	.....	0.067	1.7	.....	Prof. Jnedt.
Bamberg	29.04	737.6	29.88	759.0	31.5	— 0.3	93	calm	.....	.....	0	.....	10	.....	.....	0.130	3.3	snowing	Prof. Dr. Hoh.
Berlin	29.76	755.9	29.95	760.6	32.7	0.4	89	e.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	Prof. Dr. Arndt.
Breslau	29.40	746.8	29.93	760.3	33.6	0.9	86	e.	.....	.....	2	.....	10	.....	.....	0.004	0.1	snowing	Royal University Obs'y.
Carlsruhe	29.46	748.2	29.91	759.8	33.4	0.8	88	n.	.....	.....	1	.....	10	nw.	.....	0.008	0.2	snowing	Albert Senz.
Cassel	29.16	740.6	29.87	758.7	31.3	— 0.4	80	n.	.....	.....	2	.....	8	n.	.....	0.008	0.2	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.55	750.6	29.93	760 3	36.0	2.2	62	nne.	.....	.....	2	.....	9	.....	.....	0.004	0.1	.....	Physical Society.
Friedrichshafen	28.41	721.7	29.91	759.6	32.0	0.0	89	w.	.....	.....	2	.....	10	w.	.....	0.031	0.8	light snow	Wilhelm, Chief Te
Hamburg	29.91	759.6	30.00	762.0	31.8	— 0.1	94	e.	.....	.....	2	.....	8	.....	.....	0	0	light fog	E. Preller.
Kiel	29.98	761.5	30.00	761.9	33.4	0.8	87	sse.	.....	.....	1	.....	3	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.50	749.2	29.94	760.4	30.9	— 0.6	92	ene.	.....	.....	1	.....	10	.....	.....	.....	.....	snowing	H. Leppig, Asst.
Magdeburg	29.74	755.4	29.94	760.4	32.5	0.3	94	ene.	.....	.....	1	.....	10 ks	.....	.....	0	0	foggy	Weather Observatory.
Memel	30.24	768.1	30.29	769.3	18.7	— 7.4	56	ese.	.....	.....	3	5 c	0	.....	.....	.....	.....	.....	Issermann.
Munich	27.97	710.3	29.81	757.2	28.2	— 2.1	87	n.	.....	.....	1	.....	10	.....	.....	0.004	0.1	.....	Central Station.
Neufahrwasser	30.13	765.4	30.15	765.8	21.2	— 6.0	74	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.37	746.0	29.89	759.3	34.7	1.5	91	ne.	.....	.....	2	.....	10	.....	.....	0.248	6.3	.....	Dicknether.
Stuttgart	28 90	734.1	29.83	757.7	32.4	0.2	96	s.	.....	.....	1	.....	10	.....	.....	0.102	2.6	.....	Prof. Dr. Schoder.
Wustrow	30.05	763.3	30.08	763.9	31.3	— 0.4	92	ese.	.....	.....	2	.....	10	.....	.....	0	0	.....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.39	746.4	29.77	756.2	59.2	15.1	.....	s.	.....	.....	3.0	.....	10	.....	.....	0.476	12.1	raining	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	29.88	758.9	29 93	760.2	76.2	24.6	77	wsw.	14.0	6.3	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.37	746.1	29.84	758.0	83.1	28.4	35	wnw.	8.0	3.6	.....	.....	0	.....	.....	0	0	hazy	
Bombay	29.80	756.8	29.84	757.8	79.9	26.6	66	nnw.	23.0	10.3	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	27 98	710.6	29.84	757.8	76.9	24.9	74	ssw.	5.0	2.2	.....	.....	6	ese.	ese.	0.25	6.4	d. clouds	
Trichinopoly	29.55	750.5	29.82	757.5	87.1	30.6	59	wnw.	1.0	0.4	.....	.....	4	.....	.....	0	0	d. clouds	
Belgaum	27.28	693.0	29.83	757.8	72.8	22.7	83	ssw.	4.0	1.8	.....	.....	8	se.	nw.	0.03	0.8	showery	
Lahore	29.15	740.4	29.92	760.0	62.6	17.0	52	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	28.95	735.3	29.88	758.8	65.8	18.8	45	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.33	744.9	29.91	759.6	70.2	21.2	37	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.79	731.3	29.84	758.0	76.9	24.9	52	calm	2.0	0.9	.....	.....	5	e.	.....	0	0	d. clouds	
Jubbulpore	28.51	724.1	29.89	759.2	71.8	22.1	63	e.	4.0	1.8	.....	.....	4	.....	ne.	0	0	d. clouds	
Lucknow	29.49	749.1	29.88	758.8	71.2	21.8	47	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.56	750.7	29.88	759.0	62.0	16.7	66	ne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.70	754.4	29.89	759.2	67.8	19.9	73	n.	1.9	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.84	707.0	29.90	759.4	65.2	18.4	62	n.	3.3	1.5	.....	.....	1	.....	.....	0	0	blue sky	
Cuttack	29.75	755.7	29.83	757.8	77.0	25.0	75	calm	0	0	.....	.....	8	.....	.....	0	0	d. clouds	
Calcutta, Alipore	29.84	758.0	29.86	758.6	74.0	23.3	71	nne.	2.0	0.9	.....	.....	4	.....	.....	0	0	d. clouds	
Dhubri	29.73	755.2	29.85	758.2	71.4	21.9	77	calm	1.4	0.6	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.77	756.2	29.86	758.6	71.5	21.9	77	calm	0.8	0.3	.....	.....	9	.....	.....	0	0	d. clouds	
Sibsagar	29.56	750.7	29.90	759.5	65.9	18.8	92	ne.	2.0	0.9	.....	.....	6	w.	w.	0.19	4.8	d. clouds	
Jeypore	28.44	722.3	29.90	759.5	72.9	22.7	59	wnw.	2.2	1.0	.....	.....	0	.....	.....	0	0	blue sky	
ITALIAN.																			
Udine	29.31	744.4	29.72	755.0	37.2	2.9	61	ne.	9.4	4.2	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Cloding.
Milan	29.49	741.5	29.73	755.2	38.5	3.6	76	wsw.	4.9	2.2	.....	.....	3	.....	.....	0	0	.....	Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Padua	29.60	751.7	29.71	754.5	40.6	4.8	31	nne.	13.7	6.1			9			0.012	0.3		Prof. Dott. Lorenzoni.
Moncalieri	28.78	730.9	29.72	754.9	36.9	2.7	81	ene.	3.8	1.7			0			0	0		Prof. F. F. Denza.
Genoa	29.46	748.2	29.65	753.1	41.0	5.0	57	n.	11.2	5.0			10	se.		0	0		Prof. G. M. Garibaldi.
Mondovi	27.75	704.9	29.74	755.3	34.9	1.6	66	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.51	749.5	29.56	750.8	43.5	6.4	91	ne.	39.2	17.5			10			0.594	15.1		Prof. Luigi Guidi.
Florence	29.36	745.7	29.62	752.3	41.0	5.0	67	ne.			2		10			0.453	11.5		Prof. Costantino Pittei.
Leghorn	29.48	748.7	29.56	750.9	42.1	5.6	69	ene.	5.6	2.5			10			0.331	8.4		Prof. P. Monte.
Rome	29.33	745.0	29.51	749.5	49.3	9.6	71	n.	1.3	0.6			7			0.791	20.1		Prof. P. Tachini.
Lecce	29.38	746.2	29.63	752.7	54.0	12.2	65	wnw.	11.9	5.3			8	nw.		0.173	4.4		Prof. C. de Giorgi.
Cosenza	28.77	730.8	29.67	753.6	48.9	9.4	74	wsw.	3.1	1.4			10	sw.		1.480	37.6		Prof. D. Conti.
Cagliari	29.44	747.8	29.63	752.7	50.0	10.0	65	nw.			2		6	w.		0.177	4.5		Prof. A. Pacinotti.
Palermo	29.41	747.1	29.67	753.5	54.3	12.4	57	wsw.	11.2	5.0			7	wsw.		0.220	5.6		Prof. G. Cacciatore.
Syracuse	29.69	754.0	29.73	755.1	58.3	14.6	57	sw.	9.8	4.4			8	wsw.		0.079	2.0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.04	737.7	29.57	751.1	48.6	9.2	80	ne.	0.7	0.3			7	nw.		1.051	26.7		Prof. F. Brioschi.
Stelvio	21.69	551.0			11.1	—11.6	89	ne.			2		10			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.72	551.7			13.1	—10.5	67	e.			2		1			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.00	762.1	30.03	762.9	52.0	11.1	73	w.			2	0	8 ck		w.	1.055	26.8	cloudy	Hattori.
Awomori	29.96	761.0	29.99	761.7	41.0	5.0	92	sse.	4.6	2.1			10 n			0.243	6.2	raining	K. Ogawa.
Hakodate	29.92	760.1	29.94	760.4	44.0	6.7	80	wsw.	6.6	3.0		0	6		sw.	0	0		
Hamamatsu	30.17	766.3	30.20	767.1	44.9	7.2	83	e.			2	1 cs	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					46.7	8.2	92	nne.	4.9	2.1		0	0			0	0	clear	
Kanazawa	30.00	762.1	30.11	764.8	48.0	8.9	71	sw.	3.4	1.5		0	0			0	0	clear	S. Endo.
Kioto	30.02	762.5	30.20	767.1	38.5	3.6	96	w.	0.8	0.4		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.95	760.7	30.15	765.8	59.1	15.1	66	se.	4.5	2.0		0	1 s			0.350	8.9	clear	S. Takehayashi.
Niigata	30.04	763.0	30.08	764.0	44.9	7.2	84	se.	6.5	2.9		0	3 ck		w.	0.015	0.4	fair	M. Morita.
Nobiru	30.02	762.6	30.04	763.0	48.1	8.9	76	wsw.	5.4	2.4		0	0			0	0	clear	H. Midzushima.
Numazu	30.09	764.3	30.13	765.2	55.0	12.8	72	wnw.			6	0	0			0	0	clear	R. Kaneda.
Osaka	30.18	766.0	30.20	767.0	41.9	5.5	93	ne.	1.5	0.6		0	0			0	0	clear	H. Omura.
Sapporo					38.1	3.4	83	se.	5.4	2.4		1	0			inap.	inap.	clear	
Tokei Obs'y, Yeddo	30.04	763.0	30.12	765.0	43.1	6.2	78	nnw.	7.3	3.2		3 cs	s	w.		0	0	clear	The Staff.
Wakayama	30.13	765.4	30.19	766.9	44.4	6.9	85	ene.	7.8	3.5		0	0			0	0	clear	Y. Kuwanuea.
MAURITIUS.																			
Mauritius Observatory	29.75	755.6	29.94	760.5	77.2	25.1	81	e.	6.5	2.9			10n;ks			0.01	0.3	overcast	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.87	606.3	30.09	764.3	38.7	3.7	75	ne.	7.4	3.3		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.56	623.8	30.61	777.5	32.9	0.5	89	nnw.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.86	758.5	30.12	765.1	71.5	21.9	43	nne.	0.9	0.4		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.28	591.3	30.60	777.3	32.9	0.5	85	nw.	0.4	0.2		0	2 ks			0	0	clear	The Staff.
Morelia	24.17	614.0	30.03	762.7	47.5	8.6	66	s.			2	3 c	1 k	s.	s.	0	0	½ cloudy	M. Tena, M. D.
Pabellon, Aguascalientes	24.17	613.8	30.38	771.7	37.8	3.2	76	n.			1	0	0			0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.58	598.9	30.16?	775.5?	42.8	6.0	57	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.65	575.4	30.50	774.6	30.2	— 1.0	99	ne.	12.2	5.4			10 ks		ne.	0	0	foggy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.94	760.5	29 94	760.5	35.4	1.9		ese.			2					0	0		
Groningen	29.92	759.9	29.97	761.3	32.4	0.2		s.			1					0	0		
Helder	29 93	760.3	29.93	760.3	32.7	0.4		ssw.			1					0	0		
Hellevoetsluis	29.93	760.3	29.93	760.3	33.1	0.6	88	calm			0					0.047	1.2		
Utrecht	29.92	760.0	29.97	761.2	30.7	— 0.7	94	sse.			2		10			0	0	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.95	760.6	30.01	762.2	30.6	— 0.8	58	ssw.	2	1			1			0	0		
Brono	29.95	760.8	29.99	761.8	34.5	1.4	83	wsw.	18	8			9			0.189	4.8		
Christiania	29.97	761.3	30.13	765.3	27.0	— 2.8	83	e.	7	3			9			0.114	2.9		
Gjesvær	29.90	759.5	29.93	760.1	26.1	— 3.3		ne.			6		10						
Lodingen	29.87	758.6	29.91	759.8	25.7	— 3.5	77	n.			1		1			0	0		
PORTUGUESE.																			
Angra, Azores	30.43	772.8	30.58	776.7	64.4	18.0	88	nnw.	6.9	3.1			2			0	0		Dr. J. A. Sampaio.
Campo Major	29.10	739.1	30.11	764.8	55.0	12.8	61	sw.	5.6	2.5			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.28	769.0	30.36	771.2	64.8	18.2	68	calm	0	0			8	n.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.85	758.3	30.22	767.6	58.5	14.7	68	wnw.	10.5	4.7			8			0	0		The Staff.
Ponta Delgada, Azores	30.54	775.6	30.61	777.4	66.6	19.2	68	calm	0	0			4			0	0		
Saint Paul de Loando	29.04	752.9	29.84	758.0	76.3	24.6	97	n.	1.3	0.6			4	sse.		0	0		
Serra da Estrella	25.24	641.1	30.06	763.5	39.2	4.0	100	nw.	26.6	11.9			10			0.118	3.0	foggy	
RUSSIAN.																			
Akmolinski	28.85	732.8	29.98	761.6	26.4	— 3.1	85	sw.	4	2		0	0						Major K. Lasarew.
Archangel	30.09	764 2	30.11	764.7	— 0.1	—17.8	88	s.	2	1		1 cs	0			0	0		Capt. Ssellwerstow.
Astrakhan	29.96	760.9	29.88	759.0	46.9	8.3	87	sw.	2	1			10 s			0	0		Capt. Wisganow.
Barnaul	29.42	747.3	29.94	760.5	30.4	— 0.9	88	sw.	4	2			10			0.087	2.2		Meteorological Obs'y.
Bielosersk	29.92	760.0	30.45	773.5	— 3.3	—19.6	94	sw.	2	1			10 s			0.008	0.2		
Dorpat	30.14	765.6	30.41	772.4	17.4	— 8.1	100	calm	0	0			10 n			0.008	0.2	light snow	Observatory.
Ekaterinburg	29.09	738.9	30.16	766.0	2.3	—16.5	60	n.	9	4			10			0	0		Meteorological Obs'y.
Elissawetgrad																			
Kasan	29.73	755.2	30.03	762.7	7.0	—13.9	66	ne.	31	14			10					snowing	Observatory.
Kem	29.95	766.6			17.2	— 8.2	88	sw.	18	8			9 ks			0	0		
Kertch	29.98	761.6	30.00	762.1	33.3	0.7	85	nw.	13	6		0	8 n			0	0		Lagorio & Sastyrez.
Kieff	29.47	748.6	30.16	766.1	16.5	— 8.6	64	ne.	11	5		2 c;cs	0					light clouds	Observatory.
Libau	30.26	768.5	30.28	769.1	19.0	— 7.2	56	e.			1		2			0	0		E. Quaas.
Lugan	29.65	753.0	29.86	758.5	23.4	— 4.8	79	nw.	34	15			10			0.004	0.1		Meteorological Obs'y.
Nikolaiev	30.08	764.1	30.16	766.0	28.0	— 2.2	77	n.	4	2		0	0			0	0		Capt. Kurdakow.
Pekin, China	29.65	753.0	29.79	756.6	37.6	3.1	59	calm	0	0		0	0						Physical Observatory.
Petrozavodsk	30.10	764.5	30.32	770.0	10.0	—12.2	89	sw.	9	4		0	7 ks			inap.	inap.		Dr. Bergmann.
Pinsk																			
St. Petersburg	30.41	772.5	30.43	772.9	8.6	—13.0	100	sse.	2	1			10 n			inap.	inap.	light clouds	Central Physical Obs'y.
Sevastopol																			
Semipalatinsk	29.47	748.6	30.16	766.1	25.2	— 3.8	80	e.	9	4			1			0	0		Major Lasarew.
Staroi Bykhov	29.84	758.0	30.35	770.8	14.0	—10.0	58	ese.	9	4		cs	10 k			0	0	light clouds	
Tashkend, Laboratory	28.41	721.7	30.02	762.6	42.4	5.8	56	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.53	724.7	29.95	760.7	58.6	14.8	50	nw.	45	20		0	2 k			0	0		Physical Observatory.
Tomsk	29.59	751.5	29.89	759.2	3.6	—15.8	87	e.	4	2			10						
Vladivostock	29.60	751.7	29.66	753.4	41.9	5.5	59	se.	2	1		0	0			0	0		
Warsaw	29.64	752.9	30.09	764.3	22.1	— 5.5	63	se.	16	7			10					heavy cl'ds.	Astronomical Obs'y.
Wilna	29.89	759.1	30.34	770.7	16.5	— 8.6	70	e.	2	1			9					light clouds	Berg, Assistant.
Yeniseisk	29.91	759 6	30.25	768.3	—37.5	—38.6	80	calm	0	0			0						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.79	756.7	43	6.1	91	s.			7		10			0.2	5.	raining	J. Youngclause.
North Unst			30.05	763.3				e.			4		10						Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.73	755.1	29.84	757.8	51.8	11.0	49	nw.	4.5	2.1		0	3			0	0	clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.93	760.1	29.98	761.6	50.5	10.3	83	nw.	3.8	1.7			10			0.232	5.9	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.02	686.4	30.08	764.1	41.0	5.0	72	nw.	7.8	3.5			10			0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.78	705.6	30.04	763.0	50.2	10.1	55	se.	11.4	5.1		0	7			0	0	cloudy	The Staff.
Murcia, Met. Obs'y	29.86	758.5	30.00	762.1	59.2	15.1	55	nne.	2.5	1.1		2	4	sw.		0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.25	742.9	30.04	763.1	51.4	10.8	90	e.	11.6	5.2		10 n	8 k	w.	w.	1.008	25.6	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.20	741.6	30.11	764.8	48.2	9.1	85	n.	4.3	1.9			10			0.224	5.7	misty	R. Gil Villanueva, Dir.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill	. .	
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.82	757.3	29.87	758.7	76.0	24.4	91	sse.	1.1	0.5	.....	0	5 ks	. . ..	.....	0.189	4.8	fair.....	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.11	764.7	30.21	767.2	55.2	12.9	68	w.	4.5	2.0	.....	3	4	w.	n.	0.023	0.6	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.04	762.9	30.13	765.2	76.6	24.8	94	calm	0	0	.....	3 k	2 k	e.	e.	0.008	0.2	d. clouds.....	Manuel Maese.
Tuguegarao, Philippine Id's	29.77	756.2	29.90	759.5	74.4	23.6	97	nw.	3.3	1.5	.....	.....	10 n	.....	ne.	0.22	5.6	raining.....	José L. Yrastorza.
SWEDISH.																			
Haparanda	29.81	757.2	29.85	758.2	12.6	—10.8	93	nw.	.....	.....	4	.....	8	.....	.....	0	0	.....	
Umea	29.99	761.8	30.04	763.1	24.4	— 4.2	91	nw.	.....	.....	2	.....	10	.....	.....	0.118	3.0	.....	
Hernosand	30.13	765.4	30.19	766.7	21.2	— 6.0	79	sw.	.....	.....	2	.....	4	.....	.....	0.016	0.4	.....	
Stockholm	30.10	764.4	30.27	768.9	28.8	— 1.8	56	s.	.....	.....	2	.....	1	.....	.....	0.020	0.5	.....	
Wisby	30.17	766.2	30.22	767.7	27.7	— 2.4	71	se.	.....	.....	2	.....	0	.....	.....	0	0	....	
Sub-series.																			
Upsala	30.17	766.3	30.26	768.5	24.8	— 4.0	81	se.	7.2	3.2	.....	.....	3	nnw.	.....	0	0	....	S. G. Fineman.
SWISS.																			
Geneva	28.43	722.0	29.91	759.7	36.0	2.2	94	ne.	.....	.....	3	.. ..	3	.....	.....	0.047	1.2	....	The Observatory.
TURKISH.																			
Constantinople	.....	.....	29.93	760.2	54.9	12.7	72	ene.	9	4.0	.....	.....	8	.....	sw.	1.063	27.0	.....	The Observatory.
Valona	.....	.....	29.68	753.8	48.6	9.2	.....	se.	.....	.....	1	.....	10	.....	.....	0	0	covered.....	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.08	763.9	70.2	21.2	67	w.	.....	.....	1	.....	3 ks	.....	sw.	0.045	1.2	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.87	758.7	29.96	761.0	35	1.7	69	s.	9	4.0	.....	.....	10 s	.....	.....	inap.	inap.	cloudy.....	J. O. Barnes.
Alpena, Michigan	29.17	740.9	29.88	758.9	30.5	— 0.8	88	w.	6	2.7	.....	.....	10 s	.....	.....	0.10	2.5	cloudy.....	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.34	643.6	30.42	772.7	30	— 1.1	71	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	W. C. Barnes.
Assiniaboine, Ft., Montana	27.25	692.1	30.28	769.1	33	0.6	71	nw.	13	5.8	.....	.....	10 s	.....	w.	0	0	cloudy	B. C. Lenoir.
Atlanta, Georgia	29.24	742.7	30.48	774.2	31.0	— 0.6	68	w.	9	4.0	.....	0	fg.	.....	.....	0	0	clear.....	H. C. Smith.
Atlantic City, New Jersey	30.19	766.8	30.20	767.1	34	1.1	60	sw.	15	6.7	.....	9 ck	0	sw.	.....	0	0	cloudy	Jas. M. Watson.
Augusta, Georgia	30.29	769.4	30.49	774.4	32	0.0	78	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	John Healy.
Baltimore, Maryland	30.18	766.6	30.23	767.8	32	0.0	60	w.	6	2.7	.....	7 cs	0	nw.	.....	0	0	fair.....	Geo W Felger.
Barnegat, New Jersey	30.15	765.8	30.17	766.3	34.0	1.1	78	w.	20	8.9	.....	8 ck	0	nw.	.....	0	0	cloudy.....	G. A. Hill.
Bennett, Fort, Dakota	28.34	719.8	30.10	764.5	25	— 3.9	76	calm	0	0	.....	3 c	3 s	nw.	.....	0	0	fair	A. Pritchard.
Benton, Fort, Montana	27.28	692.9	30.28	769.1	47	8.3	60	sw.	10	4.5	.....	0	9 ks	.....	sw.	0	0	cloudy.....	S. Wheaton.
Bismarck, Dakota	28.10	713.7	30.11	764.8	24	— 4.4	76	e.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.05	763.3	30.08	764.0	33	0.6	78	w.	31	13.9	.....	0	9 ks	.....	w.	0.03	0.8	cloudy	J. T. Elker.
Boise City, Idaho	27.62	701.5	30.60	777.2	28	— 2.2	92	calm	0	0	.....	0	0	.....	.....	0.02	0.5	clear.....	B. E. Light.
Boston, Massachusetts	29.83	757.7	29.99	761.7	26.0	— 3.3	76	sw.	12	5.4	.....	.....	10 s	.....	s.	inap.	inap.	cloudy.....	O. B. Cole.
Brownsville, Texas	30.42	772.7	30.47	773.9	48.3	9.1	92	ne	3	1.3	.....	0	2 s	.....	.....	0	0	clear.....	M. McCarty.
Buffalo, New York	29.10	739.1	29.90	759.4	37	2.8	91	sw.	38	17.0	.....	.....	10 n	.....	sw.	0.37	9.4	light rain.....	W. Finn.
Buford, Fort, Dakota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. A. Mellen.
Burlington, Vermont	29.49	749.0	29.80	756.9	26.0	— 3.3	77	s.	21	9.4	.....	7 cs	0	w.	. .....	0.01	0.3	fair... ...	G. C. Schaeffer.
Cairo, Illinois	29.95	760.7	30.37	771.4	35.8	2.1	71	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	W. H. Ray.
Cape Henry, Virginia	30.31	769 9	30.33	770.4	30	— 1.1	67	sw.	13	5.8	.....	5 k	0	nw.	.....	0	0	fair.....	A. K. Alderson.
Cape May, New Jersey	30.21	767.3	30.24	768.1	37.0	2.8	82	sw.	28	12.5	.....	7 cs	0	w.	.....	0	0	fair.....	W. E. Smith.
Cape Mendocino, California	29.62	752.3	30.30	769.6	53	11.7	86	calm	0	0	.....	0	0	.....	.....	0.12	3.0	clear.....	J. J. McLean.
Cedar Keys, Florida	30.55	776.0	30.57	776.5	39	3.9	73	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	F. W. Mixer.
Champaign, Illinois	29.28	743.7	30.15	765.8	31.0	— 0.6	68	sw	12	5.4	.....	0	4 s	.....	sw.	0	0	fair.....	L. A. Welsh
Charleston, S. Carolina	30.42	772.7	30.48	774.2	37	2.8	82	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	J. H. Smith.
Charlotte, N. Carolina	29.47	748.5	30.36	771.1	29.0	— 1.7	77	calm	0	0	.....	10 cs	fg.	w.	.....	0	0	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.63	752.6	30.49	774.4	30.0	1.1	84	sw.	2	0.9	.....	3 cs	fg.	.....	.....	0	0	clear.....	B. L. Goulding.
Cheyenne, Wyoming	24.14	613.1	30.42	772.7	45.9	7.7	10	w.	16	7.2	.....	.....	10 k	.....	.....	0	0	cloudy	E. McGovern.
Chicago, Illinois	29.31	744.5	30.07	763.8	30.0	— 1.1	78	sw.	4	1.8	.....	2 c	0	.....	.....	0	0	clear.....	J. Mitchell.
Chincoteague, Virginia	30.25	768.3	30.27	768.8	29.5	— 1.4	82	sw.	5	2.2	.....	3 c	0	.....	.....	0	0	clear.....	O. F. Dickens.
Cincinnati, Ohio	29.57	751.1	30.27	768.8	36	2.2	69	sw.	6	2.7	.. ..	0	1 s	.....	sw.	0	0	clear.....	R. B. Watkins.
Cleveland, Ohio	29.31	744.5	30.10	764.5	33.4	0.8	76	sw.	16	8.0	... .	.....	10 s	.....	nw.	inap.	inap.	cloudy	J. B. Newlin.
Coleman City, Texas	28.55	725.2	30.45	773.4	34	1.1	88	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	L. Dorman.
Columbus, Ohio	29.29	744.0	30.20	767.1	33	0.6	68	s.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy.....	D. Cuthbertson.
Concho, Fort, Texas	28.43	722.1	30.45	773.4	35.8	2.1	82	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	J. McGlone.
Custer, Fort, Montana	26.89	683.0	30.29	769.4	44	6.7	47	w.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy	W. B. Lamar.
Davenport, Iowa	29.34	745.2	30.05	763.3	35	1.7	69	sw.	6	2.7	.....	7 cs	hz.	.....	.....	0	0	fair.....	R. R. Martin.
Davis, Fort, Texas	25.45	646.4	30.39	771.9	36	2.2	72	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	J. Williams.
Dayton, Washington T'y	28.62	726.9	30.45	773.4	42	5.6	96	s.	2	0.9	.....	0	0	.....	.....	0.60	15.2	cloudy.....	D. Moore.
Deadwood, Dakota	25.36	644.1	30.35	770.9	44	6.7	58	ne.	3	1.3	.....	5 cs	0	w.	.....	0	0	fair.....	F. Willson.
Delaware Breakwater, Del.	30.22	767.6	30.24	768 1	30	— 1.1	88	sw.	21	9.4	.....	.....	10 ks	.....	sw.	inap.	inap.	cloudy	T. S. Townsend.
Denison, Texas	29.55	750.6	30.40	772.1	36.0	2.2	79	s.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	J. W. Byram.
Denver, Colorado	24.86	631.4	30.38	771.6	40.5	4.7	37	s	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy.....	F. M. Neal.
Des Moines, Iowa	29.06	738.1	30.04	763.0	39	3.9	73	w.	6	2.7	.....	5 cs	0	nw.	.....	0	0	fair.....	F. W. Conrad.
Detroit, Michigan	29.28	743.7	30.04	763.0	36.5	2.5	79	sw.	12	5.4	.....	.....	10 k	.....	w.	inap.	inap.	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.52	699.0	30.32	770.1	26	— 3.3	67	w.	1	0.4	.....	5 c	0	.....	.....	0	0	fair.....	V. P. Temple.
Dubuque, Iowa	29.33	745.0	30.10	764.5	31	— 0.6	78	calm	0	0	.....	0	3 s	.....	.....	0	0	clear.....	J. Harvey Smith.
Duluth, Minnesota	29.24	742.7	30.05	763.3	29	— 1.7	77	n.	6	2.7	.....	.....	10 s	.....	n.	0	0	cloudy..... ..	N. B. Conger.
Eagle Pass, Texas	29.68	753.9	30.52	775.2	32.4	0.2	88	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	F. Belford.
Eagle Rock, Idaho	25.54	648.7	30.46	773.7	28	— 2.2	80	e.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	J. M. Clifford.
Eastport, Maine	29.87	758.7	29.94	760.5	20.0	— 6.7	76	w.	4	1.8	.....	.....	10 s	.....	sw.	0.08	2.0	cloudy.....	D. C. Murphy.
Elliott, Fort, Texas	27.43	696.7	30.39	771.9	32	0.0	81	ne.	4	1.8	.....	4 c	0	n.	.....	0	0	fair.....	W. J. Gundall.
El Paso, Texas	26.56	674.6	30.42	772.7	33.0	0.6	88	calm	0	0	.....	0	1 s	.....	calm	0	0	clear.....	J. O'Dowd.
Erie, Pennsylvania	29.26	743.2	30.03	762.7	33	0.6	88	sw.	14	6.3	.....	.....	10 s	.....	.....	0.21	5.3	cloudy.....	Peter Wood.
Escanaba, Michigan	29.24	742.7	29.96	761.0	31.0	— 0.6	74	n.	6	2.7	.....	0	9 s	.....	n.	0.02	0.5	cloudy	George Heathcote.
Fredericksburg, Texas	28.67	728.2	30.49	774.4	36	2.2	78	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	Frank Hulwegler.
Galveston, Texas	30.48	774.2	30.53	775.4	53	11.7	86	se.	5	2.2	.....	0	hz.	.....	.....	0	0	clear.....	E. O'C. MacInerney.
Grand Haven, Michigan	29.27	743.4	29.98	761.5	39.0	3.9	72	sw.	16	7.2	.....	.....	10ks	.....	sw.	0	0	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.45	646.4	30.33	770.4	42	5.6	49	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	Robert C. Lord.
Hatteras, North Carolina	30.38	771.6	30.40	772.1	37	2.8	61	w.	16	7.2	.....	3 c	hz.	w.	.....	0	0	clear.....	R. M. Crawford.
Helena, Montana	25.92	658.4	30.30	769.6	40	4.4	42	nw.	24	10.7	.....	5 c	0	nw.	.....	0	0	fair.....	N. C. Smith.
Henrietta, Texas	29.30	744.2	30.38	771 6	38	3.3	73	s.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	J. P. Sherry.
Huron, Dakota	28.52	724.4	30.06	763.5	30.8	— 0.7	78	nw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy.....	S. W. Glenn.
Indianapolis, Indiana	29.35	745.5	30.20	767.1	32	0.0	68	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear..... .	O. Schutze.
Indianola, Texas	30.48	774.2	30.51	774.9	48.5	9.2	89	ne.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	I. A. Reed.
Jacksboro, Texas	29.17	740.9	30.41	772.4	38	3.3	61	s.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	D. J. Carr.
Jacksonville, Florida	30.50	774.7	30.55	776.0	38	3.3	73	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	J. W. Smith.
Keogh, Fort, Montana	27.46	697.5	30.16	766.1	44	6.7	93	sw.	6	2.7	.....	.....	10 s	.....	nw.	0	0	cloudy.....	A. Schneider.
Keokuk, Iowa	30.38	746.2	30.09	764.3	37.0	2.8	72	sw.	12	5.4	.....	4 cs	0	w.	.....	0	0	fair.....	F. Z. Gosewisch.
Key West, Florida	30.38	771.6	30.40	772.1	57.0	13.9	80	n.	22	9.8	.....	0	0	.....	.....	0	0	clear.....	R. H. Paxton.
Kittyhawk, North Carolina	30.36	771.1	30.38	771.6	33	0.6	88	sw.	11	4.9	.....	0	6 s	.....	sw.	0	0	fair.....	R. Mc P. Baldwin.
Knoxville, Tennessee	29.40	746.7	30.48	774.2	27.3	— 2.6	90	calm	0	0	.....	0	sk.	.....	.....	0	0	clear.....	J. A. Cody.
La Crosse, Wisconsin	29.15	740.4	30.00	762.0	31	0.6	68	s.	4	1.8	.....	0	5 s	.....	.....	0	0	fair.....	S. C. Emery.
Leavenworth, Kansas	29.23	742.4	30.19	766.8	37	2.8	82	s.	10	4.5	.....	0	0	.....	.....	0	0	clear.....	A. W. Browne.
Lewiston, Idaho	29.60	751.8	30.48	774.2	34.5	1.4	92	w.	3	1.3	.....	2 k	0	w.	.....	0.27	6.9	clear.....	W. Bell.
Little Rock, Arkansas	30.09	764.3	30.42	772.7	34	1.1	78	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	W. U. Simons.
Los Angeles, California	29.80	756.9	30.20	767.1	62	16.7	28	n.	4	1.8	.....	.....	10 s	.....	ne.	0	0	cloudy	T. S. Collins.
Louisville, Kentucky	29.68	753.9	30.28	769.1	37	2.8	61	s.	10	4.5	.....	5 c	0	.....	.....	0	0	fair.....	L. M. Dey.
Lynchburg, Virginia	29.57	751.1	30.30	769,6	35	1.7	69	sw.	3	1.3	.....	0	6 s	.....	sw.	0	0	fair...	Lewis Duane.
Mackinaw City, Michigan	29.24	742.7	29.94	760.5	30.0	— 1.1	67	nw.	17	7.6	.....	4 k	0	nw.	.....	inap.	inap.	fair.....	F. R. Day.
Macon, Fort, North Carolina	30.41	772.4	30.42	772.7	35	1.7	64	nw.	3	1.3	.....	8 c	0	.....	.....	0	0	cloudy.....	C. A. Shaw.
Madison, Wisconsin	28.92	734.6	30.02	762.5	31	— 0.6	78	sw.	3	1.3	.....	3 c	0	w.	.....	0	0	clear.....	F. P. Chaffee.
Maginnis, Fort, Montana	25.59	650.0	30.13	765.3	47	8.3	38	w.	40	17.9	.....	.....	10 s	.....	w.	0	0	cloudy.....	F. Burke.

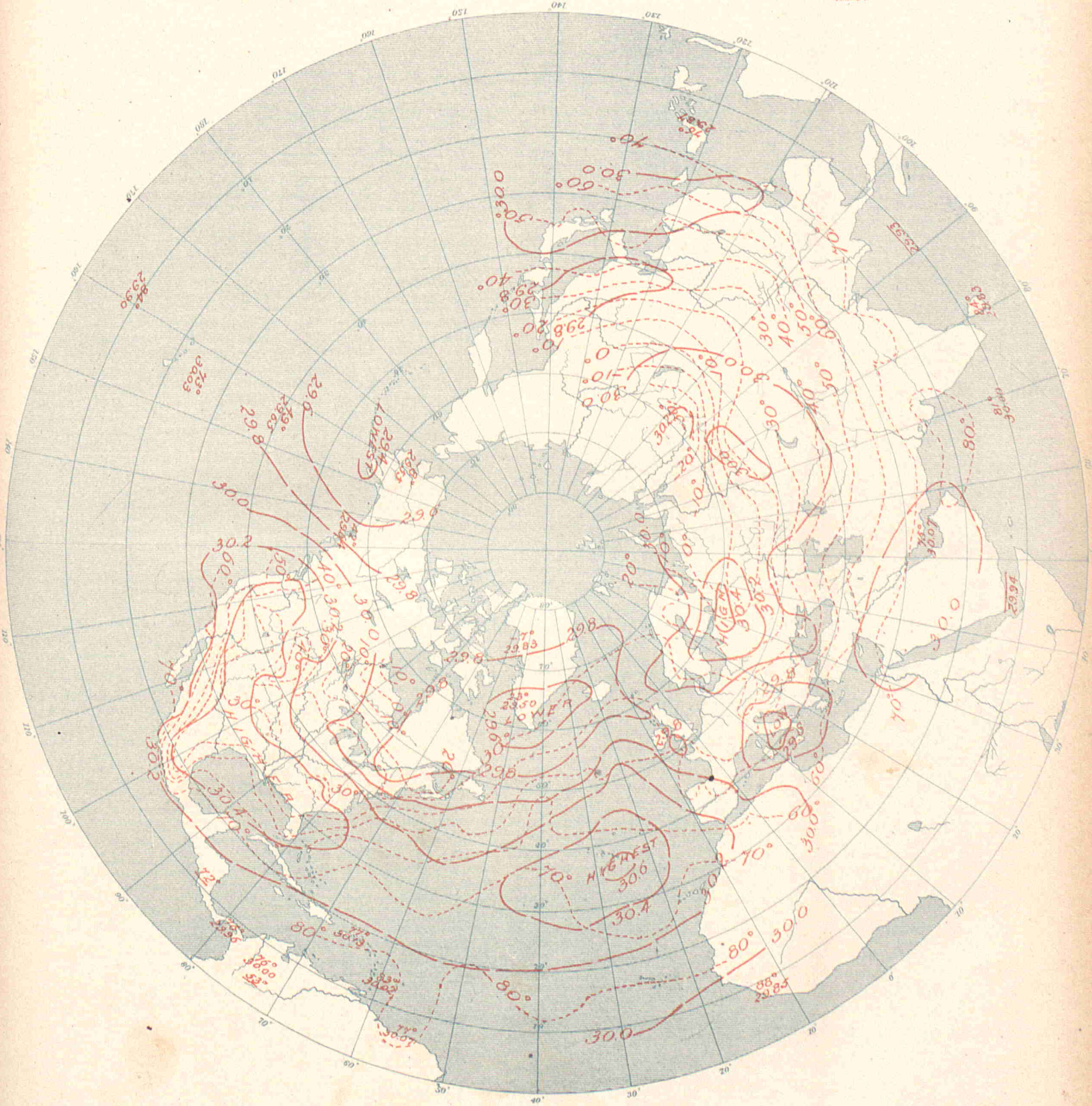
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES,—Cont'd.																			
McKavett, Fort, Texas	28.07	713.0	30.45	773.4	34	1.1	82	nw.	4	1.8		0	0			0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.18	741.2	29.96	761.0	29	— 1.7	77	nw.	12	5.4		10 k	0	nw.		0	0	cloudy	J. Gilligan.
Memphis, Tennessee	30.06	763.5	30.42	772.7	35	1.7	79	s.	1	0.4		0	0			0	0	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.20	741.7	30.01	762.2	30	— 1.1	88	W.	9	4.0		0	9 s		W.	0	0	cloudy	W. Line.
Missoula, Fort, Montana	27.00	685.8	30.46	773.7	32	0.0	81	n.	3	1.3		0	4 s			0.03	0.8	fair	I. H. Young.
Mobile, Alabama	30.54	775.7	30.58	776.7	30.5	— 0.8	88	nw.	2	0.9		0	0			0	0	clear	C. A. Read.
Montgomery, Alabama	30.30	769.6	30.54	775.7	30	— 1.1	96	calm	0	0		0	fg.			0	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	28.98	736.1	30.09	764.3	17	— 8.3	83	n.	5	2.2			10 s			0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.20	741.7	30.27	768.8	35.0	1.7	78	sw.	15	6.7		0	1 k		sw.	Inap.	Inap.	clear	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.30	591.8	29.93	760.2	4.0	—15.6	79	nw.	57	25.5			fg.		nw.	0.01	0.3	dense fog	B. S. Pague.
Nashville, Tennessee	29.78	756.4	30.40	772.1	35.0	1.7	79	sw.	4	1.8		4 cs	0	sw.		0	0	fair	L. N. Jesunofsky.
New Haven, Connecticut	29.94	760.5	30.05	763.5	29	— 1.7	67	sw.	18	8.0			10 s		sw.	0.01	0.3	cloudy	J. H. Sherman.
New London, Connecticut	30.01	762.2	30.06	763.5	33	0.6	68	sw.	12	5.4			10 s		sw.	0.02	0.5	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.53	775.4	30.59	777.0	41.5	5.3	64	n.	4	1.8		0	sk.			0	0	clear	L. Dunne.
Newport, Rhode Island	30.00	762.0	30.05	763.3	33.8	1.0	86	sw.	21	9.4		8 k	1 ks	nw.	sw.	0.02	0.5	cloudy	W. McGillivray.
New York, New York	29.94	760.5	30.13	765.3	30.5	— 0.8	82	sw.	24	10.7		3 cs	6 s	sw.	sw.	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.31	769.9	30.34	770.6	32	0.0	78	sw.	5	2.2		5 cs	0	w.		0	0	fair	Wm. Davis.
North Platte, Nebraska	27.11	688.6	30.27	768.8	30.6	— 0.8	30	nw.	5	2.2		0	4 s			0	0	fair	E. F. Brady.
Olympia, Washington T'y	30.38	771.6	30.42	772.7	44.0	6.7	93	s.	2	0.9		8 k	0	sw.		0.59	15.0	cloudy	J. Dascomb.
Omaha, Nebraska	28.80	731.5	30.09	764.3	39.5	4.2	47	s.	6	2.7		0	6 s			0	0	fair	A. Pollak.
Oswego, New York	29.49	749.0	29.84	757.9	36.0	2.2	61	sw.	12	5.4			10 n		w.	0.15	3.8	light snow	J. G. Linsley.
Palestine, Texas	29.93	760.2	30.51	774.9	37.0	2.8	82	s.	8	3.6		0	0			0	0	clear	L. M. Pindell.
Pensacola, Florida	30.56	776.2	30.59	777.0	31.2	— 0.4	78	nw.	4	1.8		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	30.07	763.8	30.18	766.6	34	1.1	60	sw.	10	4.5			10 s		sw.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.97	456.4	30.63	778.0	22	— 5.6	35	W.	40	17.9		2 c	0	sn.		0	0	clear	H. Hall.
Ploche, Nevada	24.34	618.2	30.51	774.9	41	5.0	76	W.	3	1.3		10 c	0			0.02	0.5	cloudy	C. N. Kitchel.
Pittsburg, Pennsylvania	29.32	744.7	30.18	766.6	32.0	0.0	83	sw.	10	4.5			10 s		w.	Inap.	Inap.	cloudy	W. A. Reid.
Poplar River, Montana	27.96	710.2	30.32	770.1				nw.			4		10 s			0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.58	776.7	30.59	777.0	43.0	6.1	71	n.	8	3.6		0	0			0	0	clear	H. B. Boyer.
Port Huron, Michigan	29.26	743.2	29.99	761.7	30.5	— 0.8	94	sw.	16	7.2			10 s			0.26	6.6	cloudy	W. O. Balley.
Portland, Maine	29.87	758.7	29.92	760.0	25	— 3.9	73	W.	8	3.6		3cs; ha	0			0.02	0.5	clear	W. W. Eichelberger.
Portland, Oregon	30.33	770.4	30.40	772.1	43.2	6.2	100	W.	3	1.3			fg.			0.91	23.1	dense fog	M. L. Hearne.
Portsmouth, N. C.					33	0.6	68	sw.			1	hz.	hz.			0	0	light haze	F. S. Coburn.
Prescott, Arizona	25.03	635.8	30.40	772.1	40.2	4.6	86	sw.	1	0.4			10 s		nw.	0	0	cloudy	W. H. Clendenon.
Provincetown, Mass	29.98	761.5	30.01	762 2	32	0.0	78	W.	19	8.5		0	9 s		W.	0.10	2.5	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.48	774.2	30.49	774.4	41.5	5.3	61	n.	12	5.4		0	0			0	0	clear	W. J. Evans.
Red Bluff, California																			J. R. Williams.
Rochester, New York	29.17	740.9	29.88	758.9	33	0.6	100	W.	19	8.5			10 n			0.15	3.8	heavy snow	E. W. McGann
Roseburg, Oregon	29.83	757.7	30.40	772.1	51.8	11.0	89	e.	1	0.4			fg.			0.01	0.3	dense fog	J. J. Nanry.
Sacramento, California	30.25	768.3	30.33	770.4	47.8	8.8	86	nw.	8	3.6		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.59	751.6	30.24	768.1	38.0	3.3	72	sw.	10	4.5		3 c; hz	2 s			0	0	fair	J. H. Weber.
St. Michael, Fort, Alaska	29.52	749.8	29.55	750.6	— 8	—22.2	100	e.	9	4.0		0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.05	737.9	30.01	762.2	25.0	— 3.9	88	nw.	4	1.8		3 cs	0			0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.20	741.7	30.19	766.8	14	—10.0	96	ne.	8	3.6			10 n			0.06	1.5	heavy snow	C. B Dilley.
Salt Lake City, Utah	26.03	661.2	30.57	776.5	35	1.7	66	nw.	6	2.7		10 k	0	sw.		Inap.	Inap.	cloudy	J. Craig.
San Antonio, Texas	29.77	756.1	30.49	774.4	34.5	1.4	79	calm	0	0		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.09	764.3	30.16	766.1	57.2	14.0	72	ne.	5	2.2		8 k	1 s	sw.		0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.36	745.7	30.09	764.3	35	1.7	79	W.	17	7.6			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.10	764.5	30.13	765.3	32.0	0.0	78	sw.	30	13.4			10 s			0	0	cloudy	B. A. Blundon.
San Francisco, California	30.25	768.3	30.32	770.1	53.5	11.9	77	W.	4	1.8		0	0			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.43	595.1	30.42	772.7	26	— 3.3	58	ne.	13	5.8		2 c	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.42	772.7	30.52	775.2	39	3.9	65	W	5	2.2		0	fg.			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.50	673.1	30.32	770.1	37	2.8	56	W.	4	1.8		4 k	0	W.		0	0	fair	A. L. Mathews.
Shreveport, Louisiana	30.23	767.8	30.48	774.2	34	1.1	88	s.	2	0.9		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.05	737.9	30.38	771.6	30.5	— 0.8	78	nw.	2	0.9		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.51	622.5	30.35	770.9	28.5	— 1.9	79	n.	2	0.9		0	8 s			0	0	cloudy	N. D. Lane.
Sitka, Alaska	29.57	751.1	29.64	752.8	41.7	5.4	74	s.	12	5.4			10 ks		s.	1.27	32.3	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.87	758.7	30.37	771.4	29.5	— 1.4	88	calm	0	0		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.41	772.4	30.45	773.4	35	1.7	69	nw.	6	2.7		3 c	0	w.		0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.33	719.6	30.46	773.7	36	2.2	92	sw.	4	1.8			10 s			0.92	23.4	cloudy	H. Clifford.
Springfield, Illinois	29.42	747.3	30.15	765.8	37	2.8	72	sw.	12	5.4		3 c	0	w.		0	0	clear	T. B. Jennings.
Springfield, Massachusetts	29.86	758.4	30.00	762.0	27.0	— 2.8	92	s.			1		9 n		s.	0	0	cloudy	Charles Mayr.
Springfield, Mo	28.81	731.8	30.34	770.6	36	2.2	79	sw.	10	4.5		3 c	0	sw.		0	0	clear	J. B. Marbury.
Starkville, Miss	29.98	761.5	30.48	774.2	34	1.1	78	sw.	11	4.9		0	0			0	0	clear	O. Dill.
Stevenson, Fort, Dakota	28.07	713.0	30.13	765.3	23	— 5.0	88	e.	12	5.4			10 s			0	0	cloudy	W. Burrows.
Stockton, Fort, Texas	27.29	693.2	30.43	772.9	31	— 0.6	88	sw.	4	1.8		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.97	761.2	30.03	762.7	25.5	— 3.6	80	sw.	28	12.5		0	8 k		sw.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27 51	698.7	30.33	770.4	41.5	5.3	78	calm			0		10 s			0	0	cloudy	J. T. Fitzgerald.
Toledo, Ohio	29.33	745.0	30.07	763.8	35	1.7	64	sw.	14	6.3			10 s		nw.	0	0	cloudy	A. Buell.
Tucson, Arizona	27.76	705.1	30.26	768.6	56	13.3	47	se.	5	2.2		0	4 s			0	0	fair	J. L. Whiteside.
Umatilla, Oregon	30.08	764.0	30.47	773.9	32.5	0.3	94	se.	2	0.9		0	0			0.32	8.1	clear	J. Daly.
Verde, Fort, Arizona					43.9	6.6	63	sw.			1	4 cs	3 k	s.	sw.	0	0	fair	D. Brooks.
Vicksburg, Mississippi	30.28	769.1	30.55	776.0	34.6	1.4	79	s.	5	2.2		0	0			0	0	clear	James Kenealy.
Visalia, California	29.90	759.4	30.28	769.1	49.6	9.8	84	sw.	5	2.2		5 cs	0			0	0	fair	O. D. Stewart
Washakie, Fort, Wyoming	24.64	625.8	30.41	772.4	29.0	— 1.7	92	s.	3	1.3			9 k			0	0	cloudy	T. M. Ambler.
Washington, D. C.	30.13	765.3	30.25	768.3	29.3	— 1.5	74	sw.	4	1.8		9 cs	0	sw.		0	0	cloudy	B. M. Purssell.
West Las Animas, Colorado	26.18	665.0	30.34	770.6	18	— 7.8	42	nw.	8	3.6		0	0			0	0	clear	F. H. Brandenburg
Williamsport, Pa	29.44	747.8	30.07	763.8	34.4	1.3	94	W.	14	6.3			10 s		W.	0.01	0.3	threatening	B. F. Hough.
Wilmington, N. Carolina	30.38	771.6	30.44	773.2	35	1.7	64	W.	4	1.8		6c; ck	0			0	0	fair	Samuel A. Haney.
Winnemucca, Nevada	25.99	660.1	30.52	775.2	30	— 1.1	70	ne.	5	2.2		0	4 s		sw.	Inap.	Inap.	fair	J. Grover.
Yankton, Dakota	28.58	725.9	30.01	762.2	34	1.1	72	nw.	1	0.4		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	30.01	762.2	30.16	766.1	65.5	18.6	20	n.	6	2.7		0	9 s		sw.	0	0	cloudy	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.09	561.1			53.0	11.7	71	ne.	1	0.4		2 cs; k	2 s	n.	n.	0.17	4.3	fair	Joaquin Gomez.
Havana, Cuba, W. I.	30.29	769.4	30.36	771.1	62.7	17.1	52	ne.	13	5.8		0	2 k		ne.	0	0	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.12	765.0	30.13	765.3	74	23.3	82	calm	0	0		0	1 s			0	0	fine	Robert Johnston.
Paramaribo, S. A.	30.07	763.8	30.07	763.8	77	25.0	91	e.			3	5 k	8 ks	e.	e.	0.800	20.3	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.44	747.8	30.00	762.0	76	24.4	89	calm			0		10 ks		calm	0.37	9.4	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					72.2	22.3	80	ne.			6	0	0			0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.32	744.7	29.38	746.2	29	— 1.7	88	calm			0		7 ks			0.06	1.5	fair	W. J. Fisher.
St. Thomas, W. I.	30.06	763.5	30.18	766.6	79	26.1	74	e.				0	2 k		e.	0.06	1.5	fine	Aug. Walloe.
York Factory, B. A.	29.88	758.9	29.95	760.7	—16.0	—26.7	100	nw.	42	18.8			10 n		nw.	0.10	2.5	snowing	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower	Upper.	Lower			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.21	767.3	67	19.4	79	se.			4		2					3	se.	d clouds.
H. M. S. Audacious, Colombo, Ceylon, India	29.83	757.7	84	28.9	79	wsw.			1									d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			71	21.7	57	s.			2									d. clouds.
H. M. S. Boadaica, Table Bay, Cape Colony	29.96	761.0				se.			3		3	nse.				1	s.	d. clouds.
H. M. S. Carysfort, N. 29° 56′ E. 32° 33′	30.09	764.3	70	21.1	79	nnw.			2		1							blue sky.
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.08	764.0	50	10.0	93	ssw.			1		1							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island	30.36	771.1	45	7.2	92	wnw.			3		0							blue sky.
H. M. S. Curacoa, N. 33° 52′, E. 135° 00′	30.08	764 0	56.5	13.6	81	se.			1–2		8	sw.						foggy.
H. M. S. Diamond, Sydney, N. S. W*†	30.01	762.2	61	16.1	77	ssw.			2		0							misty.
H. M. Dock Yard, Bermuda, W. I	30.26	768.6	63	17.2	67	nw.			3–4		6							d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.81	757.2	75.5	24.2	90	e.			1		6	nw.						d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	30.07	763 8	63	17.2	78	calm			0		10							thnd'r storm.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.04	763.0	69	20.6	60	calm			0		10							misty.
H. M. S. Kingfisher, N. 4° 37′, W. 92° 40′	29.97	761.2	77	25.0		se.			2		3	ne.						d. clouds.
H. M. S. Lark, S. 31° 40′, E. 153° 25′	30.17	766.3	65.3	18.5	92	s.			4		9	se.						d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.99	761.7	65	18.3		calm			0		8					2	se.	d. clouds.
H. M. S. Magpie, N. 34° 36′, E. 127° 39′	30.04	763.0	58.2	14.6	80	sw.			1		10					4	s.	showery
H. M. S. Northampton, N. 25° 05′ W. 59° 20′	30.19	766.8	71	21.7	90	ese.			1		2							d clouds.
H. M. S Rocket, Callao, Peru	30.05	763.3	72	22.2	90	calm			0		2					2	w.	d. clouds.
H. M. S. Swiftsure, S. 11° 44′ W. 77° 12′	30.07	763.8	64	17.8	100	calm			0		0					1	ese.	blue sky.
H. M. S. Sylvia, S. 52° 45′, W. 70° 55′	29.87	758.7	50.5	10.3	69	w.			3		5					2–3	sw.	d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.94	760.5				s.			2		7	calm				2	s.	d. clouds.
H. M. S. Woodlark, N. 26° 24′ E. 51° 40′	29.97	761.2	74.5	23.6	56	w.			4		0							blue sky.
H. M. S. Zephyr, Chee-foo, China	29.83	757.7	47.5	8.6	56	ssw.			1		3	nw.				2	nw.	d. clouds.
Portuguese Naval.																		
Tamega, Macao, China	30.05	763.2	69.8	21.0	69	sw.			2		8					1	sw.	blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.49	774.4	47	8.3	69	nw.	4	1.8			0			0	0			d. clouds.
Navy Yard, Portsmouth, N. H	29.92	760.0	25	— 3.9	?	sw.	12	5.4			10		sw.	0	0			clear.
Naval Hospital, Yokohama, Japan*	29.98	761.5	46.5	8.1	72	calm			0		8		w.	0	0			cloudy.
Adams, Sitka, Alaska *†	29.72	754.9	41	5.0	82	e.			2		10							hazy.
Alaska, N. 24° 55′, W. 156° 45′	30.03	762.7	73	22.8	81	ne.			1		10		n.	1.15	29.2	9m'h		cloudy.
Alliance, Hampton Roads, Va	30.31	769.9	35	1.7	90	wsw.			3–4		8			0	0			rainy.
Ashuelot, Nagasaki, Japan	30.17	766.3	61	16.1	77	sse.			1		5		sse.					cloudy.
Brooklyn, Keel Point, Patagonia	29.96	761.0	56	13.3	64	calm	0	0			8		calm	0	0	sm'h		fair.
Colorado, New York, N. Y	30.21	767.3	31	— 0.6	100	wsw.	3	1.3			10		calm	0	0			fair.
Enterprise, Norfolk, Va	30.37	771.4	33	0.6	89	sw.			1		5		w.					overcast.
Essex, Callao, Peru	30.00	762.0	66	18.9	90	calm			0		2		se.			sm'h	se.	fair.
Franklin, Norfolk, Va	30.34	770.6	31	— 0.6	?	sw.	16	7.2			5		calm	0	0			fair.
Galena, Montevideo, Uruguay	30.05	763.3	67	19.4	90	e.			4		2		e.			mod		fair.
Hartford, Sandy Point, Patagonia*	29.77	750.1	55	12.8	93	n.			3		5			light	light	sm'h		fair.
Independence, Mare Island, Cal	30.34	770.6	46	7.8	92	calm			0		0			0	0			clear.
Iroquois, Callao, Peru	30.05	763.3	66	18.9	90	calm			0		10							overcast.
Jamestown, Boston, Mass	29.96	761.0	23	— 5.0	86	sw.			2		10							misty.
Juniata, N. 36° 20′, W. 67° 45′*	30.32	770.1	54	12.2	86	wnw.			4		5		nw.	sli't	sli't	easy	nw.	fair.
Kearsarge, Norfolk, Va	30.33	770.4	36	2.2	80	sew.			2		5		nw.					fair.
Lackawanna, S. 21° 75′, W. 74° 00′ *	30.06	763.5	66	18.9	68	sw.			1		10					sm'h	sw.	cloudy.
Lancaster, Naples, Italy*	29.49	749.0	52	11.1	86	ese.			3		8		wsw.			sm'h		fair.
Michigan, Erie, Pennsylvania	29.94	760.5	38	3.3	80	sw.			5		10		se					cloudy.
Minnesota, New York, N. Y	30.11	764.8	33	0.6	100	sw.	5	2.2			10							overcast.
Monocacy, N. 34° 07′, E. 136° 50′	30.16	766.1	56	13.3	80	w.			1		8		w.			sm'h		fair.
New Hampshire, Newport, R. I	30.09	764.3	34	1.1	90	w.			6		10		wsw.			mod.	wsw.	cloudy.
Nipsic, N. 38° 10′, W. 9° 17′*	30.19	766.8	59	15.0	76	nnw.			2		2		ne.			long	n.	clear.
Onward. Callao, Peru†	30.13	765.3	64	17.8	94	calm			0		10		n.			long	w.	cloudy.
Palos, Tientsin, China*	29.73	755.1	40	4.4	73	w.			1		0							hazy.
Pensacola, Callao, Peru*	29.95	760.7	65	18.3	89	s.	2	0.9			8		s.	.0	0	sm'h		cloudy.
Powhatan, Boston, Mass	30.02	762.5	26	— 3.3	88	sw.			2		8							cloudy.
Quinnebaug, Villafranche, France*	29.60	751.8	56	13.3	62	sw.			1		0							clear.
Ranger, Salina Cruz, Mexico	30.22	767.6	71	21.7	52	n.			7		2		n.			chop		fair.
Richmond, Yokohama, Japan*	30.02	762.5	52	11.1	72	n.			1		2		n.	0	0			fair.
Saratoga, N. 40° 06′, W. 70° 51′	30.01	762.2	38	3.3	?	w.			6		10			0	0	mod.	nw.	cloudy.
St. Louis, League Island, Pa	30.40	772.1	33	0.6	89	ssw.			1		8		s.	0	0			cloudy.
Swatara, N. 33° 04′, W. 71° 26′*	30.19	766.8	58	14.4	57	w.			2		10		nw.			mod.	w.	cloudy.
Tennessee, Fort Monroe, Va	30.32	770.1	38	3.3	54	wsw.	6	2.7			10			0	0			cloudy.
Vandalia, N. 37° 50′, W. 75° 03′*	30.28	769.1	38	3.3	80	sw.			4		5		sw.			sm'h	ssw.	fair.
Wabash, Boston, Mass	29.99	761.7	26	— 3.3	76	wsw.	13	5.8			10		w.	0	0			cloudy.
Wachusetts, Mare Island, Cal†	30.19	766.8	48	8.9	85	var.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.32	770.1	38	3.3	80	s.			3		8		s.	0	0			fair.
Yantic, Norfolk, Va	30.39	771.9	31	— 0.6	89	ssw.			2		5							fair.
Merchant Marine.																		
S. S. Grecian, S. 28° 00′ W. 46° 45′*	29.93	760.2	69	20.6	100	ene.			5		10		ene.	12 h'r	12 h'r	sm'h		raining.
S. S. Polynesian, Halifax, N. S*	29.79	756.7	32	0.0		sw.			1		9		sw.	4 h'r	4 h'r	mod.	w.	snowing.
S. S. Scandinavian, N. 52° 19′, W. 31° 37′	29.81	757.2	49	9.4		ssw.			5		10		wsw.	10 h'r	10 h'r	mod.	var.	raining.
S. S. British Crown, N. 52° 27′ W. 15° 00′ †	30.07	763.8	48	8.9		wnw.			6		3		wnw.	0	0	mod.	nw.	clear.
S. S. Indiana, Liverpool, Eng†	30.01	762.2	37	2.8	81	w.			3		2		w.					fine.
S. S. Lord Clive, N. 40° 36′, W. 68° 40′*†	30.00	762.0				w.			5		10		w	2 h'r	2 h'r	mod.	w.	cloudy.
S. S. Ohio, N. 43° 37′, W. 37° 42′			49	9.4	92	wsw.			4		9		nw.			mod.	wsw.	cloudy.
S. S. Pennsylvania, Philadelphia, Pa†	30.09	764.3	31	0.0		w.			2		17		nw.					overcast.?
S. S. Castor, N. 42° 16′, W. 51° 30′ *	30.13	765.4	30.0	10		nnw.			3		9		nnw.			3	nnw.	fair.
S. S. Stella, N. 40° 30′ W. 58° 05′	30.01	762.2	53.6	12		wsw.			3		10		sw.	20 h'r	20 h'r	4	sw.	drizzling.
S. S. Bolivia, N. 48° 47′ W. 42° 10′*†	29.96	761.0	58	14.4	76	wsw.			5		5		wsw.	sh'rs	sh'rs	r'hg	wsw.	light fog.
S. S. Dorian, N. 49° 12′, W. 39° 00′*	29.76	755.9	60	15.6		sw.			7		10			shr's	sh'rs	mod.	wnw.	hazy.
S. S. Ethiopia, New York, N. Y	30.09	764.3	32	0.0		wsw.			4		10		w.	0	0			overcast.
S. S. Galatia, N. 10° 49′, E. 68° 31′†	30.00	762.0	81	27.2	96	w.			3		5		nw.	0	0	long	nw.	misty.
S. S. Ailsa, N. 32° 20′, W. 74° 25′†	30.42	772.7	60	15.6	65	w.			4		5		w.	0	0	mod.	w.	fair.
S. S. Alpin, N. 36° 21′, W. 74° 08′						wnw.			6				w.	0	0		w.	fine.
S. S. Alvo, N. 11° 00′, W. 76° 00′	29.94	760.5	80	26.7		ene.			6		3 k		e.	0	0	mod.	nne.	fine.
S. S. Antillas, Savana La Mar, Jamacia, W. I†			78	25.6		n.			3		3?		n.	1 h'r	1 h'r	mod.	n.	cloudy.?
S. S. Carroll, Charlottetown, P. E. Island*†	30.02	762.5	27	— 2.8		w.			4		8		var.	snow	snow			cloudy.
Bk. Coppename, N. 15° 26′ W. 38° 10′	30.07	763.8	78	25.6	82	e.			4		9							overcast
Inchkeith, S. 40° 47′ E. 33° 57′	30.09	764.3	58.8	14.9	76	se.			3		8							overcast.
S. S. Mertola, N. 39° 22′ W. 14° 23′	30.32	770.1	58.5	14.7	88	nnw.			6		10							overcast.
May Hulse, S. 30° 08′, W. 44° 33′	30.00	762.0	69	20.6	87	n.			2		10							drizzling.
S. S. Bethnia, N. 51° 30′, W. 10° —	29.94	760.5	53	11.7	86	nw.			4		6		n.	sh'rs	sh'rs	sm'h		misty.
S. S. Marathon, Smyrna, Turkey	29.96	761.0	66	18.9		sse.			4		7		sse.	3 h'r	3 h'r			cloudy.
S. S. Parthia, N. 48° 35′, W. 31° 53′*†	30.18	766.6	58	14.4		ssw.			6		4?		sw.	3 h'r	3 h'r	cl'd	ssw.	overcast.?
S. S. Pavonia, N. 42° 34′, W. 58° 12′*	30.03	762.7	50	10.0	79	w.			5		10		w.	8 h'r	8 h'r	mod.	wsw.	overcast.
S. S. Canada, N. 47° 02′, W. 41° 00′	30.17	766.4	55.4	13.0		sw.			5		7		wsw.	8 h'r	8 h'r	h'vy	sw.	raining.
S. S. Labradore, N. 49° 46′, W. 12° 36′			53.6	12.0		nne.			5		6		nne.				w.	clear.
S. S. Abyssinia, N. 48° 26′, W. 40° 16′ *	29.84	757.9	63	17.2	94	sw.			6		10		w.	5 h'r	5 h'r	hv'y	wsw.	
S. S. Wyoming, N. 44° 06′, W 55° 29′†	30.05	763.3	45	7.2		w.			3		8		wsw	0	0	long	n.	fair.
S. S. Bohemia, N. 48° 57′, W. 20° 25′†	30.34	770.6				wnw.			6		8		wnw.	rain	rain	long	nw.	cloudy.
S. S. Gellert, New York, N. Y	30.11	764.8	32	0.0		wsw.			3		7		wnw.	0	0			covered.
S. S. Silesia, N. 49° 43′, W. 21° 46′			52.1	11.2	90	sw.			3		9		sw.	0	0	4–5	wnw.	overcast.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																	
S. S. Vandalia, Hamburg, Germany	.....	.....	36.0	2.2	96	sw.	.....	.....	3–4	.....	10	.....	ese.	0	0	.....	.....	cloudy.
S. S. Wieland, N. 42° 20′, W. 60° 30′	30.08	764.0	.....	.....	.....	wsw.	.....	.....	5	.....	2	.....	w.	3 h'r	3 h'r	r'gh	wsw.	clearing.
S. S. City of Berlin, N. 43° 45′, W. 59° 15′	30.02	762.5	42	5.6	83	sw.	.....	.....	4	.....	7	.....	w.	0	0	mod.	wsw.	cloudy.
S. S. Archimedes, N. 52° 00′, W. 6° 12′	29.72	754.9	.....	.....	.....	nne.	.....	.....	6	.....	10	.....	calm	8 h'r	8 h'r	cross	sw;n	raining.
S. S. Hevelius, N. 19° —′, W. 24° —′*†	30.09	764.3	74	23.3	.....	ene.	.....	.....	6	.....	8	.....	ene.	0	0	high	ne.	cloudy.
S. S. Sirius, N. 34° 20′, W. 12° 40′*.	30.23	767.8	.....	.....	.....	nne.	.....	.....	4	.....	3	.....	nne.	0	0	mod.	n.	clear.
S. S. Colorado, Galveston, Texas †	30.52	775.2	53	11.7	.....	ne.	.....	.....	1	.....	2	.....	ne.	0	0	.....	.	clear.
S. S. Rio Grande, Galveston, Texas †	30.44	773.2	60	15.6	.....	se.	.....	.....	2	.....	3	.....	w.	0	0	.....	.....	clear.
S. S. San Marcos, Key West, Fla	30.62	777.7	52	11.1	.....	nne.	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	.....	.....
S. S. Archimede, N. 33° 53′, W. 43° 59′†	30.48	774.2	76	24.4	73	se.	.....	.....	3	.....	2	.....	se.	0	0	long	ese.	clear.
S. S. Hermod, N. 42° 00′ W. 53° 46′†	30.02	762.5	57.2	14.0	.....	ese.	.....	.....	3	.....	10	.....	s.	20 h'r	20 h'r	long	w.	raining.
S. S. John Hopkins, Boston Bay, Mass*†	30.14	765.5	38	3.3	.....	wsw.	.....	.....	5	.....	8	.....	sw.	0	0	.....	.....	squally.
S. S. Glenapp, S. 22° 00, W. 41° 00′ †	29.85	758.2	.....	.....	.....	ese.	.....	.....	5	.....	9	.....	e.	8 h'r	8 h'r	high	ne.	heavy rain.
S. S. Glenfyne, off Atalia Point, Brazil	.....	.....	.....	.....	.....	e.	.....	.....	2	.....	2	.....	ese.	0	0	sm'h	ese.	fair.
S. S. Chalmette, N. 25° 25′, W. 83° 45′†	30.55	776.0	62	16.7	.....	ne.	.....	.....	6	.....	1	.....	ne.	0	0	mod.	ne.	clear.
S. S. Lone Star, N. 34° 04′ W. 76° 52′†	30.33	770.4	50	10.0	.....	w.	.....	.....	2	.....	2	.....	sw.	0	0	sm'h	.....	clear.
S. S. New York, N. 32° 00′ W. 77° 45′	.....	.....	56	13.3	.....	wnw.	.....	.....	2	.....	6	.....	w.	.....	.....	sm'h	.....	fine.
S. S. Denmark, London, Eng†	29.98	761.5	34	1.1	.....	var.	.....	.....	2	.....	10	.....	.....	0	0	.....	.....	dense fog.
S. S. Erin, N. 51° 16′, W 15° 01′	30.03	762.7	50	10.0	.....	nw.	.....	.....	9	.....	4	.....	nw.	2 h'r	2 h'r	h'vy	wnw.	.....
S. S. Greece, N. 40° 48′, W. 64° 26′*†	30.09	764.3	45	7.2	.....	w.	.....	.....	6	.....	8	.....	sw.	7 h'r	7 h'r	mod.	w	showery.
S. S. Helvetia, N. 46° 00′, W. 41° 30′	30.12	765.0	64	17.8	.....	wsw.	.....	.....	4	.....	10	.....	wsw.	9 h'r	9 h'r	long	w.	raining.
S. S. Holland, N. 40° 28′, W. 72° 36′	30.12	765.0	40	4.4	.....	w.	.....	.....	6	.....	8	.....	w.	3 h'r	3 h'r	high	w.	cloudy.
S. S. City of Alexandria, Vera Cruz, Mexico †	30.32	770.1	70	21.1	.....	ene.	.....	.....	4	.....	5	.....	ne.	0	0	small	ene.	fair.
S. S. City of Merida, N. 36° 00′, W. 75° 00′ *†	30.40	772.1	.....	.....	.....	wsw.	.....	.....	4	.....	5	.....	w.	4 h'r	4 h'r	mod.	w.	fine
S. S. Knickerbocker, N. 27° 00′, W. 86° 34′ *†	30.46	773.7	61	16.1	.....	nne.	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	sw.	fair.
S. S. America, N. 39° 03′, W. 71° 43′	.....	.....	44.0	6.7	68	w.	.....	.....	6	.....	7	.....	w.	0	0	high	w.	squally.
S. S. Elbe, N. 43° 10′, W. 57° 12′	30.07	763.7	48.2	9.0	100	nw.	.....	.....	3	.....	10	.....	nw.	10 h'r	10 h'r	long	wnw.	covered.
S. S. Hohenstaufen, N. 32° 45′, W. 14° 29′	30.32	770.1	69.8	21.0	.....	nne.	.....	.....	4	.....	4	.....	nne.	0	0	light	nne.	fair.
S. S. Neckar, N. 45° 11′, W. 48° 01′	30.10	764.5	47.0	8.3	96	wsw.	.....	.....	4	.....	10	.....	wsw.	6 h'r	6 h'r	long	sw.	foggy.
S. S. Oder, N. 49° 41′, W. 9° 28′	30.03	762.7	53.6	12.0	.....	nnw.	.....	.....	6	.....	4	.....	nnw.	1 h'r	1 h'r	r'gh	nnw.	squally.
S. S. Ohio, off Sombrero, W. I	30.43	772.9	.....	.....	.....	n.	.....	.....	6	.....	0	.....	.....	0	0	mod.	n.	clear.
S. S. Salier, N. 49° 50′, W. 18° 34′	30.25	768.3	49.1	9.5	.....	wnw.	.....	.....	5	.....	8	.....	w.	4 h'r	4 h'r	h'vy	w.	fair.
S. S. Strassburg, N. 14° 12′, W. 25° 46′	30.09	764.3	73.0	22.8	90	ne.	.....	.....	5	.....	5	.....	ne.	0	0	mod.	ne.	fair.
S. S. Werra, N. 50° 46′, W. 20° 53′*†	30.30	769.6	51.8	11.0	.....	nw.	.....	.....	3–4	.....	10	.....	nw.	0	0	mod.	nw.	cloudy.
S. S. Belgic, Yokohama, Japan†	30.10	764.5	66	18.9	64	sw.	.....	.....	4	.....	10	.....	s.	0	0	mod.	.....	overcast.
S. S. Coptic, N. 39° 52′, W. 157° 52′	29.65	753.1	48.5	9.2	78	wsw.	.....	.....	6	.....	4	.....	w.	8 h'r	8 h'r	high	w.	fair
S. S. Oceanic, Yokohama, Japan*	30.00	762.0	58	14.4	70	var.	.....	.....	3	.....	5	.....	.....	.....	.....	.....	.....	fine.
S. S. Mississippi, Seattle, Wash. Ter.*†	30.49	774.4	50	10.0	86	se.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
S. S. Willamette, N. 44° 10′, W. 124° 48′†	30.38	771.6	49	9.4	93	ssw.	.....	.....	3	.....	fg.	.....	.....	0	0	r'gh	wsw.	foggy.
S. S. Columbia, N. 39° 28′, W. 124° 32′†	30.31	769.9	53.5	11.9	97	ese.	.....	.....	1	.....	2	.....	.....	.....	.....	mod.	sw.	hazy.
S. S. Oregon, Portland, Oregon †	30.37	771.4	45	7.2	92	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	foggy.
S. S. Ancon, N. 36° 44′, W. 122° 10′†	30.21	767.3	55	12.8	80	nne.	.....	.....	3	.....	0	.....	.....	.....	.....	mod	wsw.	clear.
S. S. City of Chester, Humboldt, Cal. *†	30.32	770.1	49	9.4	100	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear.
S. S. Dakota, N. 40° 42′, W. 124° 38′†	30.33	770.4	57	13.9	81	ne.	.....	.....	4	.....	5?	.....	n	0	0	light	var.	clear?
S. S. Orizaba, N. 35° 15′, W. 120° 50′ *†	30.20	767.1	59	15.0	76	ne.	.....	.....	2	.....	0	.....	.....	.....	.....	long	ssw.	clear.
S. S. State of California, San Francisco, Cal *†	30.28	769.1	50	10.0	.....	nw.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear.
S. S. Australia, S. 33° 44′, E. 157° 28′	30.11	764.8	66	18.9	89	se.	.....	.....	5	.....	10	.....	se.	3 h'r	3 h'r	r'gh	se.	cloudy.
S. S. City of New York, Sydney, N. S. W†	30.22	767.6	67	19.4	69	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear.
S. S. City of Pekin, Hong Kong, China †	30.05	763.3	65	18.3	68	ene.	.....	.....	2	.....	2	.....	e.	0	0	.....	.....	clear.
S. S. City of Rio de Janeiro, N. 13° 51′, W. 91° 33′†	30.06	763.5	77	25.0	77	e.	.....	.....	3	.....	0	.....	.....	0	0	light	se.	clear.
S. S. Grenada, Panama. Panama †	29.96	761.0	76	24.4	86	nw.	.....	.....	1	.....	2	.....	nw.	0	0	.....	.....	clear.
S. S. Zealandia, N. 9° 53′, W 162° 47 ..	29.90	759.4	84	28.9	75	se.	.....	.....	5	.....	2	.....	se.	.....	.....	mod.	e.	fine.
S. S Muriel, Guadaloupe, W. I	30.09	764.3	82	27.8	.....	ene.	.....	.....	3	.....	0	.....	.....	0	0	sm'h	.....	clear.
S. S. Caracas, N. 33° 45′, W. 71° 24′†	30.42	772.7	59	15.0	73	nw.	.....	.....	6	.....	8	.....	w.	0	0	mod.	nnw.	fair.
S. S. Claudius, Belize, Honduras†	30.34	770.6	.....	.....	.....	nw.	.....	.....	3	.....	8	.....	nw.	0	0	.....	.....	fair.
S. S. Valencia, Curacoa, W. I†	30.04	763.0	83	28.3	71	ene.	.....	.....	4	.....	3	.....	ne.	0	0	sm'h	.....	fine.
S. S. Belgenland, Antwerp, Belgium	.....	.....	33	0.6	100	nne.	.....	.....	3	.....	4	.....	n.	0	0	.....	.....	fair.
S. S. Pennland, N. 50° 44′, W. 26° 52′	30.16	766.1	50	10.0	100	sw.	.....	.....	6	.....	10	.....	w.	3 h'r	3 h'r	ong	wnw.	stormy.
S. S. Rhynland, N. 49° 00′, W 35° 00′	30.09	764.3	50	10.0	93	wsw.	.....	.....	5	.....	10	.....	wsw.	4 h'r	4 h'r	high	sw.	dense fog.
S. S. Waesland, Schelde river, Germany	30.01	762.2	33	0.6	89	sw.	.....	.....	2	.....	10	.....	s.	snow	snow	.....	.....	overcast.
S. S. P. Caland, N. 49° 55′, W. 25° 30′	30.08	764.0	53.4	11.9	85	sw.	.....	.....	6	.....	9	.....	sw.	.....	.....	5	wsw.	cloudy.
S. S. W. A. Scholten, N. 49° 20′, W. 22° 13′	30.40	772.1	52.2	11.2	76	wsw.	.....	.....	5	.....	10	.....	sw.	.....	.....	high	nw.	rainy.
S. S. Zaandam, N. 45° 04′, W. 51° 29′	30.08	764 0	53.2	11.8	87	s.	.....	.....	3	.....	9 n	.....	ne.	20 h'r	20 h'r	3	sw.	foggy.
S. S. State of Florida, N. 49° 13′, W. 35° 48′	.....	.....	60	15.6	.....	ssw.	.....	.....	6	.....	10	.....	.....	3 h'r	3 h'r	h'vy	sw.	cloudy.
S. S. Baltic, N. 51° 02′, W. 15° 18′.	30.14	765.5	48	8.9	78	nw.	.....	.....	6	.....	5	.....	nw.	0	0	r'gh	nw.	squally.
S. S. Celtic, Liverpool, Eng†	29.88	758.9	40	4.4	.....	s.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	hazy.
S. S. Germanic, Queenstown, Ireland †	29.98	761 5	47	8.3	.....	nnw	.....	.....	4	.....	3	.....	nw.	4 h'r	4 h'r	.....	.....	d. clouds.
S. S. Lepanto, Humber river, Eng*	30.05	763.3	44	6.7	.....	nw.	.....	.....	5	.....	8	.....	nw.	0	0	.....	.....	dense fog.
S. S. Marengo, N. 44° 36′, W. 53° 00′	30.06	763.5	.....	.....	.....	ssw.	.....	.....	4	.....	10	.....	ssw.	4 h'r	4 h'r	mod.	ssw.	rainy.
S. S. Salerno, N. 36° 25′, W. 3° 41′	.....	.....	.....	.....	.....	wnw.	.....	.....	4	.....	2	.....	w.	0	0	sm'h	wnw	clear.
S. S. Catherine Whiting, Providence, R. I†	30.12	765.0	90	32.2	.....	wsw.	.....	.....	1	.....	.....	.....	w.	0	0	.....	.....	
S. S. Saxon, Philadelphia, Pa†.	30.18	766.6	50	10.0	.....	ssw.	.....	.....	5	.....	10	.....	nw.	.....	.....	.....	.....	
MISCELLANEOUS.																		
Bk. Adelaid. N. 35° 52′, W. 74° 06′ *†	30.50	774.7	58	14.4	.....	wnw.	.....	.....	6	.....	1	.....	nw.	0	0	sm'h	nw.	fair.
Bg Alcira, N. 10° 39′, W. 71° 44′	29.94	760.5	82	27.8	.....	ene.	.....	.....	4	.....	2	.....	ene.	0	0	.....	.....	clear.
Schr. Annie Lewis, Tampico, Mexico †	30.59	777.0	58	14.4	.....	wsw.	.....	.....	2	.....	5?	.....	sw.	0	0	long	nne.	cloudy.?
S. Annie M. Law, N. 33° 50′, E. 134° —′* †	30.27	768 8	63	17.2	.....	wsw.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bk. Anna Thormann, S. 20° 50′ E. 68° 26′*	29.92	759.9	71.6	22.0	89	ese.	.....	.....	6	.....	10 n	.....	se.	8 h'r	8 h'r	r'gh	se.	dull.
S. S. Antonio Lopez, Havana, Cuba, W. I*	30.37	771.4	63	17.2	62	ne.	.....	.....	4	.....	4	.....	.....	0	0	.....	.....	fair.
Bgt. Arthur, N. 37° 06′, W. 52° 48′ *†	30.20	767.1	.....	.....	.....	nnw.	.....	.....	.....	.....	.....	.....	nnw.	rain	rain	var.	.....	.....
S. S. Buriswell, N. 26° 05′, W. 79° 09′*†	30.30	769.6	70	21.1	.....	nne.	.....	.....	4	.....	9	.....	nnw.	0	0	sm'h	.....	fine.
Bk. Champion, N. 27° 10′, W. 25° 00′	.....	.....	07.0	19.4	.....	ne.	.....	.....	4	.....	5	.....	ne.	½h'r	½h'r	mod.	ne.	fair.
Schr. Chas. F. Heyer, N. 24° 38′, W 80° 20′	30.47	773.9	63	17.2	89	n.	.....	.....	4	.....	8 d	.....	n.	0	0	r'gh	n.	cloudy.
Bg. Clara M. Goodrich, Sagua la Grande, Cuba, W. I	.....	.....	.....	.....	.....	nne.	.....	.....	6	.....	10?	.....	n.	0	0	.....	.....	clear?
S. Cornelius, N. 48° 45′, W. 20° 28′	.....	.....	52.9	11.6	.....	nw.	.....	.....	4	.....	4	.....	wnw.	0	0	mod.	wnw.	fair.
Bkt. David Preston, New Orleans, La	.....	.....	68.0	20.0	.....	sw.	.....	.....	.....	.....	0	.....	.....	0	0	.....	.....	fine.
Bk. E. L. Pettingill, N. 32° 54′, W. 126° 00′ *†	30.30	769.6	60	15.6	.....	n.	.....	.....	2	.....	8	.....	nne.	4 h'r	4 h'r	long	sw.	overcast.
S. E. J. Spicer, N. 39° 28′, W. 66° 00′*	30.15	765.8	48	8.9	.....	w.	.....	.....	6	.....	7	.....	w.	sq'lls	sq'lls	mod.	wsw.	cloudy.
Bk. Eliza Barss, Bermuda, W. I †	30.29	769.4	.....	.....	.....	nnw.	.....	.....	5	.....	8	.....	nw.	0	0	.....	.....	fair.
S. Enoch Train, N. 21° 00′, W. 68° 00′*†	30.28	769.1	.....	.....	.....	ene.	.....	.....	3	.....	0	.....	.....	0	0	light	ese.	clear.
Bk. Essex, Muscat, Arabia*†	29.94	760.5	81.0	27.2	.....	w.	.....	.....	3	.....	0	.....	.....	0	0	.....	nw	fine.
Schr. F E. McDonald, Belfast, Maine†	29.91	759.7	15	— 9.4	.....	nw.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	snowing.
S. S. Foscolia, N. 23° 31′ W. 60° 21′	.....	.....	.....	.....	.....	ne.	.....	.....	2	.....	.....	.....	ne	0	0	long	se	fine.
Bk Freya, N. 18° 40′ W. 50° 40′	.....	.....	82	27.8	.....	ne.	.....	.....	1	.....	0	.....	.....	0	0	mod	nne.	fine.
S. F. W. Gildemeister, N. 39° 48′ W. 71° —′*	30.16	766.1	41.0	5	41	w.	.....	.....	6	.....	8	.....	w.	0	0	5	wsw.	cloudy.
Bg. George, Port Caledonia, Cape Breton Id., N. S*†	30.04	763.0	.....	.....	.....	sw.	.....	.....	5	.....	2	.....	.....	sh'rs	sh'rs	mod.	.....	clear.
Bk. Gronsvaer, Wellington, New Zealand†	30.26	768.5	69.8	21.0	92	s.	.....	.....	5	.....	8	.....	s.	0	0	.....	.....	
Bk. Great Surgeon, S. 12° 00′, E. 105° 00′*†	29.95	760.7	80	26.7	.....	sw.	.....	.....	1	.....	3	.....	sw.	0	0	long	sse.	fair.
S. Grecian, N. 35° 57′, W. 71° 27′†	30.22	767.6	58	14.4	76	w.	.....	.....	6	.....	6	.....	w.	0	0	mod.	nw.	fair.
Bk. Grey Eagle, N. 24° 03′, W. 37° 50′*†	30.20	767.1	.....	.....	.....	e.	.....	.....	3	.....	5	.....	e.	0	0	h'vy	ne.	squally.
Bk. Hattie G. McFarland, New York, N. Y†	30.16	766.1	34	1.1	.....	wsw.	.....	.....	5	.....	4	.....	sw.	0	0	.....	.....	
Schr. Hattie Weston, N. 17° 25′ W. 66° 50′*†	30.10	764.5	82	27.8	.....	ene.	.....	.....	4	.....	2	.....	ene.	0	0	mod	e.	fair.
Bk. Heinrich & Tonio, N. 48° 58′, W. 13° 00′*†	30.22	767.6	50	10.0	70	nw.	.....	.....	6	.....	3	.....	nw.	0	0	mod	nw.	squally.
Schr. Isabel Alberto, Cedar Keys, Fla†	30.53	775.4	.....	.....	.....	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Schr. James Slater, N. 29° 00′, W. 71° 01′†	30.35	770.9	70	21.1	.....	n.	.....	.....	2	.....	2	.....	ne.	0	0	mod.	nw.	

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Schr. Jennie N. Huddell, Savanah, Ga†	30.46	773.7	36	2.2	.....	W.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear.
Schr. John L. Thomas, N. 27° 00′, W. 79° 35′*†	30.40	772.1	.....	.....	.....	nne.	.....	.....	4	.....	8	.....	e.	0	0	h'vy	n.	cloudy.
Bg. John Wesley, N. 29° 33′ W. 79° 49′†	30.36	771.1	.....	.....	.....	wnw.	.....	.....	4	.....	0	.....	.....	0	0	mod.	ne.	clear.
Bk. Joseph A. Ropes, N. 17° 03′ E. 59° 37′*†	29.95	760.7	79	26.1	86	nne.	.....	.....	3	.....	5	.....	nne.	0	0	mod.	ne.	fair.
Bkt. Josephine, N. 40° 50′, W. 67° 18′†	30.13	765.3	52	11.1	60	wsw.	.....	.....	6	.....	10	.....	.....	snow	snow	r'gh	w.	cloudy.
Bk. Julia H., N. 38° 29′, W 67° 35′	30.24	768.1	47.6	8.7	66	w.	.....	.....	6	.....	10	.....	.....	snow	snow	5	w.	overcast
Light House Tender, Laurel, Key West, Florida†	30.39	771.9	59	15.0	.....	nne.	.....	.....	3	.....	3	.....	ne.	0	0	sm'h	.....	clear.
Bg. Lilian, N. 29° 30′, W. 72° 30′ †	30.38	771.6	69	20.6	.....	nnw.	.....	.....	2	.....	1	.....	nw.	5 h'r	5 h'r	r'gh	var.	clear.
Bg. L. & W. Armstrong, N. 39° 02′, W. 71° 48′*†	30.22	767.6	.....	.....	.....	wsw.	.....	.....	7	.....	3	.....	wsw.	0	0	mod.	w.	clear.
S. S. Malabar, N. 35° 16′ E. 22° 53′†	29.87	758.7	.....	.....	.....	sse.	.....	.....	6	.....	0	.....	.....	0	0	h'vy	cross	clear.
Bk. Matilda C. Smith, N. 28° 22′ W. 44° 22′*†	30.35	770.9	.....	.....	.....	sse.	.....	.....	7	.....	8	.....	s.	12 h'r	12 h'r	mod.	ese.	stormy.
Schr. Minnie A. Bonsall, St. John s, Nfla	.....	.....	58	14.4	.....	nnw.	.....	.....	1	.....	0?	.....	.....	.....	.....	light	n.	fair.?
S. Minnie N. Gerow, N. 34° 34′, W. 13° 44′ *†	30.28	769.1	.....	.....	.....	nnw.	.....	.....	5	.....	4	.....	n.	0	0	long	n.	fair.
S. M. P. Grace, N. 5° 09′, W. 123° 10′*†	30.00	762.0	76	24.4	.....	se.	.....	.....	5	.....	7	.....	se.	0	0	mod.	se.	squally.
Bg. O. C. Clary, N. 7° 58′, W. 57° 59′*†	30.00	762 0	78	25.6	91	e.	.....	.....	3	.....	10	.....	e.	h'vy	h'vy	sm'h	e.	cloudy.
S. Orealla, N. 11° 24′, E. 91° 45′*	29.93	760.2	.....	.....	.....	s.	.....	.....	2	.....	4	.....	s.	.....	.....	sm'h	.....	fine.
Bk. Orpheus, N. 49° 01′, W. 9° 07′	29.85	758.2	52	11.1	.....	sw.	.....	.....	3	.....	10 k	.....	w.	.....	.....	mod.	nw.	drizzling.
S. Paramita, San Francisco, Cal	.....	.....	51	10.6	.....	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear.
S. S. Peconic, N. 37° 43′, W. 74° 45′	.....	.....	42	5.6	.....	sw.	.....	.....	5	.....	2	.....	wsw.	.....	.....	sm'h	sw.	cloudy.
S. S. Radnorshire, N. 5° 14′, E. 81° 00′*†	29.84	757.9	.....	.....	.....	ssw.	.....	.....	4	.....	0	.....	.....	0	0	mod.	wsw.	clear.
S. St. Francis, N. 7° 03′, W. 119° 32′†	29.89	759.2	76	24.4	.....	ese.	.....	.....	6	.....	7	.....	se.	0	0	long	nne.	cloudy.
Bk. Southern Belle, Antwerp, Belgium*†	29.90	759.4	.....	.....	.....	se.	.....	.....	3	.....	.....	.....	.....	snow	snow	.....	.....	foggy.
S. S. Sunbeam, N. 28° 27′ W. 34° 06′	30.47	773.9	69	20.6	85	ese.	.....	.....	6	.....	5	.....	ese.	4 h'r	4 h'r	3	ese.	squally.
S. S. Strathleven, N. 12° 12′, E. 48° 37′	29.95	760.7	76.0	24.4	77	ene.	.....	.....	2	.....	0	.....	.....	0	0	3	ene.	blue sky.
Schr. T. S. McLellan, N. 24° 30′, W. 80° 40′*†	30.45	773.4	64	17.8	.....	ne.	.....	.....	.....	.....	.....	.....	ne.	.....	.....	h'vy	n.	cloudy.
U.S.F.C.S.S.Fish Hawk, Washington, D. C†	30.32	770.1	32	0.0	.....	sw.	.....	.....	3	.....	7	.....	calm	0	0	.....	.....	fair.
Bk. Usko, N. 52° 29′ W. 29° 09′*	29.86	758.4	52	11.1	.....	ssw.	.....	.....	4	.....	10	.....	.....	8 h'r	8 h'r	long	w.	foggy.
S. Vincenzo Accame, N. 35° 48′, W. 24° 42′†	30.72	780.3	66.2	19	.....	nnw.	.....	.....	3	.....	8	.....	nw.	0	0	mod.	nnw.	
Schr. Walter L. Plummer, N. 24° 40′, W. 73° —′*†	30.30	769.6	.....	.....	.....	n.	.....	.....	4	.....	10	.....	.....	0	0	r'gh	cross	
Bk. Wandering Jew, S. 34° 01′, W. 51° 16′†	30.05	763.3	69	20.6	.....	sw.	.....	.....	4	.....	3	.....	sw.	0	0	mod.	ne.	clear.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.06	763.5	.....	.....	.....	s.	.....	.....	1	.....	3	.....	sse.	.....	.....	sm'h	ssw.	fair.
S. Wm. Woodbury, N. 40° 35′, W. 42° 17′*	30.36	771.1	73	22.8	.....	sw.	.....	.....	6	.....	4	.....	sw.	.....	.....	long	se.	clear.

International Chart I. December 1, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 2, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.95	760.7	61.9	16.6	80	ne.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair...	Malaterre.
Algiers	.....	.....	29.87	758.8	58.6	14.8	74	w.	.....	.....	3	.....	6	.....	.....	0.150	3.8	cloudy.	Thève.
La Calle	.....	.....	29.84	758.0	62.6	17.0	50	w.	.....	.....	2	.....	3	.....	.....	0.177	4.5	pretty fair...	Fonfrède.
Tunis	.....	.....	29.89	759.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.99	761.7	55.4	13.0	87	se.	.....	.....	2	.....	0	.....	.....	0	0	clear.....	Pérès.
Tebessa	.....	.....	30.01	762.3	51.4	10.8	86	w.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	Dognon.
Geriville	.....	.....	.....	.....	50.4	10.2	35	w.	.....	.....	3	.....	6	.....	.....	0	0	cloudy..	Lonchamp.
Laghouat	.....	.....	30.06	763.4	55.8	13.2	28	wsw.	.....	.....	2	.....	2	.....	.....	0	0	fair.....	Abraham.
Biskra	.....	.....	30.02	762.6	60.4	15.8	37	calm	.....	.....	0	.....	0	.....	.....	0	0	clear.....	Malau.
Australian.																			
Melbourne, Victoria	30.05	763.3	30.14	765.5	60.2	15.7	86	ssw.	10	4.5	.....	.....	0	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.19	741.5	29.76	756.0	32.2	0.1	96	sw.	.....	.....	2	.....	10	.....	.....	0.071	1.8	snowing.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.06	738.0	29.86	758.5	24.1	— 4.4	95	ne.	12	5.4	.....	.....	10	.....	.....	0.020	0.5	.....	Dr. Wierzbiski.
Eperies	28.82	732.1	29.75	755.6	24.8	— 4.0	82	n.	.....	.....	3	.....	10	.....	.....	0.047	1.2	.....	Julius Mikolik.
Gratz	28.47	723.1	29.76	755.9	35.1	1.7	77	nw.	.....	.....	5	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.17	715.6	29.63	752.6	37.8	3.2	68	ese.	.....	.....	2	.....	10	.....	.....	0.051	1.3	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.49	723.6	29.90	759.5	27.3	— 2.6	93	w.	.....	.....	2	.....	10	.....	.....	0.134	3.4	light snow..	The Staff.
Lemberg	28.82	732.1	29.88	758.9	18.9	— 7.3	81	se.	.....	.....	4	.....	10	.....	.....	0.339	8.6	.....	Dr. T. Stanecki.
Pola	29.66	753.4	29.74	755.3	40.1	4.5	54	nne.	.....	.....	2	.....	5	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	29.15	740.3	29.63	752.7	40.1	4.5	73	se.	.....	.....	2	.....	10	.....	.....	0.295	7.5	.....	Joseph Midlinszky, S. J.
Szegedin	29.35	745.5	29.64	752.8	35.1	1.7	98	calm	.....	.....	0	.....	10	.....	.....	0.126	3.2	.....	Karl Stancel.
Trieste	29.68	753.8	29.78	756.4	39.9	4.4	50	e.	.....	.....	1	.....	3	.....	.....	0	0	.....	Royal Academy.
Vienna	29.09	738.9	29.84	758.0	30.2	— 1.0	88	nw.	.....	.....	2	.....	10	.....	.....	0.142	3.6	snowing.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.67	753.6	29.77	756.1	39.6	4.2	63	s.	23	10.3	.....	.....	10	.....	.....	0.450	11.4	squally.....	W. Boswell
Armagh, Observatory	29.47	748.5	29.70	754.4	37.1	2.8	83	s.	19	8.5	.....	.....	10	.....	.....	.....	.....	squally.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.90	759.4	36.0	2.2	88	se.	20	8.9	.....	.....	10	.....	.....	.....	.....	misty.....	John Hartnup.
Bolton, Sharples	29.39	746.5	29.94	760.5	34.5	1.4	79	s.	12	5.4	.....	.....	10	.....	.....	.....	.....	misty.....	Thomas Mackereth.
Bradford, Yorkshire	29.51	749.5	29.90	759.4	34.3	1.3	77	ne.	.....	.....	1	.....	10	.....	.....	0.04	1.0	overcast.....	McLandsborough&Preston.
Bridgetown, Barbadoes	29.96	761.0	29.98	761.5	83.0	28.3	64	ne.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds.....	Corpl.J.Surgenor, A.H.C.
Cardington	.....	.....	.....	.....	32.0	0.1	100	s.	.....	.....	0.4	.....	10	.....	.....	.....	.....	dense fog....	John McLaren.
Chatham, School M. E.	29.96	761.0	30.10	764.5	33.6	0.9	90	calm	.....	.....	0	.....	10	.....	.....	.....	.....	misty.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.79	756 7	30.02	762.5	44.7	7.1	95	sse.	.....	.....	4	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Fort Napier, Natal	27.49	698.2	29.70	754.4	75.0	23.9	37	e.	.....	.....	1	.....	6?	.....	.....	.....	.....	overcast?....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	88.0	31.1	62	n.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds.....	Sergt. John Robinson
Gibraltar, Mediterranean	30.01	762.2	30.06	763.5	59.0	15.0	95	w.	.....	.....	3	.....	5	.....	.....	.....	.....	d. clouds.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.52	749.8	29.73	755.1	37.6	3.1	85	sse.	.....	.....	4	.....	10	.....	.....	.....	.....	gloomy.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.90	759.4	30.08	764.0	31.7	— 0.2	96	se.	.....	.....	1	.....	10	.....	.....	.....	.....	foggy.....	The Staff.
Guernsey	29.77	756.1	30.08	764.0	40	4.4	82	s.	.....	.....	2	.....	9	.....	.....	.....	.....	gloomy.....	A. Collenette, F. M. S.
Kew, Observatory	30.05	763.3	30.09	764.3	30.8	— 0.7	99	n.	1	0.4	.....	.....	.....	.....	.....	.....	.....	foggy.....	The Staff.
Leicester, Museum	29.74	755.4	30.01	762.2	32.5	0.3	92	se.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	29.83	757.7	29.90	759.4	62.0	16.7	97	w.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.21	767.3	30.26	768.6	71.0	21.7	57	ne.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds.....	C. S. Duncombe.
Oscott, St. Mary's College	29.47	748.5	30.02	762.5	31.5	— 0.3	96	s.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy.....	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.82	757.4	30.05	763.3	27.8	—2.3	98	sse.	.....	.....	1	.....	.....	.....	.....	.....	.....	foggy.....	The Staff.
Plymouth	29.97	761 2	30.02	762.5	43.9	6.6	70	sse.	.....	.....	3	.....	10	.....	.....	.....	.....	gloomy.....	John Merrifield.
Sandwick Manse, Orkneys	29.39	746.5	29.49	749.0	39.3	4.1	88	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty.....	Rev. C. Clouston, L.L.D.
Scutari Cemetery, Turkey	29.60	751.8	29.66	753.4	57.6	14.2	76	wsw.	.....	.....	4	.....	8	.....	.....	.....	.....	showery.....	W. H. Lyne.
Sheffield	29.69	754.1	29.98	761.5	35.6	2.0	82	ssw.	.....	.....	1	.....	10	.....	.....	0.09	2.3	overcast.....	W. F. Cooper.
Silloth Rectory	29.77	756.1	29.80	756.9	37.1	2.8	80	s.	.....	.....	3	.....	10	.....	.....	0.360	9.1	overcast.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.92	760.0	35.1	1.7	70	s.	27	12.1	.....	.....	10	.....	.....	.....	.....	gloomy.....	I. New.
Stratfield Turgiss	29.95	760.7	30.18	766.6	31.7	— 0.2	95	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy.....	Rev.C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.92	760 0	29.96	761.0	46	7.8	77	s.	.....	.....	6	.....	10	.....	.....	.....	.....	raining.....	W. Newcombe.
Valencia, Observatory	29.70	754.4	29.72	754.9	47.1	8.4	70	nw.	19	8.5	.....	.....	6	.....	.....	.....	.....	d. clouds	The Met'g'l Office.
Canadian.																			
Bathurst, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson
Charlottetown, P. E. Island	29.91	759.7	29.96	761.0	25	— 3.9	90	w.	5	2.2	.....	.....	10 n	.....	w.	0.160	4. 1	cloudy..	H. J. Cundall, C. E
Chatham, N. B*	29.89	759.2	29.96	761.0	10	—12.2	91	calm	0	0	.....	0	0	.....	.....	0.01	0.3	clear.....	G. A. Blair.
Father Point, Quebec*	29.90	759.4	29.92	760.0	18	— 7.8	80	nw.	25	11.2	.....	.....	10 n	.....	w.	0	0	threatening.	J. McWilliams.
Fort Garry, Manitoba*	29.57	751.1	30.50	774.7	3	—16.1	100	n.	3	1.3	.....	.....	10 s	.....	n.	0.20	5.1	light snow...	James Stewart.
Halifax, N. S*	29.88	758.9	30.02	762.5	27	— 2.8	88	w.	3	1.3	.....	1 cs	0	.....	.....	0	0	clear.....	A. Allison.
Kingston, Ontario*	29.60	751.8	29.95	760.7	20	— 6.7	91	ne.	8	3.6	.....	.....	10 n	.....	.....	0.04	1.0	light snow..	A. P. Knight, M. A
Montreal, Quebec*	29.80	756 9	30.02	762.5	15	— 9.4	91	e.	6	2.7	.....	.....	10 n	.....	.....	0.08	2.0	light snow.	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.27	743.4	30.02	762.5	15	— 9.4	83	n.	7	3.1	.....	.....	10 n	.....	.....	0.05	1.3	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.12	739.6	29.84	757.9	32	0.0	100	ne.	9	4.0	.....	.....	10 n	.....	.....	0.02	0.5	threatening.	H. Morgan.
Port Stanley, Ontario	29.15	740 4	29.82	757.4	33	0.6	85	n.	6	2.7	.....	.....	10 n	.....	nw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.65	753.1	30.00	762.0	12	—11.1	83	n.	.....	.....	3	.....	8 k	.....	ne.	0.10	2.5	cloudy.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.43	747.5	29.93	760.2	14	—10.0	83	e.	2	0.9	.....	.....	10 n	.....	.....	lnap.	lnap.	light snow...	W. H. McIntyre.
Saugeen, Ontario*	29.21	741.9	29.97	761.2	22	— 5.6	100	ne.	10	4.5	.....	.....	10 s	.....	.....	0.29	7.4	light snow...	
St. Andrews, N. B	29.94	760.5	29.99	761.7	22	— 5.6	86	w.	1	0.4	.....	.....	hz	.....	.....	0.01	0.3	clear.....	
Sydney, C. B*	29.89	759.2	29.95	760.7	31	— 0.6	74	w.	12	5.4	.....	2 c	8 ks	.....	w.	0	0	fair.....	T. C. Hill, C. E
Toronto, Ontario*	29.52	749.8	29.92	760.0	24	— 4.4	96	ne.	10	4.5	.....	.....	10 n	.....	.....	0.30	7.6	light snow ..	Magnetic Observatory.
Yarmouth, N. S*	29.95	760.7	30.02	762.5	31	— 0.6	85	se.	1	0.4	.....	0	8 k	.....	w.	0.10	2.5	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	29.45	748.0	29.94	760.5	20.0	— 6.7	100	n.	.....	.....	3	.....	10 s	.....	n.	0.549	14.0	snowing.....	Wm. Wylie.
St. Johns, Newfoundland	29.82	757.4	30.06	763.5	34	1.1	79	sw.	2	0.9	.....	.....	0	.....	.....	0.05	1.3	clear.....	John Delany
Cape Colony.																			
Cape St. Francis Lt. House	29.65	753.1	29.68	753.9	71.6	22.0	85	sw.	14.9	6.7	.....	0	2 k	.....	.....	0	0	hazy.....	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D.Gill.

STATIONS.	Barometer: Corrected for instrumental error and for temperature.		Barometer: Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind: Direction.	Wind: Velocity.		Wind: Force.	Clouds: Amount and kind. Upper	Clouds: Amount and kind. Lower.	Clouds: Direction Upper.	Clouds: Direction Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.60	624.8			24.4	— 4.2		calm			0		0						
Tchang-kia-tchouang	29.97	761.3	30.08	764.1	43.0	6.1	76	calm	5.8	2.6		0	0			0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.08	764.0	30.11	764.7	47.3	8.5	83	wsw.	1.3	0.6		0	0			0	0	clear	M. Marc Dechevrens, S. J.
DANISH.																			
Copenhagen	30.14	765.6	30.19	766.8	26.8	— 2.9	76	ene.	27	12			0						Oversergent Fischer.
Fanoe	30.19	766.7	30.21	767.2	28.8	— 1.8	80	ene.			4		3						Overloerer Lauridsen.
Godthaab, Greenland	29.37	746.0	29.41	747.1	21.2	— 6.0	85	ssw.			2		10						S. Kleinschmidt.
Ivigtut, Greenland	29.36	745.7	29.38	746.2	22.6	— 5.2		calm			0		10						
Jacobshavn, Greenland	29.40	746.8	29.45	748.0	7.2	—13.8		e.			2		4						
Stykkisholm, Iceland	28.95	735.4	29.00	736.5	33.1	0.6	80	calm			0		2						A. O. Thorlacius.
Thorshavn	29.30	744.2	29.34	745.1	44.1	6.7	77	se.	25	11			10					raining.	Overloerer Bergh.
Vestervig	30.12	765.0	30.21	767.4	22.8	— 5.1	90	e.			2		0						Loearer Oesterbol.
Upernavik, Greenland	29.47	748.5	29.52	749.7	— 8.9	—22.7		calm			0		3						
FRENCH.																			
Agen, Normal School	29.41	747.0	30.08	764.0	38.8	3.8	80	calm			0		0			0.280	7.1	clear	M. Labroue, Director.
Alençon, Normal School	29.61	752.0	30.16	766.0	33.4	0.8	92	s.			1		k			0	0		M. Nicot, Director.
Arras, Engineer School	29.82	757.4	30.09	764.3	31.5	— 0.3	83	se.			1		n			0	0		M. Fénéon, Command't.
Avignon, Normal School	29.82	757.3	29.89	759.3	37.0	2.8	75	n.			6		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.55	750.6	30.14	765.5	31.6	— 0.2	93	ene.			2		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.88	758.9	30.16	766.1	33.3	0.7	87	e.			1		10			0	0	foggy	M. Frère Eugène Marié
Besançon, Normal School	29.16	740.6	30.10	764.5	33.4	0.8	89	nne.			1	0	0			0	0	clear	M. Gobin, Director.
Bordeaux, Observatory	29.80	757.0	30.08	763.9	39.0	3.9	48	ne.			1		0			0.213	5.4	clear	M. Rayet, Director.
Bourges, Normal School	29.59	751.5	30.17	766.3	31.1	— 0.5	90	e.			1		n		e.	0	0		M. Malet, Director.
Brest, Naval Observatory	29.85	758.3	30.10	764.5	37.8	3.2	86	se.			2		10		se.	0.768	19.5		M. de Kermarée, Dir.
Caen, Normal School	30.01	762.3	30.09	764.2	38.1	3.4	60	se.			1		5		se.	0	0	cloudy	M. Berson, Director.
Châlons-sur-Marne, N. Sch'l	29.78	756.5	30.11	764.9	34.0	1.1	91	n.			1		0			0	0	clear	M. Jadot, Director.
Charleville, Normal School	29.60	751.9	30.14	765.6	32.7	0.4	80	ne.			1		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.69	728.8	30.14	765.5	27.7	— 2.4	83	n.			1		10			0	0	covered	M. Alluard, Director.
Cluny, Normal School	29.21	741.9	30.09	764.2	31.5	— 0.3	81	ne.			1		4	ne.	ne.	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.22	742.2	30.12	765.1	30.2	— 1	90	ene.			1	c		ene.	ene.	0	0		Dr. Coulet, Director.
Gap, Normal School	27.27	692.6	29.91	759.6	29.5	— 1.4		n.			1		0			0.724	18.4		M. Jeangirard, Director.
Gréasque, du Rhone	28.65	727.8	29.82	757.5	36.3	2.4	58	nnw.			2		0			0	0		M. Kinn, Director.
Grenoble, Normal School	29.20	741.6	30.01	762.2	32.0	0	96	nw.			1		k		e.	0	0		M. Ablard, Director.
Guéret	28.47	723.0	30.16	766.0	26.6	— 3	87	ne.			2		10 n		ne.	0	0	covered	M. Delorme, Dir.
Lamballe, Normal School	29.78	756.3	30.06	763.6	33.8	1	82	se.			2		10		se.	0.12	3.	covered	M. Ollitrault, Director.
Lescar, Normal School	29.39	746.4	29.97	761.2	43.2	6.2	85	w.			1		5			0.142	3.6	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	30.05	763.2	30.15	765.8	37.4	3.0	63	ese.			1		10			0.433	11.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.97	735.8	30.08	764.1	30.2	— 1.0	80	n.			3		5		n.	0	0	light haze	M. André, Director.
Mans, Normal School	29.85	758.1	30.17	766.4	30.7	— 0.7	79	s.			1		10			0.008	0.2	covered	M. Pibeën, Director.
Marseille, Observatory	29.54	750.4	29.82	757.4	39.4	4.1	66	nw.			2.3		0			0	0		M. Stephan, Director.
Mt. Louis	24.70	627.3	29.54	750.3	41.9	5.5	70	nw.	5.6	2.5			2	n.		0	0		M. Caré for Dr. Fines.
Montpellier, Normal School	29.77	756.1	29.94	760.4	44.6	7	44	nw.			1		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.21	742.0	30.03	762.8	30.2	— 1.0	73	nw.			1	ck	0			0	0		M. Hasse, Director.
Nantes, Observatory	30.00	762.0	30.16	766.1	34.5	1.4	81	ese.			1-3		10 n		ese.	0.142	3.6		M. Larocque, Director.
Perpignan, Observatory	29.80	756.9	29.91	759.8	50.0	10.0	58	nw.	24.2	10.8			1			0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	20.95	532.1			15.4	— 9.2		ne.			1				ne.	0.512	13.0		M. Vaussenat.
Privas, Normal School	28.94	735.1	30.07	763.7	33.1	0.6	89	n.			3		0			0	0	clear	M. Tallien.
Puy de Dôme Obs'y, Summit	24.96	634.0			15.4	— 9.2	98	ene.			3		0			0.004	0.1	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.08	763.9	30.11	764.7	37.0	2.8	79	ene.			2		10			1.85	47.	covered	Lt. E. Decaute, Director.
Roche-sur-Yon, N. School	29.92	759.9	30.15	765.7	35.2	1.8	78				1		0			0	0	clear	M. Brotier, Director.
Rodez, Normal School	27.83	706.9	30.10	764.6	23.9	— 4.5	91	se.			1		1		s.	0	0	clear	M. Seger, Director.
Rouen, Normal School	30.04	763.0	30.09	764.2	33.1	0.6	92	e.			1		10	e.		0	0	covered	M. Mouillot.
Saint Lô					35.2	1.8	78	s.			1		0			0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.98	761.4	30.14	765.6	31.6	— 0.2	87	n.			1		9		sse.	0	0		M. Renou, Director.
Toulouse, Observatory	29.31	744.5	30.04	762.9	39.7	4.3	85	nnw.			2		1	nw.		0.394	10.0	clear	M. Baillaud, Director.
Tours	29.94	760.5	30.12	765.0	33.8	1.0	82	ne.			1		10		nne.	0	0	covered	M. de Tastes.
Versailles, Observatory	29.65	753.0	30.14	765.5	33.8	1.0	88	n.			1					0	0		Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.91	759.6	30.06	763.4	41.4	5.2	87	e.	9.8	4.4			9 k			0.429	10.9		M. Cartier, Director.
GERMAN.																			
Ansbach	28.51	724.2	30.06	763.4	25.5	— 3.6	77	e.			2		10	e.		0.185	4.7		Prof. Jnedt.
Bamberg	29.17	740.9	30.02	762.4	26.6	— 3.0	70	n.			1		3			0.039	1.0		Prof. Dr. Hoh.
Berlin	29.86	758.4	30.05	763.3	23.4	— 4.8	71	ne.			2		10			0.031	0.8	snowing	Prof. Dr. Arndt.
Breslau	29.43	747.5	29.96	760.9	22.3	— 5.4	83	ne.			1		10			0.059	1.5		Royal University Obs'y.
Carlsruhe	29.63	752.5	30.09	764.2	32.7	0.4	67	nne.			1		9	e.		0	0		Albert Senz.
Cassel	29.31	744.4	30.02	762.5	27.3	— 2.6	62	ne.			4		3	ne.		0	0		Dr. H. Möhl.
Frankfort-on-the-Main	29.71	754.5	30.09	764.3	30.7	— 0.7	64	nne.			1		7			0	0		Physical Society.
Friedrichshafen	28.53	724.7	30.04	762.9	30.2	— 1.0	62	nnw.			4		6	n.		0.008	0.2		Wilhelm, Chief Tel.
Hamburg	30.08	763.9	30.17	766.2	28.2	— 2.1	79	nne.			2		2			0.004	0.1		E. Preller.
Kiel	30.13	765.4	30.15	765.8	31.5	— 0.3	86	ese.			2		7			0.012	0.3	snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.68	753.9	30.09	764.3	21.4	— 5.9	52	nne.			3		10					snowy	H. Leppig, Asst.
Magdeburg	29.89	759.3	30.10	764.5	25.3	— 3.7	84	n.			2	0	4 k		nne.	0.079	2.0		Weather Observatory.
Memel	30.25	768.4	30.30	769.6	12.9	—10.6	76	e.			3	7 cs	0						Issermann.
Munich	28.08	713.3	29.94	760.4	25.3	— 3.7	84	nw.			2		10			0.146	3.7		Central Station.
Neufahrwasser	30.17	766.4	30.19	766.8	22.1	— 5.5	80	e.			2		9			0	0		A. Lothes.
Neustadt, Palatinate	29.52	749.9	30.05	763.3	31.3	— 0.4	88	n.			2		8	n.		0.150	3.8		Dicknether.
Stuttgart	29.06	738.2	30.01	762.2	27.5	— 2.5	79	nw.			1		10			0.016	0.4		Prof. Dr. Schoder.
Wustrow	30.17	766.2	30.19	766.8	28.6	— 1.9	84	ne.			2		10 s			0	0		Profs. Brandes & Reimer
GREEK.																			
Athens	29.42	747.3	29.81	757.1	61.0	16.1		w.			3.0	0	4 k			0	0		Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	29.92	760.0	29.98	761.4	74.9	23.8	86	sw.	14.0	6.3			0			0	0	blue sky	
Deesa	29.42	747.3	29.89	759.2	85.0	29.4	35	nnw.	3.0	1.3			0			0	0	blue sky	
Bombay	29.86	758.5	29.90	759.5	81.8	27.7	50	nnw.	11.0	4.9			0			0	0	blue sky	
Poona, Yarrowda	28.00	711.2	29.84	758.0	81.8	27.7	39	wsw.	15.0	6.7			4		sse.	0	0	d. clouds	
Trichinopoly	29.58	751.4	29.86	758.5	84.5	29.2	66	nw.	1.0	0.4			4			0	0	d. clouds	
Belgaum	27.32	693.8	29.87	758.7	73.0	22.8	88	w.	8.0	3.6			7	w.		0.10	2.5	d. clouds	
Lahore	29.19	741.4	29.96	761.1	61.6	16.4	56	calm	0	0			0			0	0	blue sky	
Roorkee	29.00	736.5	29.92	760.1	65.2	18.4	58	calm	1.0	0.4			0			0	0		
Agra	29.37	745.9	29.94	760.5	73.2	22.9	40	calm	0	0			0			0	0	blue sky	
Nagpur	28.87	733.2	29.92	760.0	74.2	23.4	40	e.	4.0	1.8			0			0	0	blue sky	
Jubbulpore	28.58	725.9	29.96	761.1	69.5	20.8	57	calm	0	0			0			0	0	blue sky	
Lucknow	29.55	750.6	29.93	760.3	73.2	22.9	38	calm	0	0			0			0	0	blue sky	
Allahabad	29.60	751.9	29.93	760.3	60.8	16.0	82	calm	0	0			0			0	0	blue sky	
Patna	29.76	755.9	29.95	760.8	65.2	18.4	61	nnw.	2.0	0.9			0			0	0	blue sky	
Hazaribagh	27.87	708.0	29.95	760.7	62.2	16.8	55	nnw.	4.9	2.2			0			0	0	blue sky	
Cuttack	29.85	758.2	29.94	760.3	73.6	23.1	69	ne.	3.0	1.3			0			0	0	blue sky	
Calcutta, Alipore	29.87	758.6	29.89	759.2	72.2	22.3	67	n.	3.0	1.3			0			0	0	blue sky	
Dhubri	29.76	756.0	29.88	759.0	71.0	21.7	79	calm	0	0			0			0	0	blue sky	
Chittagong	29.79	756.7	29.88	759.0	70.6	21.4	82	calm	0.4	0.2			9			0	0	d. clouds	
Sibsagar	29.57	751.0	29.91	759.8	66.1	18.9	89	ne.	2.0	0.9			2			0	0	d. clouds	
Jeypore	28.47	723.1	29.93	760.3	73.7	23.2	56	nw.	4.0	1.8			0			0	0	blue sky	
ITALIAN.																			
Udine	29.35	745.4	29.76	756.0	39.4	4.1	74	ne.	1.3	0.6			9			0	0		Prof. Giovanni Clodig.
Milan	29.29	743.9	29.81	757.2	38.3	3.5	46	ne.	3.8	1.7			2			0	0		Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Padua	29.72	754.9	29.83	757.7	34.0	1.1	87	nnw.	5.6	2.5			10			0.134	3.4		Prof. Dott. Lorenzoni.
Moncalieri	28.88	733.6	29.83	757.6	37.6	3.1	71	ene.	3.1	1.4			0			0	0		Prof. F. F. Denza.
Genoa	29.56	750.9	29.76	755.8	43.7	6.5	29	ne.	8.7	3.9			0			0	0		Prof. G. M. Garibaldi
Mondovi	27.84	707.0	29.82	757.4	35.6	2.0	54	n.			2		0			0.039	1.0		Prof. D. C. Bruno.
Pesaro	29.65	753.2	29.71	754.5	42.8	6.0	64	nw.	16.8	7.5			9			0	0		Prof. Luigi Guidi.
Florence	29.50	749.4	29.76	756.0	38.8	3.8	72	sw.			2		10			0	0		Prof. Costantino Pittei.
Leghorn	29.64	752.9	29.73	755.1	34.0	1.1	89	ene.	5.6	2.5			10			0.130	3.3		Prof. P. Monte.
Rome	29.58	751.4	29.76	755.9	46.0	7.8	56	w.	0	0			3			0.232	5.9		Prof. P. Tachini.
Lecce	29.55	750.5	29.80	757.0	53.1	11.7	76	wsw.	6.3	2.8			10			0.150	3.8		Prof. C. de Giorgi.
Cosenza	28.91	734.2	29.80	757.0	50.4	10.2	74	sw.	2.5	1.1			10	w.		1.095	27.8		Prof. D. Conti.
Cagliari	29.62	752.3	29.81	757.2	55.0	12.8	57	nw.			2		7	w.		0.028	0.7		Prof. A. Pachiotti.
Palermo	29.62	752.3	29.87	758.7	58.1	14.5	48	wnw.	14.3	6.4			6	nnw.		0.441	11.2		Prof. G. Cacciatore.
Syracuse	29.81	757.2	29.85	758.3	57.7	14.3	57	s.	16.8	7.5			5	w.		0.020	0.5		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.28	743.6	29.82	757.3	47.5	8.6	82	w.	3.1	1.4			10	nw.		0.240	6.1		Prof. F. Brioschi.
Stelvio	21.70	551.2			0.9	—17.3	60	ne.			2		10			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.73	551.9			10.8	—11.8	46	n.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.81	757.1	29.84	757.9	49.7	9.8	94	calm			0		10 ck		w.	2.398	60.9	cloudy	Hattori.
Awomori	29.74	755.4	29.77	756.1	43.0	6.1	86	s.	1.3	0.6		0	1 s			0.762	19.3	fair	K. Ogawa.
Hakodate	29.73	755.2	29.74	755.4	40.0	4.4	88	e.	2.4	1.1		3	0	s.		0.300	7.0		
Hamamatsu	29.98	761.5	30.01	762.2	46.1	7.8	82	calm			0	2 cs	1 s	w.	w.	0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					52.6	11.4	89	sw.	4.9	2.1		0	1 ck		sw.	0	0	clear	
Kanazawa	29.78	756.3	29.88	758.9	60.0	15.6	44	wsw.	10.9	4.8		0	0			0	0	fair	S. Endo.
Kioto	29.80	756.9	29.98	761.5	46.7	8.2	90	wnw.	0.3	0.1			rock;s			0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.83	757.6	30.03	762.8	52.1	11.2	96	sw.	0.9	0.4		0	0			0.120	3.1	clear	S. Takehayashi.
Nigata	29.82	757.4	29.85	758.2	49.4	9.7	77	e.	2.7	1.2		0	0			0.055	1.1	clear	M. Morita.
Nobiru	29.84	757.8	29.85	758.2	51.4	10.8	67	wsw.	7.8	3.5		0	0			0	0	clear	H. Midzushima.
Numazu	29.95	760.8	29.99	761.7	51.1	10.6	84	wsw.			2	0	5 s			0	0	fair	R. Kaneda.
Osaka	29.97	761.3	29.99	761.7	50.4	10.2	86	ene.	5.1	2.2		0	0			0	0	clear	H. Omura.
Supporo					41.7	5.4	77	e.	13.8	6.2		0	1			0.005	0.1	clear	
Tokei Obs'y, Yeddo	29.85	758.3	29.93	760.2	39.6	4.2	87	nnw.	3.3	1.4		0	1 s		sw.	0	0	fair	The Staff.
Wakayama	29.91	759.7	29.97	761.2	61.6	16.4	69	ssw.	0.9	3.1		7 ck	3 ck	wsw.	s.	0	0	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.76	755 9	29.94	760.5	82.0	27.8	65	ene.	11.0	4.9		3 cics	4 k;ks		ene.	0.79	20.1	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.80	604.5	30.02	762.5	43.2	6.2	81	calm	0	0		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.49	622.0	30.53	775.4	34.7	1.5	88	n.			1	1 c	0	sw.		0	0	clear	Prof. M. Leal.
Mazatlan	29.85	758.1	30.11	764.8	69.5	20.8	77	ne.	0.9	0.4		0	1 s			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.15	588.1	30.41	772.3	30.5	2.5	88	w.	0.9	0.4			10 k			0	0	covered	The Staff.
Morelia	24.18	614.2	30.01	762.3	45.0	7.2	70	se.			2	3 c	1 k	s.	s.	c	0	½ cloudy	M. Tena, M. D.
Pabellon, Aguascallientes	24.11	612.4	30.31	769.9	39.7	4.3	80	n.			1	0	0			0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.52	597.5	30.46	773.6	42.8	6.0	94	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.63	574.9	30.49	774.3	36.5	2.2	81	ene.	4.6	2.1		0	0			0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.16	766.1	30.16	766.1	34.0	1.1		se.			3					0.008	0.2		
Groningen	30.12	765.1	30.18	766.5	31.5	— 0.3		s.			1					0	0		
Helder	30.17	766.2	30.17	766.2	32.4	0.2		se.			2					0	0		
Hellevoetsluis	30.17	766.4	30.17	766.4	31.5	— 0.3	89	e.			1					0	0		
Utrecht	30.16	766 1	30.21	767.3	31.5	— 0.3	80	e.			2		2			0	0	lightly cl'dy	H. van der Brink.
NORWEGIAN.																			
Bergen	30.01	762.2	30.07	763.8	34.2	1.2	49	s.	27	12			6			0	0		
Brono	30.01	762.2	30.05	763.2	33.6	0.9	65	sw.	18	8			10			0.110	2.8	snowing	
Christiania	30.13	765.4	30.29	769.4	19.4	— 7.0	100	sw.	0	0			10			0.016	0.4	foggy	
Gjæsvær	30.21	767.4	30.24	768.0	23.0	— 5.0		se.			4		9						
Lodingen	30.10	764.4	30.14	765.6	24.3	— 4.3	59	e.			2		0			0	0		
PORTUGUESE.																			
Angra, Azores	30.32	770.2	30.46	774.1	64.4	18.0	86	nne.	2.5	1.2			4			0	0		Dr. J. A. Sampaio.
Campo Major	28.97	735.8	29.98	761.6	52.2	11.2	48	nne.	21.0	9.4			3			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.15	765.8	30.24	768.1	66.2	19.0	46	n.	7.4	3.3			1	n.		0.071	1.8		Capt. D. A. de Cunha.
Lisbon, Observatory	29.74	755.5	30.11	764.8	52.9	11.6	56	n.	20.6	9.2			6			0.012	0.3		The Staff.
Ponta Delgada, Azores	30.40	772.2	30.47	774.0	66.2	19.0	87	n.	10.5	4.7			3			0.031	0.8		
Saint Paul de Loando	29.65	753.2	29.85	758.3	75.9	24.4	97	w.	1.8	0.8			10			0	0		
Serra da Estrella	25.21	640.2	30.14	765.6	28.8	— 1.8	100	ne.	11.2	5.0			3	ne.		0.575	14.6	foggy	
RUSSIAN.																			
Akmolinski	28.67	728.3	29.81	757.1	23.5	— 4.7	90	sw.	2	1		0	3 k						Major K. Lasarew.
Archangel	30.12	765.1	30.14	765.6	15.1	— 9.4	94	s.	2	1			10			0	0		Capt. Saeliwerstow.
Astrakhan	30.20	767.0	30.12	765.0	28.0	— 2.2	51	wnw.	11	5		0	1 s			0	0		Capt. Wisganow.
Barnaul	29.49	749.1	30.02	762.6	21.6	— 5.9	90	ne.	9	4			10			0	0		Meteorological Obs'y.
Bielosersk	29.90	759.4	30.43	772.9	— 3.6	—19.8	92	ssw.	2	1		9 cs	0			0.008	0.2		
Dorpat	30.19	766.8	30.46	773.7	2.8	—16.2	95	se.	2	1		0	0			blank	blank		Observatory.
Ekaterinburg	29.01	736.8	30.10	764.5	—10.7	—23.7	76	ne.	9	4			10			0.118	3.0	light snow	Meteorological Obs'y.
Elissawetgrad																			
Kasan	29.76	756.0	30.06	763.6	3.7	—15.7	57	n.	13	6			10						Observatory.
Kem	30.00	762.1			11.1	—11.6	93	calm	0	0			10 k			0	0	heavy cl'ds.	
Kertch	29.65	753.2	29.67	753.7	34.5	1.4	87	ene.	18	8			10 n			0.287	7.3		Lagorio & Sostyrea.
Kieff	29.40	746.7	30.10	764.4	12.4	—10.9	79	e.	11	5		c;ck	10 ks						Observatory.
Libau	30.30	769.7	30.33	770.3	10.2	—12.1	61	e.			2		0			0	0		E. Quass.
Lugan	29.86	758.5	30.09	764 2	17.2	— 8.2	62	ene.	18	8			10			0.035	0.9		Meteorological Obs'y.
Nikolaiev	29.81	757.2	29.89	759.1	19.4	— 7.0	83	ne.	45	20			10 n			0.264	6.7	snowing	Capt. Kurdakow.
Pekin, China	29.91	759.6	30.05	763.2	42.1	5.6	51	calm	0	0		0	0						Physical Observatory.
Petrozavodsk	29.97	761.3	30.19	766.8	15.4	— 9.2	88	sw.	23	10		0	8 ks			0.091	2.3		Dr. Bergmann.
Pinsk																			
St. Petersburg	30.42	772.7	30.44	773.1	0.7	—17.4	95	sw.	4	2		1 c	0			0	0	light clouds	Central Physical Obs'y.
Sevastopol																			
Semipalitinsk	29.33	744.9	30.02	762.6	23.0	— 5.0	74	e.	9	4						0	0		Major Lasarew.
Staroi Bykhov	29.84	757.8	30.34	770.6	11.8	—11.2	65	ene.	9	4		10 cs	0			0	0		
Tashkend, Laboratory	28.41	721.7	30.02	762.4	44.8	7.1	57	calm	0	0			10			0	0		Teich, A. M.
Tiflis	28.63	727.3	30.03	762.8	59.4	15.2	52	sse.	9	4		0	1 s			0	0		Physical Observatory.
Tomsk	29.89	759.3	30.21	767.3	— 6.5	—21.4	74	nw.	4	2		0	2						
Vladivostock	29.61	752.2	29.68	753.9	28.4	— 2.0	54	nw.	13	6			10 n			0.016	0.4		
Warsaw	29.58	751.4	30.04	763.9	17.2	— 8.2	91	e.	13	6			10					heavy cl'ds.	Astronomical Obs'y.
Wilna	29.85	758.1	30.31	769.8	12.9	—10.6	70	e.	2	1			6					light clouds	Berg, Assistant.
Yeniseisk	29.92	760.0	30.26	768.6	—23.1	—30.6	82	calm	0	0			0						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.32	744.7	43	6.1	91	s.			7		10			0.2	5.	raining	J. Youngclause.
North Unst			29.82	757.4				sse.			7		10			blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.84	757 9	29.95	760.6	51.3	10.7	55	n.	0.7	0.3		0	0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.02	762.6	30.08	764.1	48.0	8.9	92	nw.	3.1	1.4			10			1.158	29.4	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.06	687.2	30.13	765.4	38.3	3.5	74	n.	2.5	1.1			7			0.028	0.7	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.74	704.5	29.97	761.3	46.4	8.0	49	ne.	13.4	6.0		0	1			0	0	light clouds	The Staff.
Murcia, Met. Obs'y	29.78	756.3	29.91	759.8	52.2	11.2	75	sw.	2.5	1.1		5	5	nw.		0.020	0.5	misty	Olayo Dias, Director.
Oviedo	29.26	743.1	30.14	765.6	43.2	6.2	89	e.	6.7	3.0		8 k	8 n	e.	w.	0.024	0.6	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.19	741.4	30.10	764.6	48.7	9.3	76	n.	3.8	1.7			6			0.224	5.7	cloudy	R. Gil Villanueva, Dir.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.82	757.5	29.88	759.0	79.0	26.1	88	ese.	4.4	2.0	.....	0	2 ks	.....	.....	0.039	1.0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.86	758.4	29.96	761.0	55.0	12.8	56	nw.	12.4	5.6	.....	2	2	nw.	nw.	0.051	1.3	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.99	761.8	30.08	764.1	77.7	25.4	95	calm	0	0	.....	4 k	2 k	e.	e.	0.039	1.0	.....	Manuel Maese.
Tuguegarao, Philippine Id's	29.78	756.5	29.92	759.9	75.1	23.9	94	nw.	4.0	1.8	.....	9	3 k	.....	ne.	0.02	0.5	slightly cl'dy	José L. Yrustorza.
SWEDISH.																			
Hapsranda	30.22	767.7	30.26	768.7	4.3	—15.4	100	n.	.....	.....	2	.....	8	.....	.....	0	0	.....	
Umea	30.16	766.1	30.21	767.4	13.6	—10.2	93	n.	.....	.....	4	.....	10	.....	.....	0.020	0.5	.....	
Hernosand	29.91?	759.8?	29.97?	761.1?	19.8	— 6.8	89	calm	.....	.....	0	.....	8	.....	.....	0	0	.....	
Stockholm	30.13	765.4	30.31	769.9	16.9	— 8.4	94	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Wisby	30.22	767.6	30.28	769.1	24.4	— 4.2	73	ese.	.....	.....	2	.....	5	.....	.....	0	0	.....	
Sub-series.																			
Upsala	30.22	767.5	30.30	769.7	—4.2?	-20.1?	93	nw.	0	0	.....	.....	5	nnw.	.....	0	0	foggy	S. G. Fineman.
SWISS.																			
Geneva	28.55	725.2	30.05	763.2	32.2	0.1	75	nne.	.....	.....	5	.....	3	.....	.....	0	0	.....	The Observatory.
TURKISH.																			
Constantinople	.....	.....	29.70	754.3	60.3	15.7	78	wsw.	13	6.0	.....	.....	5	.....	sw.	0.138	3.5	raining	The Observatory.
Valona	.....	.....	29.83	757.7	55.9	13.3	.....	sw.	.....	.....	1	.....	5	.....	.....	0.55	14.	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.07	763.7	68.9	20.5	60	ne.	.....	.....	2	4 c	.....	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.86	758.4	29.95	760.7	37.5	3.1	77	n.	1	0.4	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. O. Barnes.
Alpena, Michigan	29.34	745.2	30.05	763.3	22.3	— 5.4	88	n.	7	3.1	.....	.....	10 n	.....	.....	0.20	5.1	light snow.	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.28	642.1	30.30	771.1	30	— 1.1	62	ne.	1	0.4	.....	0	5 s	.....	.....	0	0	clear	W. C. Barnes.
Assinnahoine, Ft., Montana	27.51	698.7	30.54	775.7	33	0.6	62	sw.	7	3.1	.....	5 c	0	sw.	.....	inap.	inap.	fair	B. O. Lenoir.
Atlanta, Georgia	29.05	737.9	30.28	769.1	38.0	3.3	72	sw.	15	6.7	.....	0	0	.....	.....	0	0	clear	H. C. Smith.
Atlantic City, New Jersey	29.98	761.5	29.99	761.7	42	5.6	82	s.	8	3.6	.....	8 c	0	.....	.....	0	0	cloudy	Jas. M. Watson.
Augusta, Georgia	30.09	764.3	30.29	769.4	38	3.3	72	sw.	3	1.3	.....	0	fg.	.....	.....	0	0	clear	John Healy.
Baltimore, Maryland	29.94	760.5	29.99	761.7	35	1.7	79	sw.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog	Geo W Felger.
Barnegat, New Jersey	29.98	761.5	30.00	762.0	42.0	5.6	92	sw.	10	4.5	.....	7 cs	0	w.	.....	0	0	fair	G. A. Hill.
Bennett, Fort, Dakota	28.91	734 3	30.67	779.0	12	—11.1	83	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.43	696.7	30.43	772.9	28	— 2.2	67	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.56	725.4	30.57	776.5	4	—15.6	52	se.	4	1.8	.....	0	0	.....	.....	inap.	inap.	clear	Cyrus Cramer.
Block Island, Rhode Island	29.99	761.7	30.02	762.5	41	5.0	65	w.	6	2.7	.....	6 cs	2 s	w.	.....	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.62	701.5	30.60	777.2	29.5	— 1.4	90	n.	2	0.9	.....	6 cs	0	.....	.....	0	0	fair	B. E. Light.
Boston, Massachusetts	29.83	757.7	29.99	761.7	37.0	2.8	82	s.	5	2.2	.....	.....	10s;fg	.....	s.	0	0	cloudy	O. B. Cole.
Brownsville, Texas	30.27	768.8	30.32	770.1	55.0	12.8	93	calm	0	0	.....	0	0	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.07	738 4	29.87	758.7	33	0.6	96	ne.	4	1.8	.....	.....	10n;fog	.....	.....	0.09	2.3	light snow.	W. Finn.
Buford, Fort, Dakota	28.30	718.8	30.54	775.7	14	—10.0	83	w.	1	0.4	.....	0	0	.....	.....	inap.	inap.	clear	F. A. Mellen.
Burlington, Vermont	29.70	754.4	30.01	762.2	23.3	— 4.8	66	ne.	7	3.1	.....	.....	10 s	.....	n.	0	0	clear	G. O. Schaeffer.
Cairo, Illinois	29.78	756.4	30.20	767.1	44.8	7.1	62	w.	11	4.9	.....	0	0	.....	.....	0.01	0.3	cloudy	W. H. Ray.
Cape Henry, Virginia	30.06	763.5	30.08	764.0	39	3.9	73	s.	16	7.2	.....	5cs	0	.....	.....	0	0	clear	A. K. Alderson.
Cape May, New Jersey	29.98	761.5	30.01	762.2	50.0	10.0	64	s.	17	7.6	.....	7 cs	0	.....	.....	0	0	fair	W. E. Smith.
Cape Mendocino, California	29.60	751.8	30.28	769.1	56	13.3	86	calm	0	0	.....	2 c	0	nw.	.....	0	0	fair	J. J. McLean.
Cedar Keys, Florida	30.30	769.6	30.32	770.1	43	6.1	83	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. W. Mixer.
Champaign, Illinois	29.21	741.9	30.08	764.0	34.0	1.1	78	nw.	25	11.2	.....	.....	10 s	.....	nw.	0	0	clear	L. A. Welsh.
Charleston, S. Carolina	30.22	767.6	30.28	769.1	42	5.6	73	sw.	8	3.6	.....	0	0	.....	.....	0	0	cloudy	J. H. Smith.
Charlotte, N. Carolina	29.12	739.6	30.01	762.2	33.0	0.6	88	sw.	1	0.4	.....	0	fg.	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.38	746.2	30.24	768.1	43.0	6.1	68	sw.	13	5.8	.....	2 cs	0	w.	.....	0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	24.36	618.7	30.64	778.2	27.2	— 2.7	70	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.30	744.2	30.06	763.5	30.5	— 0.8	92	nw.	12	5.4	.....	.....	10 n	.....	.....	0.01	0.3	light snow.	J. Mitchell.
Chincoteague, Virginia	30.02	762.5	30.04	763.0	42	5.6	74	s.	11	4.9	.....	2 c	2 ks	.....	.....	0	0	fair	C. F. Dickens.
Cincinnati, Ohio	29.28	743.7	29.98	761.5	45	7.2	68	sw.	6	2.7	.....	1 c	1 s	sw.	sw.	0	0	clear	R. B. Watkins.
Cleveland, Ohio	29.09	738.9	29.88	758.9	39.7	4.3	69	s.	10	4.5	.....	.....	10 s	.....	w.	0	0	cloudy	J. B. Newlin.
Coleman City, Texas	28 52	724.4	30.42	772.7	36	2.2	100	calm	0	0	.....	6 k	0	.....	.....	0	0	fair	L. Dorman.
Columbus, Ohio	29.01	736.8	29.92	760.0	38	3.3	72	s.	8	3.6	.....	4 ck	2 s	sw.	.....	0	0	fair	D. Cuthbertson.
Concho, Fort, Texas	28.38	720.8	30.40	772.1	38.0	3.3	92	calm	0	0	.....	5 cs	0	.....	.....	0	0	fair	J. McGlone.
Custer, Fort, Montana	27.21	691.1	30.61	777.5	29	— 1.7	80	se.	5	2.2	.....	0	3 k	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.60	751.8	30.31	769.9	30	— 1.1	78	n.	12	5.4	.....	.....	10 s	.....	n.	0.02	0.5	cloudy	R. R. Martin.
Davis, Fort, Texas	25.42	645.7	30.36	771.1	39	3.9	67	calm	0	0	.....	.....	10ks	.....	.....	0	0	cloudy	J. Williams.
Dayton, Washington T'y	28.62	726.9	30.45	773.4	31	— 0.6	100	ne.	2	0.9	.....	.....	fg.	.....	.....	0	0	dense fog	D. Moore.
Deadwood, Dakota	25.66	651.8	30.65	778.5	36	2.2	61	ne.	6	2.7	.....	0.	0	.....	.....	0.02	0.5	clear	F. Willson.
Delaware Breakwater, Del.	30.00	762.0	30.02	762.5	38	3.3	89	sw.	20	8.9	.....	6 ck	hz.	sw.	.....	0	0	fair	T. S. Townsend.
Denison, Texas	29.53	750 0	30.38	771.6	44.0	6.7	83	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	25.12	638.0	30.04	778.2	31.0	— 0.6	65	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.51	749.5	30.49	774.4	25	— 3.9	73	n.	14	6.3	.....	.....	10 s	.....	n.	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.12	739.6	29.88	758.9	36.6	2.6	79	n.	11	4.9	.....	.....	10 s	.....	ne.	0	0	cloudy	O. F. R. Wappenhans.
Dodge City, Kansas	27.85	707.4	30.65	778.5	32	0.0	81	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.53	750.0	30.30	769.6	27.5	— 2.5	41	nw.	10	4.5	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.78	756.4	30.59	777.0	6	—14.4	76	w.	3	1.3	.....	0	1 s	.....	w.	0.19	4.8	clear	N. B. Conger.
Eagle Pass, Texas	29.54	750.3	30.38	771.6	38.0	3.3	82	calm	0	0	.....	3 cs	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.69	732.5	30.61	777.5	18	— 7.8	73	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	29.92	760.0	30.00	762.0	26.0	— 3.3	82	sw.	5	2.2	.....	6 c	3 s	w.	.....	0.01	0.3	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.60	701.0	30.56	776.2	39	3.9	73	n.	16	7.2	.....	7 c	0	n.	.....	0	0	fair	W. J. Cundall.
El Paso, Texas	26.52	773.6	30.38	771.6	38	3.3	64	ne.	1	0.4	.....	2 ck	0	e.	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.06	738 1	29.83	757.7	40	4.4	73	sw.	9	4.0	.....	.....	10 s	.....	sw.	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.51	749.5	30.23	767.8	17.0	— 8.3	83	nw.	21	9.4	.....	.....	10 s	.....	nw.	0.08	2.0	threatening	George Heathcote.
Fredericksburg, Texas	28.59	726.2	30.41	772.4	42	5.6	82	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	30.35	770.9	30.40	772.1	59	15.0	81	se.	4	1.8	.....	5 cs	fg.	s.	.....	0	0	fair	E. O'C. MacInerney.
Grand Haven, Michigan	29.35	745.5	30.06	763.5	29.0	— 1.7	78	n.	14	6.3	.....	.....	10 n	.....	.....	0.07	1.8	light snow.	J. E. Mueller.
Grant, Fort, Arizona	25.40	645.1	30.28	769.1	42	5.6	41	ne.	4	1.8	.....	0	5 s	.....	se.	0	0	fair	Robert C. Lord.
Hatteras, North Carolina	30.14	765.5	30.16	766.1	49	9.4	77	w.	20	8.9	.....	3 c	hz.	.....	.....	0	0	clear	R. M. Crawford.
Helena, Montana	26.12	663.4	30.59	774.7	42	5.6	47	nw.	1	0.4	.....	7 c	0	.....	.....	0	0	fair	N. C. Smith.
Henrietta, Texas	29.33	745.0	30.41	772.4	39	3.9	82	calm	0	0	.....	5 cs	0	.....	.....	0	0	fair	J. P. Sherry.
Huron, Dakota	29.13	739.9	30.67	779.0	8	—13.3	66	nw.	2	0.9	.....	0	0	.....	.....	0.03	0.8	clear	S. W. Glenn.
Indianapolis, Indiana	29.11	739.4	29.96	761.0	40	4.4	73	w.	8	3.6	.....	5 cs	0	sw.	.....	0	0	fair	O. Schutze.
Indianola, Texas	30.33	770.4	30.36	771.1	54.0	12.2	91	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	I. A. Reed.
Jacksboro, Texas	29.16	740.7	30.40	772.1	43	6.1	51	sw.	3	1.3	.....	0	2 s	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.34	770.6	30.39	771.9	40	4.4	82	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.83	706.9	30.53	775.4	21	— 6.1	73	w.	2	0.9	.....	0	0	.....	.....	0.02	0.5	clear	A. Schneider.
Keokuk, Iowa	29.59	751.6	30.30	769.6	32.0	0.0	78	nw.	12	5.4	.....	.....	10 s	.....	nw.	0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.24	768.1	30.26	768.6	63.0	17.2	84	ne.	17	7.6	.....	4 ck	0	sw.	.....	0	0	fair	R. H. Paxton.
Kittyhawk, North Carolina	30.12	765.0	30.14	765.5	38.5	3.6	82	sw.	17	7.6	.....	2 c;hz	0	w	.....	0	0	clear	H. McP. Baldwin.
Knoxville, Tennessee	29.12	739.6	30.20	767.1	38.5	3.6	67	w.	9	4.0	.....	0	0	.....	.....	0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.57	751.1	30.42	772.7	18	— 7.8	84	nw.	12	5.4	.....	0	4 s	.....	nw.	0.12	3.0	fair	S. C. Emery.
Leavenworth, Kansas	29.58	751.3	30.54	775.7	26	— 3.3	76	nw.	18	8.0	.....	.....	10 s	.....	nw.	0	0	cloudy	A. W. Browne.
Lewiston, Idaho	29.63	752.6	30.51	774.9	35.0	1.7	94	s.	1	0.4	.....	0	fg.	.....	.....	0	0	clear	W. Bell.
Little Rock, Arkansas	29.97	761.2	30.30	769.6	42	5.6	73	calm	0	0	.....	0	0	.....	.....	0	0	clear	W. U. Simons.
Los Angeles, California	29.79	756.7	30.19	766.8	53	11.7	61	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.40	746.7	30.00	762.0	46	7.8	60	sw.	13	5.8	.....	6 cs	0	.....	.....	0	0	fair	L. M. Dey.
Lynchburg, Virginia	29.31	744 5	30.04	763.0	41	5.0	57	w.	5	2.2	.....	2 c	0	.....	.....	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.43	747.5	30.13	765.3	19.3	— 7.1	84	n.	15	6.7	.....	5 k	0	n.	.....	0.12	3.0	fair	F. R. Day.
Macon, Fort, North Carolina	30.17	766.3	30.18	766.6	51	10.6	72	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	C. A. Shaw.
Madison, Wisconsin	29 16	740.7	30.26	768.6	22	— 5.6	87	ne.	20	8.9	.....	.....	10 s	.....	ne.	0.05	1.3	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.86	656.8	30.40	772.1	40	4.4	35	nw.	16	7.2	.....	.....	10 s	.....	nw.	0	0	cloudy	F. Burke.

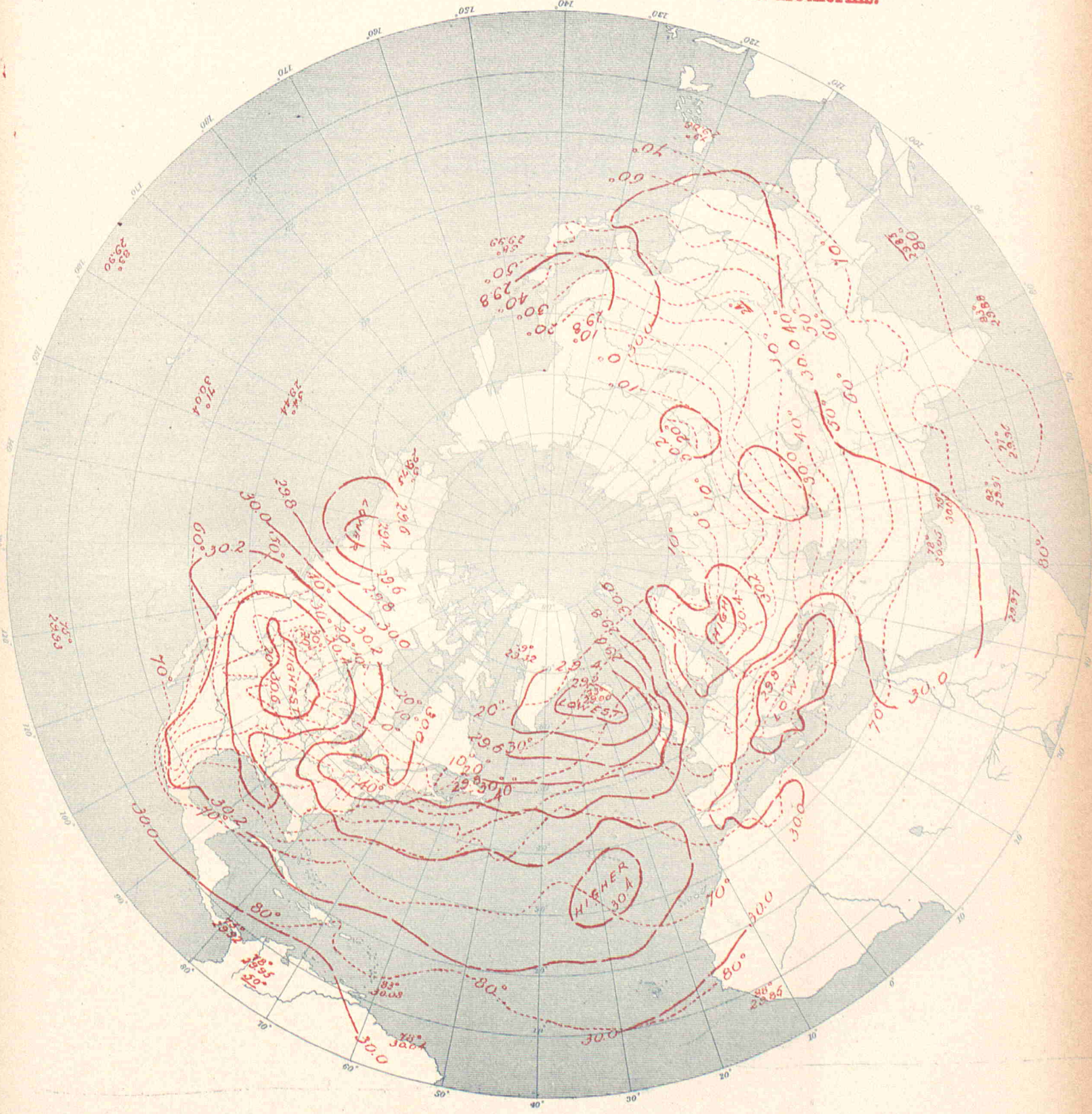
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES.—Cont'd.																			
McKavett, Fort, Texas	27.98	710.7	30.36	771.1	38	3.3	82	s.	1	0.4		0	0			0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.48	748.8	30.26	768.6	16	— 8.9	83	nw.	18	8.0			10 n		nw.	0.29	7.4	heavy snow	J. Gilligan.
Memphis, Tennessee	29.89	759.2	30.25	768.3	47	8.3	77	w.	2	0.9		0	0			0	0	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.37	746.0	30.18	766.6	23	— 5.0	88	nw.	23	10.3			10 n			0.09	2.3	light snow.	W. Line.
Missoula, Fort, Montana	27.13	689.1	30.59	777.0	28	— 2.2	67	se.	1	0.4		0	hz			inap.	inap.	clear	J. H. Young.
Mobile, Alabama	30.38	771.6	30.42	772.7	39	3.9	89	w.	1	0.4		0	0			0	0	clear	C. A. Read.
Montgomery, Alabama	30.12	765.0	30.36	771.1	38	3.3	82	sw.	6	2.7		0	0			0	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	29.47	748.5	30.58	776.7	— 3	—19.4	65	calm	0	0		0	0			0.18	4.6	clear	H. Bessant.
Morgantown, W. Virginia	28.92	734.6	29.99	761.7	44.0	6.7	83	sw.	13	5.8		3 cs	0	sw.		0	0	clear	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.43	595.1	30.06	763.5	7.0	—13.9	100	nw.	54	24.2			10n;fg		nw.	0.11	2.8	light snow.	B. S. Pague.
Nashville, Tennessee	29.54	750.3	30.14	765.5	46.0	7.8	68	sw.	6	2.7		7 cs	0	sw.		0	0	fair	L. N. Jesunofsky.
New Haven, Connecticut	29.86	758.4	29.98	761.5	34	1.1	78	calm	0	0		10 c	sk.	w.		0	0	cloudy	J. H. Sherman.
New London, Connecticut	29.98	761.5	30.03	762.7	34	1.1	79	calm	0	0		10 ck	fg.			0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.36	771.1	30.42	772.7	49.0	9.4	77	w.	3	1.3		0	sk.			0	0	clear	L. Dunne.
Newport, Rhode Island	29.96	761.0	30.01	762.2	40.6	4.8	77	sw.	7	3.1		6 c	3 s	sw.		0	0	cloudy	W. McGillivray.
New York, New York	29.82	757.4	30.01	762.2	34	1.1	88	sw.	2	0.9		8 cs	fg.	w.		0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.04	763.0	30.07	763 8	38	3.3	72	s.	8	3.6		0	0			0	0	clear	Wm. Davis.
North Platte, Nebraska	27.52	699.0	30.68	779.3	24.6	— 4.1	53	calm	0	0		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.24	768.1	30.28	769.1	42.0	5.6	82	calm	0	0			10 s			0	0	cloudy	J. Dascomb.
Omaha, Nebraska	29.34	745.2	30.63	778.0	17.7	— 7.9	61	n.	16	7.2		0	0			0	0	clear	A. Pollak.
Oswego, New York	29.56	750.8	29.90	759.4	30.0	— 1.1	82	ne.	6	2.7			10 s			0.22	5.6	cloudy	J. G. Linsley.
Palestine, Texas	29.82	757.4	30.40	772.1	47.0	8.3	86	sw.	6	2.7		6 cs	0	w.		c	0	fair	L. M. Pindell.
Pensacola, Florida	30.40	772.1	30.43	772.9	41.0	5.0	92	w.	4	1.8		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	29.89	759.2	30.00	762.0	37	2.8	72	calm	0	0		5 cs	fg.	sw.		0	0	fair	T. T. Townsend.
Pike's Peak, Colorado	18.04	458.2	30.70	779.8	17	— 8.3	46	nw.	22	9.8		0	0			0	0	clear	H. Hall.
Ploche, Nevada	24.37	619.0	30.54	775.7	35	1.7	69	nw.	5	2.2		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.06	738.1	29.92	760.0	42.0	5.6	65	s.	11	4.9		0	2 s			0	0	clear	W. A. Reid.
Poplar River, Montana	28.11	714 0	30.47	773.9				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.44	773.2	30.45	773.4	51.1	10.6	86	n.	11	4.9		0	0			0	0	clear	H. B. Boyer.
Port Huron, Michigan	29.15	740.4	29.88	758.9	33.4	0.8	87	n.	12	5.4			10 n		n.	0.06	1.5	light snow.	W. O. Bailey.
Portland, Maine	29.92	760 0	29.97	761.2	32.0	0.0	88	w.	2	0.9			10 n			inap.	inap.	light snow	W. W. Eichelberger.
Portland, Oregon	30.26	768.6	30.33	770.4	45.2	7.3	100	s.	2	0.9			fg.			0	0	dense fog.	M. L. Hearne.
Portsmouth, N. C.					48	8.9	86	sw.			2	hz	1 s			0	0	clear	F. S. Coburn.
Prescott, Arizona	25.00	635.0	30.37	771.4	37	2.8	82	w.	1	0.4			10 ks		w.	0	0	cloudy	W. H. Clendenon.
Provincetown, Mass	29.98	761.5	30.01	762.2	41	5.0	73	sw.	3	1.3		0	9 s		w.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.34	770.6	30.35	770.9	49.5	9.7	57	n.	9	4.0		0	0			0	0	clear	W. J. Evans.
Red Bluff, California																			J. R. Williams.
Rochester, New York	29.18	741.2	29.89	759.2	31	— 0.6	92	e	8	3.6			10 s			0.15	3.8	cloudy	E. W. McGann
Roseburg, Oregon	29.80	756.9	30.37	771.4	47	8.3	93	e.	3	1.3			fg.			0	0	dense fog	J. J. Nanry.
Sacramento, California	30.25	768.3	30.33	770.4	48.0	8.9	86	se.	1	0.4		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.59	751.6	30.24	768.1	38.5	3.6	77	nw.	28	12.5			10 s		nw.	0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.72	754.9	29.75	755.6	5	—15.0	100	calm	0	0		0	5 s		s.	0	0	fair	A. P. Leavitt.
St. Paul, Minnesota	29.53	750.0	30.49	774.4	15.0	— 9.4	83	nw.	9	4.0			10 s		n.	0.05	1.3	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.51	750.3	30.53	775.4	5	—15.0	76	w.	4	1.8			10 k		w.	0.08	2.0	cloudy	O. B Dilley.
Salt Lake City, Utah	26.05	661.7	30.59	777.0	31	— 0.6	62	calm	0	0		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.62	752.3	30.34	770.6	42.0	5.6	83	e.	2	0.9		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.07	763.8	30.14	765.5	56.7	13.7	41	nw.	4	1.8		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.12	739.6	29.86	758.4	41.3	5.2	73	w.	12	5.4			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.97	761.2	30.00	762.0	35.0	1.7	79	sw.	7	3.1		5 k	5 s		sw.	0	0	cloudy	B. A. Blundon.
San Francisco, California	30.25	768.3	30.32	770.1	52	11.1	83	nw.	2	0.9		0	fg.			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.53	597.7	30.52	775.2	33	0.6	50	ne.	2	0.9		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.23	767.8	30.33	770.4	43	6.1	60	sw.	7	3.1		0	fg.			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.67	677.4	30.50	774.7	45	7.2	49	sw.	16	7.2			10 s			0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	30.12	765 0	30.37	771.4	40	4.4	100	calm	0	0		3 cs	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.12	739.6	30.45	773.4	39.5	4.2	78	n.	14	6.3		5 c	0	n.		0	0	fair	W. M. Mattingly.
Silver City, New Mexico	24.49	622.0	30.33	770.4	33.0	0.6	71	n.	2	0.9		0	2 s			0	0	clear	N. D. Lane.
Sitka, Alaska	29.27	743 4	29.34	745 2	42.5	5.8	65	e.	26	11.6			10 n		e.	0.40	10.2	light rain	F. W. Fickett.
Smith, Fort, Arkansas	29.86	758.4	30.36	771.1	36.0	2.2	79	sw.	3	1.3		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.18	766.6	30.22	767.6	46	7.8	76	w.	12	5.4		0	0			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.36	720.3	30.48	774.2	34	1.1	88	n.	4	1.8			10 s			0	0	cloudy	H. Clifford.
Springfield, Illinois	29.44	747.8	30.17	766.3	35	1.7	79	nw.	18	8.0			10 s		nw.	inap.	inap.	cloudy	T. B. Jennings.
Springfield, Massachusetts	29.85	758.2	29.99	761.7	35.2	1.8	88	calm	0	0	0		10 n			0	0	cloudy	Charles Mayr.
Springfield, Mo	28.85	732.8	30.38	771.6	40	4.4	73	nw.	20	8.9		0	8 k		nw.	0	0	cloudy	J. B. Marbury.
Starkville, Miss	29.78	756.4	30.28	769.1	45	7.2	86	sw.	15	6.7		3 c	0			0	0	clear	C. Dill.
Stevenson, Fort, Dakota	28.48	723.4	30.54	775.7	6	—14.4	76	e.	4	1.8		8 ck	0			0.03	0.8	cloudy	W. Burrows.
Stockton, Fort, Texas	27.25	692.1	30.39	771.9	42	5.6	76	sw.	6	2.7		8 ck	0	nw.		0	0	cloudy	J. F. Marshall.
Thatcher's Island, Mass	29.94	760.5	30.00	762.0	41.3	5.2	87	sw.	10	4.5		5 c	0	w.		0	0	fair	G. Liebmann.
Thomas, Camp, Arizona	27.47	697.7	30.29	769.4	39.5	4.2	87	se.			1	hz	3 ks	sw.	sw.	0	0	fair	J. T. Fitzgerald.
Toledo, Ohio	29.13	739.9	29.87	858.7	39	3.9	65	n.	8	3.6			10 s		nw.	0	0	threatening	A. Buell.
Tucson, Arizona	27.71	703.8	30.21	767.3	48	8.9	80	calm	0	0		0	8 ks		sw.	0	0	cloudy	J. L. Whiteside.
Umatilla, Oregon	30.10	764.5	30.49	774.4	36.5	2.5	94	calm	0	0			10 s			0	0	cloudy	J. Daly.
Verde, Fort, Arizona					43	6.1	76	w.			1	4 cs	5 k	s.	sw.	0	0	cloudy	D. Brooks.
Vicksburg, Mississippi	30.11	764.8	30.38	771.6	46.0	7.8	93	s.	10	4.5		1 cs	0			0	0	clear	James Kenealy.
Visalia, California	29.03	760.2	30.31	769.9	45.3	7.4	88	se.	4	1.8		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.83	630.7	30.60	777.2	19.9	— 6.7	87	w.	5	2.2		0	0			0	0	clear	T. M. Ambler.
Washington, D. C	29.88	758.9	30.00	762.0	30.0	— 1.1	80	calm	0	0		2 c	sk.			0	0	clear	B. M. Purssell.
West Las Animas, Colorado	26.49	672.8	30.65	778.5	23	— 5.0	64	nw.	7	3.1		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.31	744.5	29.94	760.5	29.5	— 1.4	94	calm	0	0		5 k	5 s	w.		0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.15	765.8	30.21	767.3	41	5.0	73	sw.	7	3.1		hz.	0			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	26.00	660.4	30.52	775.2	30.5	— 0.8	66	ne.	9	4.0		5 c	0	sw.		0	0	fair	J. Grover.
Yankton, Dakota	29.23	742.4	30.60	778.7	12	—11.1	64	nw.	2	0.9		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.99	761.7	30.14	765.5	63.7	17.6	43	ne.	14	6.3		1 k	0	se.		0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.06	560.3			50.0	10.0	94	sw.	1	0.4		1 k	1 ks	w.	w.	0.26	6.6	fair	Joaquin Gomez.
Havana, Cuba, W. I	30.12	765:0	30.19	766.8	70.1	21.2	76	ne.	12	5.4		2 cs	8 n	e.	ne.	0	0	cloudy	Benito Vines, S. J.
Kingston, Jamaica, W. I	30.08	764.0	30.09	764.3	76	24.4	80	e.	2	0.9			10 s;n		e.	0.04	1.0	cloudy	Robert Johnston.
Paramaribo, S. A	30.04	763.0	30.04	763.0	78	25.6	86	se.			2	5 k	6 ks	e.		0.340	8.6		Dr. C. J. Hering.
Puerto Berrio, U. S. Colombia	29.39	746.5	29.95	760.7	78	25.6	95	n.			1	3 sk	3 ks	n.	n.	0	0	fair	Francisco J. Cisneros.
Rivas, Nicaragua, C. A					74.8	23.8	87	ne.			1	4	3 ks		ne.	0	0	fair	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.54	750.3	29.60	751.8	29	— 1.7	88	calm			0		5 s			0	0	fair	W. J. Fisher.
St. Thomas, W. I	29.98	761.5	30.10	764.5	79	26.1	69	e.				0	2 k		e.	0	0	fine	Aug. Walloe.
York Factory R A	30.11	764.8	30.18	766.6	—26.0	—32.2		nw.	16	7.2			10 s		nw.	0.30	7.6	cloudy	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																	
H. M. S. Amethyst, Montevideo, Uruguay †	30.35	770.9	65	18.3	78	ese.			3		5				2	se.	d. clouds.
H. M. S. Audacious, Colombo, Ceylon, India	29.88	758.9	83	28.3	83	wsw.			2								d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			73	22.8	54	ene.			2		1	wsw.			1	ene.	blue sky.
H. M. S. Boadecia, Table Bay, Cape Colony	29.86	758.4	...	...		sse			1-2								d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.09	764.3	70	21.1	79	nnw.			1		1						blue sky.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.08	764.0	54	12.2	73	s.			1		0						blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C.	30.16	766.1	46	7.8	96	ese.			1		10						misty.
H. M. S. Curacoa, N. 33° 20′, E. 135° 45′	30.01	762.2	62.5	16.9	88	ne.			1		0						blue sky.
H. M. S. Diamond, Sydney, N. S. W*†	30.00	762.0	63	17.2	61	s.			1		5	s.					d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	30.25	768.3	64	17.8	62	nnw.			1		2	nnw.					d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.72	754.9	78.5	25.8	90	nnw.			2		2	nnw.					d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	30.03	762 7	63	17.2	83	calm			0		1						misty.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.05	763.3	64	17.8	94	calm			0		0						blue sky.
H. M. S. Kingfisher, N. 3° 53′ W. 90° 49′	29.92	760.0	75	23.9		sse.			1		10				2	sse.	showery.
H. M. S. Lark, S. 31° 55′, E. 154° 08′	30.19	766.8	65.3	18.5	76	s.			4		7				4	s.	d. clouds.
H. M. S. Liffey, S. 29- 56′, W. 71° 20′	29.99	761 7	65	18.3		calm			0								d. clouds.
H. M. S. Magpie, N. 34° 37′ E. 127° 48′	29.95	760.7	56.5	13.6	69	wsw.			2-4		0						misty.
H. M. S. Northampton, N. 22° 40′, W. 60° 00′	30.19	766.8	75	23.9	76	n.			1		4				1	ne.	d. clouds.
H. M. S. Rocket, Callao, Peru	30.03	762.7	66	18.9	?	sw.			1		2				2-3	sw.	d. clouds.
H. M. S. Swiftsure, Ancon Bay, Peru	30.05	763.3	65	18.3	100	calm			0		10						d. clouds.
H. M. S. Sylvia, Peckett Harbor, Patagonia	29.97	761.2	51	10.6	72	wnw.			3		5	calm					d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.97	761.2				s.			2		0						blue sky.
H. M. S. Woodlark, N. 25° 19′, E. 51° 22′	29.95	760.7	77.5	25.3	77	nnw.			2		2	nnw.					d. clouds.
H. M. S. Zephyr, Chee-foo, China	30.10	764.5	41.5	5.3	83	n.			2		3	n.			2	n.	squally.
Portuguese Naval																	
Tamega, Macao, China	30.06	763.6	68.0	20.0	60	calm			0		1						blue sky.
United States Naval.																	
Navy Yard, Pensacola, Fla	30.34	770.6	43	6.1	91	nw.	5	1.3			0		0	0			clear.
Navy Yard, Portsmouth, N. H.	29.97	761.2	35	1.7	80	nw.	2	0.9			10	nw.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	29.85	758.2	58.5	14.7	55	sw.			4		2		0	0			clear.
Adams, Sitka, Alaska*†	29.42	747.3	43	6.1	66	ene.			5		10						light rain.
Alaska, N. 27° 00′, W. 154° 47′	30.04	763.0	71	21.7	85	se.			3		5	s.	0	0	long	w.	fair.
Alliance, Hampton Roads, Va	30.06	763.5	42	5.6	100	sw.			2		2		0	0			clear.
Ashuelot, Nagasaki, Japan	30.05	763.3	56	13.3	93	calm			0		2	calm					clear.
Brooklyn, Keel Point, Patagonia	30.01	762.2	56	13.3	87	se.	12	5.4			0		0	0	sm'h		clear.
Colorado, New York, N. Y.	30.11	764.8	35	1.7	100	sw.	2	0.9			8	calm	0	0			hazy.
Enterprise, Norfolk, Va	30.11	764.8	39	3.9	81	s			1		2	calm					clear.
Essex, Callao, Peru	29.97	761.2	67	19.4	79	sw.			0-1		10				sm'h		cloudy.
Franklin, Norfolk, Va	30.08	764.0	38	3.3	71	ssw.	13	5.8			2	calm	0	0			fair.
Galena, Montevideo, Uruguay	30.21	767.3	64	17.8	78	ene.			2		2	ene.			sm'h		fair.
Hartford, Sandy Point, Patagonia*	29.90	759.4	53	11.7	86	wnw.			1-3		5		0	0	sm'h		fair.
Independence, Mare Island, Cal	29.33	745.0	48	8.9	92	calm			0		5		0	0			fair.
Iroquois, Callao, Peru	29.02	737.1	66	18.9	84	se.			1		10						overcast.
Jamestown, Boston, Mass.	29.99	761.7	37	2.8	90	sw.			2		10						hazy.
Juniata, N. 36° 02′, W. 64° 25′*	30.26	768.6	59	15.0	70	ssw.			2		5	nw.	0	0	mod.	wnw.	fair.
Kearsarge, Norfolk, Va	30.23	767.8	47	8.3	85	ssw.			2		2						fair.
Lackawanna, S. 18° 52′, W. 74° 30′*	29.98	761.5	68	20.0	69	se.			2		10				sm'h	se.	cloudy.
Lancaster, Naples, Italy*	29.69	754.1	50	10.0	100	calm			0		10	calm			sm'h		heavy rain.
Michigan, Erie, Pa.	29.83	757.7	31	— 0.6	68	n.			7		10	n.					snowing.
Minnesota, New York, N. Y.	30.04	763.0	35	1.7	90	wsw.	17	7.6			5	w.					foggy.
Monocacy, Kobe, Japan*	29.93	760.2	59	15.0	94	calm			0		10	calm					cloudy.
New Hampshire, Newport, R. I.	30.05	763.3	44	6.7	75	sw.			3		8	sw.			sm'h		fair.
Nipsic, Lisbon, Portugal*	30.00	763.5	57	13.9	62	ne.			3		5	ne.			sm'h		fair.
Onward, Callao, Peru	30.13	765 3	65	18.3	89	ssw.			2		10	n.			long	w.	cloudy
Palos, Tien-Tsin, China*	29.96	761.0	38	3.3	80	sse.			2		0						clear.
Pensacola, Callao, Peru*	29.93	760.2	66	18.9	84	sw.	4	1.8			10	sw.	0	0	sm'h		cloudy.
Powhatan, Boston, Mass.	30.02	762.5	36	2.2	90	s.			1		8						cloudy.
Quinnebaug, Villefranche, France*	29.73	755.1	56	13.3	51	s.			2		2	calm					fair.
Ranger, Salina Cruz, Mexico	30.16	766.1	71	21.7	52	n.			4		2	n.			sm'h		fair.
Richmond, Yokohama, Japan*	29.86	758.4	59	15.0	64	ssw.			1-3		2	ssw.	0	0			fair.
Saratoga, Newport, R. I.	29.96	761.0	46	7.8	84	nnw.			2		8	w.			sm'h		cloudy.
St. Louis, League Island, Pa.	30.24	768.1	31	— 0.6	89	sw.			1		5	ne	0	0			fair.
Swatara, N. 34° 24′, W. 72° 41′*	30.04	763.0	67	19.4	64	wsw.			5		10	wsw.			mod.	w.	cloudy.
Tennessee, Fort Monroe, Va.	30.06	763.5	42	5.6	65	ssw.	18	8.0			0		0	0			clear.
Vandalia, Hampton Roads, Va	30.04	763.0	40	4.4	91	sw.			2		0						clear.
Wabash, Boston, Mass.	30.01	762.2	38	3.3	63	sw.	6	2.7			10	sw.	0	0			cloudy.
Wachusetts, Mare Island, Cal†	30.20	767.1	45	7.2	100	var.			1		0		0	0	sm'h		clear.
Wyandotte, Washington, D. C	29.94	760.5	58	14.4	81	sw.			1		2	calm	0	0			fair.
Yantic, Norfolk, Va.	30.14	765.5	39	3.9	91	sse.			1		5						fair.
Merchant Marine.																	
S. S. Grecian, S. 24° 46′, W. 43° 30′*	29.91	759.7	74	23.3	86	sse.			4		10	sse.	11 h'r	11 h'r	sm'h		cloudy.
S. S. Polynesian, Halifax, N. S*	29.84	757.9	31	— 0.6		n.			4		10	nw.	5 h'r	5 h'r	mod.	w.	fair.
S. S. Scandinavian, N. 51° 25′ W. 35° 30′	29.79	756.7	44	6.7		wsw			1		3	nw.	5 h'r	5 h'r	mod.	w.	fair.
S. S. British Crown, N. 53° 36′, W. 20° 44′†	29.53	750.0	48	8.9		wsw.			4		10	wsw.	sh's	sh's	high	wsw.	drizzling.
S. S. British Prince, N. 41° 54′, W. 63° 09′	30.10	764.5	46	7.8		nw.			7		4	w.	4 h'r	4 h'r	hv'y	wsw.	fine.
S. S. Indiana, Liverpool, Eng †	29.82	757.4	38	3.3	81	se.			4		6	nw.	0	0	mod.	nw.	cloudy.
S. S. Lord Clive, N. 39° 41′ W. 72° 10′*†	30.00	762 0				sw.			4		8	se.					cloudy.
S. S. Ohio, N. 42° 15′, W 62° 53′			57	13.9	100	sw.			3		0		0	0	slt	sw.	fine.
S. S. Pennsylvania, Philadelphia, Pa†	29.93	760.2	33	0.6		w.			6		10	w.			h'vy	wsw.	overcast.
S. S. Castor, N. 41° 20′, W. 56° 30′*	30.07	763.7	50.0	10		wnw.			2		1	nw.					clear.
S. S. Stella, N. 41° 14′ W. 53° 08′	30.09	764.2	60.8	16		ne.			2		7	wnw.					fair.
S. S. Bolivia, N. 50° 38′, W. 35° 26′ *†	29.86	758.4	49	9.4	85	w.			1		4	n.	8 h'r	8 h'r	4	w.	
S. S. Dorian, N. 51° 07′, W. 34° 02′ *	29.70	754.4	49	9.4		var.			3		3	w.	2	nne.	d clouds.		
S. S. Ethiopia, New York, N. Y	29.97	761.2	34.5	1.4		sw.			1		10	wnw.	light	light	mod.	wsw.	drizzling.
S. S. Galatia, N. 11° 34′, E. 64° 47′†	30.06	763.5	77	25.0	100	wnw.			3		8	sw.	12 h'r	12 h'r	mod	wnw.	hazy.
S. S. Ailsa, N. 28° 42′, W. 74° 27′†	30.32	770.1	59	20.6	75	var.			4		7	n.	0	0			cloudy.
S. S. Alpin, N. 39° 22′, W. 74° 12′	29.93	760.2				sw.			2		2	se.	1 h'r	1 h'r	long	nne.	
S. S. Alvo, off Greytown, Nicaragua	30.00	762.0	76	24.4		n.			6		6	w.	0	0	sm'h	w.	fair.
S. S. Antillas, Black River, Jamacia, W. I.			78	25.6		n.			6		10kn		0	0	sm'h	sw.	fine.
S. S. Carroll, N. 44° 50′, W. 61° 58′	30.05	763.3	32	0.0		wsw.			1		17	n.			long	n.	raining.
Bk. Coppename, N. 14° 07′, W. 41° 12′	30.00	762.0	79.5	26.4	78	e.			5		4	n.	3 h'r	3 h'r	mod.	n.	cloudy.?
S. S. Gordon Castle, N. 25° 22′, E. 119° 56′	30.06	763 5	67.5	19.7	84	ne.			6		8	w.	snow	snow	short	wsw.	fair.
Mertola, N. 39° 20′, W. 15° 18′	30.29	769.4	59.3	15.2	88	nnw.			4		0						d. clouds.
May Hulse, S. 30° 40′, W. 46° 01′	30.04	763.0	72.3	22.4	78	se.			6		9						blue sky.
S. S. Marathon, Smyrna, Turkey	29.92	760.0	66	18.9		s.			4		5						d. clouds.
S. S Parthia, N. 49° 45′, W. 24° 28′*†	29.98	761.5	58	14.4		sww.			5		6	s.	8 h'r	8 h'r			showery.
S. S. Pavonia, N. 42° 27′, W. 64° 15′*	30.04	763.0	46	7.8	77	w.			5		3	sw.	16 h'r	16 h'r	cf'd	ssw.	raining.
S. S. Scythia, River Mersey, Eng	29.95	760.7	33	0.6		s.			5		10	w.	sh'rs	shr's	long	wsw.	overcast.
S. S. Canada, N. 45° 42′ W. 47° 13′	30.03	762.7	41.0	5.0		wnw.			4		10	s.	0	0			overcast.
S. S. Labradore, N. 49° 50′, W. 60° 00′*†			46.4	8		n.			3		3	w.	12 h'r	12h'r	sm'h	w.	clear.
S. S. Abyssinia, N. 46° 42′, W. 45° 56′*	29.88	758.9	46	7.8	64	w.			5		6	n.			sm'h	var.	clear.
S. S. Wyoming, N. 46° 18′, W. 47° 03′	30.04	763.0	41	5.0		wsw.			6		7	w	8 h'r	8 h'r	mod.	w.	cloudy.
S. S. Bohemia, N. 48° 40′, W. 26° 15′†	30.05	763.3				sw.			4		0		1 h'r	1 h'r	long	ssw.	fair.
S. S. Gellert, New York, N. Y.	29.98	761.5	30	— 1.1		ne.			6		10	sw	6 h'r	6 h'r	r'gh	wsw.	foggy.
									5		9	nnw.	0	0			covered.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Silesia, N. 49° 52′, W. 14° 06′	.....	.....	53.1	11.7	88	sw.	.....	.....	4	.....	10	.....	sw.	0	0	3	sw	misty.
S. S. Vandalia, Hamburg, Germany	.....	.....	36.5	2.5	93	ne.	.....	.....	4	.....	2	.....	e.	0	0	.....	.....	fair.
S. S. Wieland, N. 40° 58′, W. 66° 27′	30.12	765.0	.....	.....	.....	w.	.....	.....	2	.....	2	.....	w.	0	0	mod.	ne.	
S. S. City of Berlin, N. 41° 45′, W. 65° 15′	30.05	763.3	47	8.3	85	w.	.....	.....	5	.....	9	.....	w.	0	0	mod.	w.	cloudy.
S. S. Archimedes, N. 48° 44′, W. 7° 04′	29.98	761.5	.....	.....	.....	ssw.	.....	.....	5	.....	10	.....	ssw.	0	0	mod	w.	overcast.
S. S. Hevelius, N. 23° —′ W. 22° —′ *†	30.17	766.3	72	22.2	.....	ne.	.....	.....	6	.....	4?	.....	ene.	0	0	mod.	ne.	cloudy.?
S. S. Sirius, N. 31° 00′, W. 14° 40′ *	30.11	764.8	.....	.....	.....	nne.	.....	.....	4	.....	3	.....	nne.	1 h'r	1 h'r	mod.	nne.	clear.
S. S. Colorado, Galveston, Texas†	30.40	772.1	56	13.3	.....	e.	.....	.....	2	.....	2	.....	e	0	0	.....	.....	clear.
S. S. Rio Grande, Galveston, Texas†	30.45	773.4	62	16.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	.....	clear.
S. S. San Marcos, N. 25° 40′, W. 86° 40′	.....	.....	62	16.7	.....	nne.	.....	.....	4	.....	.....	.....	ne.	.....	.....	sm'h	.....	fine.
S. S. Archimedes, N. 33° 58′, W. 49° 11′†	30.24	768.1	76	24.4	73	s.	.....	.....	3	.....	4?	.....	ssw.	0	0	long	wnw.	cloudy.?
S. S. Hermod, N. 43° 20′, W. 50° 06′†	30.10	764.5	53.6	12.0	.....	s.	.....	.....	1	.....	1	.....	sw.	16 h'r	16 h'r	long	w.	clear.
S. S. John Hopkins, Boston, Mass	.....	.....	37	2.8	.....	sw.	.....	.....	2	.....	0?	.....	.....	0	0	.....	.....	overcast.?
S. S. Glenapp, S. 20° 00′, W. 39° 00′†	29.81	757.2	.....	.....	.....	nnw.	.....	.....	4	.....	8	.....	ne.	8 h'r	8 h'r	high	ne.	cloudy.
S. S. Glenfyne, Para, Brazil	.....	.....	.....	.....	.....	e.	.....	.....	3	.....	1	.....	e.	0	6	.....	.....	clear.
S. S. Chalmette, N. 25° 35′, W. 80° 00′†	30.29	769.4	67	19.4	.....	n.	.....	.....	5	.....	10	.....	nne.	0	0	mod.	nne.	cloudy.
S. S. Lone Star, N. 31° 05′, W. 80° 17′ †	30.25	768.3	56	13.3	.....	wnw.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	.....	clear.
S. S. New York, N. 35° 55′, W. 75° 00′†	30.06	763.5	52	11.1	.....	sw.	.....	.....	5	.....	0	.....	.....	.....	.....	sm'h	.....	fine.
S. S Denmark, London, Eng †	30.03	762.7	33	0.6	.....	nw.	.....	.....	2	.....	10	.....	.....	0	0	.....	.....	dense fog.
S. S. Egypt, New York, N. Y *†	29.85	758.2	.....	.....	.....	sw.	.....	.....	4	.....	5	.....	ssw.	0	0	.....	.....	fair.
S. S. Erin, N. 51° 14′, W. 21° 03′	29.83	757.7	53	11.7	.....	wnw.	.....	.....	8	.....	10	.....	w.	10 h'r	10 h'r	h'vy	w.	raining.
S. S. Greece, N. 41° 06′, W. 58° 39′ *†	30.10	764.5	54	12.2	.....	nne.	.....	.....	3	.....	9	.....	ne.	10 h'r	10 h'r	long	wsw.	showery.
S. S. Helvetia, N. 47° 52′, W. 35° 30′	29.81	757.2	61	16.1	.....	wnw.	.....	.....	6	.....	10	.....	wsw.	9 h'r	9 h'r	short	w.	raining.
S. S. City of Alexandria, Vera Cruz, Mexico†	30.17	766.3	67	19.4	.....	wsw.	.....	.....	2	.....	8	.....	ne.	3 h'r	3 h'r	small	ene.	rainy.
S. S. City of Merida, N. 33° 00′, W. 76° 50′*†	30.20	767.1	71.6	22.0	.....	wsw.	.....	.....	4	.....	1	.....	wsw.	0	0	mod.	wsw.	fine.
S. S. Elbe, N. 41° 10′, W. 64° 39′	30.08	764.0	48.2	9.0	88	w.	.....	.....	3	.....	8	.....	w.	0	0	mod.	w.	cloudy.
S. S. Hohenstaufen, N. 28° 30′, W. 16° 02′	30.14	765.5	77.0	25.0	.....	n.	.....	.....	5	.....	6	.....	n.	0	0	mod.	n.	fair.
S. S. Neckar, N. 43° 05′, W. 54° 25′	30.08	764.0	47.0	8.3	100	sw.	.....	.....	3	.....	9	.....	ssw.	2 h'r	2 h'r	sm'h	s.	fair.
S. S. Oder, N. 50° 23′, W. 1° 42′	30.06	763.5	45.7	7.6	.....	calm	.....	.....	0	.....	9	.....	ene.	3 h'r	3 h'r	sm'h	sw.	covered.
S. S. Ohio, N 28° 11′ W. 79° 20′	30.37	771.4	.....	.....	.....	n.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	n.	clear.
S. S. Saller, N. 49° 39′, W. 25° 12′	29.89	759.2	56.3	13.5	.....	w.	.....	.....	5	.....	10	.....	w.	6 h'r	6 h'r	h'vy	w.	misty.
S. S. Strassburg, N. 100° 22′ W. 26° 53′	29.99	761.7	80	26.7	96	ene.	.....	.....	4	.....	8	.....	se.	0	0	mod	ne.	fair.
S. S. Werra, N. 50° 10′, W. 100 49′*†	29.90	759.4	49.1	9.5	.....	sw.	.....	.....	0	.....	10	.....	sw.	0	0	r'gh	sw.	covered.
S. S. Belgic, N. 37° 38′, E. 147° 15′†	29.99	761.7	68	20.0	79	s.	.....	.....	2	.....	10	.....	s.	2 h'r	2 h'r	mod.	sw.	overcast.
S. S. Coptic, N. 39° 43′, W. 161° 59′	29.44	747.8	53.5	11.9	97	wsw.	.....	.....	6	.....	2	.....	wsw.	2 h'r	2 h'r	r'gh	w.	clear.
S. S. Oceanic, Yokohama, Japan*	30.04	763.0	58	14.4	70	s.	.....	.....	4	.....	8	.....	s.	.....	.....	.....	.....	cloudy.
S. S. Mississippi, Seattle, Wash. Ter*†	30.30	769.6	47	8.3	85	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	.....	cloudy.
S. S. Willamette, N. 40° 41′, W. 124° 38′†	30.40	772.1	50	10.0	93	s.	.....	.....	1	.....	1	.....	sw.	0	0	long	w.	foggy.
S. S. Oregon, Portland, Oregon†	30.29	769.4	43	6.1	92	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	foggy.
S. S. Ancon, San Francisco, Cal†	30.07	763.8	50	10.0	86	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear.
S. S. City of Chester, Humboldt, Cal.*†	30.32	770.1	50	10.0	93	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	foggy.
S. S. Dakota, N. 45° 00′, W. 124° 44′†	30.28	769.1	53	11.7	86	ne.	.....	.....	4	.....	5?	.....	n.	0	0	light	nw.	clear?
S. S. Orizaba, N. 33° 43′ W. 118° 15′*†	30.18	766.6	64	17.8	58	ne.	.....	.....	2	.....	0	.....	.....	.....	.....	mod.	s.	clear.
S. S. State of California, San Francisco, Cal*†	30.28	769.1	47	8.3	.....	calm	.....	.....	0	.....	4	.....	.....	0	0	.....	.....	fair.
S. S. Australia, S. 33° 52′, E. 163° 18′	29.90	759.4	65	18.3	89	w.	.....	.....	2	.....	1	.....	w.	0	0	long	s.	clear.
S. S. City of New York, Sydney, N. S. W †	30.22	767.6	67	19.4	64	w.	.....	.....	1	.....	5	.....	sw.	0	0	.....	.....	fair.
S. S. City of Pekin, N. 22° 13′, E. 114° 57′†	30.03	762.7	69	20.6	75	ene.	.....	.....	2	.....	2	.....	se.	0	0	sm'h	.....	clear.
S. S. City of Rio de Janeiro, N. 12° 22′, W. 88° 16′ †	30.04	763.0	78	25.6	78	une.	.....	.....	5	.....	2	.....	ne.	0	0	mod.	nne.	fine.
S. S. Colima, N. 35° 38′ W. 121° 36′†	30.25	768.3	56	13.3	87	var.	.....	.....	2	.....	0	.....	.....	0	0	mod.	w.	misty.
S. S. Grenada, Panama, Panama †	29.94	760.5	75	23.9	90	nw.	.....	.....	1	.....	2	.....	nw.	0	0	.....	.....	clear.
S. S. Zealandia, N. 3° 57′, W. 164° 20′	29.90	759.4	83	28.3	83	se.	.....	.....	6	.....	5	.....	se.	.....	.....	mod.	e.	fine.
S. S. Muriel, Martinique, W. I.	30.07	763.8	80	26.7	.....	ene.	.....	.....	3	.....	0	.....	.....	0	0	sm'h	.....	clear.
S. S. Caracas, N. 29° 37′, W. 76° 01′†	30.32	770.1	68	20.0	67	ese.	.....	.....	2	.....	2	.....	ese.	0	0	mod.	une.	fine.
S. S. Claudius, N. 16° 00′, W. 88° 40′†	30.24	768.1	.....	.....	.....	w.	.....	.....	3	.....	9	.....	n.	2 h'r	2 h'r	short	wsw.	cloudy.
S. S. Valencia, N. 15° 07′, W. 68° 14′ †	30.11	764.8	82	27.8	83	ene.	.....	.....	5	.....	4	.....	ne.	0	0	mod.	ene.	fine.
S. S. Belgenland, Scheldt river, Germany	30.27	768.8	34	1.1	90	ese.	.....	.....	4	.....	2	.....	e.	0	0	.....	.....	fine.
S. S. Penuland, N. 50° 36′, W. 32° 40′	29.94	760.5	50	10.0	93	wsw.	.....	.....	6	.....	10	.....	.....	9 h'r	9 h'r	long	w.	raining.
S. S. Rhynland, N. 49° 50′, W. 26° 30′	29.99	761.7	57	13.9	87	w.	.....	.....	4	.....	10	.....	wsw.	8 h'r	8 h r	high	sw.	dense fog.
S. S. Waesland, Antwerp, Belgium	30.18	766.6	33	0.6	89	ese.	.....	.....	2	.....	3	.....	e.	0	0	.....	.....	fair.
S. S. P. Caland, N. 49° 29′, W. 30° 02′	29.90	759.4	54.9	12.7	95	sw.	.....	.....	2	.....	10	.....	sw.	.....	.....	4	wsw.	foggy.
S. S. W. A. Scholten, N. 49° 33′, W. 15° 33′	30.05	763.3	53.6	12.0	100	w.	.....	.....	5	.....	10	.....	w.	10 h'r	10 h'r	mod.	wnw.	rainy.
S. S. Zaandam, N. 43° 00′, W. 56° 10′	30.07	763.8	49.6	9.8	79	w.	.....	.....	3	.....	6 k	.....	e.	10 h'r	10 h'r	2	w.	foggy.
S. S. State of Florida, N. 47° 21′, W. 40° 45′	29.87	758.7	53	11.7	.....	sew.	.....	.....	4	.....	5	.....	wsw.	10 h'r	10 h'r	mod.	wsw.	fair.
S. S. Baltic, off Waterford, Ireland	29.89	759.2	47	8.3	77	sw.	.....	.....	5	.....	9	.....	sw.	0	0	sm'h	.....	threat-ning.
S. S. Celtic, Liverpool, Eng†	29.96	761.0	39	3.9	.....	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	.....	foggy.
S. S. Germanic, N. 51° 33′, W. 14° 30′ †	29.81	757.2	51	10.6	.....	w.	.....	.....	5	.....	7	.....	w.	sh'rs	sh'rs	high	w.	d clouds.
S. S. Marengo, N. 43° 40′, W. 56° 56′	30.07	763.8	.....	.....	.....	wnw.	.....	.....	3	.....	0	.....	.....	2 h'r	2 h'r	mod.	wnw.	clear.
S. S. Salerno, N. 36° 15′. W. 60° 53′	.....	.....	.....	.....	.....	nnw.	.....	.....	6	.....	7	.....	nw.	3 h'r	3 h'r	r'gh	nw.	cloudy
S. S. Aries. N. 43° 00′, W. 73° 45′*†	30.00	762.0	.....	.....	.....	s.	.....	.....	4	.....	5	.....	.....	0	0	long	sse.	
S. S. Catherine Whiting, Providence, R. I†	30.00	762.0	40	4.4	.....	calm	.....	.....	0	.....	.....	.....	.....	0	0	.....	.....	
S. S. Saxon, N. 40° —′, W. 73° 30′†	30.01	762.2	46	7.8	.....	ssw.	.....	.....	4	.....	5	.....	nw.	.....	.....	long	s.	
MISCELLANEOUS.																		
Bk. Adelaid, N. 37° 16′ W. 75° 00′ *†	30.20	767.1	50	10.0	.....	sw.	.....	.....	5	.....	1	.....	sw.	0	0	sm'h	sw.	clear.
Bg. Alcira, N. 10° 39′, W. 71° 44′	29.94	760.5	80	30.0	.....	ene.	.....	.....	4	.....	2	.....	ene.	0	0	.....	.....	clear.
Schr. Annie Lewis, Tampico, Mexico †	30.46	773.7	65	18.3	.....	ne.	.....	.....	2	.....	10	.....	.....	18 h'r	18 h'r	long	ne.	drizzling.
S. Annie, M. Law, N. 32° 20′ E. 135° —′*†	30.12	765.0	63	17.2	.....	sw.	.....	.....	2	.....	5?	.....	nw.	0	0	sm'h	.....	clear.?
Bk Anna Thormann, S. 21° 45′, E. 66° 40′*	30.08	763.9	76.6	24.8	83	ese.	.....	.....	5	.....	4 k	.....	sse.	15 h'r	15 h'r	cross	se.	fair
S. S. Antonio Lopez, Havana, Cuba, W. I.*	30.26	768.6	69.5	20.8	87	ne.	.....	.....	4	.....	10	.....	.....	0	0	.....	.....	squally.
Bgt. Arthur, N. 38° 20′, W. 53° 20′*†	30.26	768.6	.....	.....	.....	var.	.....	.....	4	.....	.....	.....	ese	0	0	var.	.....	
S. S. Burswell, N. 24° 17′ W. 82° 42′ *†	30.26	768.6	71	21.7	.....	ene.	.....	.....	4	.....	0	.....	wsw.	0	0	sm'h	.....	fine.
Bk. Champion. N. 25° 04′, W. 27° 38′	.....	.....	71.0	21.7	.....	ne.	.....	.....	4	.....	5	.....	ne.	½h'r	½h'r	mod.	ne.	fair.
Schr. Chas. F. Heyer, N. 25° 00′, W. 79° 43′	30.33	770.4	71	21.7	71	ne.	.....	.....	3	.....	8 k	.....	ne	0	0	r'gh	ne.	cloudy.
Bg. Clara M. Goodrich, Sagua la Grande, Cuba, W.I*†	30.01	762.2	.....	.....	.....	nne.	.....	.....	6	.....	10?	.....	nne.	0	0	.....	.....	clear?
S. Cornelius, N. 49° 01′, W. 17° 27′	.....	.....	55.6	13.1	.....	wsw.	.....	.....	3	.....	10	.....	w.	10 h'r	10 h'r	mod.	nw.	foggy.
Bkt. David Preston, New Orleans, La	.....	.....	68.0	20.0	.....	se.	.....	.....	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Bk. E. L. Pettingill, N. 31° 24′, W. 125° 58′ *†	30.30	769.6	60	15.6	.....	.....	.....	.....	2	.....	8	.....	nne.	0	0	mod.	wsw.	overcast.
S. E. J. Spicer, N. 39° 43′, W. 61° 51′ *	30.17	766.3	61	16.1	.....	wsw.	.....	.....	5	.....	5	.....	wsw.	12 h'r	12 h'r	mod.	wsw.	fair.
Bk. Eliza Barss, Bermuda, W. I†	30.24	768.1	.....	.....	.....	n.	.....	.....	3	.....	2	.....	n.	0	0	.....	.....	clear.
S. Enoch Train, N. 21° 56′, W. 69° 00′ *†	30.28	769.1	.....	.....	.....	ne.	.....	.....	2	.....	5	.....	ne.	sh'rs	sh'rs	light	nw.	showery.
Bk. Essex, Muscat, Arabia*†	29.91	759.7	79.0	26.1	.....	nw.	.....	.....	0	.....	0	.....	.....	0	0	.....	nnw.	fine.
Schr. F. E. McDonald, Belfast, Maine†	30.04	763.0	.....	.....	.....	nw.	.....	.....	1	.....	.....	.....	.....	snow	snow	.....	.....	threatening.
S. S. Foscolia, N. 25° 46′, W. 62° 29′	.....	.....	.....	.....	.....	ne.	.....	.....	5	.....	8	.....	ne.	7 h'r	7 h'r	cross	.....	dull.
Bk. Freya, N. 18° 50′, W. 51° 30′	.....	.....	81	27.2	.....	nne.	.....	.....	2	.....	0	.....	.....	0	0	mod.	nne.	fine.
S. F. W. Gl demeister, N. 39° 17′, W. 66° 32′ *	30.10	764.5	53.6	12	54	wnw.	.....	.....	3–6	.....	3	.....	wsw.	0	0	4	w.	clear.
Bg. George. Port Caledonia, N. S.	.....	.....	.....	.....	.....	sw.	.....	.....	5	.....	8	.....	.....	0	0	.....	.....	fair.
Bk. Godelfroy, off Point India, La Plata, S. A†	30.12	765.0	.....	.....	.....	ne.	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	
Bk. Great Surge n, S. 11° 55′, E. 104° 00′*†	29.95	760.7	82	27.8	.....	sew.	.....	.....	1	.....	2	.....	ssw.	0	0	long	sse.	clear.
S. Grecian, N. 38° 10′, W. 72° 10′†	30.02	762.5	56	13.3	70	wsw.	.....	.....	0	.....	0	.....	.....	0	0	sm'h	sw.	clear.
Bk. Grey Eagle, N. 22° 17′, W. 37° 02′*†	30.10	764.5	.....	.....	.....	ese.	.....	.....	3	.....	5	.....	e.	1 h'r	1 h'r	h'vy	ne.	squally.
Bk. Hattie G. McFarland, New York, N. Y†	30.00	763.5	39	3.2	.....	sw.	.....	.....	1	.....	3	.....	sw.	0	0	.....	.....	fair.
Schr. Hattie Weston, N. 19° 35′ W. 083° 00′ *†	30.20	767.1	81	27.2	.....	ne.	.....	.....	3	.....	2	.....	ne.	0	0	mod.	n	fair.
Bk. Heinrich & Tonio, N. 49° 05′, W. 9° 55′	.....	.....	50	10.0	79	ssw.	.....	.....	2	.....	10	.....	.....	1 h'r	1 h'r	h'vy	nw.	rainy.
Schr. Isabel Alberto, N. 27° 50′, W. 83° 08′†	30.41	772.4	.....	.....	.....	n.	.....	.....	1	.....	2	.....	e.	0	0	sli't	n.	fair.
Schr. James Slater, N. 29° 32′, W. 74° 35′†	30.27	768.3	71	21.7	.....	ne.	.....	.....	1	.....	2	.....	se.	0	0	mod.	wnw.	

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec.	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Schr. Jennie N. Huddell, Savannah, Ga†	30.31	769.9	35	1.7	.....	w.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear.
Schr. John L. Thomas, N. 28° 32′, W 79° 30′*†	30.38	771.6	.....	.....	.....	wnw.	.....	.....	2	.....	0	.....	.....	0	0	mod.	n.	clear.
Bg. John Wesley, N. 31° 49′, W. 77° 39′†	30.28	769.1	.....	.....	.....	nnw.	.....	.....	6	.....	8	.....	nnw.	0	0	cross	nw.	cloudy.
Bk. Joseph A. Ropes, N. 14° 49′ E. 58° 53′*†	29.97	761.2	82	27.8	83	nne.	.....	.....	3	.....	8	.....	ne.	0	0	mod.	ne.	cloudy.
Bkt. Josephine, N. 39° 38′, W. 63° 24′†	30.13	765.3	64	17.8	48	wsw.	.....	.....	6	.....	10	.....	.....	3 h'r	3 h'r	cross	var.	hazy.
Bk. Julia H, N. 38° 33′, W. 63° 51′	30.16	766.1	61.0	16.1	77	wsw.	.....	.....	4	.....	10	.....	.....	⅛ h'r	⅛ h'r	5	w.	misty.
Light House Tender Laurel, Key West, Fla†	30.26	768.6	64	17.8	.....	nne.	.....	.....	3	.....	4	.....	ne.	0	0	sm'h	.....	fair.
Bg. Lilian, N. 29° 35′, W. 73° 12′†	30.35	770.9	68	20.0	.....	calm	.....	.....	0	.....	1	.....	sw.	0	0	mod	n.	clear.
Bg. L. & W. Armstrong, N. 37° 44′, W. 68° 25′*†	30.18	766.6	.....	.....	.....	wsw.	.....	.....	1	.....	2	.....	wsw.	0	0	mod	wsw.	clearing
S. S. Malabar, N. 36° 24′, E. 19° 38′†	29.89	759.2	.....	.....	.....	nw.	.....	.....	9	.....	8	.....	nw.	6 h'r	6 h'r	hv'y	nw.	fair.
Bk. Matilda C. Smith, N. 27° 45′, W. 48° 00′*†	30.27	768.8	.....	.....	.....	s.	.....	.....	6	.....	5	.....	s.	shr's	shr's	mod.	ese.	clearing.
Schr. Minnie A. Bonsall, St. John's, Porto Rico, W I*†	30.38	771.6	66	18.9	.....	wnw.	.....	.....	1	.....	0	.....	.....	.....	.....	light	nw.	fair.
S. Minnie N. Gerow, N. 33° 55′, W. 17° 40′ *†	30.26	768.6	.....	.....	.....	n.	.....	.....	6	.....	7	.....	n.	0	0	long	ene.	fair.
S. M. P. Grace, N. 3° 16′, W. 124° 29′*†	30.02	762.5	74	23.3	.....	se.	.....	.....	7	.....	6	.....	se.	light	light	long	ese.	squally.
Bg. O. C. Clary, Demerara, British Guiana, S. A *†	30.05	763.3	84	28.9	91	calm	.....	.....	0	.....	1	.....	ne.	0	0	.....	.....	clear.
S. Orealla, N. 12° 23′ E. 91° 48′*	29.85	758.2	.....	.....	.....	s.	.....	.....	3	.....	5	.....	s.	.....	.....	sm'h	.....	fine.
Bk. Orpheus, N. 49° 40′ W. 5° 15′	.....	.....	55	12.8	.....	wsw.	.....	.....	6	.....	10 k	.....	.....	.....	.....	mod.	wsw.	drizzling.
S. Paramita, San Francisco, Cal†	30.00	762.0	52	11.1	.....	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	
S. S. Peconic, N. 34° 47′, W. 75° 35′	.....	.....	58	14.4	.....	sw.	.....	.....	5	.....	2	.....	sw.	0	0	mod	sw.	fair.
S. S. Radnorshire, N. 5° 08′, E. 84° 44′*†	29.76	755.9	.....	.....	.....	wnw.	.....	.....	4	.....	2	.....	w.	0	0	sm'h	wsw.	fair.
S. St. Francis, N. 8° 38′ W. 120° 35′†	29.93	760 2	75	23.9	.....	e.	.....	.....	3	.....	9	.....	e.	10 h'r	10 h'r	long	ne.	raining.
Bk. Southern Belle, Antwerp, Belgium*†	30.00	762.0	.....	.....	.....	e.	.....	.....	3	.....	.....	.....	.....	0	0	.....	.....	clear.
S. S. Sunbeam, N. 25° 57′, W. 37° 56′	30.31	769.9	73	22.8	76	ese.	.....	.....	5	.....	9	.....	ese.	6 h'r	6 h'r	4	e.	d. clouds.
S. S. Strathleven, N. 12° 01′ E. 52° 56′	29.95	760.7	77.2	25.1	95	nne.	.....	.....	2	.....	3	.....	ne.	0	0	2	ne.	d. clouds.
Schr. T. S. McLellan, N. 24° 50′, W. 79° 40′*†	30.30	769.6	70	21.1	.....	ene.	.....	.....	.....	.....	.....	.....	ne.	.....	.....	h'vy	n.	cloudy.
U.S.F.C.S.S. Fish Hawk, Washington, D. C†	30.10	764.5	37	2.8	80	ne.	.....	.....	1	.....	4	.....	calm	0	0	.....	.....	clear.
Bk. Usko, N. 53° 12′, W. 23° 01′*	29.61	752.1	48	8.9	.....	wsw.	.....	.....	6	.....	6	.....	w.	4 h'r	4 h'r	long	w.	clearing.
S. Vincenzo Accame, N. 35° 12′, W. 27° 33′†	30.70	779.8	67.1	19.5	.....	nne.	.....	.....	3	.....	4	.....	nw.	0	0	mod.	nnw.	
Schr. Walter L. Plummer, N. 25° 15′, W. 73° 40′*†	30.30	769.6	.....	.....	.....	ne.	.....	.....	4	.....	5	.....	ne.	0	0	cross	.....	fine.
Bk. Wandering Jew, S. 35° 10′, W. 54° 20′ †	30.27	768.8	67	19.4	.....	e.	.....	.....	6	.....	7	.....	e.	0	0	mod.	e.	cloudy.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.06	763.5	.....	.....	.....	s.	.....	.....	1	.....	4	.....	ssw.	.....	.....	sm'h	s.	fair.
S. Wm. Woodbury, N. 41° 56′, W. 38° 15′*	30.22	767.6	69	20.6	.....	sw.	.....	.....	6	.....	6	.....	sw.	.....	.....	long	sw.	cloudy.

International Chart I. December 2, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 3, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.25	768.4	60.4	15.8	80	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.14	765.6	60.8	16.0	73	wsw.	.....	.....	3	.....	0	.....	.....	0.031	0.8	clear	Thève.
La Calle	.....	.....	30.10	764.4	55.4	13.0	89	wsw.	.....	.....	4	.....	4	.....	.....	0.059	1.5	cloudy	Fonfrède.
Tunis	.....	.....	30.08	763.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.23	767.9	64.4	18.0	88	sw.	.....	.....	2	.....	2	.....	.....	0	0	fair	Pérès.
Tebessa	.....	.....	30.19	766.8	53.2	11.8	78	w.	.....	.....	1	.....	1	.....	.....	0	0	very fair	Dognon.
Geriville	.....	.....	.....	.....	57.6	14.2	28	wsw.	.....	.....	2	.....	2	.....	.....	0	0	fair	Louchamp.
Laghouat	.....	.....	30.06	763.4	58.6	14.8	24	sw.	.....	.....	1	.....	1	.....	.....	0	0	very fair	Abraham.
Biskra	.....	.....	30.02	762.6	65.1	18.4	37	nw.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	29.89	759.2	29.98	761.5	66.0	18.9	79	sse.	5	2.2	.....	.....	2	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.51	749.5	30.10	764.4	26.6	— 3.0	87	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.22	742.1	30.05	763.2	15.6	— 9.1	88	ene.	1.8	0.8	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.00	736.6	29.95	760.6	20.1	— 6.6	73	n.	.....	.....	3	.....	10 s	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.71	729.1	30.02	762.6	28.8	— 1.8	80	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.30	718.8	29.77	756.1	35.4	1.9	98	nw.	.....	.....	2	.....	10	.....	.....	0.244	6.2	snowing	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.62	727.0	30.06	763.5	21.2	— 6.0	83	ene.	.....	.....	1	.....	2	.....	.....	0	0	clear	The Staff.
Lemberg	28.89	733.9	29.95	760.8	19.8	— 6.8	75	e.	.....	.....	3	.....	10	.....	.....	0.063	1.6	.....	Dr. T. Stanecki.
Pola	29.90	759.4	30.02	762.4	40.6	4.8	30	calm	.....	.....	0	.....	1	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.33	745.0	29.79	756.6	23.7	— 4.6	90	w.	.....	.....	2	.....	10	.....	.....	0	0	light fog	Joseph Midlinszky, S J.
Szegedin	29.65	753.0	29.95	760.6	22.8	— 5.1	85	nw.	.....	.....	3	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.96	760.9	30.06	763.5	39.9	4.4	33	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	Royal Academy.
Vienna	29.32	744.6	30.08	764.1	23.0	— 5.0	76	nw.	.....	.....	1	.....	9	.....	.....	.....	.....	snowing	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.08	738.6	29.18	741.2	43.6	6.4	83	s.	16	7.2	.....	.....	9	.....	.....	0.310	7.9	overcast	W. Boswell
Armagh, Observatory	28.99	736.3	29.23	742.4	43.9	6.6	91	s.	15	6.7	.....	.....	.....	.....	.....	.....	.....	.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.33	745.0	40.0	4.4	93	ssw.	12	5.4	.....	.....	10	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	28.78	731.0	29.32	744.7	41.4	5.2	96	ssw.	3	1.3	.....	.....	10	.....	.....	.....	.....	gloomy	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.05	1.3	.....	McLandsborough&Preston.
Bridgetown, Barbadoes	29.92	760.0	29.96	761.0	83.0	28.3	60	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	46.0	7.8	95	sw.	.....	.....	1.0	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E	29.37	746.0	29.50	749.3	43.7	6.5	100	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	misty	Corpl. G. A. Pickles.
Falmouth, Observatory	29.16	740.7	29.38	746.2	51.9	11.1	96	wsw.	.....	.....	5	.....	10	.....	.....	.....	.....	raining	The Staff.
Fort Napier, Natal	27.43	696.7	29.64	752.8	72.0	22.2	65	s.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	87.0	30.6	55	nw.	.....	.....	1	.....	5	.....	.....	.....	.....	blue sky	Sergt. John Robinson
Gibraltar, Mediterranean	30.09	764.3	30.14	765.5	57.1	13.9	94	sw.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	28.93	734.8	29.14	740.1	43.7	6.5	91	ssw.	.....	.....	5	.....	10	.....	.....	.....	.....	gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.32	744.7	29.49	749.0	45.2	7.3	96	ssw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.24	742.7	29.53	750.0	53.5	11.9	97	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S
Kew, Observatory	29.45	748.0	29.48	748.8	47.0	8.3	94	s.	8	3.6	.....	.....	10	.....	.....	.....	.....	misty	The Staff.
Leicester, Museum	29.08	738.6	29.33	745.0	43.6	6.4	95	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.92	760.0	30.00	762.0	61.8	16.6	97	n.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.11	764.8	30.16	766.1	69.8	21.0	69	n.	.....	.....	3	.....	9	.....	.....	.....	.....	overcast	C. S. Duncombe
Oscott, St. Mary's College	28.88	733.5	29.40	746.7	43.3	6.3	93	ssw.	.....	.....	3	.....	10	.....	.....	.....	.....	threatening	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.22	742.2	29.45	748.0	47.1	8.4	91	s.	.....	.....	3	.....	6	.....	.....	.....	.....	misty	The Staff.
Plymouth	29.37	746.0	29.44	747.8	51.4	10.8	97	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	John Merrifield.
Sandwick Manse, Orkneys	28.90	734.0	29.00	736.6	42.8	6.0	92	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.65	753.1	29.71	754.6	60.6	15.9	65	sw.	.....	.....	3	.....	1	.....	.....	.....	.....	blue sky	W. H. Lyne.
Sheffield	29.08	738.6	29.36	745.7	42.9	6.1	96	s.	.....	.....	1	.....	10	.....	.....	0.13	3.3	overcast	W. F. Cooper.
Silloth Rectory	29.18	741.2	29.21	741.9	45.5	7.5	89	ssw.	.....	.....	3	.....	10	.....	.....	0.450	11.4	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.34	745.2	42.4	5.8	89	s.	8	3.6	.....	.....	10	.....	.....	blank	blank	gloomy	I. New.
Stratfield Turgiss	29.23	742.4	29.45	748.0	49.5	9.7	89	w.	.....	.....	3	.....	10	.....	.....	.....	.....	gloomy	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.33	745.0	29.37	746.0	55	12.8	93	sw.	.....	.....	7	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.25	742.9	29.27	743.4	52.4	11.3	94	sw.	25	11.2	.....	.....	10	.....	.....	.....	.....	misty	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson
Charlottetown, P. E. Island	29.77	756.1	29.81	757.2	32	0.0	90	ne.	6	2.7	.....	.....	10 n	.....	calm	0.030	0.8	cloudy	H. J. Cundall, C. E
Chatham, N. B*	29.88	758.9	29.94	760.5	15	— 9.4	96	ne.	11	4.9	.....	.....	10 n	.....	ne.	0.18	4.6	light snow	G. A. Blair.
Father Point, Quebec*	30.08	764.0	30.10	764.5	10	—12.2	87	nne.	23	10.3	.....	.....	10 s	.....	n.	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.18	741.2	30.08	764.0	9	—12.8	80	se.	9	4.0	.....	.....	10 s	.....	se.	0	0	cloudy	James Stewart.
Halifax, N. S*	29.62	752.3	29.75	755.6	43	6.1	96	e.	8	3.6	.....	.....	10 n	.....	.....	0	0	cloudy	A. Allison.
Kingston, Ontario*	29.87	758.7	30.24	768.1	10	—12.2	76	nw.	5	2.2	.....	.....	10 n	.....	.....	0.12	3.0	hailing	A. P. Knight, M. A
Montreal, Quebec*	29.94	760.5	30.17	766 3	7	—13.9	80	n.	6	2.7	.....	.....	10 s	.....	.....	0.04	1.0	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.56	750.8	30.34	770.6	3	—16.1	72	n.	3	1.3	.....	.....	10 n	.....	n.	0.02	0.5	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.55	750.6	30.31	769.9	14	—10.0	100	calm	0	0	.....	.....	10 n	.....	.....	0.25	6.3	cloudy	H. Morgan.
Port Stanley, Ontario	29.59	751.6	30.30	769.6	14	—10.0	96	w.	6	2.7	.....	0	2 k	.....	nw.	0.07	1.8	clear	M. Payne.
Quebec, Quebec*	29.77	756.1	30.12	765.0	6	—14.4	76	n.	.....	.....	3	.....	10 k	.....	n.	0.02	0.5	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.77	756.1	30.28	769.1	4	—15.6	87	n.	3	1.3	.....	.....	10 s	.....	ne.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.52	749.8	30.29	769.4	17	— 8.3	96	n.	20	8.9	.....	.....	10 ks	.....	.....	0.08	2.0	cloudy	.....
St. Andrews, N. B	29.70	754.4	29.75	755.6	20	— 6.7	85	ne.	18	8.0	.....	.....	10 n	.....	.....	0.01	0.3	cloudy	.....
Sydney, C. B*	29.90	759.4	29.96	761.0	38	3.3	85	se.	7	3.1	.....	.....	10 ks	.....	sw.	0	0	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.90	759.4	30.32	770.1	13	—10.6	76	n.	3	1.3	.....	.....	10 n	.....	.....	0.25	6.3	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.56	750.8	29.62	752.3	46	7.8	96	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.76	730 5	30.29	769.4	11.0	—11.7	80	nnw.	16	7.2	.....	.....	10kn	.....	nw.	0.110	2.8	cloudy	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	32	0.0	100	sw.	2	0.9	.....	.....	10	.....	.....	0	0	overcast	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.91	759.7	29.94	760.5	66.0	18.9	80	sw.	19.8	8.9	.....	.....	10 k	.....	.....	0.090	2.3	cloudy	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
Chinese (*Sub-series*).																			
Sung-shu-chwang	24.59	624.7	.....	.....	28.4	— 2.0	.....	w.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	29.91	759.8	30.02	762.6	46.4	8.0	71	sw.	8.5	3.8	.....	0	0	.....	.....	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.17	766.4	30.20	767.1	48.6	9.2	92	e.	6.0	2.7	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.96	761.0	30.01	762.2	26.4	— 3.1	85	se.	18	8	.....	.....	10	.....	.....	.....	.....	snowing	Oversergent Fischer.
Fanoe	29.87	758.6	29.89	759.1	23.9	— 4.5	90	sse.	.....	.....	6	.....	7	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.52	749.7	29.56	750.8	15.1	— 9.4	78	nne.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.52	749.8	29.54	750.3	23.5	— 4.7	.....	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.54	750.4	29.59	751.6	10.2	—12.1	.....	e.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	28.76	730.6	28.81	731.7	37.0	2.8	91	ne.	.....	.....	7	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	28.67	728.3	28.71	729.2	43.9	6.6	87	s.	20	9	.....	.....	7	.....	.....	.....	.....	raining	Overloerer Bergh.
Vestervig	29.78	756.4	29.87	758.8	24.3	— 4.3	89	ese.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	Loerarer Oesterboi.
Upernavik, Greenland	29.58	751.2	29.62	752.4	3.7	—15.7	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.36	745.7	30.03	762.7	42.4	5.8	94	calm	.....	.....	0	.....	8	.....	w.	0.134	3.4	raining	M. Labroue, Director.
Alençon, Normal School	29.15	740.4	29.70	754.4	35.2	1.8	93	s.	.....	.....	1	.....	1g	.....	s.	0.28	7.	foggy	M. Nicot, Director.
Arras, Engineer School	29.37	746.1	29.64	752 9	32.0	0.0	.....	s.	.....	.....	3	.....	10	.....	.....	.....	.....	snowing	M. Fénéon, Command't.
Avignon, Normal School	30.00	761.9	30.08	763.9	36.7	2.6	58	n.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Giraud, Director.
Bar-sur-Seine	29.28	743.7	29.86	758.5	31.8	— 0.1	93	sse.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.45	748.0	29.73	755.1	33.8	1.0	81	sse.	.....	.....	1	.....	10	.....	.....	0.04	1.	foggy	M. Frère Eugène Marié
Besançon, Normal School	28.97	735.9	29.90	759.4	35.2	1.8	70	ssw.	.....	.....	1	.....	kn	.....	sw.	10	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.63	752.5	29.89	759.2	47.8	8.8	90	sw.	.....	.....	1	.....	10	.....	wsw.	0.114	2.9	raining	M. Rayet, Director.
Bourges, Normal School	29.27	743 5	29.84	758.0	37.4	3	67	se.	.....	.....	2	.....	10	.....	se.	.....	.....	snowing	M. Mallet, Director.
Brest, Naval Observatory	29.43	747.5	29.67	753.7	53.2	11.8	97	sw.	.....	.....	3	.....	10	.....	sw.	1.752	44.5	raining	M. de Kermarec, Dir.
Caen, Normal School	29.59	749.3	29.58	751.2	40.5	4.7	71	sw.	.....	.....	1	.....	10	.....	.....	0.043	1.1	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.46	748.3	29.79	756.7	30.6	— 0.8	93	s.	.....	.....	4	.....	10	.....	.....	0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.26	743.2	29.80	756.9	28.8	— 1.8	83	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	snowing	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.52	724.5	29.93	760.2	35.8	2.1	72	e.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Allnard, Director.
Cluny, Normal School	29.08	738.7	29.96	760.9	32.0	0	86	ssw.	.....	.....	2	.....	10	sse.	ssw.	.....	.....	snowing	M. de Villemontée, Dir.
Commercy, Normal School	28.98	736.0	29.87	758.8	29.8	— 1.2	90	s.	.....	.....	1	.....	10	s.	s.	.....	.....	snowing	Dr. Coulet, Director.
Gap, Normal School	27.44	697.0	30.09	764.2	30.2	— 1	.....	ne.	.....	.....	1	.....	5	.....	s.	0	0	.....	M. Jeangirard, Director.
Grénasque, du Rhone	28.88	733.6	30.05	763.2	38.3	3.5	54	n.	.....	.....	1	.....	9	.....	sw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.29	743.9	30.11	764.7	32.0	0.0	73	wnw.	.....	.....	1	.....	kn	.....	.....	0	0	.....	M. Ablard, Director.
Guéret	28.22	716.7	29.91	759.7	37.4	3	91	sw.	.....	.....	4	.....	10 n	.....	sw.	0.012	0.3	raining	M. Delorme, Dir.
Lamballe, Normal School	29.31	744.5	29.58	751.3	52.2	11.2	85	w.	.....	.....	2	.....	hz	.....	w.	0.268	6,8	hazy	M. Ollitrault, Director.
Lescar, Normal School	29.44	747.8	30.01	762.3	45.5	7.5	95	w.	.....	.....	1	.....	10	.....	.....	0.024	0.6	raining	M. Chauvin, Director.
Lorient, Naval Observatory	29.59	751.5	29.69	754.1	55.0	12.8	93	sw.	.....	.....	2	.....	10	.....	.....	0.449	11.4	raining	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.91	734 2	30.02	762.4	29.5	— 1.4	84	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	snowing	M. André, Director.
Mans, Normal School	29.42	747.2	29.74	755.4	35.6	2	98	sw.	.....	.....	3	.....	10	.....	.....	0.185	4.7	light rain	M. Pibeën, Director.
Marseille, Observatory	29.75	755.7	30.03	762.7	42.1	5.6	37	nw.	.....	.....	0.1	.....	10	.....	nw.	0.008	0.2	.....	M. Stephan, Director.
Mt. Louis	24.75	628.6	29.59	751.6	36.7	2.6	78	w.	7.4	3.3	.....	.....	6	n.	.....	0	0	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29 91	759.8	30.08	764.0	34.9	1.6	84	ne.	.....	.....	2	.....	10	.....	ne.	0.08	2.	covered	M. Galzin, Director.
Nancy, Normal School	29.04	737.7	29.86	758.5	29.1	— 1.6	72	s.	.....	.....	1	.....	kn	.....	.....	0	0	.....	M. Hasse, Director.
Nantes, Observatory	29.60	751.9	29.76	756.0	53.2	11.8	96	sw.	.....	.....	0–2	.....	10	.....	.....	0.260	6.6	rainy	M. Larocque, Director.
Perpignan, Observatory	29.95	760.7	30.07	763.7	49.5	9.7	59	n.	5.6	2.5	.....	.....	10	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.10	535.9	.....	.....	25.2	— 3.8	.....	nw.	.....	.....	2	.....	.....	.....	nw.	0.394	10.0	.....	M. Vaussenat.
Privas, Normal School	28.97	735.7	30.09	764.2	32.4	0.2	97	n.	.....	.....	1	.....	5 s	s.	s.	0	0	cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.86	631.5	.....	.....	27.3	— 2.6	100	wsw.	.....	.....	6	.....	10	.....	.....	0.185	4.7	snowing	M. Allnard, Director.
Rochefort, Naval Obs'y	29.78	756.4	29.81	757.2	53.2	11.8	100	sw.	.....	.....	2	.....	10	.....	sw.	4.57	116.	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.51	749.6	29.72	755.0	53.2	11.8	98	sw.	.....	.....	1	.....	10	.....	w.	0.610	15.5	raining	M. Brotier, Director.
Rodez, Normal School	27.89	708.4	30.14	765 6	26.6	— 3	75	calm	.....	.....	0	.....	10	.....	s.	.....	.....	snowing	M. Seger, Director.
Rouen, Normal School	29.65	753.1	29.70	754.3	34.5	1.4	78	se.	.....	.....	1	.....	10	se.	.....	0	0	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	40.6	4.8	100	s.	.....	.....	1	.....	10	.....	.....	0.08	2.	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.57	751.1	29.74	755.3	32.7	0.4	100	s.	.....	.....	1	.....	10	.....	.....	0.051	1.3	.....	M. Renou, Director.
Toulouse, Observatory	29.34	745.1	30.06	763.5	43.0	6.1	88	se.	.....	.....	1	.....	10	w.	.....	0	0	covered	M. Baillaud, Director.
Tours	29.56	750.7	29.73	755.2	42.8	6.0	94	sse.	.....	.....	1	.....	10	.....	sw.	0.256	6.5	rainy	M. de Tastes.
Versailles, Observatory	29.22	742.2	29.71	754.7	33.8	1.0	88	s.	.....	.....	1	.....	.....	.....	.....	0.500	12.7	.....	Dr. A. Hériany, Director.
Sub-series.																			
St. Martin du Hinx	29.87	758.8	30.02	762.6	48.0	8.9	92	sw.	7.8	3.5	.....	.....	10 k	.....	nw.	0.043	1.1	hazy	M. Cartier, Director.
German.																			
Ansbach	28.48	723.4	30.04	762.9	19.4	— 7.0	78	se.	.....	.....	2	.....	8	se.	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.13	739.8	29.97	761.2	21.2	— 6.0	82	calm	.....	.....	0	.....	5	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.80	756.9	29.99	761.7	24.8	— 4.0	77	se.	.....	.....	2	.....	7	.....	.....	0.024	0.6	.....	Prof. Dr. Arndt.
Breslau	29.53	750.1	30.06	763.6	15.6	— 9.1	85	wnw.	.....	.....	1	.....	10	.....	.....	0.012	0.3	.....	Royal University Obs'y.
Carlsruhe	29.49	749.0	29.95	760.7	28.8	— 1.8	75	ne.	.....	.....	1	.....	10	nw.	.....	0.264	6.7	.....	Albert Senz.
Cassel	29.12	739.6	29.83	757 7	25.5	— 3.6	80	s.	.....	.....	5	.....	6	se.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.55	750.6	29.94	760.4	27.7	— 2.4	77	se.	.....	.....	1	.....	4	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.50	723.9	30.01	762.3	26.6	— 3.0	74	ne.	.....	.....	2	.....	10	w.	.....	0.008	0.2	.....	Wilhelm, Chief Tel.
Hamburg	29.87	758.8	29.97	761.1	22.3	— 5.4	85	ese.	.....	.....	4	.....	6	.....	.....	0	0	.....	E. Preller.
Kiel	29.93	760.3	29.95	760.7	23.5	— 4.7	74	se.	.....	.....	2	.....	7	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.60	751.7	30.05	763.2	19.6	— 6.9	92	e.	.....	.....	1	.....	5	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.81	757.1	30.01	762.3	21.0	— 6.1	80	se.	.....	.....	2	6 cs	0	nw.	.....	0	0	.....	Weather Observatory.
Memel	30.16	766.0	30.21	767.2	16.2	— 8.8	82	ese.	.....	.....	3	.....	0	.....	.....	.....	.....	clear	Issermann.
Munich	28.10	713.7	29.96	760.9	23.9	— 4.5	65	calm	.....	.....	0	.....	6	.....	.....	0.035	0.9	.....	Central Station.
Neufahrwasser	30.08	764.1	30.10	764.5	19.6	— 6.9	70	se.	.....	.....	1	.....	7	.....	.....	0.004	0.1	.....	A. Lothes.
Neustadt, Palatinate	29.35	745.6	29.87	758.6	26.6	— 3.0	89	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Dicknether.
Stuttgart	28.97	735.8	29.91	759.7	26.6	— 3.0	85	w.	.....	.....	1	.....	7	n.	.....	0.134	3.4	.....	Prof. Dr. Schoder.
Wustrow	30.02	762.6	30.05	763.2	20.1	— 6.6	95	se.	.....	.....	2	.....	5 s	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.43	747.5	29.82	757.3	60.4	15.8	.....	w.	.....	.....	2.0	.....	7	.....	.....	0	0	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.96	760.9	30.01	762.2	74.9	23.8	72	sw.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.45	747.9	29.92	759.9	85.1	29.5	35	wnw.	3.0	1.3	.....	.....	1	sse.	.....	0	0	d. clouds	
Bombay	29.86	758.5	29.90	759.4	76.6	24.8	80	nw.	13.0	5.8	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.02	711.8	29.87	758.8	80.6	27.0	34	e.	5.0	2.2	.....	.....	1	.....	se.	0	0	d. clouds	
Trichinopoly	29.61	752.2	29.90	759.3	82.7	28.2	68	ene.	1.0	0.4	.....	.....	5	.....	.....	0.88	22.4	d. clouds	
Belgaum	27.35	694.6	29.88	758.9	77.9	25.5	47	nne.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.21	742.0	29.99	761.8	60.6	15.9	55	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.04	737.5	29.97	761.1	65.0	18.3	55	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.39	746.5	29.96	761.1	73.2	22.9	40	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.90	734.1	29.96	761.0	73.9	23.3	44	e.	5.0	2.2	.....	.....	2	e.	.....	0	0	blue sky	
Jubbulpore	28.61	726.8	30.01	762.1	67.9	19.9	82	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.58	751.2	29.97	761.1	68.3	20.2	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.64	753.0	29.97	761.3	62.8	17.1	72	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.77	756.1	29.96	761.0	66.6	19.2	69	w.	2.1	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.90	708.8	29.99	761.7	61.5	16.4	63	nw.	5.8	2.6	.....	.....	2	.....	.....	0	0	d. clouds	
Cuttack	29.85	758.3	29.94	760.4	69.4	20.8	75	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Allpore	29.91	759.7	29.93	760.3	70.8	21.6	71	nnw.	3.0	1.3	.....	.....	5	.....	.....	0	0	d. clouds	
Dhubri	29.81	757.1	29.93	760.2	70.1	21.2	80	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.81	757.2	29.90	759.5	76.7	24.8	57	nw.	1.0	0.4	.....	.....	3	.....	.....	0	0	d. clouds	
Sibsagar	29.61	752.0	29.96	760.8	65.4	18.6	92	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jeypore	28.51	724.1	29.97	761.3	74.0	23.3	45	nw.	2.5	1.1	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.61	752.1	30.03	762.7	37.4	3.0	42	.....	.....	.....	.....	.....	1	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.50	749.3	30.04	763.0	35.6	2.0	54	sw.	3.1	1.4	.....	.....	2	nnw.	.....	0	0	.....	Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Padua	29.97	761.3	30.08	764.1	34.0	1.1	74	calm	0	0			2	nnw		0.024	0.6		Prof. Dott. Lorenzoni.
Moncalieri	29.08	738.5	30.02	762.5	35.8	2.1	69	se.	3.8	1.7			3	s.		0	0		Prof. F. F. Denza.
Genoa	29.81	757.1	30.00	762.0	44.6	7.0	44	e.	4.3	1.9			10	sw.		0	0		Prof. G. M. Garibaldi
Mondovi	28.02	711.7	30.00	762.1	31.3	— 0.4	42	w.			2		1	nnw.		0	0		Prof. D. C. Bruno.
Pesaro	29.99	761.8	30.04	763.1	37.0	2.8	72	w.	5.6	2.5			1			0	0		Prof. Luigi Guidi.
Florence	29.81	757.2	30.07	763.8	37.0	2.8	51	e.			2		0			0	0		Prof. Costantino Pittei.
Leghorn	29.91	759.6	29.99	761.8	39.7	4.3	40	ne.	3.8	1.7			4			0	0		Prof. P. Monte.
Rome	29.86	758.5	30.04	763.0	42.1	5.6	52	n.	3.8	1.7			1			0.083	2.1		Prof. P. Tachini.
Lecce	29.71	754.6	29.97	761.1	48.2	9.0	57	nne.	21.7	9.7			4	n.		0.090	2.3		Prof. C. de Giorgi.
Cosenza	29.08	738.6	29.98	761.4	51.8	11.0	75	w.	3.8	1.7			7	nw.		0	0		Prof. D. Conti.
Cagliari	29.86	758.4	30.05	763.3	53.1	11.8	56	nw.			4		5			0	0		Prof. A. Pacinotti.
Palermo	29.79	756.6	30.04	763.0	58.8	14.9	36	nw.	7.4	3.3			1			0.146	3.7		Prof. G. Cacciatore.
Syracuse	29.92	759.9	29.96	761.0	60.4	15.8	40	wnw.	9.8	4.4			4	wnw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.50	749.2	30.04	763.0	46.4	8.0	41	nw.	0.7	0.3			4			0.051	1.3		Prof. F. Brioschi.
Stelvio	21.84	554.8			10.0	—12.2	33	se.			2		2			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.87	555 5			15.1	— 9.4	42	e.			2		1			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.10	764.4	30.13	765.2	34.9	1.6	72	nw.			4		10 cu;n		nw.	0.185	4.7	cloudy	Hattori.
Awomori	29.99	761.7	30.02	762.5	30.5	— 0.8	79	w.	15.9	7.1			10 n			0.136	3.4	snowing	K. Ogawa.
Hakodate	29.92	760.1	29.94	760.4	30.0	— 1.1	92	wnw.	27.0	12.1			9			0	0		
Hamamatsu	30.05	763.3	30.08	764.0	44.8	7.1	60	nw.			7	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					43.9	6.6	72	nne.	5.8	2.6		0	0			0	0	clear	
Kanazawa	30.08	764.1	30.19	766.8	40.9	4.9	87	sse.	6.3	2.8			10			0.161	4.1	raining	S. Endo.
Kioto	30.01	762.2	30.19	766.8	38.9	3.8	92	nw.	0.2	0.1		0	2 s		w.	0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.98	761 4	30.19	766.8	43.8	6.6	78	nw.	0.6	0.3		0	0			0	0	clear	S. Takehayashi.
Niigata	30.13	765.3	30.17	766.3	41.6	5.3	60	w.	8.7	3.9		0	4 ck;s		w.	0.020	0.5	fair	M. Morita.
Nobiru	30.02	762.4	30.03	762.8	36.6	2.6	69	nw.	31.4	14.0		0	0			0	0	clear	H. Midzushima.
Numazu	29.98	761.4	30.01	762.3	44.1	6.7	86	calm			0	0	0			0	0	clear	R. Kaneda.
Osaka	30.17	766.3	30.19	766.7	42.7	5.9	76	n.	3.5	1.8		0	0			0	0	clear	H. Ominra.
Sapporo					24.1	— 4.4	55	sw.	15.0	6.7		1	0			0.200	5.1	clear	
Tokei Obs'y, Yeddo	29.94	760.6	30.02	762.6	40.2	7.9	53	nnw.	15.6	7.0		0	0			0	0	clear	The Staff.
Wakayama	30.12	765.1	30.18	766.6	44.0	6.7	70	e.	5.6	2.5		0	0			0	0	clear	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.74	755.4	29.92	760.0	80.0	26.7	78	w.	6.0	2.7		2 c	9 n;k	wnw.	w.	0.13	3.3	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.78	604.1	30.01	762.1	45.3	7.4	82	ne.	4.0	1.8		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.44	620.8	30.39	771.9	35 2	1.8	91	nnw.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.90	759.5	30.05	763.2	71.0	21.7	73	ne.	1.6	0.8		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.19	589.1	30.42	772.8	41.2	5.1	83	calm	0	0			10 k			0	0	foggy	The Staff.
Morelia	24.15	613.5	30.00	762.0	43.3	6.3	69	se.			2	1 c	1 k	s.	se.	0	0		M. Tena, M. D.
Pabellon, Aguascallentes	24.05	610.9	30.24	768.0	40.1	4.5	82	n.			1	0	0			0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.47	596.2	30.36	771.5	47.3	8.5	77	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.61	574.4	30.44	773.1	38.5	3.3	91	e.	3.5	1.6		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.64	752.9	29.64	752.9	32.5	0.3		s.			5					0.012	0.3		
Groningen	29.72	755.0	29.78	756.4	28.4	— 2.0		s.			4					0.315	8.0		
Helder	29.69	754.1	29.69	754.1	29.5	— 1.4		sse.			4					0	0		
Hellevoetsluis	29.69	754.1	29.69	754.1	31.1	— 0.5	92	sse.			4					0	0		
Utrecht	29.67	753.7	29.72	754.9	29.7	— 1.3	96	sse.			4		10			0.067	1.7	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.56	750.9	29.63	752.5	34.5	1.4	46	s.	25	11			9			0	0		
Brono	29.77	756.1	29.81	757.1	22.3	— 5.4	66	sse.	27	12			2			0	0		
Christiania	29.89	759.1	30.04	763.1	18.0	— 7.8	77	ene.	9	4			10			0	0		
Gjæsvær	30.01	762.2	30.03	762.8	18.5	— 7.5		se.			7		5						
Lodingen	29.96	761.0	30.01	762.2	25.0	— 3.9	44	sse.			3		1			0	0		
PORTUGUESE.																			
Angra, Azores	30.28	769.2	30.44	773.1	64.0	17.8	65	nw.	7.4	3.3			2	n.		0	0		Dr. J. A. Sampaio.
Campo Major	29.22	742.2	30.23	767.9	57.6	14.2	58	e.	11.9	5.3			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.14	765.5	30.22	767.7	67.8	19.9	48	e.	9.8	4.4			1	n.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.93	760.2	30.30	769.6	49.8	9.9	51	nne.	5.6	2.5			1			0	0		The Staff.
Ponta Delgada, Azores	30.39	772.0	30.47	773.8	64.8	18.2	82	calm	0	0			3			0.047	1.2		
Saint Paul de Loando	29.05	753.0	29.85	758.1	80.8	27.1	98	w.	2.5	1.1			2	wnw.		0	0		
Serra da Estrella	25.38	644.7	30.21	767.2	41.5	5.3	57	nw.	15.0	6.7			8			0	0		
RUSSIAN.																			
Akmolinski	28.64	727 4	29.76	756.0	26.8	— 2.9	98	wsw.	18	8			10 n						Major K. Lasarew.
Archangel	30.27	768.8	30.29	769.3	8.6	—13.0	96	e.	2	1			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.03	762.7	29.95	760.7	35.8	2.1	80	se.	9	4			10 n			0.031	0.8		Capt. Wisganow.
Barnaul	29.27	743.5	29.79	756.7	27.1	— 2.7	77	s.	4	2			9			0.217	5.5	light clouds	Meteorological Obs'y.
Bielosersk	29.88	759.0	30.41	772.4	— 0.1	—17.8	94	sse.	2	1			10 s			0	0	foggy	
Dorpat	30.14	765.5	30.41	772.5	— 1.5	—18.6	94	se.	4	2		10 cs	0			0	0	light clouds	Observatory.
Ekaterinburg	29.21	742.0	30.31	769.9	— 9.2	—22.9	76	nnw.	0	4			10			0.024	0.6		Metecrological Obs'y.
Elissawetgrad	29.50	749.3	29.99	761.7	14.7	— 9.6	100	n.	7	3			10 n			0.028	0.7		
Kasan	30.09	764.3	30.40	772.1	— 0.9	—18.3	59	nne.	4	2			4						Observatory.
Kem	30.18	766.6			11.5	—11.4	97	calm	0	0		0	8 ks			0	0	light clouds	
Kertch	29.74	755.3	29.76	755.8	34.3	1.3	57	nw.	9	4		0	8 n			0.173	4.4		Lagorio & Sastyrez.
Kieff	29.32	744.7	30.01	762.2	16.5	— 8.6	64	ne.	11	5		c	10ks;n					light clouds	Observatory.
Liban	30.17	766.4	30.20	767.0	16.5	— 8.6	61	e.			2		5			0	0		E. Quaas.
Lugan	29.48	748 9	29.70	754.4	20.7	— 6.3	82	e.	13	6			10			0.075	1.9		Meteorological Obs'y.
Nikolaiev	29.85	758.3	29.93	760.2	19.8	— 6.8	84	n.	9	4		0	0			blank	blank		Capt. Kurdakow.
Pekin, China	29.83	757.6	29.97	761.2	34.3	1.3	96	calm	0	0		0	0						Physical Observatory.
Petrozavodsk	30.04	763.0	30.26	768.5	12.2	—11.0	86	sw.	7	3		0	8 ks			0.043	1.1		Dr. Bergmann.
Pinsk																			
St. Petersburg	30.37	771.3	30.38	771.7	3.7	—15.7	85	sw.	7	3		2 cs	0			0	0		Central Physical Obs'y.
Sevastopol																			
Semipalatinsk	29.25	742 9	29.94	760 4	27.9	— 2.3	75	se.	4	2			10			0	0		Major Lasarew.
Staroi Bykhov	29.72	754.8	30.22	767.6	10.8	—11.8	74	e.	7	3			10						
Tashkend, Laboratory	28.60	726.5	30.22	767.5	44.8	7.1	53	calm	0	0			0						Teich, A. M.
Tiflis	28.52	724.5	29.95	760.6	53.8	12.1	64	nnw.	11	5			9 k			0	0		Physical Observatory.
Tomsk	29.54	750.4	29.85	758.3	— 3.5	—19.7	81	e.	2	1			10					snowing	
Vladivostock	29.74	755.3	29.80	757.0	27.7	— 2.4	50	se.	11	5			10 n			0	0		
Warsaw	29.58	751.3	30.04	762.9	18.0	— 7.8	86	e.	4	2			10					heavy clouds	Astronomical Obs'y.
Wilna	29.74	755.4	30.20	767.0	16.3	— 8.7	52	ene.	4	2			10					heavy clouds	Berg, Assistant.
Yeniseisk	29.97	761.3	30.32	770.0	—35.1	—37.3	80	calm	0	0			1						M. C. Marks.
SCOTTISH.																			
Monach Lt			28.95	735.3	44	6.7	92	w.			7		10			0.6	15.	raining	J. Youngclause.
North Unst			29.05	737.9				s.			9		10			blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.96	761.0	30.07	763.7	54.0	12.2	55	w.	2.2	1.0		0	1			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.03	762.8	30.09	764.3	48.6	9.2	93	se.	0.9	0.4			10			0.003	1.6	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.17	690.2	30.24	768.1	42.4	5.8	77	sw.	0.7	3.0		0	7			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.95	709.9	30.26	768.6	42.6	5.9	65	calm	0.1	0.03			10			0	0	covered	The Staff.
Murcia, Met. Obs'y	30.02	762.4	30.15	765.9	57.2	14.0	69	sw.	1.6	0.7		0	0			0.008	0.2	clear	Olayo Diaz, Director.
Oviedo	29.44	747.8	30.17	766.2	52.2	11.2	82	se.	15.7	7.0		8 n	8 n	nw.	w.	0.126	3.2	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.21	742.0	30.13	765.2	47.7	8.7	93	ssw.	8.1	3.6			10			0	0	covered	R. Gil Villanueva, Dir.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.87	758.6	29.93	760.1	79.0	26.1	92	nne.	1.1	0.5	.....	1 c	3 ks	.....	.....	0.012	0.3	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.11	764.8	30.21	767.3	58.5	14.7	50	nne.	9.1	4.1	.....	0	4	.....	n.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.95	760.7	30.04	763.0	74.8	23.8	79	calm	0	0	.....	0	3 k	.....	e.	0	0	clear	Manuel Maese.
Tuguegarao, Philippine Id's	29.84	757.9	29.97	761.3	75.8	24.3	92	nnw.	3.5	1.6	.....	.....	9 k;n	....	ne.	0.11	2.8	covered	José L. Yrastorza.
SWEDISH.																			
Haparanda	30.26	768.5	30.30	769.5	— 0.1	—17.8	100	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.21	767.2	30.26	768.5	10.4	—12.0	93	ne.	.....	.....	2	.....	6	.....	.....	0.079	2.0	.....	
Hernosand	30.18	766.6	30.23	767.9	16.5	— 8.6	88	calm	.....	.....	0	.....	1	.....	.....	0.098	2.5	.....	
Stockholm	30.00	761.9	30.17	766.4	24.1	— 4.4	81	ese.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Wisby	30.09	764.2	30.15	765.7	21.2	— 6.0	85	se.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	
Sub-series.																			
Upsala	30.09	764.2	30.17	766.4	18.1	— 7.7	92	ene.	0	0	.....	.....	10	.....	ese.	0.039	1.0	.....	S. G. Fineman.
SWISS.																			
Geneva	28.56	725.5	30.06	763.6	30.7	— 0.7	68	sw.	.....	.....	1	.....	10	.....	.....	0	0	covered	The Observatory.
TURKISH.																			
Constantinople	.....	.....	29.74	755.4	60.1	15.6	68	sw.	15	6.5	.....	.....	1	....	sw.	0.335	8.5	.....	The Observatory.
Valona	.....	.....	29.98	761.6	49.6	9.8	.....	sw.	.....	.....	1	.....	5	.....	.....	0.20	5.	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.95	760.7	69.8	21.0	70	ne.	.....	.....	3	9 cs	.....	w.	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.03	762.7	30.12	765.0	20	— 6.7	76	n.	9	4.0	.....	.....	10 n	.....	.....	0.09	2.3	light snow	J. C. Barnes.
Alpena, Michigan	29.61	752.1	30.32	770.1	14	—10.0	80	w.	4	1.8	.....	.....	10 s	.....	.....	0.09	2.3	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.28	642.1	30.36	771.1	31	— 0.6	74	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.14	689 3	30.17	766.3	42	5.6	38	w.	18	8.0	.....	1 c	0	w.	.....	0	0	clear	B. C. Lenoir.
Atlanta, Georgia	29.11	739.4	30.34	770.6	31.0	— 0.6	68	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.02	762.5	30.03	762.7	29	— 1.7	56	nw.	18	8.0	.....	.....	10 s	.....	.....	0	0	cloudy	Jas. M. Watson.
Augusta, Georgia	30.11	764.8	30.31	769.9	38	3.3	82	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear	John Healy.
Baltimore, Maryland	30.11	764.8	30.16	766.1	32	0.0	50	n.	10	4.5	.....	4 k	0	nw.	.....	0	0	fair	Geo W Felger.
Barnegat, New Jersey	29.99	761.7	30.01	762.2	28.0	— 2.2	77	nw.	33	14.8	.....	.....	10 s	....	n.	0	0	cloudy	G. A. Hill.
Bennett, Fort, Dakota	28 30	718.8	30.06	763.5	26	— 3.3	88	se.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	A. Pritchard.
Benton, Fort, Montana	27.21	691.1	30.21	767.3	41	5.0	59	sw.	14	6.3	.....	7 k	3 s	sw.	.....	0	0	cloudy	S. Wheaton.
Bismarck, Dakota	28.03	711 9	30.04	763.0	22	— 5.6	87	s.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	Cyrus Cramer.
Block Island, Rhode Island	29.86	758.4	29.89	759.2	35	1.7	89	ne.	19	8.5	.....	.....	10 ks	.....	ne.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.52	699.0	30.50	774.7	30	— 1.1	88	nw.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	B. E. Light.
Boston, Massachusetts	29.73	755.1	29.89	759.2	28.0	— 2.2	77	nw.	12	5.4	.....	.....	10 s	.....	nw.	0	0	threatening	O. B. Cole.
Brownsville, Texas	30.24	768.1	30.29	769.4	57.2	14.0	93	ne.	2	0.9	.....	0	2 s	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.48	748.8	30.28	769.1	16.2	— 8.8	80	nw.	6	2.7	.....	.....	10 s	.....	nw	0.07	1.8	cloudy	W. Finn.
Buford, Fort, Dakota	27.71	703 8	29.95	760.7	33	0.6	88	s.	4	1.8	.....	0	3 s	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.84	757.9	30.15	765.8	9.7	—12.4	93	n.	11	4.9	.....	.....	10 n	.....	n.	0.05	1.3	light snow	Cyrus Scheaffer.
Cairo, Illinois	30.06	763.5	30.48	774.2	28.0	— 2.2	77	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. H. Ray.
Cape Henry, Virginia	30.10	764.5	30.12	765.0	35	1.7	69	nw.	43	19.2	.....	0	9 k;s	.....	nw.	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.04	763.0	30.07	763.8	35.0	1.7	64	nw.	44	19.7	.....	.....	10 s	.....	nw.	0	0	cloudy	W. E. Smith.
Cape Mendocino, California	29.62	752.3	30.30	769.6	50	10.0	86	nw.	12	5.4	.....	c	0	.....	.....	0	0	clear	J. J. McLean.
Cedar Keys, Florida	30.23	767.8	30.25	768.3	50	10.0	77	nw.	8	3.0	.....	0	0	.....	.....	0	0	clear	F. W. Mixer.
Champaign, Illinois	29.53	750.0	30.40	772.1	20.7	— 6.3	60	nw.	1	0.4	.....	.....	10 s	.....	nw.	0.02	0.5	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.18	766.6	30.24	768.1	44	6.7	60	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.35	745.5	30.24	768.1	33.0	0.6	52	n.	5	2.2	.....	0	sk.	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.53	750.0	30.39	771.9	31.0	— 0.6	78	nw.	7	3.1	.....	0	1 s	.....	.....	0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	24.02	610.1	30.30	769.6	45.5	7.5	15	nw.	22	9.8	.....	3 c	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.62	752.3	30.38	771.6	19.2	— 7.1	78	w.	4	1.8	.....	.....	10 s	.....	w.	0.02	0.5	cloudy	J. Mitchell.
Chincoteague, Virginia	30.03	762.7	30.05	763.3	35	1.7	66	nw.	36	16.1	.....	.....	9 ks	.....	n.	0	0	cloudy	O. F. Dickens.
Cincinnati, Ohio	29.73	755.1	30.43	772.9	27	— 2.8	64	nw.	4	1.8	.....	0	0	.....	.....	0.01	0.3	clear	R. B. Watkins.
Cleveland, Ohio	29.66	750.8	30.34	770.6	23.4	— 4.8	74	nw.	14	6.3	.....	.....	10 s	.....	n.	0.10	2.5	cloudy	J. B. Newlin.
Coleman City, Texas	28 54	724.9	30.44	773.2	33	0.6	88	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.48	748 8	30.40	772.1	22	— 5.6	73	nw.	4	1.8	.....	3 c	4 s	nw.	.....	0.10	2.5	fair	D. Cuthbertson.
Concho, Fort, Texas	28.40	721.3	30.42	772.7	33.8	1.0	81	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.77	679.9	30.17	766.3	45	7.2	41	w.	18	8.0	.....	.....	10 s	.....	calm	0	0	cloudy	W. B. Lamar.
Davenport, Iowa	29.05	753.1	30.37	771.4	27	— 2.8	64	s.	4	1.8	.....	hz.	4 ks	.....	s.	0	0	fair	R. R. Martin.
Davis, Fort, Texas	25.41	645.4	30.35	770.9	33	0.6	74	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington Ty	28.61	726.7	30.44	773.2	47.2	8.4	76	sw.	1	0.4	.....	.....	10 s	.....	.....	0.11	2.8	cloudy	D. Moore.
Deadwood, Dakota	25.26	641.6	30.25	768.3	46	7.8	47	e.	6	2.7	.....	10 cs	0	w.	.....	0	0	cloudy	F. Willson.
Delaware Breakwater, Del.	30.05	763.3	30.07	763.8	32	0.0	68	nw.	40	17.9	.....	2 ck	4 s	nw.	nw.	0	0	fair	T. S. Townsend.
Denison, Texas	29.57	751.1	30.42	772.7	32.0	0.0	78	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24.77	629.1	30.29	769.4	47.8	8.8	31	w.	8	3.6	.....	4 c	0	.....	.....	0	0	fair	F. M. Neal.
Des Moines, Iowa	29.27	743.4	30.25	768.3	23	— 5.0	73	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. W. Conrad.
Detroit, Michigan	29.61	752.1	30.37	771.4	24.0	— 4.4	88	nw.	5	2.2	.....	.....	10 s	.....	nw.	0.05	1.3	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.47	697.7	30.27	768.8	34	1.1	82	sw.	5	2.2	.....	0	6 s	....	s.	0	0	fair	V. P. Temple.
Dubuque, Iowa	29.58	751.3	30.35	770.9	26.5	— 3.1	76	s.	2	0.9	.....	... ...	10 s	.....	s.	0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.46	748.3	30.26	768.6	16	— 8.9	83	sw.	2	0.9	.....	.....	10 s	.....	sw.	0.01	0.3	cloudy	N. B. Conger.
Eagle Pass, Texas	29.55	750.6	30.39	771.9	51.1	10.6	86	n.	1	0.4	.....	.....	10 s	.....	s.	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25.52	648.2	30.44	773.2	26	— 3.3	80	e.	3	1.3	.....	5 k	0	ne.	.....	0	0	fair	J. M. Clifford.
Eastport, Maine	29.68	753.9	29.75	755.6	22.0	— 5.6	94	n.	22	9.8	.....	.....	10s;fg	....	ne;n.	0.02	0.5	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.44	697.0	30.40	772.1	30	— 1.1	58	calm	0	0	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.52	673.6	30.38	771.6	35.0	1.7	89	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.52	749 8	30.29	769.4	23	— 5.0	88	nw.	5	2.2	.....	.....	10 s	.....	nw.	0.17	4.3	cloudy	Peter Wood.
Escanaba, Michigan	29.62	752.3	30.34	770.6	15.0	— 9.4	83	w.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.61	726 7	30.43	772.9	40	4.4	92	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	30.29	769.4	30.34	770.6	52	11.1	86	e.	8	3.6	.....	2 k	hz.	s.	.....	0	0	clear	E. O'C. MacInerney.
Grand Haven, Michigan	29.62	752.3	30.33	770.4	25.0	— 3.9	88	e.	3	1.3	.....	.....	10 n	.....	.....	0.03	0.8	light snow	J. E. Mueller.
Grant, Fort, Arizona	25.42	645.7	30.30	769.6	41	5.0	59	n.	7	3.1	.....	0	0	.....	.....	0	0	clear	Robert C. Lord.
Hatteras, North Carolina	30.07	763.8	30.09	764.3	44	6.7	68	n.	28	12.5	.....	6 k	3 s	ne.	.....	0	0	cloudy	R. M. Crawford.
Helena, Montana	25.89	657.6	30.27	768.8	39	3.9	30	nw.	3	1.3	.....	5 k	0	calm	.....	0	0	fair	N. C. Smith.
Henrietta, Texas	29.36	745.7	30.44	773.2	29	— 1.7	77	calm	0	0	.....	.....	0	.....	.....	0	0	clear	J. P. Sherry.
Huron, Dakota	28.55	725.2	30.09	764.3	19.8	— 6.8	64	e.	8	3.6	.....	.....	10 s	.....	ne.	0	0	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.58	751.3	30.43	772.9	21	— 6.1	70	nw.	1	0.4	.....	4 ck	0	nw.	.....	inap.	inap.	fair	O. Schutze.
Indianola, Texas	30.30	769.6	30.33	770.4	53.2	11.7	84	ne.	12	5.4	.....	0	0	.....	.....	inap.	inap.	clear	I. A. Reed.
Jacksboro, Texas	29.16	740.7	30.40	772.1	30	— 1.1	67	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.21	767.3	30.26	768.6	46	7.8	76	w.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.34	694.4	30.04	763.0	43	6.1	60	w.	17	7.6	.....	0	8 k	.....	w.	0	0	cloudy	A. Schneider.
Keokuk, Iowa	29.65	753.1	30.30	771.1	25.0	— 3.9	73	se.	1	0.4	.....	0	0	.....	.....	0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.18	766.6	30.20	767.1	62.0	16.7	78	n.	20	8.9	.....	0	0	.....	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.10	764.5	30.12	765.0	37	2.8	51	n.	34	15.2	.....	0	8 ks	.....	n.	0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.30	744.2	30.38	771.6	31	— 0.6	68	n.	6	2.7	.....	0	5 s	.....	n.	0	0	fair	J. A. Cody.
La Crosse, Wisconsin	29.42	747.3	30.27	768.8	24	— 4.4	61	se.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.33	745.0	30.29	769.4	29	— 1.7	77	s.	4	1.8	.....	3 cs	0	nw.	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.52	749.8	30.40	772.1	38.0	3.3	94	n.	1	0.4	.....	10 k	0	w.	.....	0.05	1.3	cloudy	W. Bell.
Little Rock, Arkansas	30.08	764.0	30.41	772.4	36	2.2	69	calm	0	0	.....	0	0	.....	.....	0	0	clear	W. U. Simons.
Los Angeles, California	29.74	755.4	30.14	765.5	58	14.4	42	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.79	756.7	30.39	771.9	29	— 1.7	67	w.	3	1.3	.....	0	0	.....	.....	inap.	inap.	clear	L. M. Dey.
Lynchburg, Virginia	29.48	748.8	30.21	767.3	34.5	1.4	48	nw.	4	1.8	.....	0	5 ks	.....	nw.	0	0	fair	Lewis Duane.
Mackinaw City, Michigan	29.61	752.1	30.31	769.9	17.0	— 8.3	83	ne.	11	4.9	.....	.....	10 n	.....	.....	0.09	2.3	light snow	F. R. Day.
Macon, Fort, North Carolina	30.09	764.3	30.10	764.5	43	6.1	60	nw.	29	13.0	.....	0	8 k	.....	w.	0	0	cloudy	C. A. Shaw.
Madison, Wisconsin	29.25	742.9	30.35	770.9	22	— 5.6	73	se.	4	1.8	.....	.....	10 s	....	.....	0	0	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25 50	647.7	30.04	763.0	40	4.4	42	w.	28	12.5	.....	0	0	.....	.....	0	0	clear	F. Burke.

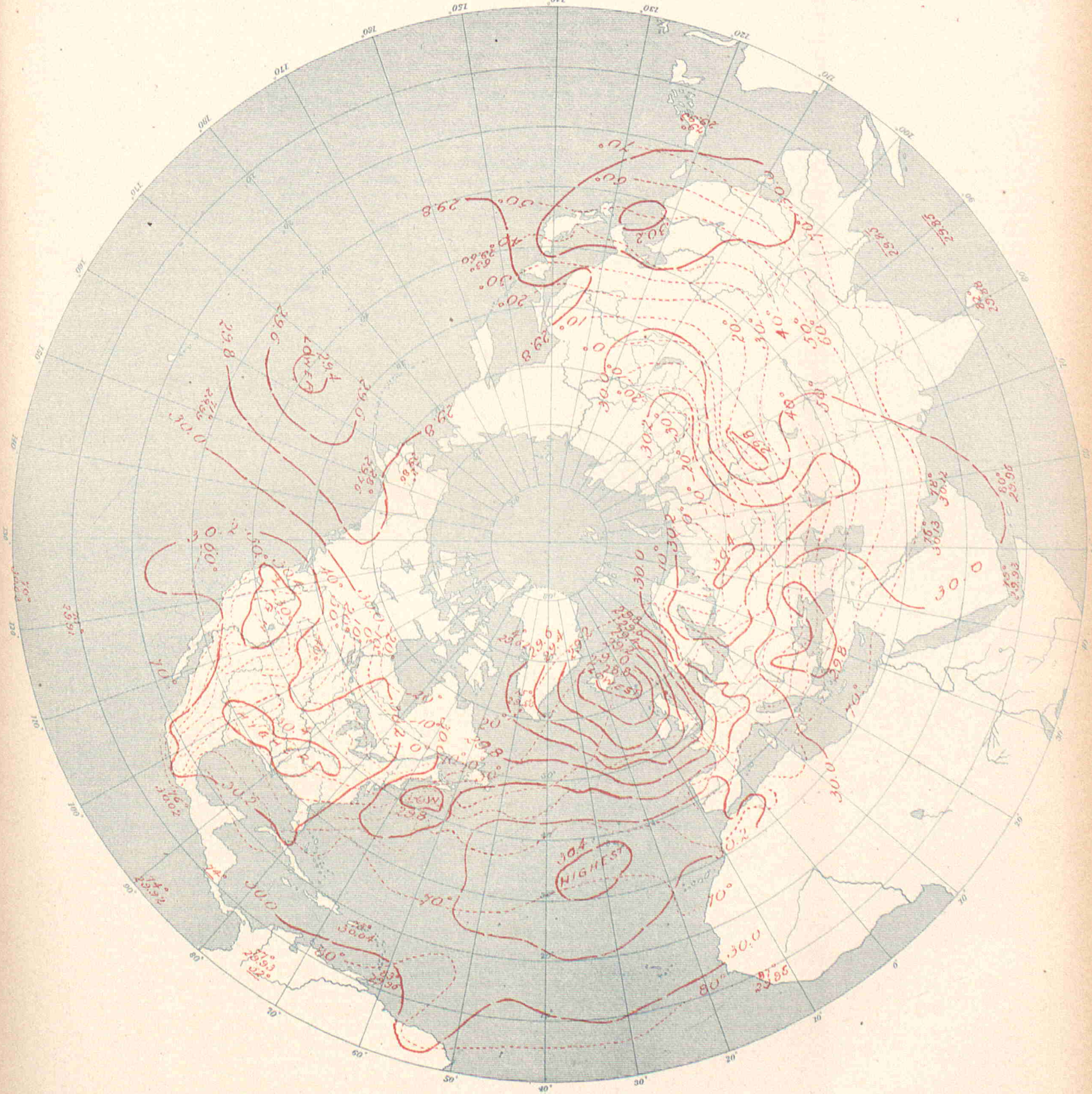
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
McKavett, Fort, Texas	28.02	711.7	30.40	772.1	38	3.3	82	s.	5	2.2		0	0			0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.51	749.5	30.29	769.4	12	—11.1	80	w.	8	3.6		10 k	0	w.		0.02	0.5	cloudy	J. Gilligan.
Memphis, Tennessee	30.09	764.3	30.45	773.4	33	0.6	78	calm	0	0		0	0			0	0	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.55	750.6	30.36	771.1	19	— 7.2	70	nw.	3	1.3			10 s			0.02	0.5	cloudy	W. Line
Missoula, Fort, Montana	26.93	684.0	30.39	771.9	35	1.7	82	nw.	3	1.3			8 s			0.03	0.8	cloudy	J. H. Young.
Mobile, Alabama	30.32	770.1	30.36	771.1	42	5.6	73	n.	9	4.0		0	0			0	0	clear	C. A. Read.
Montgomery, Alabama	30.13	765.3	30.37	771.4	34	1.1	75	ne.	6	2.7		0	0			0	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	29.03	737.3	30.14	765.5	17	— 8.3	83	se.	12	5.4			10 s			0.07	1.8	cloudy	H. Bessant.
Morgantown, W. Virginia	29.26	743.2	30.34	770.6	24.5	— 4.2	79	nw.	13	5.8		0	5 s		n.	0.04	1.0	fair	J. C. Sprigg, jr.
Mt. Washington, N. H	23.36	593.3	29.99	761.7	11.0	—11.7	100	nw.	13	5.8			10n;fg		nw.	0.12	3.0	light snow	B. S. Pague.
Nashville, Tennessee	29.81	757.2	30.42	771.7	28.5	— 1.9	77	n.	4	1.8		0	0			0	0	clear	L. N. Jesunofsky.
New Haven, Connecticut	29.85	758.2	29.97	761.2	21	— 6.1	70	n.	15	6.7			10 n		n.	inap	inap.	light snow	J. H. Sherman.
New London, Connecticut	29.95	760.7	30.00	762.0	24	— 4.4	88	w.	10	4.5			10 n		w.	0.01	0.3	light snow	J. G. Lynch.
New Orleans, Louisiana	30.28	769.1	30.34	770.6	49.0	9.4	71	n.	10	4.5		0	0			0	0	clear	L. Dunne.
Newport, Rhode Island	29.82	757.4	29.87	758.7	33.0	0.6	81	n	8	3.6			10 ks		nw.	0	0	cloudy	W. McGillivray.
New York, New York	29.85	758.2	30.04	763.0	25	— 3.9	73	w.	15	6.7			10 s		w.	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.12	765.0	30.15	765.8	37	2.8	46	nw.	21	9.4		0	9 ks		w.	0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.03	686.5	30.19	766.8	27.6	— 2.4	64	calm	0	0		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.35	770.9	30.39	771.9	45.0	7 2	83	s.	5	2.2			10 s			0.22	5.6	cloudy	J. Dascomb.
Omaha, Nebraska	28 90	734.0	30.19	766.8	29.0	— 1.7	77	s.	4	1.8		0	5 s			0	0	fair	A. Pollak.
Oswego, New York	29.87	758.7	30.22	767.6	17.0	— 8.3	74	n.	11	4.9			10 s		n.	0.48	12 2	cloudy	J. G. Linsley.
Palestine, Texas	29.84	757.9	30.42	772.7	38.0	3.3	62	ne.	10	4.5		1 cs	0			0	0	clear	L. M. Pindell.
Pensacola, Florida	30.32	770.1	30.35	770.9	42.7	5.9	64	n.	9	4.0		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	30.00	762.0	30.11	764.8	28	— 2.2	64	nw.	17	7.6		3 cs	0	w.		0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.84	453.1	30.50	774.7	16	— 8.9	48	nw.	48	21.5		0	8 s		nw.	0	0	cloudy	H. Hall.
Ploche, Nevada	24.26	616.2	30.43	772.9	35.5	1.9	57	w.	1	0.4		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.45	748.0	30.31	769.9	22.0	— 5.6	88	sw.	6	2.7		0	2 s		sw.	0.06	1.5	clear	W. A. Reid.
Poplar River, Montana	27.64	702.0	30.00	762.0				nw.			6	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.31	769.9	30.32	770.1	56.0	13.3	74	ne.	16	7.2		0	0			0	0	clear	H. B. Boyer.
Port Huron, Michigan	29.58	751.3	30.31	769 9	13.2	—10.4	89	nw.	7	3.1		0	8 s		nw.	0.16	4.1	cloudy	W. O. Bailey.
Portland, Maine	29.84	757.9	29.89	759.2	24.5	— 4.2	82	n.	19	8.5			10 n		n	0.01	0.3	light snow	W. W. Eichelberger.
Portland, Oregon	30.34	770.6	30.41	772 4	40.0	7.8	100	calm	0	0			fg.			0.05	1.3	dense fog	M. L. Hearne.
Portsmouth, N. C					44	6.7	83	ne.			4		10 s		nw.	inap.	inap.	cloudy	F. S Coburn.
Prescott, Arizona	24.96	634.0	30.33	770.4	28.5	— 1.9	92	s.	2	0.9		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	29.78	756.4	29.81	757.2	33	0.6	88	nw.	20	8.9			10 s			0.03	0.8	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.22	767.6	30.23	767.8	49.5	9.7	86	ne.	4	1.8		0	0			0	0	clear	W. J. Evans.
Red Bluff, California	29.81	757.2	30.18	766.6	47	8.3	93	ne.	5	2.2		0	0			0	0	clear	J. R. Williams.
Rochester, New York	29.84	759.3	30.25	768.3	15	— 9.4	83	nw.	8	3.6			10 n			0.18	4.6	light snow	E. W. McGann
Roseburg, Oregon	29.86	758.4	30.43	772.9	50	10.0	93	calm	0	0			fg.			0	0	dense fog	J. J. Naury.
Sacramento, California	30.20	767.1	30.28	769.1	46.8	8.2	86	se.	4	1.8		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.78	756.4	30.44	773.2	25.9	— 3.4	84	s.	7	3.1		0	hz.			0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.83	757.7	29.86	758.4	— 2	—18.9	100	calm	0	0		0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.25	742.9	30.21	767.3	21.0	— 6.1	84	se.	8	3.6			10 s			0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.14	740.1	30.13	765.3	12	—11.1	89	se.	11	4.9			10 s			0.02	0.5	cloudy	C. B Dilley.
Salt Lake City, Utah	25.93	658.6	30.47	773.9	32	0.0	52	calm	0	0		2 cs	0			0	0	clear	J. Craig.
San Antonio, Texas	29.64	752.8	30.36	771.1	45.5	7.5	68	n.	6	2.7		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.01	762.2	30.08	764.0	54.2	12.3	55	n.	1	0.4		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.64	752.8	30.37	771.4	24	— 4.4	73	n.	12	5.4			10 s			0.16	4.1	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.98	761.5	30.01	762.2	27.0	— 2.8	64	nw.	28	12.5			10 s			0	0	cloudy	B. A. Blundon.
San Francisco, California	30.22	767.8	30.29	769.4	50	10.0	89	calm	0	0		0	fg.			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.37	593.6	30.36	771.1	33	0.6	50	n.	18	8.0		1 ck	0	n.		0	0	clear	H. U. Jones.
Savannah, Georgia	30.17	766.3	30.27	768.8	43.5	6.4	54	nw.	10	4.5		0	0			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.42	671.1	30.25	768.3	45	7.2	36	w.	23	10.3		4 cs	0	w.		0	0	fair	A. L. Mathews.
Shreveport, Louisiana	30.14	765.5	30.39	771.9	39	3.9	73	n.	2	0.9		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.09	738.9	30.42	772.7	26.5	— 3.1	78	n.	1	0.4		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.52	622.8	30.36	771.1	28.5	— 1.9	79	nw.	2	0.9		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.67	753.6	29.74	755.4	39.2	4.0	82	e.	2	0.9			10 ks		e.	0.15	3.8	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.89	759.2	30.39	771.9	28.3	— 2.1	88	e.	2	0.9		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.15	765.8	30.19	766.8	41	5.0	57	n.	15	6.7		0	1 s			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.28	718.3	30.41	772.4	38	3.3	92	sw.	2	0.9			10 s			0.02	0.5	cloudy	H. Clifford.
Springfield, Illinois	29.68	753.9	30.40	772.1	26.5	— 3.1	76	s.	3	1.3		0	5 s		w.	inap.	inap.	fair	T. B. Jennings.
Springfield, Massachusetts	29.88	758.9	30.02	762.5	24	— 4.4	80	nw.			7		10 n			0.01	0.3	light snow	Charles Mayr.
Springfield, Mo	28.86	733.0	30.39	771.9	27	— 2.8	82	s.	9	4.0		0	0			0	0	clear	J. B. Marbury.
Starkville, Miss	29.94	760.5	30.44	773.2	32	0.0	78	nw.	5	2.2		0	0			0	0	clear	C. Dill.
Stevenson, Fort, Dakota	27.89	708.4	29.95	760.7	23	— 5.0	87	se.	8	3.6			10 s			0	0	cloudy	W. Burrows.
Stockton, Fort, Texas	27.27	692.6	30.41	772.4	30	— 1.1	80	sw.	1	0.4		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.82	757.4	29.88	758.9	22.0	— 5.6	80	nw.	26	11.6			10 s		nw.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.45	697.2	30.27	768.8	43.5	6.4	61	sw.			1	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.61	752.1	30.35	770.9	22	— 5.0	73	w.	4	1.8			10 s		w.	inap.	inap.	cloudy	A. Buell.
Tucson, Arizona	27.68	703.1	30.18	766.6	51	10.6	48	se.	4	1.8		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	30.03	762.7	30.42	772.7	38	3.3	94	s.	3	1.3		4 c	0	nw		0.01	0.3	fair	J. Daly.
Verde, Fort, Arizona					37.1	2.8	56	nw.			1	3 cs	2 s	w.	nw.	0	0	fair	D. Brooks.
Vicksburg, Mississippi	30.14	765.5	30.41	772.4	38.6	3.7	78	ne.	4	1.8		0	0			0	0	clear	James Kenealy.
Visalia, California	29.89	759.2	30.27	768.8	41.4	5.2	88	s.	2	0.9		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.50	622.3	30.28	769.1	21.1	— 6.1	87	nw.	6	2.7		0	8 k			0	0	cloudy	T. M. Ambler.
Washington, D. C	30.06	763.5	30.18	766.6	29.0	— 1.7	67	nw.	18	8.0		0	0			0	0	clear	B. M. Purssell.
West Las Animas, Colorado	26.10	662.9	30.26	768.6	23	— 5.0	73	w.	7	3.1			10 n		nw.	0	0	cloudy	F. H. Brandenburg.
Williamsport, Pa	29.57	751.1	30.20	767.1	23	— 5.0	73	nw.	10	4.5			10 ks		nw.	0.02	0.5	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.13	765.3	30.19	766.8	42	5.6	88	n.	5	2.2		hz.	0			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.92	658.4	30.45	773 4	26	— 3.3	82	e.	8	3.6		3 c	0			0	0	clear	J. Grover.
Yankton, Dakota	28.69	728.7	30.12	765.0	18	— 7.8	53	ne.	4	1.8		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.94	760.5	30.09	764.3	60.1	15.6	44	n.	4	1.8		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.01	559.0			52.0	11.1	82	calm	0	0		2cs;k	3 s	w.	w.	0	0	fair	Joaquin Gomez.
Havana, Cuba, W. I	30.08	764.0	30.14	765.5	67.9	19.9	73	n.	17	7.6		1 ck	7 k	sw.	n.	1.26	32.0	cloudy	Benito Vines, S. J.
Kingston, Jamaica, W. I	30.03	762.7	30.04	763.0	74	23 3	79	n.	5	2.2			10 s		e.	0	0	cloudy	Robert Johnston.
Paramaribo, S. A	30.02	762.5	30.03	762.7	79	26.1	87	se.			2	3 c	4 k	e.		0.270	6.9	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.93	760.2	77	25.0	94	n.			1		10 ks		calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A					74	23.3	88	ne.			3	1 ck	0	ne.		0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.72	754.9	29.76	755.9	28	— 2.2	88	calm			0		7 cs			0	0	fair	W. J. Fisher.
St. Thomas, W. I	29.94	760.5	30.06	763.5	79	26.1	69	e.				0	2 k			0	0	fine	Aug. Walloe.
York Factory, B. A	30.11	764.8	30.18	766.6	—30.0	—34.4		w.	4	1.8		2 k	1 s	w.	w.	0	0	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Force.	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill	Character.	Direction from	
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.29	769.4	66	18.9	78	e.			5		7	se.				3	se.	misty.
H. M. S. Audacious, N. 5° 50′, E. 79° 45′	29.88	758.9	82	27.8	87	sw.			1		1	wsw.						blue sky.
H. M. S. Beacon, Lake Timsah, Egypt			73	22.8	54	ene.			1		1	wsw.				1	ene.	blue sky.
H. M. S. Boadecia, Simon's Bay, Cape Colony	30.04	763.0				sw.			1-2									d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	29.98	761.5	74	23.3	68	nnw.			3		2	nnw.						d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.18	766.6	51	10.6	86	e.			1		1							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	30.33	770.4	47	8.3	92	sse.			1-2		10							misty.
H. M. S. Curacoa, N. 33° 34′, E. 136° 45′	29.97	761.2	55.5	13.1	80	nnw.			5-7		1					4	n	squally.
H. M. S. Diamond, Sydney, N. S. W*†	29.99	761.7	65	18.3	58	sw.			1		3							d. clouds.
H. M. Dock-Yard, Bermuda, W. I	30.09	764.3	63	17.2	78	calm			0		4							d. clouds.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.76	755.9	77.5	25.3	86	nw.			3		4	nnw.						d. clouds.
H. M. S. Flamingo, N. 14° 00′, W. 59° 56′	29.96	761.0	83	28.3	95	ene.			2-3		2	e.				2	ene.	d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	30.00	762.0	62	16.7	83	n.			1		10							overcast.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.07	763.8	68	20.0	94	ene.			1		4	ne.						d. clouds.
H. M. S. Kingfisher, N. 3° 30′ W. 89° 06′	29.92	760.0	74	23.3		s.			1		10					2	s.	showery.
H. M. S. Lark, S. 32° 44′, E. 153° 17′	30.23	767.8	64.3	17.9	70	se.			1		4					4	s.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.97	761.2	64	17.8		calm			0									d. clouds
H. M. S. Magpie, N. 34° 37′, E. 127° 48′	30.20	767.1	45.9	7.7	65	s.			1		0					2	e.	blue sky.
H. M. S. Northampton, N. 21° 00′ W. 60° 45′	30.01	762.2	78	25.6	73	ne.			3		3	ne.				2	nne.	d. clouds.
H. M. S. Rocket, Callao, Peru	30.00	762.0	65	18.3	94	s.			1		2					2-3	sw.	d. clouds.
H. M. S. Swiftsure, Ancon Bay, Peru	30.03	762.7	64	17.8	94	calm			0		4							d. clouds.
H. M. S. Sylvia, Peckett Harbor, Patagonia	29.87	758.7	56	13.3	80	wsw.			2		5	wsw.						d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.99	761.7				se.			2		0							blue sky.
H. M. S. Woodlark, N. 25° 19′ E 51° 22′	30.03	762.7	75.5	24.2	56	nw.			3-5		3	wnw.						d. clouds.
H. M. S. Zephyr, Chee-foo, China	30.05	763.3	49.5	9.7	78	ssw.			5		0					1	ssw.	squally.
Portuguese Naval.																		
Tamega, Macao, China	30.10	764.6	70.7	21.5	76	calm			0		0							blue sky
United States Naval.																		
Navy Yard, Pensacola, Fla	30.25	768.3	44	6.7	84	ne.	8	3.6			0			0	0			clear.
Navy Yard, Portsmouth, N. H	29.88	758.9	29	— 1.7	?	n.	6	2.7			10		ne.	0	0			cloudy
Naval Hospital, Yokohama, Japan*	29.86	758.4	47.5	8.6	48	nnw.			4		0			0	0			clear.
Adams, Sitka, Alaska *†	29.80	756.9	39	3.9	81	e.			1		8		ese.					fair.
Alaska, N. 28° 21′, W. 152° 53′	29.99	761.7	71	21.7	90	sse.			3		5		se.	0.025	0.6	mod.	se.	fair.
Alliance, Hampton Roads, Va	30.11	764.8	36	2.2	100	nw.			6-7		0?			0	0			cloudy?
Ashuelot, Nagasaki, Japan	30.18	766.6	49	9.4	85	nne.			1		1		calm					clear.
Brooklyn, Keel Point, Patagonia	29.88	758 9	63	17.2	77	w.	12	5.4			2		calm	0	0	sm'h		fair.
Colorado, New York, N. Y	30.16	766.1	25	— 3.9	75	nw.	25	11.2			10		nw.	0	0			cloudy.
Enterprise, Norfolk, Va	30.15	765.8	37	2.8	62	nnw.			4		10		calm					cloudy.
Essex, Callao, Peru	29.94	760.5	65	18.3	83	calm			0		5?		s.			sm'h	s.	clear. ?
Franklin, Norfolk, Va	30.11	764.8	36	2.2	?	nnw.	24	10.7			8		nnw.	0	0			fair.
Galena, Montevideo, Uruguay	30.14	765.5	67	19.4	79	ene.			3		5		ene.			mod	e.	fair.
Hartford, Sandy Point, Patagonia*	29.81	757.2	50	10.0	86	wsw.			3		5			0	0	sm'h		fair.
Independence, Mare Island, Cal	30.35	770.9	44	6.7	100	calm			0		2			0	0			foggy.
Iroquois, Callao, Peru	30.00	762.0	66	18.9	84	calm			0		5							fair.
Jamestown, Boston, Mass	29.88	758.9	32	0.0	100	ne.			4		10		ne.					cloudy.
Juniata, N. 36° 05′, W. 61° 40′*	30.14	765.5	67	19.4	79	sse.			4		2		s.	0	0	sm'h	w.	fair.
Kearsarge, Norfolk, Va	30.13	765.3	38	3.3	71	n.			6		10							cloudy.
Lackawanna, S. 16° 34′, W. 75° 41′*	29.93	760.2	69	20.6	75	ese.			2		5					sm'h	se.	fair.
Lancaster, Naples, Italy*	29.91	759 7	49	9.4	71	ne.			1		5		calm			sm'h		fair.
Michigan, Erie, Pa	30.01	762.2	28	— 2.2	57	nw.			2		10		e.					cloudy.
Minnesota, New York, N. Y	30.05	763 3	25	— 3.9	75	nw.	14	6.3			10		nw.					squally.
Monocacy, Kobe, Japan	30.13	765.3	52	11.1	72	ne.			1		0							misty.
New Hampshire, Newport, R. I	29.92	760.0	37	2.8	90	nne.			4		10		nne.			sm'h		cloudy.
Nipsic, Lisbon, Portugal†	30.22	767.6	55	12.8	55	ene.			2		0					sm'h		clear.
Onward, Callao, Peru†	30.10	764.5	64	17.8	89	ssw.			2		5		n.			long	w.	fair.
Palos, Tientsin, China*	29.90	759.4	38	3.3	90	nne.			1		0							hazy.
Pensacola, Callao, Peru*	29.90	759.4	66	18.9	90	ssw.	3	1.3			8		ssw.	0	0	sm'h		cloudy
Powhatan, Boston, Mass	29.84	757.9	29	— 1.7	89	nnw.			2		10							snowing.
Quinnebaug, Villafranch^, France*	29.97	761.2	52	11.1	53	calm			0		8		calm					cloudy.
Ranger, N. 15° 40′, W. 96° 05′	30.02	762.5	76	24.4	76	nw.			2		0					h'vy	ene.	clear.
Richmond, Yokohama, Japan*	29.93	760.2	50	10.0	51	n.			5					0	0			clear.
Saratoga, Newport, R. I	29.78	756.4	34	1.1	100	nne.			4-5		10		ne.	0	0			overcast
St. Louis, League Island, Pa	30.33	770.4	26	— 3.3	76	nnw.			4		5		nnw.	0	0			fair.
Swatara, N. 36° 32′ W. 74° 43′*	29.85	758.2	44	6.7	75	nw.			6		10		nw.			r'gh	nw.	cloudy.
Tennessee, Fort Monroe, Va	30.14	765.5	39	3.9	47	n.	25	11.2			8			0	0			squally.
Vandalia, Hampton Roads, Va*	30.14	765.5	35	1.7	70	nnw.			6		2		nw.					fair.
Wabash, Boston, Mass	29.87	758.7	28	— 2.2	77	nw.	9	4.0			10		nw.	0	0			cloudy.
Wachusetts, Mare Island, Cal*	30.18	766 6	45	7.2	100	var.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.45	773.4	36	2.2	45	nw.			5		2		nw.	0	0			fair.
Yantic, Norfolk, Va	30.22	767.6	37	2.8	80	nnw.			3-5		8							cloudy.
Merchant Marine.																		
S. S. Grecian, S 21° 17′, W. 40° 11′*	29.96	761 0	83	28.3	71	ssw.			6		2		s.	2 h'r	2 h'r	sm'h		clear.
S S. Polynesian, N. 43° 40′, W., 64° 15′ *	29.62	752.3	48	8.9		se.			3		10		ssw.	0	0	mod.	sw.	foggy.
S. S. Scandinavian, N. 50° 17′, W. 37° 59′	29.99	761.7	40	4.4		wsw.			7		7		wsw.	sh'rs	sh'rs	high	wsw.	raining.
S. S. British Crown, N. 54° 08′, W. 24° 50′†	29.35	745.5	43	6.1		wnw.			8		5		nw.	3 h'r	3 h'r	h'vy	wnw.	raining.
S. S. British Prince, N 44° 02′, W. 57° 39′†	30.08	764.0	40	4.4		se.			4-5		10		sw.	0	0	sm'h	se.	overcast.
S. S. Indiana, Liverpool, Eng †	29.17	740.9	38	3.3	81	sw.			3		8		sw.					cloudy.
S. S. Lord Clive, Brandywine, Delaware*†	30.00	762.0				nnw.			4		2		nnw.	0	0			fine.
S. S. Ohio, N. 40° 16′, W. 69° 00′†	29.87	758.7	62	16.7	94	s.			4		2		nw.			mod.	w.	clear.
S. S. Pennsylvania. Philadelphia, Pa†	30.03	762.7	27	— 2.8		w.			3		2		w.					clear.
S. S. Castor, N. 41° 40′ W. 61° 00′†	29.97	761.1	51.8	11		nw.			3		2		wnw.	0	0	3	nw.	fair.
S. S. Stella, N. 42° 57′, W. 48° 24′	30.24	768.1	64.4	18		s.			1		4		sse.	0	0	1	sse.	d. clouds.
S. S. Bolivia, N. 53° 05′, W. 28° 26′*†	29.74	755.4	40	4.4	91	wsw.			6		6		wsw.	hail	hail	r'gh	wnw.	cloudy.
S. S. Dorian, N. 52° 10′, W. 28° 28′*	29.62	752.3	49	9.4		wnw.			7		6		nw.	snow	snow	r'gh	wnw.	cloudy.
S. S. Ethiopia, New York, N. Y	29.89	759.2	26	— 3.3		nw.			4		10		nw.	0	0			overcast.
S. S. Galatia, N. 12° 38′, E. 60° 54′ †	30.07	763 8	79	26.1	95	ne.			3		3		ne.	2 h'r	2 h'r	mod.	ne.	fair.
S. S. Ailsa, N. 24° 59′, W. 74° 25′†	30.17	760.3	74	23.3	90	ne.			2		10		ne.	0	0	sm'h		cloudy.
S. S. Alpin, Sandy Hook, N. J	30.08	764.0				n.			6				w.	0	0			
S. S. Alvo, off Greytown, Nicaragua	29.97	761.2	74	23.3		nw.			6		10 ns		nnw.	4 h'r	4 h'r	sli't	n.	raining.
S. S. Antillas, Kingston, Jamaica, W. I			80	26.7		sse.			1		1			0	0	sm'h		clear.
S. S. Carroll, N. 43° 38′, W. 65° 00′*†	29.75	755 6	50	10.0		sse.			3		10		sse.	rain	rain	short	wsw.	rain & fog.
Bk. Coppename, N. 12° 24′, W. 44° 04′	29.97	761.2	79.3	26.3	78	e.			6		9							overcast.
S. S. Gordon Castle, N. 22° 17′, E. 116° 40′	30.08	764.0	67.5	19.7	74	ese.			4		0							blue sky'
Inchkeith, S. 41° 51′, E. 37° 35′	29.51	749.5	53.8	12.1	95	n.			6		6							misty.
Mertola, N. 39° 43′, W. 15° 42′	30.28	769.1	61.3	16.3	94	nw.			3		9							d. clouds.
May Hulse, S. 32° 19, W. 49° 09′	30.20	767.1	69.7	20.9	62	e.			4		2							blue sky.
S. S. Marathon, Smyrna, Turkey	29.93	760.2	62	16.7		ssw.			2		3		ssw.	2 h'r	2 h'r			
S. S. Parthia, N. 50° 47′, W. 16° 43′*†	29.63	752.6	53	11.7		sw.			6		5		ssw.	11 h'r	11 h'r	h'vy	sw.	raining.
S. S. Pavonia, Boston, Mass*	29.85	758.2	42	5.6	66	nnw.			4		10		n.	snow	snow	sm'h	wsw.	snowy.
S. S. Scythia, Roches Point, Ireland	29.27	743.4	53	11.7		wsw.			3		10		w.	4 h'r	4 h'r	sli't	w.	hazy.
S. S. Canada, N. 43° 58′, W. 54° 00′	30.10	764.4	50.0	10.0		sse.			3-4		4?		w.			sm'h	wsw.	covered.?
S. S. France, N. 49° 44′, W. 8° 40′			51.8	11		e.			5		2 k		ese.	rain	rain	h'vy	e.	hailing.
S. S. Labradore, Harve, France			37.4	3.0		s.			6		8		sw.			sm'h		
S. S Abyssinia, N. 45° 08′, W. 52° 18′*	30.12	765.0	49	9.4	93	se.			5		10		sw.	0	0	mod.	sw.	gloomy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE—Continued.																		
S. S. Wisconsin, off Queenstown, Ireland	29.31	744.5	44	6.7		wsw.			6		10		w.	0	0	mod.	sw.	foggy.
S. S. Wyoming, N. 48° 26′, W. 41° 21′	30.17	766.3	44	6.7		w.			6		0		wnw.	0	0	r'gh	w.	fair.
S. S. Bohemia, N. 48° 24′, W. 29° 47′†	30.10	764.5				sw.			9		9		w.	0	0	r'gh	sw.	foggy.
S. S. Silesia, N. 49° 47′, W. 6° 37′			53	11.7	100	sw.			6		10		wsw.	12 h'r	12 h'r	5–6	w.	raining.
S. S. Vandalia, Elbe River, Germany	29.81	757.2	37.4	3.0	87	n.			3		10		nw.	0	0			cloudy
S. S. City of Berlin, N. 40° 30′, W. 72° 00′	29.85	758.2	41	5.0	91	nw.			6		10			0	0	mod.	nnw.	overcast.
S. S. Archimede, N. 45° 17′, W. 8° 31′	29.78	756.4				wsw.			6		10		wsw.	4 h'r	4 h'r	mod.	w.	misty.
S. S. Hevelius, N. 26° —′, W. 20° —′*†	30.19	766.8	72	22.2		ne.			6		5?		ne	0	0	mod	ne.	clear.?
S. S. Sirius, N. 27° 30′, W. 16° 30′*	30.03	762.7				nne.			6		4		nne.	2 h'r	2 h'r	mod.	ne.	clear.
S. S. Colorado, Galveston, Texas†	30.35	770.9	52	11.1		ne.			3		1		ne.	0	0			clear.
S. S. Rio Grande, Galveston, Texas†	30.39	771.9	56	13.3										0	0			clear.
S. S. San Marcos, N. 27° 46′, W. 89° 52′	30.37	771.4	68	20.0		n.			4		5		n.			sm'h		fine.
S. S. Archimede, N. 34° 31′, W. 55° 33′†	30.16	766.1	74	23.3	72	nne.			3		4?		ne.	3 h'r	3 h'r	r'gh	ne.	cloudy.?
S. S. Hermod, N. 44° 10′, W. 46° 16′†	30.28	769.1	50.0	10.0		e.			1		6		sw.	2 h'r	2 h'r	long	w.	hazy
S. S. John Hopkins, N. 41° 04′ W. 71° 30′*†	30.02	762.5	34	1.1		nnw.			7		8		var.	sleet	sleet	long	sw.	squally.
S. S. Glenapp, S. 17° 30′, W. 37° 15′†	29.80	756.9				sw.			5		9		w.	9 h'r	9 h'r	high	con.	rainy.
S. S. Glenfyne, Para, Brazil*†	29.66	753.4				ene.			1		1		e.	0	0			clear.
S. S. Toronto, Portland, Maine			20.0	— 6.7		nw.			5		10			0	0			covered.
S. S. Chalmette, N. 30° 45′, W. 79° 40′†	30.17	766.3	61	16.1		nnw.			6		3		nw.	0	0	short	nnw.	clear.
S. S. Lone Star, N. 26° 40′, W. 80° 00′†	30.14	765.5	56	13.3		nnw.			2		0			0	0	sm'h		clear.
S. S. New York, N. 39° 45′. W. 74° 00′ †.	29.93	760.2	35	1.7		nw.			6		5		nw.			sm'h		fine.
S. S. Denmark, London, Eng			36	2.2		sw.			4		10		w.	3 h'r	3 h'r			overcast.
S. S. Egypt, N. 40° 33′, W. 69° 01′*†	29.78	756.4				nnw.			3		10		n.	0	0	long	sw.	cloudy.
S. S. Erin, N. 50° 50′, W. 26° 30′	29.74	755.4	50	10.0		w.			9		7		wnw.	8 h'r	8 h'r	h'vy	w.	squally.
S. S. Greece, N. 41° 41°, W. 53° 10′*†	30.20	767.1	63	17.2		se.			5		2		se.	2 h'r	2 h'r	long	ssw.	clear.
S. S. Helvetia, N. 49° 12′ W. 29° 00	29.90	759.4	45	7.2		wnw.			6		2		w.	4 h'r	4 h'r	long	wnw.	clear.
S. S. City of Alexandria, Vera Cruz, Mexico †	30.13	765.3	76	24.4		e.			4		6		ne.	2 h'r	2 h'r	small	ene.	rainy.
S. S. City of Merida, N. 30° 01′. W. 80° 36′*†	30.14	765.5	64.4	18.0		nnw.			4		0			0	0	mod.	wsw.	fine.
S. S. Western Texas, N. 35° 15′ W. 75° 05′*†	30.25	768.3	49	9.4		n.			5							sm'h	ne.	fine.
S. S. Donau, N. 40° 28′. W. 69° 38′	29.87	758.7				wsw.			4		10		nw.	0	0	mod.	wnw.	cloudy.
S. S. Elbe, N 40° 41′, W. 71° 51′	29.83	757.7	43.7	6.5	88	n.			4		10		n.	0	0	sm'h	wnw.	covered.
S. S. Hohenstaufen., N. 25° 08′, W. 18° 40′	30.11	764.8	78.8	26.0		ne.			4		4		ne.	0	0	light	ne.	fair.
S. S. Neckar, N. 42° 00′, W. 60° 59′	29.93	760.2	54.0	12.2	97	sse.			4		4		sse.	0	0	mod.	sw.	fair.
S. S. Oder, N. 53° 25′, E. 4° 42′	29.69	754.1	33.8	1.0		sse.			6		10		s.	snow	snow	r'gh	s.	cloudy.
S. S. Ohio, N. 31° 47′, W. 76° 44′	30.07	763.8				wnw.			6		6		nw.	0	0	mod.	wnw.	cloudy.
S. S. Salier, N. 49° 48′, W. 30° 09′	29.99	761.7	47.3	8.5		w.			6		8		w.	7 h'r	7 h'r	hv'y	w.	fair.
S. S. Strassburg, N. 6° 38′, W. 28° 24′	29.93	760.2	80	26.7	100	ne.			3–4		8		ne.	0	0	mod.	ne.	cloudy.
S. S. Werra, Southampton, Eng*†	29.58	751.3	53.6	12.0		w.			3–4		7		wnw.	2 h'r	2 h'r	sm'h	w.	raining.
S. S. Belgic, N. 39° 40′, E. 152° 08′†	29.60	751.8	63	17.2	83	s.			3		5?		ssw.	3 h'r	3 h'r	mod.	sw.	cloudy.†
S. S. Coptic, N. 39° 26′ W. 166° 08′	29.30	744.2	48.0	8.9	85	wsw.			6		5		wsw.	6 h'r	6 h'r	r'gh	w.	fair.
S. S. Oceanic N. 34° 22′, E. 137° 32′*	30.01	762.2	53	11.7	61	nw.			9		0					mod.	nw.	clear.
S. S. Mississippi, Seattle, Wash. Ter*†	30.45	773.4	50	10.0	86	sse.			1		9		sw.					cloudy.
S. S. Willamette, N. 38° 04′, W. 123° 06′†	30.36	771.1	51	10.6	93	nnw.			2		0			0	0	long	nw.	dense fog.
S. S. Oregon, N. 42° 31′, W. 124° 46′†	30.43	772 9	48	8 9	100	se.			1		0					high	sw.	hazy.
S. S. Ancon, San Francisco, Cal†	30.21	767.3	48	8.9	85	calm			0		10		w.					foggy.
S. S. City of Chester, Humboldt, Cal*†	30.33	770.4	50	13.3	94	nw.			5		10		nw.			mod	wnw.	foggy.
S. S. Dakota, Strait of Fuca, Wash Ter†	30.33	770.4	54	12.2	87	se.			5		10		s.	6 h'r	6 h'r	mod.	var.	cloudy.
S. S. Orizaba, N. 32° 40′, W. 117° 14′*†	30.08	764.0	64	17.8	58	n.			3		0					mod.	sw.	clear.
S. S. State of California, N. 40° 50′, W. 124° 30′ *†	30.36	771 1	51	10.6		nnw.			3		10		nw.	0	0	sm'h	w.	foggy.
S. S. Australia, S. 34° 05′, E. 169° 11′	29.89	759.2	62	16.7	100	se.			3		10		se.	4 h'r	4 h r	mod.	se.	foggy.
S. S. City of New York, Sydney, N. S. W †	30.18	766.6	68	20.0	65	e.			1		0			0	0			clear.
S. S. City of Pekin, N. 23° 39′, E. 118° 01′†	30.06	763.5	66	18.9	68	ne.			5		5		ne.	0	0	mod.	n.	fair.
S. S. City of Rio de Janeiro N. 9° 26′ W. 85° 10′ †	29.93	760.2	80	26.7	78	ne.			2		5		ne.	0	0	light	sw.	fair.
S. S. Colima, N. 31° 48′, W. 119° 55′ †	30.12	765 0	60	15.6	88	calm			0		0			0	0	mod.	wnw.	misty.
S. S. Grenada, N. 7° 10′, E. 81° 25′†	29.89	759.2	77	25.0	91	w.			2		2		nw.	0	0	sm'h	w.	clear.
S. S. Zealandia, S. 0° 42′, W. 166° 08′	29.91	759.7	81	27.2	91	ese.			6		4		se.			mod.	e.	fine.
S. S. Muriel, St. Lucia, W. I	29.97	761.2	80	26.7		ene.			0		0			0	0	sm'h		clear.
S. S. Carcoas, N. 25° 32′, W. 68° 50′†	30.12	765.0	75	23.9	86	e.			5		10		e.	2 h'r	2 h'r	h'vy	e.	overcast.
S. S. Claudius, Puerto-Cortez, Honduras, C. A†	30.14	765.5				wsw.			5		9		wsw.	0	0	short	wsw.	misty.
S. S. Valencia, N. 19° 35′ E. 68° 00′†	30.11	764.8	82	27.8	81	se.			4		3		ne.	1 h'r	1 h'r	h'vy	nne.	fine.
S. S. Belgenland, English Channel			50	10.0	79	ssw.			8		10		ssw.	6 h'r	6 h'r	mod.	w.	misty.
S. S. Nederland, N. 40° 37′, W. 69° 35′			41	5.0		w.			4		10		wnw.	0	0	sm'h	w.	cloudy.
S. S. Penniand, N. 49° 40′, W. 37° 14′	30.04	763.0	45	7.2	88	w.			6		10		w.	rain	rain	r'gh	sw.	stormy.
S. S. Rhyniand, N. 50° 40′, W. 19° 30′	29.64	752.8	57	13.9	94	w.			6		8		wnw.	4 h'r	4 h'r	high	nw.	squally.
S. S. Wuesland, Antwerp, Belgium	29.76	755.9	32	0.0	90	sse.			3		10		s.	snow	snow			cloudy.
S. S. P. Oaland, N. 48° 45′, W. 33° 02′	30.08	764.0	50.5	10.3	79	wnw.			6		5		nw.			8	wnw.	squally.
S. S. W. A. Scholten, N. 49° 33′, W. 9° 18′	29.53	750.0	54.5	12.5	100	sw.			6		10		sw.	24 h'r	24 h'r	long	nw.	foggy.
S. S. Zaandam. N. 42° 28′, W. 61° 10′	29.69	754.1	51.0	10.6	82	s.			3		7 n		e.	2 h'r	2 h'r	2	w.	raining.
S. S. State of Florida, N. 46° 08′. W. 48° 00′	30.13	765.3	48	8.9		sw.			3		4		sw.	2 h'r	2 h'r	mod.	wsw.	fair.
S. S. Iowa, N. 42° 29′, W. 67° 14′*†	29.79	756.7	50	10.0		wsw.			2		6		ssw.	0	0	slt	sse.	fair.
S. S. Britanic, N. 40° 41′, W. 68° 18′ †	29.80	756.9	51	10.6	100	wnw.			4		3		wnw.	0	0	mod.	wsw.	fair.
S. S Celtic, Liverpool, Eng†	29.37	746.0	42	5.6		sw.			1		10			4 h'r	4 h'r			overcast.
S. S. Germanic, N. 51° 21′, W. 22° 00′†	29.65	753.1	51	10.6		w.			6		6		w.	sh'rs	sh'rs	high	w.	d. clouds.
S. S. Marengo, N. 42° 36′, W. 61° 30′	29.71	754.6				sse.			4		10		sse.	4 h'r	4 h'r	mod.	sse.	rainy.
S. S. Salerno, N. 38° 16′ W. 9° 17′						nne.			1		0			0	0	sm'h	nw.	fine.
S. S. Catherine Whiting, Point Judith, R.I†	29.92	760 0	58	14.4		n.			1				nnw.	0	0	light	s.	
S. S. Saxon, N. 42° 15′, W. 70° 30′†	29.88	758.9	42	5.6		n.			7		10		nw.			sm'h		
MISCELLANEOUS.																		
Bg. Alcira, N. 10° 39′, W. 71° 44′	29.94	763.5	82	27.8		ene.			4		2		ene.	0	0			clear.
Schr. Annie Lewis, Tampico, Mexico †	30.41	772.4	66	18.9		wnw.			3		10		wnw.	12 h'r	12 h'r	long	ne.	raining.
S. Annie M. Law, N. 30° 47′, E. 135° —′*†	30.20	767.1	65	18.3		w.			1		0			0	0	sm'h		clear.
Bk. Anna Thormann, S. 22° 54′, E. 64° 28′*	30.01	762.3	74.5	23.6	91	ese.			5		9 n		se.	sh'rs	sh'rs	mod.	se.	misty.
S. S. Antonio Lopez, Havana, Cuba, W. I*	30.17	766.3	67	19.4		n.			4		9			12 h'r	12 h'r			cloudy.
Bgt. Arthur, N. 38° 14′, W. 51° 17′ *†	29.26	743.2				e.			4				wsw.e.	0	0		e.w.	fair.
S. S. Burswell, N. 26° 15′, W. 86° 02′*†	30.22	767.6	71	21.7		n.			3		5		n.	0	0	lum'y	nnw.	fine.
Bk. Champion, N. 23° 14′, W. 29° 54′			73.0	22.8		ne.			4		5		ne.	0	3	mod.	ne.	fair.
Schr. Claus, F. Heyer, N. 25° 05′, W. 79° 35′	30.21	767.3	71	21.7	71	n.			2	0	3 k		nne.	0.02	0.5	mod.	n.	fair.
Br. Clara M. Goodrich, Sagua la Grande *†	30.01	762.2				une.			6		10?		nne.	0	0			clear.?
S Cornelius, N. 49° 17′, W. 13° 23′			53.4	11.9		wnw.			6		10		wnw.			long	wnw.	raining.
S. S. D. J. Foley, Delaware River*†	30.07	763.8	30	— 1.1		nw.			6		2			0	0	sm'h		clear.
Bkt. David Preston, Port Eads, La			72.0	22.2		ne.					0			0	0			fine.
Bk. E. L. Pettingill, N. 28° 56′, W. 124° 45′*†	30.40	772.1	62	16.7		nne.			4		0			0	0	sm'h	wsw.	clear.
S. E. J. Spicer, N. 39° 48′, W. 58° 10′*	30.11	764.8	63	17.2		sse.			5		7		s.	sqll's	sqll's	mod.	wsw.	cloudy.
Bk. Eliza Barss, Bermuda, W. I†	30.14	765.5				calm			0		0			0	0			clear.
S Enoch Train, N. 22° 32′, W. 70° 20′ *†	30.20	767.1				ese.			1		3		se.	shr's	shr's	light	ne.	clear.
Bk. Essex, Muscat, Arabia*†	29.92	760.0	78.0	25.6		nw.			3				n.	0	0		nnw.	fine.
Schr. F. E. McDonald, Belfast, Maine†	29.85	758.2	16	— 8.9		n.			5					snow	snow			snowing.
S. S. Foscolia, N. 27° 54′, W. 64° 33′ *†	29.78	756.4				ne.			2		8		nw.ne.	0	0	cross		dull.
Bk. Freya, N. 18° 58′, W. 53° 01′	29.89		81	27.2		ne.			3		0			0	0	sm'h		fine.
S. F. W. Gildemeister, N. 39° 54′, W. 62° 44′*		759.2	63.5	17.5	63	ssw.			0		5		ssw.	½h'r	½h'r	6	ssw.	
Bg. George, Gut of Canso, N. S. W*†	30.02	762.5				ene.			4		10			rain	rain	mod.	sw.	threatening
Bk. Gronsvner, Wellington, New Zealand†	29.90	759.5	68.0	20.0	97	nnw.			4		10		nw.	6 h'r	6 h'r			
Bk. Godeffroy, S. 38° 20′, W. 55° 45′ †	30.15	765.8				ene.			5		5			0	0	long	sse.	fair.
Bk. Great Surgeon, S. 12° 15′, E. 103° 45′ *†	29.96	761.0	81	27.2		sse.			4		2		sse.	0	0	r'gh	sse.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.					
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.	Character.	Direction from.	
MISCELLANEOUS.—(Continued.																		
Bk. Grey Eagle, N. 20° 44′ W. 36° 55′ *†.....	30.10	764.5	.....	.....	.....	ese.	.....	.....	3	.....	5	.....	e.	3 h'r	3 h'r	long	e.	squally.
Bk Hattie G. McFarland, New York, N. Y †	30.09	764.3	26	— 3.3	.....	nw.	.....	.....	5	.....	8	.....	nw.	o	o	.....	.....	
Schr Hattie Weston, N. 21° 00′, W. 68° 50′ *†	30.15	765.8	81	27.2	.....	ese.	.....	.....	2	.....	2	.....	ese.	½h'r	½h'r	long	nne.	fair.
Bk. Heinrich & Tonio, N. 49° 41′, W. 5° 42′	.....	.....	58	14.4	93	wsw.	.....	.....	6	.....	10	.....	.....	24 h'r	24 h'r	mod.	w.	rainy.
Schr. Isabel Alberto, N. 25° 51′, W. 83° 10†.....	30.13	765.3	.....	.....	.....	n.	.....	.....	3	.....	3	.....	n.	o	o	sli't	n.	fair
Schr. James Slater, N. 30° 20′, W. 73° 02′ †.....	30.05	763.3	72	22.2	.....	wsw.	.....	.....	4	.....	5	.....	nw.	o	o	h'vy	wnw.	
Schr. Jennie N. Huddell, Savannah, Ga †.....	30.25	768.3	41	5.0	.....	nw.	.....	.....	4	.....	0	.....	.....	o	o	.....	.....	clear.
Schr. John L. Thomas, N. 31° 12′, W. 78° 49′*†	30.16	766.1	.....	.....	.....	nnw.	.....	.....	5	.....	2	.....	nw.	o	o	mod.	n.	clear.
Bg. John Wesley, N. 32° 57′, W. 76° 53′†.....	30.31	769.9	.....	.....	.....	nne.	.....	.....	2	.....	6	.....	sw.	o	o	mod.	se.	fair
Bk. Joseph A. Ropes, N. 12° 35′, E. 58° 19′*†	29.96	761.0	80	26.7	82	nne.	.....	.....	3	.....	8	.....	ne.	o	o	mod.	ne.	cloudy.
Bkt. Josephine, N. 39° 01′, W. 60° 31′†.....	30.04	763.0	69	20.6	65	s.	.....	.....	6	.....	5	.....	s.	3 h'r	3 h'r	mod.	s.	fair.
Light House Tender, Laurel, Key West, Fla†.....	30.18	766.6	63	17.2	.....	nne.	.....	.....	3	.....	2	.....	nne.	o	o	sm'h	.....	clear.
Bg. Lilian, N. 30° 45′, W. 73° 45′†	30.11	764.8	71	21.7	.....	w.	.....	.....	6	.....	5	.....	w.	o	o	r'gh	var.	fair.
Bg. L. & W. Armstrong, N. 36° 40′, W. 66° 11′ *†.....	29.96	761.0	.....	.....	.....	sw.	.....	.....	8	.....	3	.....	sw.	4 h'r	4 h'r	r'gh	sw.	threatening.
S. S. Malabar, N. 37° 46′, E. 16° 30′†.....	29.97	761.2	.....	.....	.....	nw.	.....	.....	9	.....	0	.....	.....	o	o	h'vy	nw.	clear.
Bk. Matilda C. Smith, N. 27° 42′, W. 50° 48′ *†.....	30.23	767.8	.....	.....	.....	se.	.....	.....	6	.....	3	.....	s.	o	o	long	se.	fine.
Schr. Minnie A. Bonsall, St. John's, Porto Rico, W.I †	30.24	768.1	64	17.8	.....	nnw.	.....	.....	5	.....	0	.....	.....	.....	.....	light	nne.	fair.
S. Minnie N. Gerow, N. 33° 36′, W. 21° 50′*†.....	30.32	770.1	.....	.....	.....	n.	.....	.....	4	.....	7	.....	ene.	.....	.....	sm'h	ene.	fair.
S. M. P. Grace. N. 1° 05′, W. 126° 07′ *†.....	30.02	762.5	70	21.1	.....	e. to se.	.....	.....	5	.....	8	.....	ese.	light	light	sm'h	se.	cloudy.
Bg. O. C. Clary, Demerara, British Guiana, S. A*†.....	29.95	760.7	84	28.9	91	e.	.....	.....	6	.....	1	.....	ne.	o	o	.....	.....	clear.
S. Orealla, N. 14° 05′, E. 92° 03′*.....	29.85	758.2	.....	.....	.....	e.	.....	.....	4	.....	5	.....	e.	.....	.....	sm'h	.....	fine.
S Paramita, San Francisco, Cal	.....	.....	50	10.0	.....	calm	.....	.....	0	.....	0	.....	.....	o	o	.....	.....	
S. S. Peconic, N. 32° 58′, W. 77° 58′*†.....	30.02	762.5	56	13.3	.....	nw.	.....	.....	6	.....	2	.....	nw.	.....	.....	mod.	nw.	fair.
S. S. Radnorshire, N. 5° 22′, E. 88° 58′ *†..	29.85	758.2	.....	.....	.....	w.	.....	.....	2	.....	0	.....	.....	o	o	mod.	ne.	clear.
Bk. Rebus, N. 39° 45′, W. 71° 39 *.....	29.78	756.4	.....	.....	.....	nnw.	.....	.....	7	.....	10	.....	nnw.	snow	snow	r'gh	nnw.	snowing.
S. St. Francis, N. 10° 05′, W. 121° 00′†.....	29.91	759.7	75	23.9	.....	ne.	.....	.....	3–4	.....	9	.....	ene.	6 h'r	6 h'r	long	ne.	squally.
Bk. Southern Belle, Antwerp, Belgium*†.....	29.60	751.8	48	8.9	.....	se.	.....	.....	5	.....	9	.....	ese.	light	light	.....	.....	snowing.
S. S. Sunbeam, N. 23° 30′, W. 41° 52′.....	30.19	766.8	74	23.3	90	ese.	.....	.....	4	.....	5	.....	ne.	o	o	4	e.	d. clouds.
S. S. Strathleven, N. 12° 28′, E. 56° 19′.....	29.93	760.2	79.0	26.1	93	ne.	.....	.....	5	.....	2	.....	nw.	o	o	3.	ne.	d. clouds.
Schr. T. S. McLellan, N. 26° 00′, W. 79° 45′ *†.....	30.25	768.3	65	18.3	.....	nne.	.....	.....	.....	.....	.....	.....	ne.	.....	.....	h'vy	n.	cloudy.
U. S. F. C. S. S. FishHawk, Washington, D. C†..	30.25	768.3	33	0.6	.....	wnw.	.....	.....	5	.....	2	.....	nw.	o	o	.....	.....	clear.
Bk. Usko, N. 54° 14′, W. 18° 30′ *.....	29.04	737.6	48	8.9	.....	var.	.....	.....	2–6	.....	10	.....	wnw.	2 h'r	2 h'r	long	var.	drizzling.
Bk. Vincenzo Accame, N. 34° 30′, W. 30° 15′†.....	30.60	777.3	68.9	20.5	.....	n.	.....	.....	2	.....	6	.....	n.	o	o	mod.	nnw.	
Schr. Walter L. Plummer, N. 26° 18′, W. 74° 50′*†.....	30.20	767.1	.....	.....	.....	n.	.....	.....	4	.....	10	.....	ne.	o	o	sm'h	.....	fine.
Bk. Wandering Jew, Montevideo, Uruguay †.....	30.19	766.8	67	19.4	.....	e.	.....	.....	6	.....	6?	.....	e.	o	o	.....	.....	clear?
Bk. Warden Law, Tocapilla, Peru, S. A*.....	30.07	763.8	.....	.....	.....	ne.	.....	.....	2	.....	2	.....	s.	.....	.....	sm'h	s.	fair.
S. Wm. Woodbury, N. 42° 40′, W. 35° 35′*.....	30.33	770.4	64	17.8	.....	nne.	.....	.....	4	.....	2?	.....	nw.	.....	.....	long	ssw.	cloudy.?

International Chart I. December 3, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 4, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.15	765.7	59.0	15.0	91	n.	.....	.....	1	.....	3	.....	.....	0	0	pretty fair...	Malaterre.
Algiers	.....	.....	30.08	763.9	67.6	19.8	36	wsw.	.....	.....	5	.....	0	.....	.....	0	0	clear.....	Thève.
La Calle	.....	.....	30.04	763.0	64.8	18.2	47	w.	.....	.....	2	.....	1	.....	.....	0.098	2.5	very fair.....	Fonfrède.
Tunis	.....	.....	30.07	763.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.15	765.9	63.3	17.4	86	sw.	.....	.....	2	.....	1	.....	.....	0	0	very fair.....	Pérès.
Tebessa	.....	.....	30.19	766.9	52.5	11.4	78	w.	.....	.....	2	.....	0	.....	.....	0	0	clear.....	Dognon.
Geriville	.....	.....	.....	.....	59.7	15.4	21	sw.	.....	.....	4	.....	4	.....	.....	0	0	cloudy.....	Louchamp.
Laghouat	.....	.....	30.24	768.2	52.9	11.6	55	sw.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	Abraham.
Biskra	.....	.....	30.23	767.8	61.2	16.2	29	nw.	.....	.....	1	.....	4	.....	.....	0	0	cloudy.....	Malau.
Australian.																			
Melbourne, Victoria	29.75	755 6	29.84	757.9	72.7	22.6	53	nw.	4	1.8	.....	.....	10	.....	.....	0	0	threatening.	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.09	738 8	29.66	753.3	30.2	— 1.0	92	ne.	.....	.....	2	.....	10	.....	.....	0.701	17.8	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.84	732.5	29.66	753.3	16.2	— 8.8	82	ssw.	12.5	5.6	.....	.....	0	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.87	733.3	29.81	757.1	20.8	— 6.2	82	s.	.....	.....	3	.....	10 8	.....	n.	0.094	2.4	foggy.....	Julius Mikolik.
Gratz	28.35	720.0	29.65	753.1	28.0	— 2.2	68	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.40	721.3	29.92	759.9	22.6	— 5.2	90	wnw.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsamunster, Obs'y	28.10	713.7	29.50	749.3	24.3	— 4.3	97	ne.	.....	.....	1	.....	10	.....	.....	0.441	11.2	raining.....	The Staff.
Lemberg	28.76	730.6	29.82	757.4	19.8	— 6.8	70	s.	.....	.....	1	.....	0	.....	.....	0.047	1.2	.....	Dr. T. Stanecki.
Pola	29.59	751.5	29.70	754.4	47.8	8.8	84	sw.	.....	.....	1	.....	10	.....	.....	0.748	19.0	.....	I. R.Hydrographic Office.
Szathmar	29.37	746.1	29.84	757.9	22.6	— 5.2	85	e.	.....	.....	2	.....	10	.....	.....	0.091	2.3	.....	Joseph Midlinszay, S J.
Szegedin	29.48	748.9	29.78	756.4	27.1	— 2.7	89	se.	.....	.....	3	.....	10	.....	.....	0.307	7.8	.....	Karl Stancel.
Trieste	29.68	753.9	29.78	756.5	35.6	2.0	89	e.	.....	.....	1	.....	10	.....	.....	0.843	21.4	snowing.....	Royal Academy.
Vienna	28.84	732 6	29.60	751.8	23.2	— 4.9	93	se.	.....	.....	3	.....	10	.....	.....	0.100	2.7	sleeting	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.00	736 6	29.10	739.1	37.0	2.8	90	ese.	35	15.6	.....	.....	10	.....	.....	0.450	11.4	raining.....	W. Boswell
Armagh, Observatory	28.85	732.8	29.10	739.1	40.3	4.6	89	w.	10	4.5	.....	.....	7	.....	.....	.....	.....	d. clouds....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.00	736.6	42.8	6.0	83	w.	35	15.6	.....	.....	7	.....	.....	.....	.....	d. clouds....	John Hartnup.
Bolton, Sharples	28.44	722.4	28.96	735.6	41.0	5.0	85	wsw.	24	10.7	.....	.....	9	.....	.....	.....	.....	overcast.....	Thomas Mackereth.
Bradford, Yorkshire	28.53	724.6	28.92	734.6	41.7	5.4	87	sw.	.....	.....	3	.....	6	.....	.....	0.08	2.0	raining	McLandsborough&Preston.
Bridgetown, Barbadoes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Corpl.J.Surgenor, A.H C.
Cardington	.....	.....	.....	.....	45.0	7.2	76	w.	.....	.....	2.0	.....	2	.....	.....	.....	.....	blue sky.....	John McLaren.
Chatham, School M. E	28.98	736.1	29.11	739.4	45.6	7.6	73	w.	.....	.....	1	.....	0	.....	.....	blank	blank	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.06	738.1	29.29	744.0	44.6	7.0	69	wnw.	.....	.....	5	.....	8	.....	.....	.....	.....	d. clouds....	The Staff.
Fort Napier, Natal	27.63	701 8	29.84	757.9	69.8	21.0	46	se.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	86.0	30.0	61	w.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.05	763.3	30.11	764.8	62.5	16.9	94	sw.	.....	.....	3	.....	2	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	28.77	730.7	28.98	736.1	38.4	3.6	86	wnw.	.....	.....	3	.....	10	.....	.....	.....	.....	d. clouds....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	28.94	735.1	29.11	739.4	44.8	7.1	70	wsw.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds....	The Staff.
Guernsey	29.02	737.1	29.32	744.7	44	6.7	76	nnw.	.....	.....	3	.....	9	.....	.....	.....	.....	raining.	A. Collenette, F. M. S
Kew, Observatory	29.09	738.9	29.13	739.6	44.6	7.0	67	sw.	18	8.0	.....	.....	5	.....	.....	.....	.....	d. clouds....	The Staff.
Leicester, Museum	28.76	730.5	29.02	737.1	45.1	7.3	72	sw.	.....	.....	2	.....	8	.....	.....	.....	.....	d. clouds	J. C. Smith.
Malta, Mediterranean	29.92	760 0	30.00	762.0	64.2	17.9	98	w.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.12	765.0	30.16	766.1	71.0	21.7	57	ne.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	U. S. Duncombe
Oscott, St. Mary's College	28.52	724.4	29.04	737.6	41.5	5.3	78	wsw.	.....	.....	6	.....	8	.....	.....	.....	.....	threatening.	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	28.88	733.5	29.10	739.1	44.4	6.9	74	sw.	.....	.....	6	.....	5	.....	.....	.....	.....	squally.....	The Staff.
Plymouth	29.18	741.2	29.25	742.9	43.6	6.4	88	w.	.....	.....	6	.....	10	.....	.....	.....	.....	t ailing.....	John Merrifield.
Sandwick Manse, Orkneys	29.07	738.4	29.18	741.2	37.2	2.9	97	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	raining.	Rev. C. Clouston, L L D.
Scutari Cemetery, Turkey	29.89	759.2	29.95	760.7	46.0	7.8	84	sw.	.....	.....	1	.....	5	.....	.....	blank	blank	d. clouds....	W. H. Lyne.
Sheffield	28.71	729.2	28.96	735.6	43.0	6.1	85	wsw.	.....	.....	4	.....	6	.....	.....	0.11	2.8	d. clouds	W. F. Cooper.
Silloth Rectory	28.89	733.8	28.92	734.6	38.4	3.6	96	w.	.....	.....	2	.....	10	.....	.....	0.180	4.6	gloomy.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	28.98	736.1	39.0	3.9	91	w.	23	10.3	.....	.....	10	.....	.....	.....	.....	raining.....	t. New.
Strathfield Turgiss	28.93	734.8	29.15	740.4	43.2	6.2	75	w.	.....	.....	3	.....	8	.....	.....	.....	.....	d. clouds....	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	29.25	742.9	29.29	744.0	40	7.8	60	nw.	.....	.....	7	.....	10	.....	.....	.....	.....	raining.....	W. Newcombe.
Valencia, Observatory	29.31	744.5	29.34	745.2	44.1	6.7	68	w.	26	11.6	.....	.....	6	.....	.....	blank	blank	d. clouds	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.87	758.7	29.92	760 0	18	— 7.8	86	w.	14	6.3	.....	.....	10 n	.....	.....	calm	0.115	2.9	light snow..	H. J. Cundall, C E
Chatham, N. B*	29.98	761.5	30.05	763.3	8	—13.3	91	w.	6	2.7	.....	0	0	.....	.....	.....	0.04	1.0	clear.....	G. A. Blair.
Father Point, Quebec*	30.19	766.8	30.27	767.3	7	—13.9	80	nw.	25	11.2	.....	0	5 k	.....	nw.	0	0	fair.....	J. McWilliams.
Fort Garry, Manitoba*	28.88	733.5	29.79	756.7	2	—16.7	91	e.	12	5.4	.....	.....	10 s	.....	e.	0.40	10.2	cloudy	James Stewart.
Halifax, N. S*	29.86	758.4	30.00	762.0	18	— 7.8	87	nw.	12	5.4	.....	.....	10 k	.....	nw.	0.105	2.9	light snow...	A. Allison.
Kingston, Ontario*	29.87	758.7	30 23	767.8	15	— 9.4	76	e.	9	4.0	.....	.....	10 n	.....	se.	inap.	inap.	light snow...	A. P. Knight, M. A
Montreal, Quebec*	30.09	764.3	30.32	770.1	3	—16.1	96	s.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy.....	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.22	742 2	29.97	761.2	13	—10.6	80	e.	20	8.9	.....	.....	10 n	.....	e.	0.03	0.8	light snow...	Rev. R. Mosley.
Port Dover, Ontario	29 25	742.9	29.97	761.2	28	— 2.2	100	s.	2	0.9	.....	.....	10 n	.....	s.	inap.	inap.	threatening.	H. Morgan.
Port Stanley, Ontario	29.26	743 2	29.93	760.2	29	— 1.7	92	se.	28	12.5	.....	.....	10 n	.....	s.	inap.	inap.	cloudy.....	M. Payne.
Quebec, Quebec*	29.94	760.5	30.31	769.9	— 4	—20.0	87	w.	.....	.....	1	0	2	.....	sw.	0	0	fair.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.66	753.4	30.17	766.3	3	—16.1	83	e.	8	3.6	.....	0	hz.	.....	.....	0	0	threatening.	W. H. McIntyre.
Saugeen, Ontario*	29.05	737.9	29.80	756.9	25	— 3.9	100	se.	33	14.8	.....	.....	10 ks	.....	.....	0.02	0.5	light snow...	
St. Andrews, N. B	30.11	764.8	30.17	766.3	5	—15.0	87	nw.	10	4.5	.....	0	0	.....	.....	0.02	0.5	clear.....	
Sydney, C. B*	29.67	753.6	29.73	755.1	29	— 1.7	80	w.	22	9.8	.....	.....	10 n	.....	nw.	0.38	9.7	cloudy.....	T. C. Hill, C. E
Toronto, Ontario*	29.64	752.8	30.04	763.0	26	— 3.3	92	se.	30	13.4	.....	.....	10 n	.....	.....	0.01	0.3	light snow...	Magnetic Observatory.
Yarmouth, N. S*	30.07	763.8	30.14	765.5	18	— 7.8	76	nw.	18	8.0	.....	.....	10 n	.....	.....	0.07	1.8	light snow...	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.36	720.3	29.86	758.4	21.0	— 6.1	93	s.	.....	.....	6	.....	10kn	.....	s.	0	0	stormy.....	Wm. Wylie
St. Johns, Newfoundland	.....	.....	.....	.....	.....	.....	100	sw.	4	1.8	.....	.....	10	.....	.....	0.60	15.2	raining	John Delany
Cape Colony.																			
Cape St.Francis Lt.House	30.06	763.5	30.09	764 3	67.6	19.8	85	wsw.	25.0	11.2	.....	3 c	0	.....	.....	0	0	light haze...	John Duthie.
Cape Town, C G.H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D.Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
												Upper	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.66	626.3	.....	.....	29.7	— 1.3	.....	w.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.14	765.5	30.25	768.3	28.8	— 1.8	75	calm	4.3	1.9	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.04	762.9	30.06	763.5	50.5	10.3	96	sse.	1.3	0.6	.....	0	9 k	.....	.....	0	0	covered	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.44	747.7	29.48	748.9	23.7	— 4.6	79	se.	49	22	.....	.....	10	.....	.....	.....	.....	snowing	Oversergent Fischer.
Fanoe	29.20	741.6	29.22	742.1	22.5	— 5.3	100	e.	.....	.....	8	.....	10	.....	.....	.....	.....	snowing	Overloerer Lauridsen.
Godthaab, Greenland	29.72	754.9	29.76	756.0	17.1	— 8.3	82	ene.	.....	.....	4	.....	5	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.73	755.1	29.75	755.6	23.0	— 5.0	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.87	758.8	29.92	760.0	6.1	—14 4	.....	e.	.....	.....	4	.....	3	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.05	737.9	29.10	739 0	36.0	2.2	98	ne.	.....	.....	8	.....	8	.....	.....	.....	...	...	A. O. Thorlacius.
Thorshavn	29.10	739.0	29.13	739.9	44.1	6.7	90	se.	27	12	.....	.....	10	.....	.....	.....	.....	raining	Overloerer Bergh.
Vestervig	29.32	744.8	29.42	747.2	24.6	— 4.1	82	ene.	.....	.....	6	.....	9	.....	.....	.....	.....	.....	Loerer Oesterboi.
Upernavik, Greenland	29.88	758.9	29.93	760.1	8 6	—13.0	.....	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.13	740.0	29.79	756.6	51.1	10.6	84	wsw.	.....	.....	1	0	8 n	.....	.....	0.232	5.9	¾ covered	M. Labroue, Director.
Alençon, Normal School	28.95	735.4	29.50	749.4	45.0	7.2	91	w.	.....	.....	1	.....	kn	n.	n.	0.39	10.	.....	M. Nicot, Director.
Arras, Engineer School	29.08	738.6	29.34	745.1	43.7	6.5	28	sw.	.....	.....	3	.....	n	.....	sw.	0.12	3.	.....	M. Fénéon, Command't.
Avignon, Normal School	29.61	752.1	29.69	754.1	45.0	7.2	91	ene.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	M. Giraud, Director.
Bar-sur-Seine	28.85	732.9	29.41	747.0	44.6	7.0	79	nnw.	.....	.....	2	.....	8	.....	wnw.	0.764	19.4	raining	M. Saillard, Director.
Beauvais, Normal School	29.03	737.4	29.30	744.1	46.9	8.3	75	w.	.....	.....	3	.....	8	.....	w.	0.516	13.1	cloudy	M. Frère Eugène Marié
Besançon, Normal School	28.54	724.9	29.43	747.5	47.8	8.8	86	sw.	.....	.....	4	.....	10 n	.....	wsw.	0.835	21.2	raining	M. Gobin, Director.
Bordeaux, Observatory	29.42	747.2	29.68	753.9	50.4	10.2	73	w.	.....	.....	3	.....	5	.....	w.	0.654	16.6	cloudy	M. Rayet, Director.
Bourges, Normal School	28.98	736.1	29.53	750.1	48.2	9	80	wsw.	.....	.....	2	.....	k	.....	wsw.	0.795	20.2	.....	M. Mallet, Director.
Brest, Naval Observatory	29.25	742.9	29.49	749.1	48.6	9.2	73	w.	.....	.....	3	.....	6	.....	w.	1.567	39.8	hailing	M. de Kermarec, Dir.
Caen, Normal School	29.21	742.0	29.29	743.9	45.7	7.6	64	sw.	.....	.....	1	.....	5	.....	sw.	0.43	11.	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	28.98	736.1	29.30	744 3	48.2	9.0	85	sw.	.....	.....	4	.....	2	.....	w.	0.795	20.2	slightly cl'dy	M. Judot, Director.
Charleville, Normal School	28.73	729.8	29.24	742.7	44.6	7	80	wsw.	.....	.....	2	.....	8	.....	.....	0.47	12.	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.22	716.7	29.57	751.1	47.3	8.5	66	wsw.	.....	.....	3	.....	8	.....	.....	0.248	6.3	.....	M. Allnard, Director.
Cluny, Normal School	28 72	729.4	29.57	751.1	46.8	8.2	77	sw.	.....	.....	2	.....	10	sw.	sw.	0.413	10.5	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.49	723.6	29.36	745.8	36.1	2.3	94	w.	.....	.....	4	.....	en	w.	w.	1.30	33.	.....	Dr. Coulet, Director.
Gap, Normal School	27.04	686.9	29.64	752.8	33.4	0.8	.....	.....	.....	.....	.....	.....	10	.....	.....	0.071	1.8	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.57	725.7	29.71	754.7	44.6	7.0	97	sw.	.....	.....	1	.....	10	.....	sw.	0.39	10.	raining	M. Kina, Director.
Grenoble, Normal School	28.84	732.5	29.63	752.6	38.5	3.6	83	wsw.	.....	.....	1	.....	kn	.....	sw.	0.449	11.4	.....	M. Ablard, Director.
Guéret	27.99	711.0	29.59	751.5	41.0	5	90	w.	.....	.....	1	.....	n	.....	sw.	1.161	29.5	.....	M. Delorme, Dir.
Lamballe, Normal School	29.15	740.3	29.41	747.1	46.4	8	94	w.	.....	.....	4	.....	2	.....	w.	0.205	5.2	slightly cl'dy	M. Ollitrault, Director.
Lescar, Normal School	29.22	742.3	29.79	756.7	48.9	9.4	81	w.	.....	.....	4	.....	10	.....	e.	0.102	2.6	raining	M. Chauvin, Director.
Lorient, Naval Observatory	29.43	747.4	29.53	750.0	46.4	8.0	61	wsw.	.....	.....	2	.....	10	sw.	w.	0.024	0.6	raining	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.54	724.8	29.00	751.7	46.8	8.2	92	nnw.	.....	.....	2	.....	10 n	.....	nnw.	0.110	2.8	covered	M. André, Director.
Mans, Normal School	29.18	741.1	29.49	749.0	46.2	7.9	71	w.	.....	.....	4	.....	2	.....	w.	0.67	17.	slightly cl'dy	M. Pibœu, Director.
Marseille, Observatory	29.48	748.9	29.70	755.8	50.4	10.2	84	ene.	.....	.....	2	.....	10	.....	w.	0.850	21.6	raining	M. Stephan, Director.
Mt. Louis	24.54	623.3	29.38	746.3	37.4	3.0	96	s.	3.8	1.7	.....	.....	7	w.	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.57	751.0	29.73	755.2	41.9	5.5	97	nnw.	.....	.....	2	.....	10	.....	nnw.	0.24	6.	raining	M. Galzin, Director.
Nancy, Normal School	28.50	723.9	29.29	743.9	44.2	6.8	85	w.	.....	.....	1	.....	n	.....	nw.	0.433	11.0	.....	M. Hasse, Director.
Nantes, Observatory	29.35	745.5	29.51	749.6	51.1	10.6	66	w.	.....	.....	1–3	0	6 n; kn	.....	w.	0.787	20.0	.....	M. Larocque, Director.
Perpignan, Observatory	29.63	752.6	29.74	755.5	46.8	8.2	94	n.	1.8	0.8	.....	.....	10	.....	.....	0.020	0.5	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20 96	532.4	.....	.....	21.2	— 6.0	.....	w.	.....	.....	1	.....	10	.....	w.	0.354	9.0	snowy	M. Vaussenat.
Privas, Normal School	28.59	726.2	29.68	753.8	41.4	5.2	94	s.	.....	.....	3	.....	10 s	.....	.....	0.157	4.0	covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.66	626.4	.....	.....	30.7	— 0.7	100	w.	.....	.....	6	.....	10	.....	.....	0.575	14.6	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.59	751.5	29.61	752 2	51.1	10.6	80	wsw.	.....	.....	2	.....	5	.....	wsw.	2.50	65.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.37	746.1	29.59	751.6	48.2	9	78	w.	.....	.....	3	.....	5	.....	w.	0.728	18.5	cloudy	M. Brotier, Director.
Rodez, Normal School	27.59	700.7	29.81	757.1	32.9	0.5	75	calm	.....	.....	0	.....	5	.....	s.	0.083	2.1	fair	M. Seger, Director.
Rouen, Normal School	29.24	742.7	29.29	743.9	46.0	7.8	77	sw.	.....	.....	1	.....	5	sw.	.....	0.83	21.	cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	43.5	6.4	70	w.	.....	.....	1	.....	5	w.	w.	0.953	24.2	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.18	741.2	29.35	745.4	47.8	8.8	67	wsw.	.....	.....	2	.....	8	.....	.....	0.547	13.9	.....	M. Renou, Director.
Toulouse, Observatory	29.06	738.0	29.78	756.3	47.8	8.8	83	w.	.....	.....	4	.....	10	w.	.....	0.610	15.5	covered	M. Baillaud, Director.
Tours	29.30	744.2	29.48	748.7	49.6	9.8	72	wsw.	.....	.....	3	.....	5	.....	wsw.	0.583	14.8	cloudy	M. de Tastes.
Versailles, Observatory	28.85	732 7	29.34	745.2	46.8	8.2	67	w.	.....	.....	3	.....	.....	.....	.....	0.100	2.7	..	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.67	753.7	29.82	757.5	50.4	10.2	92	w.	23.7	10.6	.....	.....	9 kn	.....	wsw.	0.614	15.6	.....	M. Cartier, Director.
GERMAN.																			
Ansbach	27.82	706.6	29.28	743.7	39.9	4.4	95	sw.	.....	.....	2	.....	10	sw.	.....	0.264	6.7	.....	Prof. Jnedt.
Bamberg	28 37	720.0	29.19	741.4	35.6	2.0	90	s.	.....	.....	1	.....	10	.....	.....	0.315	8.0	raining	Prof. Dr. Hoh.
Berlin	29.14	740.1	29.33	744.9	19.8	— 6.8	94	se.	.....	.....	2	.....	10	.....	.....	0.003	1.6	.....	Prof. Dr. Arndt.
Breslau	28.98	736.0	29.50	749.3	21.0	— 6.1	77	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	28.83	732.3	29.26	743.1	46.8	8.2	88	sw.	.....	.....	6	.....	10	sw.	.....	0.760	19.3	heavy rain	Albert Senz.
Cassel	28.37	720 7	29.09	738.8	34.7	1.5	91	s.	.....	.....	2	.....	10	s.	.....	0.087	2.2	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	28.83	732.2	29.20	741.7	34.3	1.3	87	ssw.	.....	.....	1	.....	10	.....	.....	0.689	17.5	.....	Physical Society.
Friedrichshafen	27.98	710.8	29.43	747.5	40.6	4.8	94	w.	.....	.....	5	.....	10	sw.	.....	0.516	13.1	.....	Wilhelm, Chief Tel.
Hamburg	29.08	738.7	29.17	741.0	17.8	— 7.9	97	ese.	.....	.....	8	.....	10	.....	.....	0.094	2.4	snowing	E. Preller.
Kiel	29.24	742.6	29.25	743.0	20.3	— 6.5	84	e.	.....	.....	4	.....	10	.....	.....	0.047	1.2	snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	28.81	731.8	29.24	742.8	28.0	— 2.2	89	se.	.....	.....	2	.....	10	.....	.....	0	C	.....	H. Leppig, Asst.
Magdeburg	29.04	737.5	29.23	742.5	21.4	— 5.9	90	ese.	.....	.....	3	.....	10 n	.....	.....	0.087	2.2	foggy	Weather Observatory.
Memel	29.87	758.6	29.91	759.8	12.9	—10.6	86	ese.	.....	.....	3	.....	ks	.....	.....	.....	.....	.....	Issermann.
Munich	27.53	699.3	29.35	745.6	38.8	3.8	88	sw.	.....	.....	1	.....	10	.....	.....	0.437	11.1	raining	Central Station.
Neufahrwasser	29.76	755.8	29.77	756.2	15.6	— 9.1	78	se.	.....	.....	2	.....	10	.....	.....	0.008	0.2	snowing	A. Lothes.
Neustadt, Palatinate	28.63	727.2	29.15	740.4	46.0	7.8	86	w.	.....	.....	3	.....	10	.....	.....	0.236	6.0	.....	Dicknether.
Stuttgart	28.33	719.6	29.22	742.1	46.4	8.0	82	sw.	.....	.....	6	.....	6	w.	.....	0.051	1.3	.....	Prof. Dr. Schoder.
Wustrow	29.42	747.2	29.45	747.9	15.6	— 9.1	97	ene.	.....	.....	6	.....	10	.....	.....	0	0	.....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.59	751.6	29.98	761.5	55.9	13.3	.....	nw.	.....	.....	1.0	.....	10	.....	.....	0	0	misty	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	30.01	762.2	30.06	763.5	75.9	24.4	77	w.	19.0	8.5	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.50	749.2	29.97	761.2	82.6	28.1	28	s.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.91	759.8	29.95	760.7	79.7	26.5	66	w.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.10	713.6	29.76	755.9	78.2	25.7	23	e.	4.0	1.8	.....	.....	1	.....	.....	0	0	d. clouds	
Trichinopoly	29.65	753.0	29 93	760.2	80.9	27.2	62	e.	1.0	0.4	.....	.....	6	.....	.....	0	0	d. clouds	
Belgaum	27.39	695.7	29.94	760.4	76.0	24.4	34	ne.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.26	743.3	30.04	763.0	62.6	17.0	52	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.06	738.1	29.99	761.6	66.8	19.3	52	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.43	747.6	30.01	762.3	71.2	21.8	38	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.94	735.2	30.00	762.1	73.9	23.3	42	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.65	727.7	30.05	763.2	67.9	19.9	71	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.60	751.9	29.99	761.8	69.3	20.7	54	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.67	753.5	29.99	761.8	62.8	17.1	77	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.83	757.6	30.02	762.5	67.0	19.4	69	w.	2.2	1.0	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.93	709.4	30.00	762.0	64.2	17.9	62	n.	4.5	2.0	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.86	758.5	29.94	760.4	72.1	22.3	62	calm	0	0	.....	.....	3	.....	.....	0	0	d. clouds	
Calcutta, Allpore	29.93	760.1	29.95	760.7	68.5	20.3	82	n.	1.0	0.4	.....	.....	6	.....	.....	0	0	d. clouds	
Dhubri	29.84	757.9	29.96	761.0	72.1	22.3	72	e.	5.8	2.6	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.84	757.9	29.93	760.2	74.6	23.7	78	w.	1.4	0.6	.....	.....	10	.....	.....	0	0	overcast	
Sibsagar	29.66	753.4	30.01	762.2	65.3	18.5	87	ne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Jeypore	28.54	725.0	30.01	762.3	72.7	22.6	52	nw.	3.5	1.6	.....	.....	0	.....	.....	0	0	blue sky	
ITALIAN.																			
Udine	29.36	745.8	29.78	756.4	33.8	1.0	85	.....	.....	.....	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.25	742.9	29.79	756.6	33.8	1.0	80	se.	1.8	0.8	.....	.....	10	.....	.....	0	0	.....	Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Padua	29.65	753.2	29.76	756.0	34.9	1.6	72	n.	4.3	1.9			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.86	733.1	29.81	757.1	35.6	2.0	65	nw.	0.7	0.3			10			0	0		Prof. F. F. Denza.
Genoa	29.49	749.1	29.69	754.0	42.8	6.0	83	s.	0.7	0.3			10	s.		0.024	0.6		Prof. G. M. Garibaldi
Mondovi	27.79	705.9	29.78	756.3	32.7	0.4	59	w.			2		2			0	0		Prof. D. C. Bruno.
Pesaro	29.88?	758.9?	29.93?	760.2?	39.6	4.2	87	n.	5.6	2.5			10			0.083	2.1		Prof. Luigi Guidi.
Florence	29.50	749.3	29.76	755.9	39.2	4.0	87	sw.			2		10			0.138	3.5		Prof. Costantino Pittei.
Leghorn	29.56	750.9	29.65	753.1	50.7	10.4	97	s.	9.8	4.4			10			1.264	32.1		Prof. P. Monte.
Rome	29.68	753.9	29.86	758.4	50.7	10.4	87	ssw.	5.6	2.5			10			0.098	2.5		Prof. P. Tachini.
Lecce	29.73	755.1	29.98	761.6	51.4	10.8	75	wnw.	8.1	3.6			8	n.		0	0		Prof. C. de Giorgi
Cosenza	29.11	739.5	30.01	762.3	51.4	10.8	75	ssw.	3.1	1.4			9	sw.		0.070	1.8		Prof. D. Conti.
Cagliari	29.69	754.1	29.88	759.0	59.5	15.3	69	sw.			2		2			0	0		Prof. A. Pacinotti.
Palermo	29.76	755.8	30.01	762.2	59.0	15.0	62	wsw.	20.6	9.2			5			0	0		Prof. G. Cacciatore.
Syracuse	29.97	761.3	30.02	762.4	60.1	15.6	63	wsw.	9.4	4.2			0	wsw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.44	747.8	29.98	761.4	52.3	11.3	90	ssw.	0.7	0.3			10	w.		0.039	1.0		Prof. F. Brioschi.
Stelvio	21.70	551.1			14.7	— 9.6	97	wsw.			4		10			0	0	covered	Prof. P. F. Denza.
Valdobbia	21.68	550.8			23.2	— 4.9	70	ne.			7		10			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.93	760.1	29.95	760.9	40.1	4.5	68	nw.			2		10 ck		w.	0.201	5.1	cloudy	Hattori.
Awomori	29.85	758.2	29.88	758.9	34.7	1.5	72	w.	22.0	9.8		0	7 ks		w.	0.258	6.5	fair	K. Ogawa.
Hakodate	29.84	758.0	29.85	758.3	39.8	4.3	92	wnw.	24.0	10.7			10		w.	0.055	1.4		
Hamamatsu	29.99	761.7	30.02	762.5	42.1	5.6	73	calm			0	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					42.8	6.0	80	nne.	9.4	4.2		0	0			0	0	clear	
Kanazawa	29.94	760.6	30.05	763.2	47.8	8.8	80	nw.	5.2	2.3			10			0.207	5.3	raining	S. Endo.
Kioto	29.91	759.7	30.09	764.3	36.4	2.4	93	nw.	1.0	0.4		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.90	759.5	30.11	764.8	44.1	6.7	94	sse.	0.6	0.3		0	0			0	0	clear	S. Takehayashi.
Nagasaki	29.94	760.5	29.98	761.5	48.8	9.3	80	n.	15.7	7.0			10 ck			0.270	6.9	overcast	M. Morita.
Niigata	29.87	758.0	29.88	759.0	47.8	8.8	67	nw.	18.5	8.2			9 s;n			0.005	0.1	cloudy	H. Midzushima.
Nobiru	29.90	759.4	29 93	760.3	52.2	11.2	64	w.			4	0	0			0	0	clear	R. Kaneda.
Numazu	30.07	763.8	30.09	764.2	39.9	4.4	93	ene.	3.6	1.6		0	0			0	0	clear	H. Omura.
Osaka					22.0	— 5.6	71	w.	7.2	3.2		0	1			0.101	2.6	clear	
Sapporo	29.86	758.4	29.94	760.4	38.9	3.8	93	nw.	4.0	1.8		0	0			0	0	clear	The Staff.
Tokei Obs'y, Yeddo	30.02	762.4	30.07	763.9	42.3	5.7	84	ene.	3.8	1.7		0	0			0	0	clear	Y. Kuwamnea.
Wakayama																			
MAURITIUS.																			
Mauritius Observatory	29.76	755.9	29.94	760.5	81.6	27.6	70	nw.	10.5	4.7		4 cs;c	4 ks;k	w.	nw.	0.56	14.2	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.69	601.8	29.91	759.8	46.6	8.1	91	sw.	lmp.	lmp.		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.30	618.7	30.29	769.4	39.6	4.2	86	ne.			1	0 c	0			0	0	¼ cloudy	Prof. M. Leal.
Mazatlan	29.72	755.0	29.99	761.7	67.3	19.6	79	ne	0.9	0.4		2 cs	0	s.		0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.1	30.33	770.4	39.4	4.1	84	calm	0	0		2 c	2 ks			0	0	¼ cloudy	The Staff.
Morelia	24.11	612.3	29.99	761.8	41.7	5.4	72	s.			3	2 c	2 k		s.	c	0	¾ cloudy	M. Tena, M. D.
Pabellon, Aguascallientes	23.96	608.5	30.12	765.0	39.4	4.4	82	calm	0	0		0	0			0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.7	30.25	768.3	50.0	10.0	44	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.50	571.6	30.24	768.1	41.0	4.9	73	se.	6.8	3.1		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.07	738.3	29.07	738.3	43.9	6.6		wsw.			5					0.236	6.0		
Groningen	28.91	734.3	28.97	735.7	31.8	— 0.1		ese.			2					0.110	2.8		
Helder	28.92	734.5	28.92	734.5	41.4	5.2		wsw.			3					0.252	6.4		
Hellevoetsluis	29.02	737.2	29.02	737.2	43.7	6.5	79	wsw.			4					0.307	7.8		
Utrecht	28.98	736.1	29.03	737.3	40.8	4.9	95	wsw.			3		8			0.322	8.2	very cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.48	748.7	29 54	750.3	28.0	— 2.2	35	e.	13	6			3			0	0		
Brono	29.95	760.6	29.98	761.6	23.0	— 5.0	45	se.	29	13			1			0	0		
Christiania	29.76	756.0	29.92	760.0	20.8	— 6.2	79	e.	18	8			9			0	0		
Gjæsvær	29.98	761.6	30.01	762.2	16.9	— 8.4		s.			2		7						
Lodingen	30.05	763.2	30.10	764.4	22.8	— 5.1	56	ese.			4		3			0	0		
PORTUGUESE.																			
Angra, Azores	30.28	769.0	30.43	773.0	63.0	17.2	92	wnw.	6.3	2.8			0			0	0		Dr. J. A. Sampaio.
Campo Major	29.06	738.0	30.07	763.7	54.3	12.4	93	sw.	0.9	3.			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.21	767.3	30.30	769.5	66.6	19.2	68	calm	0	0			9			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.75	756.3	30.13	765.4	58.6	14.8	98	wnw.	16.1	7.2			10			0.059	1.5		The Staff.
Ponta Delgada, Azores	30.38	771.6	30.45	773.4	65.1	18.4	86	calm	0	0			3			0.051	1.3		
Saint Paul de Loando	29.66	753.3	29.85	758.3	80.2	26.8	77	w.	2.5	1.1			1	se.		0	0		
Serra da Estrella	25.37?	644.3?	30.26?	768.7?	34.7	1.5	100	nw.	37.4	16.7			10			4.481	113.8	foggy	
RUSSIAN.																			
Akmolinski	29.21	742.0	30.45	773.4	— 6.7	—21.5	78	nnw.	4	2		0	0						Major K. Lasarew.
Archangel	30.43	772 9	30.45	773.4	— 2.6	—19.2	87	sse.	4	2			10			0	0		Capt. Sselliwerstow.
Astrakhan	29.97	761.2	29.89	759.2	39.2	4.0	90	ese.	16	7			10 n;s			0.024	0.6		Capt. Wisganow.
Barnaul	29.80	756.8	30.37	771.4	— 9.2	—22.9	79	sw.	4	2			0			0	0		Meteorological Obs'y.
Bielosersk	29.91	759.6	30.43	773.0	— 0.1	—17.8	94	ene.	2	1			10 s			0	0		
Dorpat	29.85	758.3	30.12	765.1	11.8	—11.2	85	ene.	11	5			10 n			0.031	0.8		Observatory.
Ekaterinburg	29.48	748.8	30.58	776.6	— 4.7	—20.4	70	w.	4	2		0	1 s			0	0	light clouds	Meteorological Obs'y.
Elissawetgrad	29.26	743.2	29.75	755.6	9.5	—12.5	100	nnw.	9	4			10 n			0.004	0.1		
Kasan	30.11	764.8	30.41	772.5	4.1	—15.5	58	ene.	4	2		10 cs	0						Observatory.
Kem	30.33	770.3			0.3	—17.6	89	s.	4	2			10			0	0	heavy cl'ds.	
Kertch	29.63	752.6	29.65	753.1	34.5	1.4	82	n.	4	2		0	5 k			0	0		Lagorio & Sastyres.
Kieff	29.11	739.4	29.86	750.9	11.5	—11.4	85	nw.	7	3		c	8 ks					light clouds	Observatory.
Libau	29.89	759.1	29.91	759.7	15.1	— 9.4	69	e.			1		2			0	0		E. Quaas.
Lugan	29.35	745.5	29.56	750.9	33.1	0.6	82	sse.	13	6			10			0.031	0.8		Meteorological Obs'y.
Nikolaiev																			Capt. Kurdakow.
Pekin, China	30.10	764.5	30.24	768.1	32.2	0.1	65	se.	4	2		0	0						Physical Observatory.
Petrozavodsk	30.12	765.1	30.34	770.7	7.7	—13.5	80	ssw.	7	3		5 cs	0			0.012	0.3		Dr. Bergmann.
Pinsk																			
St. Petersburg	30.26	768.6	30.28	769.0	— 2.0	—19.2	88	sw.	7	3		5 cs	0			0	0		Central Physical Obs'y.
Sevastopol																			
Semipalintinsk	29.70	754.3	30.43	772.8	7.2	—13.8	87	n.	9	4			10			0.039	1.0		Major Lasarew.
Staroi Bykhov	29.47	748.4	29.96	761.0	12.2	—11.0	69	e.	7	3			10			blank	blank		
Tashkend, Laboratory	28.45	722.7	30.05	763.2	48.9	9.4	50	calm	0	0			0			blank	blank		Teich, A. M.
Tiflis	28.44	722 4	29.85	758.1	57.9	14.4	59	se.	7	3		0	5 ks			0.012	0.3		Physical Observatory.
Tomsk	29.95	760.6	30.27	768.8	—15.7	—26.5	81	nw.	4	2		0	2 s						
Vladivostock	30.10	764.6	30.17	766.3	17.1	— 8.3	45	nw.	11	5		0	0			0	0		
Warsaw	29.30	744.2	29.76	755.8	12.0	—11.1	97	se.	11	5		0	7 ks						Astronomical Obs'y.
Wilna	29.48	748.8	29.93	760.3	15.4	— 9.2	81	e.	2	1			10					heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.04	752.9	29.97	761.1	—10.1	—23.4	85	calm	0	0			4						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.05	737.9	44	6.7	92	se.			3		10			0.1	3.	showery	J. Youngclause.
North Unst			29.25	742.9				sse.			8		10			blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.66	753.3	29.76	756.0	60.1	15.6	55	w.	3.8	1.7		0	2			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.22?	767.5?	30.28?	769.0?	55.4	13.0	03	nw.	4.7	2.1		3	4	nw.		0.098	2.5	almost cov.	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.91	683.5	29.93	760.2	50.0	10.0	62	w.	14.1	6.3			3			0.035	0.9	light clouds	Domingo Martin.
Madrid, Royal Obs'y	27.72	704.2	29.99	761.7	48.2	9.0	77	w.	14.5	6.5			10			0	0	covered	The Staff.
Murcia, Met. Obs'y	29.81	757.1	29.96	761.0	62.4	16.9	75	sw.	2.5	1.1		0	2			0	0	almost clear	Olayo Diaz, Director.
Oviedo	29.09	738.8	29.96	761.0	52.7	11.5	88	e.	21.0	9.4		9 k	9 n	e.	w.	0.268	6.8	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.07	738.3	29.98	761.4	49.1	9.5	88	w.	3.8	1.7			9			0.413	10.5	misty	R. Gil Villanueva, Dir.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill	Weather.	Observers.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.88	759.0	29.94	760.4	79.2	26.2	88	e.	2.2	1.0	.....	0	3 k	.....	.....	0.157	4.0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.08	763.9	30.17	766.4	56.8	13.8	73	ene.	4.7	2.1	.....	0	1	.....	nw.	0.018	0.5	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.98	761.4	30.07	763.7	74.1	23.4	89	calm	0	0	.....	3 k	6 k	e.	e.	0	0	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.82	757.3	29.95	760.7	78.0	25.6	90	e.	c.9	0.4	.....	0	3 k	.....	ese.	0.05	1.3	fair	José L. Yrastorza.
SWEDISH.																			
Hapsranda	30.28	769.2	30.32	770.2	8.6	—13.0	100	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.20	767.1	30.25	768.4	21.2	— 6.0	95	ssw.	.....	.....	2	.....	10	.....	.....	0.051	1.3	.....	
Hernosand	30.14	765.6	30.19	766.9	25.2	— 3.8	73	calm	.....	.....	0	.....	10	.....	.....	0.091	2.3	.....	
Stockholm	29.76	756.0	29.94	760.5	21.9	— 5.6	75	ese.	.....	.....	7	.....	10	.....	.....	0.047	1.2	snowing	
Wisby	29.81	757.2	29.87	758.7	19.8	— 6.8	84	e.	.....	.....	4	.....	5	.....	.....	0.055	1.4	snowing	
Sub-series.																			
Upsala	29.93	760.3	30.02	762.5	21.4	— 5.9	87	ene.	9.4	4.2	.....	.....	9	.....	ese.	0.055	1.4	.....	S. G. Fineman.
SWISS.																			
Geneva	28.10	713.7	29.54	750.4	48.6	9.2	77	ssw.	.....	.....	7	.....	10	.....	.....	0.224	5.7	raining	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.02	762.4	42.3	5.7	61	ne.	4	2.0	.....	.....	6	.....	wsw.	.....	.....	.....	The Observatory.
Valona	.....	.....	30.03	762.7	51.4	10.8	.....	s.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.93	760.2	60.3	15.7	88	se.	.....	.....	2	.....	10 n	.....	sw.	0.437	*11.1	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.32	770.1	30.41	772.4	12	—11.1	80	nw.	1	0.4	.....	4 c	0	nw.	.....	0.02	0.5	fair	J. O. Barnes.
Alpena, Michigan	28.96	735.6	29.67	753.6	26	— 3.3	88	s.	26	11.6	.....	.....	10 n	.....	.....	0.18	4.6	light snow	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.13	638.3	30.21	767.3	36	2.2	66	ne	2	0.9	.....	0	0	.....	.....	0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	26.97	685.0	30.00	762.0	39	3.9	50	sw.	16	7.2	.....	.....	10 s	.....	sw.	0	0	cloudy	B. O. Lenoir.
Atlanta, Georgia	29.08	738.6	30.31	769.9	36.0	2.2	61	e.	8	3.6	.....	4 cs	0	w.	.....	0	0	fair	H. C. Smith.
Atlantic City, New Jersey	30.40	772.1	30.41	772.4	19	— 7.2	70	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.18	766.6	30.38	771.6	32	0.0	88	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	John Healy.
Baltimore, Maryland	30.34	770.6	30.39	771.9	26	— 3.3	77	nw.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog	Geo W Felger.
Barnegat, New Jersey	30.39	771.9	30.41	772.4	18.0	— 7.8	67	n.	10	4.5	.....	1 k	0	.....	.....	0	0	clear	G. A. Hill.
Bennett, Fort, Dakota	28.27	718.0	30.03	762.7	34	1.1	71	calm	0	0	.....	3 c	3 s	nw.	.....	0	0	fair	A. Pritchard.
Benton, Fort, Montana	27.02	686.3	30.02	762.5	43	6.1	60	sw.	16	7.2	.....	.....	10 s	.....	sw.	0	0	cloudy	S. Wheaton.
Bismarck, Dakota	27.96	710.2	29.97	761.2	28	— 2.2	88	nw.	6	2.7	.....	0	0	.....	.....	0.06	1.5	clear	Cyrus Cramer.
Block Island, Rhode Island	30.35	770.9	30.38	771.6	14	—10.0	64	n.	11	4.9	.....	0	0	.....	.....	0	0	clear	J. T. Elker.
Boise City, Idaho	27.33	694.2	30.31	769.9	33	0.6	88	w.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	B. E. Light.
Boston, Massachusetts	30.19	766.8	30.35	770.9	8.0	—13.3	55	w.	8	3.6	.....	0	fg.	.....	.....	inap.	inap.	clear	O. B. Cole.
Brownsville, Texas	30.02	762.5	30.07	763.8	60.2	15.7	89	se.	3	1.3	.....	0	3 s	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.29	744.0	30.09	764.3	23.6	— 4.7	69	se.	10	4.5	.....	.....	10 s	.....	se.	inap.	inap.	cloudy	W. Finn.
Buford, Fort, Dakota	27.81	706.4	30.05	763.3	31	— 0.6	88	sw.	4	1.8	.....	.....	10 s	.....	nw.	0	0	cloudy	F. A. Mellen.
Burlington, Vermont	30.03	762.7	30.34	770.6	6.3	—14.3	75	se.	3	1.3	.....	7 ck	0	w.	.....	0.01	0.3	fair	G. C. Schaeffer.
Cairo, Illinois	29.65	753.1	30.07	763.8	42.8	6.0	54	sw.	10	4.5	.....	.....	10 s	.....	sw.	0	0	cloudy	W. H. Ray.
Cape Henry, Virginia	30.39	771.9	30.41	772.4	33	0.6	60	ne.	11	4.9	.....	0	0	.....	.....	0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.38	771.6	30.41	772.4	21.0	— 6.1	70	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	29.51	749.5	30.19	766.8	58	14.4	31	n.	36	16.1	.....	0	0	.....	.....	0	0	clear	J. J. McLean.
Cedar Keys, Florida	30.27	768.8	30.29	769.4	45	7.2	76	ne.	10	4.5	.....	0	0	.....	.....	0	0	clear	F. W. Mixer.
Champaign, Illinois	28.99	736.3	29.86	758.4	37.0	2.8	51	sw.	21	9.4	.....	.....	10 s	.....	sw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.29	769.4	30.35	770.9	39	3.9	73	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.45	748.0	30.34	770.6	28.0	— 2.2	77	ne.	2	0.9	.....	0	fg.	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.42	747.3	30.28	769.1	29.0	— 1.7	88	calm	0	0	.....	7 cs	fg.	.....	.....	0	0	fair	B. L. Goulding.
Cheyenne, Wyoming	23.94	608.1	30.22	767.6	33.2	0.7	50	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	28.94	735.1	29.70	754.4	34.1	1.2	66	sw.	15	6.7	.....	0	0	.....	.....	0	0	clear	J. Mitchell.
Chincoteague, Virginia	30.38	771.6	30.40	772.1	26	— 3.3	64	ne.	4	1.8	.....	3 c	0	.....	.....	0	0	clear	C. F. Dickens.
Cincinnati, Ohio	29.32	744.7	30.02	762.5	36	2.2	79	sw.	7	3.1	.....	.....	10 s	.....	w.	0	0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.18	741.2	29.96	761.0	27.2	— 2.7	75	se.	22	9.8	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	J. B. Newlin.
Coleman City, Texas	28.19	716.0	30.09	764.3	41	5.0	92	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.09	738.9	30.00	762.0	30	— 1.1	64	s.	10	4.5	.....	.....	10 s	.....	sw.	0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.05	712.5	30.07	763.8	47.0	8.3	93	s.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.72	678.7	30.12	765.0	38	3.3	65	sw.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	W. B. Lamar.
Davenport, Iowa	29.05	737.9	29.76	755.9	37	2.8	61	sw.	8	3.6	.....	hz.	7 ks	.....	sw.	0	0	fair	R. R. Martin.
Davis, Fort, Texas	25.19	639.8	30.13	765.3	38	3.3	59	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.36	720 3	30.18	766.6	44.8	7.1	81	sw.	16	7.2	.....	.....	10 n	.....	.....	0.05	1.3	heavy rain	D. Moore.
Deadwood, Dakota	25.22	640.6	30.21	767.3	37	2.8	58	e.	4	1.8	.....	hz.	0	.....	.....	0	0	clear	F. Wilson.
Delaware Breakwater, Del.	30.39	771.9	30.41	772.4	25	— 3.9	88	ne.	8	3.6	.....	0	hz.	.....	.....	0	0	clear	T. S. Townsend.
Denison, Texas	29.21	741.9	30.06	763.5	47.7	8.7	71	s.	8	3.6	.....	.....	9 ks	.....	.....	0	0	cloudy	J. W. Byram.
Denver, Colorado	24.63	625.6	30.15	765.8	37.0	2.8	49	s	2	0.9	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	28.87	733 3	29.85	758.2	42	5.6	50	nw.	12	5.4	.....	10 cs	0	nw.	.....	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.08	738.6	29.84	757.9	38.0	3.3	82	se.	24	10.7	.....	.....	10 k	.....	w.	0.11	2.8	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.37	695.2	30.17	766.3	27	— 2.8	67	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	28.90	734.0	29.67	753.6	35	1.7	69	sw.	5	2.2	.....	0	8 s	.....	nw.	0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	28.73	729.7	29.54	750.3	21	— 6.1	84	nw.	27	12.1	.....	.....	10 s	.....	nw.	0.10	2.5	cloudy	N. B. Conger.
Eagle Pass, Texas	29.28	743.7	30.12	765.0	46.2	7.9	93	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.36	644.1	30.28	769.1	32	0.0	81	sw.	28	12.5	.....	.....	10 s	.....	s.	0	0	cloudy	J. M. Clifford.
Eastport, Maine	30.12	765.0	30.19	766.8	5.0	—15.0	76	nw.	14	6.3	.....	0	1 s	.....	nw.	0.06	1.5	clear	D. C. Murphy.
Elliott, Fort, Texas	27.19	690.6	30.15	765.8	35	1.7	72	n.	8	3.0	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.30	668.0	30.16	765.1	35.0	1.7	89	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.18	741.2	29.96	761.0	24	— 4.4	88	s.	30	13.4	.....	.....	10 s	.....	s.	0.02	0.5	cloudy	Peter Wood.
Escanaba, Michigan	28.67	728.2	29.39	746.5	32.0	0.0	100	s.	6	2.7	.....	.....	10 n	.....	s.	0.12	3.0	light snow	George Heathcote.
Fredericksburg, Texas	28.30	718.8	30.12	765.0	51	10.6	86	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	30.09	764.3	30.14	765.5	59	15.0	87	se.	8	3.6	.....	2 c	0	.....	.....	0	0	clear	E. O'C. Macinerney.
Grand Haven, Michigan	28.90	734.0	29.60	751.8	39.0	3.9	73	s.	28	12.5	.....	.....	10 ks	.....	s.	0.04	1.0	threatening	J. E. Mueller.
Grant, Fort, Arizona	25.27	641.8	30.15	765.8	39	3.9	36	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	Robert O. Lord.
Hatteras, North Carolina	30.37	771.4	30.39	771.9	37	2.8	82	ne.	8	3.6	.....	hz.	3 k	.....	e.	0	0	clear	R. M. Crawford.
Helena, Montana	25.88	652.3	30.06	763.5	41	5.0	43	sw.	25	11.2	.....	.....	10 s	.....	calm	0	0	cloudy	N. C. Smith.
Henrietta, Texas	28.98	736.1	30.06	763.5	41	5.0	82	s.	4	1.8	.....	0	2 ks	.....	s.	0	0	clear	J. P. Sherry.
Huron, Dakota	28.45	722.6	29.99	761.7	29.2	— 1.6	67	n.	9	4.0	.....	.....	10 s	.....	.....	0	0	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.04	737.6	29.89	759.2	37	2.8	82	sw.	8	3.6	.....	5 ck	0	sw.	.....	0	0	fair	O. Schutze.
Indianola, Texas	30.07	763.8	30.10	764.5	57.8	14.3	89	se.	4	1.8	.....	8 k	0	s.	.....	0	0	cloudy	I. A. Reed.
Jacksboro, Texas	28.82	732.0	30.06	763.5	44	0.7	45	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.26	768.6	30.31	769.9	40	4.4	82	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.32	693.9	30.02	762.5	34	1.1	66	sw.	10	4.5	.....	4 c	0	nw.	.....	inap.	inap.	fair	A. Schneider.
Keokuk, Iowa	29.15	740.4	29.86	758.4	36.5	2.5	76	sw.	4	1.8	.....	.....	10 s	.....	sw.	0	0	cloudy	F. Z. Goswinch.
Key West, Florida	30.13	765.3	30.15	765.8	62.0	16.7	73	ne.	11	4.9	.....	0	0	.....	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.39	771.9	30.41	772.4	37	2.8	61	e.	4	1.8	.....	hz.	1 k	.....	se.	0	0	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	29.17	740.9	30.25	768 3	26.8	— 2.9	88	ne.	2	0.9	.....	4 cs	sk.	.....	.....	0	0	fair	J. A. Cody.
La Grosse, Wisconsin	28.77	730.7	29.62	752.3	27	— 2.8	77	w.	16	7.2	.....	0	8 s	.....	w.	0.06	1.5	clearing	S. C. Emery.
Leavenworth, Kansas	29.06	738.1	30.02	762.5	35	1.7	69	calm	0	0	.....	3 cs	3 k	.....	nw.	0	0	fair	A. W. Browne.
Lewiston, Idaho	29.29	744.0	30.17	766.3	41.5	5.3	94	w.	1	0.4	.....	.....	10 n	.....	.....	0.21	5.3	heavy rain	W. Bell.
Little Rock, Arkansas	29.77	756.1	30.10	764.5	42	5.6	74	calm	0	0	.....	0	8 ks	.....	w	0	0	cloudy	W. U. Simons.
Los Angeles, California	29.66	753.4	30.06	763.5	62	10.7	32	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.41	747.0	30.01	762.2	42	5.0	57	s.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	L. M. Dey.
Lynchburg, Virginia	29.66	753.4	30.39	771.9	22.8	— 5.1	73	calm	0	0	.....	3 c	0	.....	.....	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	28.82	732.0	29.52	749.8	27.0	— 2.8	77	s.	28	12.5	.....	.....	10 s	.....	s.	0.10	2.5	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.36	771.1	30.37	771 4	34	1.1	72	ne.	9	4.0	.....	0	0	.....	.....	0	0	clear	C. A. Shaw.
Madison, Wisconsin	28.50	723.9	29.60	751.8	30	— 1.1	78	w.	30	13.4	.....	.....	10 s	.....	w.	0.15	3.8	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25 33	643.4	29.87	758.7	40	4.4	50	nw.	32	14.3	.....	10 k	0	nw.	.....	0	0	cloudy	F. Burke.

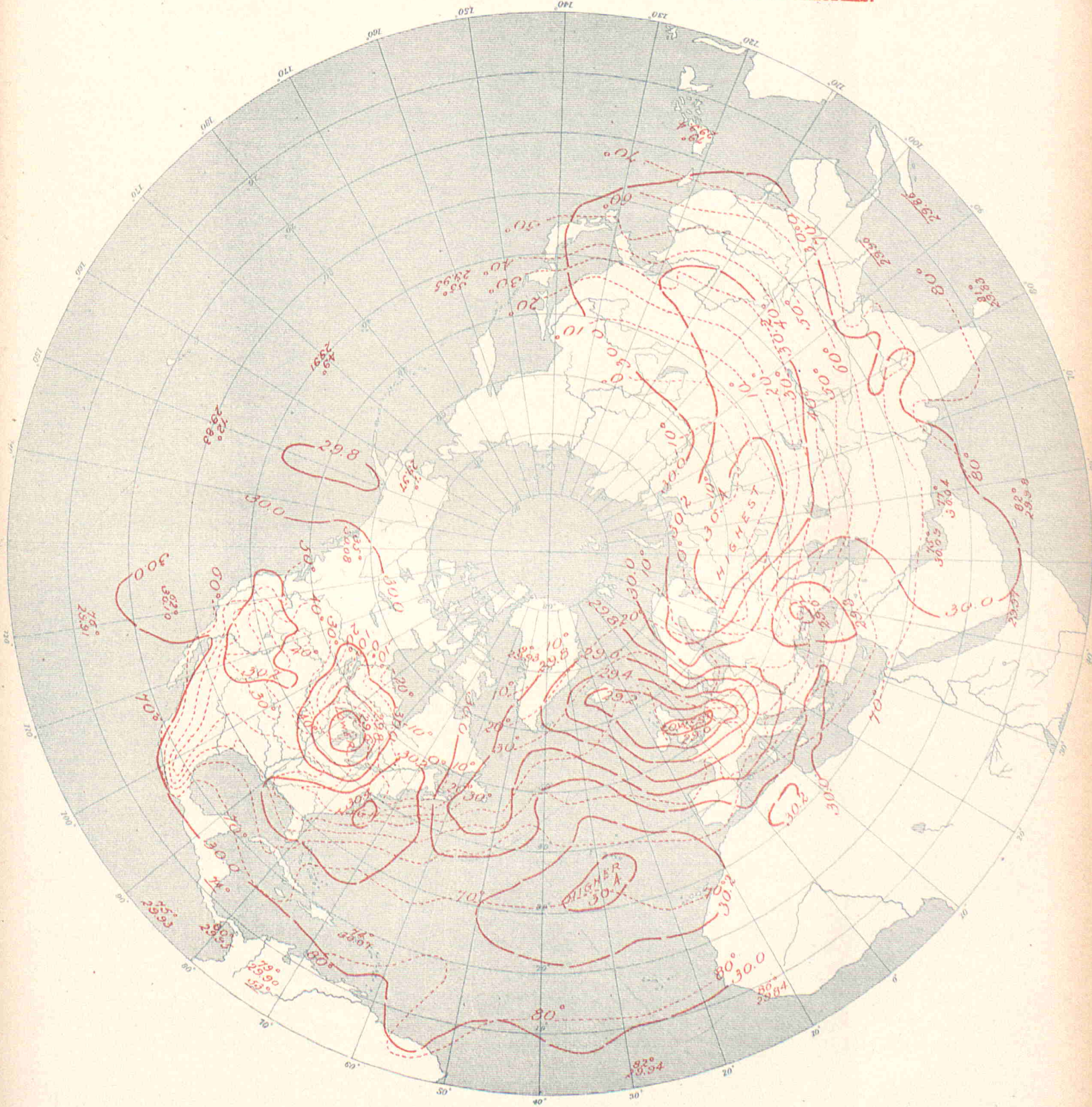
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.			o-to	o-to	o-to	From.	From.	Inch.	Mill.		
UNITED STATES.—(Cont'd.																			
McKavett, Fort, Texas	27.74	704.6	30.12	765.0	47	8.3	77	s.	5	2.2		0	0			0	0	clear	J. E. Thatcher.
Marquette, Michigan	28.62	726.9	29.40	746.7	30	— 1.1	88	e.	20	8.9			10 n			0.16	4.1	light snow	J. Gilligan.
Memphis, Tennessee	29.76	755.9	30.12	765.0	41	5.0	73	calm	0	0			10 s		se.	0	0	cloudy	D. T. Flannery
Milwaukee, Wisconsin	28.74	730.0	29.55	750.6	35	1.7	69	sw.	20	8.9		0	7 ks		w.	0.20	5.1	fair	W. Line
Missoula, Fort, Montana	26.78	680.2	30.24	768.1	34	1.1	89	nw.	1	0.4			10 n			0.07	1.8	light rain	J. H. Young.
Mobile, Alabama	30.22	767.6	30.26	768.6	37	2.8	89	n.	2	0.9		1 c	0	sw.		0	0	clear	C. A. Read.
Montgomery, Alabama	30.02	762.5	30.26	768.6	30.8	— 0.7	96	calm	0	0		0	fg.			0	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	28 75	730.2	29.86	758.4	3	—16.1	72	nw.	22	9.8		0	0			0.21	5.3	clear	H. Bessant.
Morgantown, W. Virginia	29.08	738 6	30.15	765.8	24.0	— 4.4	73	e.	1	0.4		0	8 s			0	0	cloudy	J. C. Sprigg, jr.
Mt. Washington, N. H	23.58	598.9	30.21	767.3	4.0	—15.6	57	nw.	20	8.9		0	0			0.02	0.5	clear	B. S. Pague.
Nashville, Tennessee	29.53	750.0	30.14	765.5	38.0	3.3	62	se.	3	1.3		10 cs	0			0	0	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.25	768.3	30.37	771.4	6	—14.4	87	n.	3	1.3		0	0			0.02	0.5	clear	J. H. Sherman.
New London, Connecticut	30.35	770.9	30.40	772.1	11	—11.7	61	n.	4	1.8		0	0			0.03	0.8	clear	J. G. Lynch.
New Orleans, Louisiana	30.15	765.8	30.21	767.3	49.5	9.7	86	se.	4	1.8			10 s		se.	0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.31	769.9	30.36	771.1	13.8	—10.1	71	nw.	6	2.7		1 c	0			inap.	inap.	clear	W. McGillivray.
New York, New York	30.20	767.1	30.39	771.9	16	— 8.9	83	w.	2	0.9		0	8s:fg			0	0	fair	J. B. Merrill.
Norfolk, Virginia	30.37	771.4	30.40	772.1	32	0.0	78	calm	0	0		0	sk.			0	0	clear	Wm. Davis.
North Platte, Nebraska	27.01	686.0	30.17	766.3	37.6	3.1	70	calm	0	0			10 s			0	0	cloudy	E. F. Brady.
Olympia, Washington T'y	30.09	764.3	30.13	765.3	49.0	9.4	86	s.	12	5.4		5 cs	4 n	s.	s.	0.40	10.2	light rain	J. Dascomb.
Omaha, Nebraska	28.69	728.7	29.98	761.5	43.1	6.2	36	w.	14	6.3			10 s			0	0	cloudy	A. Pollak.
Oswego, New York	29.89	759.2	30.24	768.1	14.0	—10.0	60	se.	11	4.9		hz.	0			0.03	0.8	dense haze	J. G. Linsley.
Palestine, Texas	29.56	750.8	30.14	765.5	48.5	9.2	89	s.	5	2.2		5 ck	0	sw.		0	0	fair	L. M. Pindell.
Pensacola, Florida	30.23	767.8	30.26	768.6	41.8	5.4	63	ne.	5	2.2		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	30.31	769.9	30.42	772.4	23	— 5.0	73	nw.	1	0.4		0	fg.			0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.65	448.3	30.31	769.9	15	— 9.4	50	nw.	64	28.6		0	0			0	0	clear	H. Hall.
Pioche, Nevada	24.19	614.4	30.36	771.1	38	3.3	47	nw.	5	2.2		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.26	743.2	30.12	765.0	26.0	— 3.3	88	e.	5	2.2			10 s		e.	0	0	cloudy	W. A. Reid.
Poplar River, Montana	27.65	702.3	30.01	762.2				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.21	767.3	30.22	767.6	55.1	12.8	86	ne.	5	2.2		0	0			0	0	clear	H. B. Boyer.
Port Huron, Michigan	29.05	737.9	29.78	756.4	30.2	— 1.0	88	s.	20	8.9			10 n		s.	0.07	1.8	light snow	W. O. Bailey.
Portland, Maine	30.28	769.1	30.33	770.4	9.0	—12.8	76	nw.	3	1.3		0	hz.			inap.	inap.	clear	W. W. Elchelberger.
Portland, Oregon	30.14	765.5	30.20	767.1	50.2	10.1	93	s.	12	5.4			10 n		s.	0.29	7.4	light rain	M. L. Hearne.
Portsmouth, N. C.					39	3.9	82	ne.			2	hz.	hz.			0	0	light haze	F. S. Coburn.
Prescott, Arizona	24.84	630.9	30.21	767.3	29	— 1.7	84	ne.	1	0.4		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.28	769.1	30.31	769.9	18.5	— 7.5	84	w.	4	1.8		0	8 s		n.	0.42	10.7	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.19	766.8	30.20	767.1	52.5	11.4	80	ne.	14	6.3		0	0			0	0	clear	W. J. Evans.
Red Bluff, California	29.82	757 4	30.19	766.8	51	10.6	47	ne.	4	1.8		0	0			0	0	clear	J. R. Williams.
Rochester, New York	29.46	748.3	30.18	766.6	19	— 7.2	84	se.	10	4.5			9 s			0.01	0.3	cloudy	E. W. McGann
Roseburg, Oregon	29.83	757.7	30.40	772.1	44	6.7	93	sw.	2	0.9			10 s		sw.	0	0	cloudy	J. J. Nanry.
Sacramento, California	30.09	764.3	30.17	766.3	47.0	8.3	93	se.	4	1.8		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.34	745.2	29.99	761.7	40.9	4.9	67	sw.	12	5.4		hz.	8 s		sw.	0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.94	760.5	29.97	761 2	7	—13.9	100	e.	23	10.3		0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	28.69	728.7	29.65	753.1	19.0	— 7.2	84	w.	15	6.7			10 s		nw.	0.07	1.8	cloudy	P. F. Lyons.
St. Vincent, Minnesota	28.87	733.3	29.86	758.4	11	—11.7	89	nw.	13	5.8		5 c	0			0.26	6.6	fair	C. B Dilley.
Salt Lake City, Utah	25.81	655.6	30.35	770.9	29	— 1.7	59	se.	1	0.4		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.38	746.2	30.10	764.5	48.5	9.2	86	calm	0	0		0	0			0	0	clear	T. J. Kenan.
San Diego, California	29.93	760.2	30.00	762.0	56.6	13.7	68	ne.	2	0.9		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.14	740.1	29.87	758.7	35	1.7	79	s.	16	7.2			10 s		s.	0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.37	771.4	30.40	772.1	18.0	— 7.8	83	n.	4	1.8		3 k	0			0	0	clear	B. A. Blundon.
San Francisco, California	30.08	764.0	30.15	765.8	50.5	10.3	90	nw.	4	1.8		0	fg.			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.20	589.3	30.19	766.8	32	0.0	65	ne.	11	4.9		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.25	768.3	30.35	770.9	40	4.4	70	n.	3	1.3		3 c	0	w.		0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.22	666.0	30.05	763.3	43	6.1	39	sw.	16	7.2			10 s			0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	29.89	759.2	30.14	765.5	42	5.6	92	s.	3	1.3		0	5 s		s.	0	0	fair	E. N. Meekins.
Sill, Fort, Indian Territory	28.72	729.5	30.05	763.3	37.5	3.1	87	n.	4	1.8		hz.	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.29	617.0	30.13	765.3	32.5	0.3	70	n.	3	1.3		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	30.01	762.2	30.08	764.0	34.0	1.4	84	ne.	4	1.8		0	0			0.02	0.5	clear	F. W. Fickett.
Smith, Fort, Arkansas	29.53	750.0	30.03	762.7	45.0	7.2	60	e.	5	2.2			10 s			0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.33	770.4	30.37	771.4	32	0.0	78	n.	6	2.7		0	1 s			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.03	711.9	30.16	766.1	38	3.3	100	s.	8	3.6			10 n			0.35	8.9	light rain	H. Clifford.
Springfield, Illinois	29.16	740.7	29.89	759.2	39	3.9	73	sw.			3	3 c	3 s	w.	w.	0	0	fair	T. B. Jennings.
Springfield, Massachusetts	30.25	768.3	30.39	771.9	7	—13.9	87	n.			2	0	fg.			0.01	0.3	clear	Charles Mayr.
Springfield, Mo	28.55	725.2	30.08	764.0	39	3.9	82	sw.	2	0.9		6 cs	0	w.		0	0	fair	J. B. Marbury.
Starkville, Miss	29.70	754.4	30.20	767.1	38	3.3	73	s.	13	5.8		3 c	0			0	0	clear	C. Dill.
Stevenson, Fort, Dakota	27.92	709.2	29.98	761.5	25	— 3.9	88	nw.	4	1.8		0	9 ks		nw.	0.23	5.8	cloudy	W. Burrows.
Stockton, Fort, Texas	26.97	685.0	30.11	764.8	42	5.6	82	sw.	6	2.7		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	30.29	769.4	30.35	770.9	12.8	—10.7	61	nw.	14	6.3		2 k	0	w.		inap.	inap.	clear	G. Liebmann.
Thomas, Camp, Arizona	27 33	694.2	30.15	765.8	31.5	— 0.3	83	calm			0	3 cs	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.10	739.1	29.84	757.9	33	0.6	68	s.	14	6.3		5 cs	4 s	sw.	sw.	0	0	threatening	A. Buell.
Tucson, Arizona	27 60	701.0	30.10	764.5	43	6.1	68	se.	2	0.9		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.76	755.9	30.15	765.8	50	10.0	72	w.	12	5.4			10 s		w.	0	0	cloudy	J. Daly.
Verde, Fort, Arizona					32.4	0.2	81	nw.			1	0	0			0	0	clear	D. Brooke.
Vicksburg, Mississippi	29.93	760.2	30.20	767 1	40.5	4.7	82	se.	6	2.7		0	0			0	0	clear	James Kenealy.
Visalia, California	29.77	756.1	30.15	765.8	41.2	5.1	88	s.	1	0.4		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.36	618.7	30.13	765.3	22.0	— 5.6	87	w.	7	3.1		0	1 k			0	0	clear	T. M. Ambler.
Washington, D. C	30.26	768.6	30.38	771.6	21.3	— 5.9	80	calm	0	0		2 c	0	nw.		0	0	clear	B. M. Purssell.
West Las Animas, Colorado	25.98	659.9	30.14	765.5	19	— 7.2	44	w.	5	2.2		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.68	753.9	30.31	769.9	19.8	— 6.8	84	e.	4	1.8			10 s			0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.32	770.1	30.38	771.6	33	0.6	78	ne.	5	2.2		0	0			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.86	656.8	30.38	771.6	25	— 3.9	82	sw.	7	3.1		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.53	724 6	29.96	761.0	41	5.0	73	nw.	16	7.2			10 s			0	0	cloudy	J. H. Atfield.
Yuma, Arizona	29.84	757.9	30.00	762.0	56.0	13.3	34	n.	6	2.7		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.99	558.5			52.5	11.4	79	e.	1	0.4		1 ck	0	w.		0.19	4.8	clear	Joaquim Gomez.
Havana, Cuba, W. I	30.03	762.7	30.09	764.3	58.8	14.9	91	e.	2	0.9		0	1 ks		e.	0	0	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I	30.01	762.2	30.02	762.5	70	21.1	88	calm	0	0		0	3 s			0	0	fair	Robert Johnston.
Paramaribo, S. A	30.02	762.5	30.02	762.5	77	25.0	91	e			2	3 c	0			0.100	2.5	clear	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.90	759.4	79	26.1	95	calm			0	0	8 n		calm	0	0	light rain	Francisco J. Cisneros.
Rivas, Nicaragua, C. A					74	23.3	92	ne.			2	0	1 ks		ne.	0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.69	754.1	29.75	755.6	35	1.7	89	ne.			3		10 n			0.54	13.7	light rain	W. J. Fisher.
St. Thomas, W. I	29.95	760.7	30.07	763.8	78	25.6	74	e.				1 c	2 k	e.	e.	0	0	fine	Aug. Walloe.
York Factory H A	30.04	763.0	30.12	765.0	—25.0	—31.7		sw.	8	3.6		1 c	0	sw.		0	0	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.21	767.3	67	19.4	81	e.			4		5	s.				1	se.	d. clouds.
H. M. S. Audacious, N. 5° 28′, E. 81° 41′	29.83	757.7	81	27.2	95	ssw.			1		1	sw.				3	n.	blue sky.
H. M. S. Beacon, Lake Timsah, Egypt			72	22.2	58	wsw.			1		1	wsw.				1	wsw.	blue sky.
H. M. S. Boadaica, Simon's Bay, Cape Colony	30.15	765.8				ese.			2		4							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.07	763.8	77	25.0	69	calm			0		0							blue sky.
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.04	763.0	55	12.8	87	se.			1		3							d clouds.
H. M. S. Comus, Esquimalt, Vancouver Island	30.11	764.8	47	8.3	92	calm			0		10							raining.
H. M. S. Curacoa, N. 35° 10′, E. 139° 40′	29.81	757.2	55.5	13.1	?	n.			2–4		0							squally.
H. M. S. Diamond, Sydney, N. S. W*†	29.88	758.9	66	18.9	59	ne.			1		2							d. clouds.
H. M. Dock Yard, Bermuda, W. I.	30.16	766.1	63.5	17.5	67	nnw.			1–2		8	nnw.						d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.79	756.7	78.5	25.8	95	wsw.			1–2		5	wsw.						d. clouds.
H. M. S. Flamingo, N. 15° 32′ W. 60° 27′	30.00	762.0	83	28.3	95	ene.			2–3		2	ne.				3	ene.	d clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.98	761.5	61	16.1	88	calm			0		10							misty.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.00	762.0	69	20.6	95	calm			0		5	ne.						d. clouds.
H. M. S. Kingfisher, N. 2° 52′, W. 87° 36′	29.93	760.2	75	23.9		s.			3–4		5	s.				4	s.	d. clouds.
H. M. S. Lark, S. 33° 40′, E. 151° 40′	30.12	765 0	69.3	20.7	73	ne.			4		5					2	ne	d clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20.	29.97	761.2	63	17.2		calm			0									d. clouds.
H. M. S. Magpie, N. 34° 56′, E. 127° 52′	30.08	764.0	51.5	10.8	53	e.			1		0							blue sky.
S. S. Monarch, N. 40° 29′, E. 14° 22′			60	15.6		sw.			2–3		4	sse.				3	sse.	showery
H. M. S. Northampton, N. 19° 00′ W. 61° 23′	30.04	763.0	78	25.6	82	ene.			3		4	ene.				1	ne.	d. clouds.
H. M. S. Rocket, Callao, Peru	29.97	761.2	65	18.3	?	calm			0		2					2–3	sw.	d. clouds.
H. M. S. Swiftsure, Ancon Bay, Peru	30.04	763.0	64	17.8	94	calm			0		3							d. clouds.
H. M. S. Sylvia, Peckett Harbor, Patagonia	29.83	757 7	55	12.8	66	w.			2		5	calm						d. clouds.
H. M. S. Tourmaline, Aden, Arabia	29.97	761.2				s.			2		0							blue sky.
H. M. S. Woodlark, Off Al-bida, Arabia	29.99	761.7	74.5	23.6	56	nw.			1–2		0							blue sky.
H. M. S. Zephyr, Chee-foo, China	30.14	765.5	43.5	6.4	75	ne.			3		2	n.				2	ne.	d. clouds.
Portuguese Naval.																		
Tamega, Macao, China	30.06	763.4	71.6	22.0	78	n.			2		0							blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.17	766.3	47	8.3	77	ne.	7	3.1			2		ne.	0	0			fair.
Navy Yard, Portsmouth, N. H.	30.28	769.1	10	—12.2	?	nw.	7	3.1			0			0	0			clear.
Naval Hospital, Yokohama, Japan*	29.84	757.9	44.5	6.9	80	calm			0		0			0	0			clear.
Adams, Sitka, Alaska *†	30.18	766.6	34	1.1	90	ene.			1		2		ene.					fair.
Alaska, N. 30° 10′, W. 152° 35′	29.83	757.7	72	22.2	85	sse.			6		5		se.	0.05	1.3	mod.	se.	fair.
Alliance, Hampton Roads, Va	30.39	771.9	36	2.2	100	ene.			2		2			0	0			clear.
Ashuelot, Nagasaki, Japan	30.10	764.5	50	10.0	93	calm			0		1		calm					clear.
Brooklyn, Keel Point, Patagonia	29.86	758.4	62	16.7	77	sw.			4		5		s.	0	0	sm'h		fair.
Colorado, New York, N. Y.	30.42	772.7	14	—10.0	100	nw.	1	0.4			10		calm	0	0			foggy.
Enterprise, Norfolk, Va.	30.42	772.7	32	0.0	79	n.			1		0							clear.
Essex, Callao, Peru	29.98	761.5	64	17.8	89	calm			0		2		n.			sm'h	nw.	clear.
Franklin, Norfolk, Va.	30.36	771.6	35	1.7	?	nnw.	4	1.8			0			0	0			clear.
Galena, Montevideo, Uruguay	30.08	764.0	67	19.4	79	ene.			3		5		ne.			mod.	ene.	fair.
Hartford, Sandy Point, Patagonia*	29.76	755.9	55	12.8	68	w.			3–4		8		w.	0	0	sm'h		fair.
Independence, Mare Island, Cal.	30.19	766.8	45	7.2	100	calm			0		0			0	0			clear.
Iroquois, Callao, Peru	29.98	761.5	65	18.3	83	calm			0		2							fair.
Jamestown, Boston, Mass.	30.32	770.1	9	—12.8	100	w.			2		2							hazy.
Juniata, N. 36° 05′, W. 58° 05′*	30.05	763.3	67	19.4	84	w.			4		8		w.	0	0	sm'h	w.	cloudy.
Kearsarge, Norfolk, Va	30.40	772.1	40	4.4	82	calm			0		0							clear.
Lackawanna, S. 14° 42′, W. 76° 22′ *	29.94	760.5	68	20.0	84	s.			2		5		se			sm'h	se.	fair.
Lancaster, Naples, Italy*	29.84	757.9	60	15.6	94	ssw.			3		10		calm			sm'h		heavy rain.
Michigan, Erie, Pennsylvania	29.94	760.5	40	4.4	82	s.			6		10		ne.					cloudy.
Minnesota, New York, N. Y.	30.43	772.9	16	— 8.9	100	nnw.	2	0.9			2							clear.
Monocacy, Kobe, Japan	30.02	762.5	52	11.1	86	nnw.			1		0							clear.
New Hampshire, Newport, R. I.	30.41	772.4	16	— 8.9	100	nnw.			3		0					sm'h		clear.
Nipsic, Lisbon, Portugal*	30.07	763.8	59	15.0	94	w.			3		10					sm'h		rainy.
Onward, Callao, Peru†	30.09	764.3	64	17.8	94	calm			0		2					long	w.	clear.
Palos, Tientsin, China*	30.19	766.8	30	— 1.1	78	e.			1		0							clear.
Pensacola, Callao, Peru*	29.92	760.0	64	17.8	89	s.	3	1.3			5			0	0	sm'h		fair.
Powhatan, Boston, Mass	30.32	770.1	21	— 6.1	85	ssw.			1		2							fair.
Quinnebaug, Villafranche, France*	29.65	753.1	54	12.2	73	calm			0		10		wsw.			sm'h	ssw.	rainy.
Ranger, N. 15° 57′, W. 95° 33′	29.99	761.7	76	24.4	72	ne.			1		0					sm'h		clear.
Richmond, Yokohama, Japan*	29.95	760.7	48	8.9	85	n.			1		2			0	0			clear.
Saratoga, Newport, R. I.	30.24	768.1	11	—11.7	100	n.			5		0			0	0	sm'h		fair.?
St. Louis, League Island, Pa.	30.64	778.2	19	— 7.2	100	nw.			3		0			0	0			clear.
Swatara, N. 36° 07′, W. 74° 16′ *	30.21	767.3	41	5.0	56	nne.			2		8		n.			long	n.	fair.
Tennessee, Fort Monroe, Va.	30.47	773.9	37	2.8	46	e.	7	3.1			0			0	0			clear.
Vandalia, Hampton Roads, Va*	30.33	770.4	34	1.1	79	ne.			2		0							clear.
Wabash, Boston, Mass.	30.35	770.9	35	1.7	80	nw.	5	2.2			2		nw.	0	0			clear.
Wachusetts, Mare Island, Cal*	30.09	764.3	46	7.8	100	var.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.43	772.9	43	6.1	91	s.			4		5		se.	0	0			fair.
Yantic, Norfolk, Va.	30.46	773.7	33	0.6	100	calm			0		2							clear.
Merchant Marine.																		
S. S. Grecian, S. 16° 45′ W. 38° 00′*	29.97	761.2	90	32.2	65	s.			5		4		s.	0	0	light	sw.	clear.
S. S. Polynesian, N. 40° 10′, W. 68° 06′*	30.30	769.6	38	3.3		wnw.			4		9		nw.	snow	snow	mod.	var.	cloudy.
S. S. Scandinavian, N. 49° 01′, W. 42° 00′	30.02	762.5	55	12.8		se.			5		10		se.	0	0	mod.	se.	threatening.
S. S. British Crown, N. 54° 12′ W. 28° 65′†	29.92	760.0	42	5.6		nw.			8		5		nw.	sleet	sleet	h'vy	nw.	sleeting.
S. S. British Prince, N. 40° 54′ W. 50° 54′ †	29.68	753 9	36	2.2		wnw.			6		9		w.	½ h'r	½ h'r	mod.	sse.	hazy.
S. S. Indiana, Liverpool, Eng†	28.88	733.5	39	3.9	82	ne.			4		10		ne.					squally.
S. S. Lord Clive, Philadelphia, Pa						nw.			4		2		nw.	0	0			fine.
S. S. Ohio, Cape Henlopen, Delaware†	30.25	768.3	25	— 3.9	87	nnw.			4		6?		nw.			sm'h	w.	clear.?
S. S. Pennsylvania, Philadelphia, Pa†	30.28	769.1	15	— 9.4		w.			2		1		w.					clear.
S. S. Castor, N. 41° 36′, W. 64° 00′			46.4	8		wnw.			3		9		nw.			4	n.	raining.
S. S. Stella, N. 44° 43′ W. 43° 25′	29.83	757.6	64.4	18		s.			4		9		sstw.	0	0	3	sw.	misty.
S. S. Bolivia, N. 54° 21′ W. 20° 27′* †	29.62	752.3	45	7.2	100	nnw.			7		8		nnw.	hail	hail	r'gh	nnw.	threatening
S. S. Dorian, N. 52° 02′, W. 22° 14′*	29.74	755.4	48	8.9		wnw.			7		6		nw.	snow	snow	r'gh	wnw.	cloudy.
S. S. Ethiopia, New York, N. Y.	30.37	771.4	17.5	— 8.1		nw.			3		3		nw.	0	0			clear.
S. S. Galatia, N. 12° 57′, E. 56° 51′†	30.11	764.8	79	26.1	95	ne.			3		3		ne.	0	0	mod.	ne.	fair.
S. S. Ailsa, N. 21° 30′, W. 73° 59′†	30.17	766.3	78	25.6	73	ne.			2		10		ne.	0	0	sm'h		cloudy.
S. S. Alvo, Greytown, Nicaragua	30.02	762.5	70	21.1		e.			2		10 n			6 h'r	6 h'r	long	e.	raining.
S. S. Carroll, N. 42° 48′, W. 68° 10′*†	30.38	771.6	20	— 6.7		nnw.			5		8		nnw.	snow	snow	sm'h	nnw.	snowing.
Bk. Coppename, N. 10° 23′ W. 46° 25′	29.97	761.2	80.7	27.1	78	ene.			6		9							overcast.
Inchkeith, S. 41° 50′ E. 41° 00′	29.22	742.2	51.6	10.9	79	n.			6		0							blue sky.
Mertola, N. 41° 15′ W. 14° 35′	30.17	766.3	57.2	14.0	86	nw.			6		5							d. clouds.
S. S. Marathon, Smyrna, Turkey	29.95	760 7	55	12.8		wnw.			2		4		nnw.	0	0			fine.
S. S. Parthia, Queenstown, Ireland*†	29.34	745.2	45	7.2		wsw.			7		5		wsw.	rain	rain	h'vy	sw.	squally.
S. S. Scythia, N. 51° 06′, W. 12° 26′	29.57	751.1	52	11.1		wnw.			7		6		wnw.	4 h'r	4 h'r	h'vy	wnw.	clouds.
S. S. Canada, N. 43° 00′, W. 61° 40′	30.04	762.9	30.2	— 1.0		nw.			6		4?		nw.			h'vy	w.	covered.?
S. S. France, N. 49° 41′, W. 13° 40′†	29.48	748.8	44.6	7		ne.			6		k		ene.	rain	rain	h'vy	ene.	hailing.
S. S. Abyssinia, N. 43° 20′, W. 58° 19′ *	29.80	756.9	45	7.2	?	nw.			7		10		nw.	8 h'r	8 h'r	r'gh	nw.	hail squalls
S. S. Wisconsin, N. 51° 19′, W. 12° 30′			43	6.1		nw.			7		8		nw.	6 h'r	6 h'r	r'gh	nw.	squally.
S. S. Wyoming, N. 50° 22′, W 33° 23′	30 29	769.4	44	6.7		nne.			1		6		ne.	0	0	long	wsw.	fair.
S. S. Bohemia, N. 47° 33′, W. 34° 26′†	30.28	769.1				ssw.			2		8		w.	0	0	long	wsw.	foggy.
S. S. Frisia, N. 49° 34′, W. 12° 20′	29.51	749 5	48	8.9		nw.			7–9		6		wnw.	rain	rain	h'vy	wnw.	rain & hail.
S. S. Gellert, N. 40° 47′, W. 67° 24′	30.24	768.1	34	1.1		nnw.			5		10		nne.	9	0	r'gh	nnw.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Force.	Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.			Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Silesia, N. 50° 03′, E. 0° 54′†	29.03	737.3	50	10.0	79	nw.			5		4		nw.	0	0	4–5	nw.	d. clouds.
S. S. Vandalia, N. 52° 27′, E. 3° 26′	29.99	730.3	45.0	7.2	97	w.			5		5		w.	0	0	mod.	w.	light haze.
S. S. Mentmore, N. 38° 13′, W. 68° 56′*	30.34	770.0				n.			4		8		n.	0	0	h'vy	nw.	threatening.
S. S. Archimedes, N. 42° 41′, W. 9° 48′	29.89	759.2				nw.			6		3		nw.	7 h'r	7 h'r	h'vy	wnw.	hazy.
S. S. Hevelius, N. 29° —′, W. 18° —′*†	30.27	768 8	69	20.6		ne.			6		3		ne.	0	0	mod.	ne.	clear.
S. S. Sirius, N. 24° 00′, W. 18° 40′*	30.14	765.5				ne.			6		1		ne.	0	0	mod.	ne.	clear.
S. S. Colorado, Galveston, Texas †	30.10	764.5	58	14.4		e.			2		1		ne.	0	0			clear.
S. S. Rio Grande, Galveston, Texas †	30.14	765.5	70	21.1		e.			1		2		nw.	0	0			clear.
S. S. San Marcos, N. 29° 22′, W. 94° 38.′	30.30	769.6	68	20.0		calm			0				s.					
S. S. Archimede, N. 35° 13′, W. 60° 43′†	30.10	764.5	70	21.1	70	wnw.			6		3!		w.	0	0	h'vy	wnw.	cloudy.?
S. S. Hermod, N. 45° 03′ W. 42° 36′†	29.82	757.4	64.4	18.0		se.			7		10		se.	6 h'r	6 h'r	high	s.	threatening.
S. S. John Hopkins, N. 37° 26′, W. 75° 30′ *†	30.50	774.7	38	3.3		e.			2		0			0	0			clear.
S. S. Glenapp, S. 14° 40, W. 36° 00′ †	29.80	756.9				s.			4		9		sw.	9 h'r	9 h'r	high	sw.	heavy rain.
S. S. Glenfyne, off Para, Brazil *†	29.61	752.1				ene.			3		2		e.			sm'h	e.	clear.
S. S. Toronto, N. 43° 12′, W. 66° 52′*†	30.30	769 6	22.0	— 5.6		nw.			4		8		nw.	0	0	mod.	nw.	cloudy.
S. S. Chalmette, N. 34° 13′, W. 76° 00′†	30.31	769.9	52	11.1		nne.			5		3		nne.	0	0	mod.	nne.	clear.
S. S. Lone Star, N. 24° 40′, W. 83° 09′†	30.13	765.3	68	20.0		ne.			3		5		ne.	0	0	small	ne.	fair.
S S. Denmark, London, Engt	29.03	737.3	42	5.6		wnw.			2		2			0	0			clear.
S. S. Egypt, N. 40° 47′, W. 61° 59′ *†	30.03	762.7				nw.			6		10		nw.	0	0	r'gh	nw.	cloudy.
S. S. Erin, N. 50° 09′, W. 31° 16′	30.09	764.3	48	8.9		nw.			5		4		nnw.	6 h'r	6 h'r	long	wnw.	fine.
S. S. Greece, N. 43° 03′, W. 47° 23′*†	29.87	758.7	60	15.6		s.			4		5		s8w.	2½h'r	2½h'r	short	se.	fair.
S. S Helvetia, N. 50° 36′, W. 22° 00′	29.83	757.7	45	7.2		nw.			7		5		nw.	5 h'r	5 h'r	h'vy	nw.	rainy.
S. S. City of Alexandria, Vera Cruz, Mexico †	30.23	767.8	75	23.9		ne.			3		4		ne.	0	0	small	ene.	fine
S. S. City of Mer da, N. 26° 00′, W. 80° 10′ *†	30.12	765.0	69.8	21.0		ne.			3		2		se.	0	0	mod.	e.	fine.
S. S. State of Nebraska, N. 55° 30′, W. 8° 00′ †	29.05	737 9	46	7.8		nw.			3–4							high	nw.	showery.
S. S. Western Texas, N. 32° 04′, W. 80° 30′*†	30.38	771.6				n.			5								ne.	
S. S. Donau, N. 41° 20′, W. 62° 31′	30.12	765.0				wnw.			5–6		8		wnw.	rain	rain	h'vy	wnw.	squally.
S. S. Hohenstaufen, N. 21° 31′, W. 21° 32′	30.14	765.5	75.2	24.0		ene.			4		10		ne.	2 h'r	2 h'r	mod.	ne.	covered.
S. S. Neckar, N. 40° 47′, W. 60° 59′	30.21	767.3	33.0	0.6	94	nw.			6		9		nw.	2 h'r	2 h'r	long	nw.	cloudy.
S. S. Oder, Weser Light Ship, Germany	29.06	738.1	26.6	— 3.0		ese.			8		10		ese.	snow	snow	r'gh	ese.	covered.
S. S. Ohio, N. 34° 51′, W. 76° 13′	30.41	772.4				nne.			2–3		4		ne.	0	0	sm'h	nne.	fair
S. S. Salier, N. 49° 08′, W. 35° 40′	30.21	767.3	49.1	9.5		s.			2		10		s.	2 h'r	2 h'r	r'gh	w.	cloudy.
S. S. Strassburg, N. 3° 11′, W. 29° 31′	29.94	760.5	82.0	27.8	91	se.			3–4		8		se.	3 h'r	3 h'r	mod.	se.	cloudy.
S. S. Werra, N. 53° 45′, E. 6° 00′ *†	28.95	735.3	35.6	2.0		e.			6		10		ese.	rain	rain	high	ese.	hailing.
S. S. Belgic, N. 41° 08′, E. 158° 25′†	29.95	760.7	55	12.8	56	s.			4		0			0	0	mod	w.	clear.
S. S. Coptic, N. 39° 18′, W. 171° 40′	29.91	759.7	49.0	9.4	85	n.			4		3		nnw.	0	0	long	w.	clear.
S. S. Oceanic, N. 32° 21′, E. 132° 52′*	30.02	762.5	64	17.8	62	wsw.			2		1		wsw.			sm'h		clear.
S. S. Mississippi, Seattle, Wash. Ter.*†	30.26	768.6	50	10.0	86	calm			0		10		sw.					light rain.
S. S. Oregon, N. 37° 58′, W. 122° 35′†	30.18	766.6	54.5	12.5	87	n.			3		0					light	wnw.	clear.
S. S. Ancon, San Francisco, Cal †	30.08	764 0	48	8.9	100	calm			0		0							clear.
S. S. City of Chester, off San Francisco, Cal. *†	30.12	765.0	48	8.9	92	nw.			2		2		nw.			mod.		clear.
S. S. Dakota, Victoria, B. C †	30.03	762.7	48	8.9	92	s.			4		8		s.	10 h'r	10 h'r	sm'h		cloudy.
S. S. Orizaba, N. 33° 43′, W. 118° 15′ *†	30.00	762.0	60	15.6	76	ene.			2		0					mod.	sw.	clear.
S. S. State of California, N. 46° 00′, W. 124° 10′*†	30.20	767.1	50	10.0		se.			3		10		se.	0	0	sm'h	w.	foggy.
S. S. Australia, S. 34° 00′, E. 174° 21′	29.85	758 2	61	16.1	100	s.			4		10		sse.	6 h'r	6 h'r	mod.	se.	cloudy.
S. S. City of New York, Sydney, N. S. W†	30.04	763.0	70	21.1	70	ne.			1		0			0	0			clear.
S. S. City of Pekin, N. 25° 35′, E 120° 30′ †	30.04	763.0	67	19.4	84	n.			4		10		s.	0	0	small	n.	cloudy.
S. S. City of Rio de Janeiro, N. 7° 10′, W. 81° 10†.	29.95	760.7	80	26.7	78	nne.			2		2		n.	0.1	3.	light	sw.	fine.
S. S. Colima, N. 28° 42′, W. 117° 06′ †	30.02	762.5	63	17.2	83	n.			2		0			0	0	mod.	w.	misty.
S. S. Grenada, N. 9° 35′ W. 84° 43′†	29.85	758.2	78	25.6	86	nw.			1		10		nw.	3 h'r	3 h'r	sm'h	s.	cloudy.
S. S. Zealandia, S. 5° 30′, W. 167° 55	29.93	760.2	83	28.3	91	ne			3		3		ne.			sm'h	se.	fine.
S. S Muriel, St. Lucia, W. I.	29.99	761.7	78	25.6		ene.			2		0			0	0	sm'h		clear.
S. S. Caracas, N. 21° 22′, W. 68° 13′ †	30.12	765.0	79	26.1	82	e.			4		5		e.	0	0	mod.	ne.	fine.
S. S. Claudius, Puerto Cortez, Honduras†	30.11	764.8				wsw.			6		10		w.	7 h'r	7 h'r	short	wsw.	
S. S. Valencia, N. 23° 54′, W. 69° 03′ †	30.15	765.8	79	26.1	86	n.			6		7		n.	1 h'r	1 h'r	mod.	nne.	squally.
S. S. Belgenland, N. 49° 30′, W. 7° 35′	29.51	749.5	48	8.9	100	wnw.			9		8		wnw.	4 h'r	4 h'r	h'vy		squally.
S. S. Nederland, N. 41° 03′ W. 63° 24′†	30.22	767.6	37	2.8		w.			5		10		w.	0	0	mod.	w.	cloudy.
S. S. Pennland, N. 49° 23′, W. 41° 14′	30.15	765.8	50	10.0	93	se.			5		8		s.	7 h'r	7 h'r	mod.	sw.	fine.
S. S. Rhynland, N. 50° 10′, W 11° 00′	29.44	747.8	50	10.0	72	nw.			8		6		wnw.	4 h'r	4 h'r	high	nw	squally.
S. S. Waesland, Antwerp, Belgium	29.13	739.9	47	8.3	77	wsw.			6		10		sw.	10 h'r	10 h'r			threatening.
S. S. P. Caland, N. 47° 52′, W. 37° 00′	30.13	765.3	53.1	11.7	80	sse.			3		4		s.			2	w.	fair.
S. S. Schiedam, N. 40° 30′, W. 69° 20′			46.8	8.2	75	nne.			4		10			0	0	mod.	n.	cloudy.
S. S. W. A. Scholten, N. 50° 11′, W. 2° 44′	29.43	747.5	49.4	9.7	74	nw.			6		6		ne.			high	nw.	squally.
S. S. Zaandam, N. 41° 19′, W. 66° 08′	30.22	767.6	47.5	8.6	80	nw.			3		6 ks		se.	8 h'r	8 h'r	2	nw.	
S. S. State of Florida, N. 44° 45′, W. 55° 45′	29.63	752.6	49	9.4		wsw.			6		8		wsw.	6 h'r	6 h'r	mod	wsw.	cloudy.
S. S. Iowa, N. 42° 41′, W. 60° 45′ *†	30.08	764.0	38	3.3		nw.			6		5		•wnw.	rain	rain	r'gh	wnw.	fair.
S. S. Britannic, N. 41° 07′, W. 60° 13° †	29.87	758.7	51	10.6	100	w.			6		5?		w.	4 h'r	4 h'r	r'gh	w.	cloudy.?
S. S. Celtic, Liverpool, Engt	29.05	737.9	46	7.8		nw.			6		5		nw.	12 h'r	12 h'r			showery.
S. S. Ge manic, N. 50° 44′, W. 27° 15′†	30.19	766.8	48	8.9		nw.			6		8		wsw.	sh'rs	sh'rs	high	wsw.	d. clouds.
S. S. Marengo, N. 40° 45′, W. 64° 40′	30.23	767.8				wnw.			6		10		wnw.	17 h'r	17 h'r	r'gh	var.	heavy rain.
S. S. Salerno, N. 41° 28′, W. 9° 43′*	29.85	758.2				n.			5		7		n.	2 h'r	2 h'r	h'vy	n.	cloudy.
S S. Catherine Whiting, Cape May, N. J.†	30.40	772.1	80	26.7		nnw.			1		0			0	0	light	e.	
S. S. Saxon, Boston, Masst	30.22	767.6	18	— 7.8		w.			6		0							
MISCELLANEOUS.																		
Bg Alcira, N. 10° 39′, W. 71° 44′	29.92	759.9	82	27.8		ene.			4		2		ene.	0	0			clear.
Schr. Annie Lewis, Tampico, Mexico †	30.23	767.8	67	19.4		wsw.			2					0	0	long	ne.	fair.
S. Annie M. Law, N. 29° 26′, E. 134° 04′*†	30.00	762.0	67	19.4		w.			1		5		nw.	0	0	sm'h		gloomy.
Bk. Anna Thormann, S. 24° 38′ E. 62° 31′*	29.95	760.7	76.6	24.8	88	ne.			4		9 n		n.	sh'rs	sh'rs	mod.	e.	misty.
S. S. Antonio Lopez, Havana, Cuba, W. I*	30.12	765.0	59	15.0	94	calm			0		2			0	0			hazy.
Bgt. Arthur, N. 37° 45′, W. 49° 15′ *†	30.10	764.5				w.			4				wnw.	rain	rain		var.	raining.
S. S. Buswell, N. 28° 50′, W. 88° 53′*†	30.18	766.6	68	20.0		nne.			2		1			0	0	sm'h		clear.
Bk. Champion, N. 22° 48′, W. 34° 13′			72.0	22.2		ne.			5		5		ne.	0	0	mod.	ne.	fair.
Schr. Chas. F. Beyer, N. 25° 53′, W. 79° 28′	30.21	767.3	70	21.1	75	ene.			1	0	5 k		e.	0	0	mod.	n.	fair.
Bg. Clara M. Goodrich, Sagua la Grande, Cuba, W.I*†	30.00	762.0				ne.			6		8?		ne.	0	0			cloudy?
S. Cornelius, N. 49° 30′, W. 9° 10′			45.5	7.5		nw.			5		8		nw.			long	nw.	hailing.
S. S. D. J. Foley, N. 36° 45′, W. 75° 05′ *†	30.35	770.9	41	5.0		ne.			2		0			0	0	sm'h	ne.	clear.
Bkt. David Preston, Port Eads, La			63.0	17.2							5		wnw.	0	0			fine.
Bk. E. L. Pettingill, N. 26° 29′, W. 123° 16′*†	30.20	767.1	62	16.7		nne.			4		0			0	0	sm'h	wsw.	clear.
S. E. J. Spicer, N. 40° 26′, W. 53° 35′*	29.85	758.2	66	18.9		wsw.			6		5		w.	rain	rain	mod.	wsw.	fair.
Bk. Eliza Barss, Bermuda, W. I †	30.19	766.8				n.			4		2		nw.	0	0			clear.
S. Enoch Train, N. 23° 40′, W. 72° 00′*†	30.21	767.3				ne.			4		5		ne.	0	0	light	ne.	fair.
Bk. Essex, Muscat, Arabia*†	29.94	760.5	77.0	25.0		ne.			6				ne.	0	0			fine
Schr. F. E. McDonald, Belfast, Maine†	30.33	770.4	— 3	—19.4		nw.			1		0			0	0			fine
S S. Foscolia, N. 29° 54′ W. 66° 41′						nnw.			4		8		nw.	0	0	cross		dull.
Bk. Freya, N. 19° 09′, W. 55° 21′			82	27.8		n.			4		0			0	0	long	ne.	fine.
S. F. W. Gildemeister, N. 40° 30′ W. 58° 17′*	29.87	758.7	55.4	13	56	nw.			7		10		nw.	1½h'r	1½h'r	7–8	wnw.	squally.
Bg. George, N. 44° 05′, W. 61° 30′ *†	30.02	762.5				nw.			4		10		nw.	snow	snow	r'gh	cross	cloudy.
Bk. Gronsvaer, Wellington, New Zealandf†	29.75	755.6	67.0	19.4	99	nw.			6		8		nw.	8 h'r	8 h'r			rainy.
Bk. Godeffroy, S. 40° 38′, W. 56° 17′ †	30.11	764.8	57.4	14.1	78	ne.			4		1			0	0	mod.	var.	clear.
Bk. Great Surgeon, S. 13° 16′, E. 101° 25′*†	30.00	762.0	80	26.7		sse.			4		3		w.	0	0	mod	sse.	fair.
Bk. Grey Eagle, N. 18° 45′, W. 36° 18′ *†	30.00	762.0				ese.			4		3		e.	0	0	long	e.	fair.
Bk. Hattie G. McFarland, New York, N. Y†	30.46	773.7	22	— 5.6		nw.			1		4		nw.	0	0			threatening.
Schr. Hattie Weston, N. 22° 30′ W. 69° 30′*†	30.17	766.3	82	27.8		e.			2		10		ese.	0	0	mod.	ene.	cloudy.
Bk. Heinrich & Tonio, N. 50° 25′, W. 1° 25′*†	29.31	744.5	49	9.4	78	wnw.			6		3		wnw.	8 h'r	8 h'r	h'vy	wnw.	fair.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Schr. Isabel Alberto, N. 24° 20′, W. 82° 38′ †	30.16	766.1				ne.			3		3		ne.	0	0	mod.	ne.	fair.
Schr. James Slater, N. 31° 10′, W. 73° 00′†	30.25	768.3	68	20.0		n.			1		5		ne.	0	0	r'gh	nnw.	
Schr. Jennie N. Huddell, Savanah, Ga†	30.31	769.9	41	5.0		ne.			1		2		w.	0	0			clear.
Schr. John L. Thomas, N. 32° 10′, W. 77° 30′*†	30.36	771.1				n.			2		4		ese.	0	0	light.	n.	fair.
Bg. John Wesley, N. 34° 08′ W. 76° 13′†	30.27	768.8				n.			2		10			4 h'r	4 h'r	sm'h	ne.	clearing.
Bk. Joseph A. Ropes, N. 10° 38′ E. 56° 53′*†	29.98	761.5	82	27.8	83	ne.			4		9		ne.	0	0	mod.	ne.	cloudy.
Bkt. Josephine, N. 37° 43′, W. 57° 07′†	29.99	761.7	68	20.0	60	wnw.			6		2			1 h'r	1 h'r	long	w.	fair.
Bk. Julia H., N. 38° 58′, W 56° 39′	29.89	759.2	60.4	15.8	76	wnw.			6		4			0	0	7	w.	d clouds.
Light House Tender, Laurel, Key West, Florida†	30.14	765 5	63	17.2		nne.			2		3		ne.	0	0	sm'h		clear.
Bg. Lilian, N. 31° 35′, W. 74° 20′ †	30.31	769.9	62	16.7		ne.			1		6		ne.	0	0	r'gh	var.	fair.
Bg. L. & W. Armstrong, N. 35° 40′, W. 63° 40′*†	30.18	766.6				nnw.			6		2		nw.	2 h'r	2 h'r	high	var.	clearing.
S. S. Malabar, N. 39° 35′ E. 73° 42′†	29.97	761.2				var.			9		8		nw.	0	0	sm'h		cloudy.
Bk. Matilda C. Smith, N. 27° 30′ W. 53° 10′*†	30.28	769.1				sse.			6		3		s.	sh'rs	sh'rs	mod.	var.	fine.
Schr. Minnie A. Bonsall, St. Johns, Flat	30.32	770.1	68	20.0		ne.			1		0					light	nne.	fair.
S. Minnie N. Gerow, N. 33° 27′, W. 24° 12′ *†	30.38	771.6				n.			4		4		e.			sm'h	n.	fine.
S. M. P. Grace, S. 0° 30′, W. 126° 31′ *†	30.01	762.2	70	21.1		ese.			4		0			0	0	sm'h	ese.	clear.
Bg. O. C. Clary, Demerara, British Guiana, S. A *†	29.90	759.4	82	27.8	91	e.			2		10?		ne.	h'vy	h'vy			clear?
S. Orealla, N. 16° 43′, E. 93° 10′*	29.90	759.4				se.			4		3		se.			sli't	sw.	fine.
S. Paramita, San Francisco, Cal			52	11.1		n.			2		0			0	0			
S. S. Peconic, N. 30° —′, W. 80° 40′ *†	30.18	766.6	65	18.3		var.			2		2?		sse.			sm'h	nnw.	cloudy.?
Bk. Pilgrim, N. 0° 50′, W. 34° 30′ *†	29.97	761.2				se.			3				e.	0	0	long	ne.	fair.
S. S. Radnorshire, N. 5° 47′, E. 93° 12′*†	29.86	758.4				ssw.			2		0			0	0	sm'h		clear.
S. S. Raleigh, N. 32° 30′ W. 80° 00′			53	11.7		ne.			2		1			0	0	light	ne.	
Bk. Rebus, N. 39° 05′, W. 67° 35′*	30.15	765.8	40	4.4		n.			4		9		nnw.	light	light	mod.	nnw.	cloudy.
S. St. Francis, N. 12° 56′, W. 122° 33′†	29.91	759.7	76	24.4		nne.			6		3		ne.	1 h'r	1 h'r	mod.	ne.	fair.
Bk. Southern Belle, Antwerp, Belgium *†	29.00	736.6				sw.			5		7		w.	6 h'r	6 h'r			fair.
S. S. Sunbeam, N. 21° 39′ W. 45° 51′	30.13	765.3	79	26.1	74	ese.			5		5		ese.	4 h'r	4 h'r	4	ese.	d. clouds.
S. S. Strathleven, N. 10° 24′, E. 59° 40′	29.92	760.0	79.0	26.1	95	ene.			4		5		ene.	0	0	4	ne.	d. clouds.
Schr. T. S. McLellan, N. 27° 45′, W. 79° 45′*†	30.20	767.1	70	21.1		ne.							ne.	0	0	h'vy	n.	cloudy.
U.S.F.C.S.S. Fish Hawk, Washington, D. C†	30.42	772.7	28	— 2.2		s.			1		4		calm					clear.
Bk. Usko, N. 55° 18′ W. 12° 18′*	28.95	735.3	47	8.3		wnw.			6		6		wnw.	hail	hail	long	w.	squally.
Bk. Vincenzo Accame, N. 34° 30′, W. 32° 06′†	30.58	776.8	69.8	21.0		e.			2		0			0	0	mod.		clear.
Schr. Walter L. Plummer, N. 26° 50′, W. 75° 30′*†	30.20	767.1				ne.			4		8		ne.	0	0	mod.	n.	fair.
Bk. Wandering Jew, Montevideo, Uruguay †	30.17	766.3	67	19.4		e.			6		6		e.	0	0			fair.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.08	764.0				calm			0		0					sm'h	sw.	fair.
S. Wm. Woodbury, N. 43° 29′, W. 34° 50′*	30.28	769.1	59	15.0		ne.			6		3?		sw.			long	n.	cloudy.?

International Chart I. December 4, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 5, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.97	761.1	57.2	14.0	80	ne.	.....	.....	1	.....	4	.....	.....	inap.	inap.	cloudy	Malaterre.
Algiers	.....	.....	29.83	757.6	58.3	14.6	78	wsw.	.....	.....	7	.....	10	.....	.....	0.110	2.8	covered	Thève.
La Calle	.....	.....	29.77	756.2	65.8	18.8	85	wsw.	.....	.....	4	.....	2	.....	.....	0	0	fair	Fonfréde.
Tunis	.....	.....	29.75	755.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.99	761.8	59.0	15.0	74	n.	.....	.....	2	.....	2	.....	.....	0.295	7.5	pretty fair	Pérès.
Tebessa	.....	.....	29.96	760.9	58.6	14.8	54	w.	.....	.....	2	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	50.7	10.4	48	nw.	.....	.....	4	.....	8	.....	.....	0	0	very cloudy	Lonchamp.
Laghouat	.....	.....	29.99	761.8	62.2	16.8	33	nw.	.....	.....	5	.....	3	.....	.....	0	0	pretty fair	Abraham.
Biskra	.....	.....	29.98	761.6	61.5	16.4	35	nw.	.....	.....	1	.....	0	.....	.....	inap.	inap.	clear	Malau.
Australian.																			
Melbourne, Victoria	29.65	753.1	29.74	755.4	62.0	16.7	88	s.	6	2.7	.....	.....	9	.....	.....	2.06	52.3	thud'r st'rm	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	28.94	735.0	29.49	749 1	40.6	4.8	99	w.	.....	.....	2	.....	7	.....	.....	0.394	10.0	raining	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.65	727.8	29.44	747 7	33.4	0.8	89	wnw.	0	0	.....	.....	7	.....	.....	0.055	1.4	.....	Dr. Wierzbiski.
Eperies	28.61	726.6	29.52	749.7	31.1	— 0.5	85	calm	.....	.....	0	.....	10 s	.....	.....	0.087	2.2	.....	Julius Mikolik.
Gratz	28.22	716.7	29.48	748.9	37.8	3.2	90	nw.	.....	.....	1	.....	10	.....	.....	0.165	4.2	.....	Andreas Rospini.
Hermannstadt	28.10	713.7	29.53	750.1	42.4	5.8	79	nw.	.....	.....	1	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.02	711.8	29.39	746.4	34.3	1.3	93	ne.	.....	.....	1	.....	10	.....	.....	0	0	foggy	The Staff.
Lemberg	28.45	722.5	29.47	748.4	30.2	— 1.0	80	s.	.....	.....	3	.....	10	.....	.....	0.169	4.3	.....	Dr. T. Stanecki.
Pola	29.33	744.9	29.44	747.8	47.8	8.8	92	ne.	.....	.....	1	.....	10	.....	.....	0.279	7.0	.....	I. R.Hydrographic Office.
Szathmar	29.02	737.2	29.48	748.8	34.2	1.2	96	se.	.....	.....	1	.....	10	.....	.....	0.535	13.6	.....	Joseph Midlluszky, S. J.
Szegedin	29.22	742.1	29.50	749.3	39.9	4.4	93	s.	.....	.....	2	.....	5	.....	.....	0.598	15.2	.....	Karl Stancel.
Trieste	29.39	746.5	29.49	749.1	44.6	7.0	88	calm	.....	.....	0	.....	10	.....	.....	0.354	9.0	foggy	Royal Academy.
Vienna	28.76	730.6	29.50	749.4	29.5	— 1.4	100	s.	.....	.....	1	.....	10	.....	.....	0	0	foggy	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.52	749.8	29.62	752.3	29.7	— 1.3	94	ne.	39	17.4	.....	.....	7	.....	.....	0.290	7.4	snowy	W. Boswell
Armagh, Observatory	29.28	743.7	29.52	749.8	36.3	2.4	76	nne.	17	7.6	.....	.....	8	.....	.....	.....	.....	d. clouds	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.25	742.9	37.2	2.9	78	n.	25	11.2	.....	.....	10	.....	.....	.....	.....	overcast	John Harman.
Bolton, Sharples	28.68	728.5	29.22	742.2	35.7	2.1	78	nne.	36	16.1	.....	.....	9	.....	.....	.....	.....	squally	Thomas Mackereth.
Bradford, Yorkshire	28.81	731.8	29.21	741.9	35.9	2.2	88	ne.	.....	.....	5	.....	10	.....	.....	0.01	0.3	snowing	McLandsborough&Preston.
Bridgetown, Barbadoes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Corpl.J.Surgenor, A.H.C.
Cardington	.....	.....	.....	.....	36.0	2.2	92	n.	.....	.....	0.6	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E.	28.94	735.1	29.07	738.4	36.2	2.3	82	calm	.....	.....	0	.....	10	.....	.....	.....	.....	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.08	738.6	29.31	744.5	41.9	5.5	74	nw.	.....	.....	5	.....	7	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.76	705.1	29.97	761.2	72.0	22.2	46	ne.	.....	.....	1	.....	7?	.....	.....	.....	.....	overcast?	The Staff.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88.0	31.1	59	ne.	.....	.....	1	.....	2	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	29.99	761.7	30.04	763.0	57.2	14.0	97	nw.	.....	.....	4	.....	8	.....	.....	.....	.....	gloomy	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.34	745.2	29.54	750.3	32.5	0.3	70	n.	.....	.....	6	.....	6	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	28.88	733.5	29.06	738.1	35.3	1.8	89	wnw.	.....	.....	1	.....	10	.....	.....	.....	.....	gloomy	The Staff.
Guernsey	28.92	734.6	29.22	742.2	42	5.6	66	nw.	.....	.....	2	.....	8	.....	.....	.....	.....	drizzling	A. Collenette, F. M. S.
Kew, Observatory	29.04	737.6	29.08	738.6	36.3	2.4	79	w.	10	4.5	.....	.....	10	.....	.....	.....	.....	threatening	The Staff.
Leicester, Museum	28.84	732.5	29.10	739.1	38.5	3.6	91	n.	.....	.....	1	.....	10	.....	.....	.....	.....	drizzling	J. C. Smith.
Malta, Mediterranean	29.68	753.9	29.76	755.9	66.0	18.9	98	sw.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.11	764.8	30.16	766.1	74.0	23.3	83	ne.	.....	.....	4	.....	6	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	28.56	725.4	29.09	738.9	36.0	2.2	94	nne.	.....	.....	3	.....	10	.....	.....	.....	.....	raining	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	28.86	733 0	29.08	738.6	36.2	2.3	89	nw.	.....	.....	3	.....	10	.....	.....	.....	.....	threatening	The Staff.
Plymouth	29.16	740.7	29.23	742.4	40.7	4.8	87	nw.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	29.02	752 3	29.73	755.1	20.2	— 1.6	100	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	snowy	Rev. C. Clouston, L L D.
Scutari Cemetery, Turkey	29.84	757.9	29.91	759 7	51.2	10.7	52	ssw.	.....	.....	3	.....	1	.....	.....	.....	.....	blue sky	W. H. Lyne.
Sheffield	28.92	734.6	29.20	741.7	37.3	2.9	92	n.	.....	.....	3	.....	10	.....	.....	0.15	3.8	rain & snow	W. F. Cooper.
Silloth Rectory	29.36	745.7	29.39	746.5	34.8	1.6	75	n.	.....	.....	4	.....	5	.....	.....	0.020	0.5	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.28	743 7	35.4	1.9	75	nne.	20	8.9	.....	.....	10	.....	.....	.....	.....	overcast	I. New.
Stratfield Turgiss	28.90	734.0	29.12	739.6	37.7	3.2	95	nw.	.....	.....	2	.....	8	.....	.....	.....	.....	d. clouds	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	29.26	743.2	29.30	744.2	44	6.7	84	n.	.....	.....	0	.....	8	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.50	749 3	29.52	749.8	42.5	5.8	67	ne.	16	7.2	.....	.....	5	.....	.....	.....	.....	d. clouds	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.28	769 1	30.33	770.4	27	— 2.8	84	s.	20	8.9	.....	.....	10 s	.....	sw.	0.100	2.5	cloudy	H. J. Cundall, C E
Chatham, N. B*	30.12	765.0	30.18	766.6	14	—10.0	87	e.	1	0.4	.....	.....	10 n	.....	e.	0.06	1.5	light snow	G. A. Blair.
Father Point, Quebec*	29.94	760.5	29.96	761.0	21	— 6.1	91	sw.	13	5.8	.....	.....	10 n	.....	calm	0.05	1.3	light snow	J. McWilliams.
Fort Garry, Manitoba*	29.19	741.4	30.13	765.3	— 5	—20.6	68	n.	10	4.5	.....	0	0	.....	.....	0	0	clear	James Stewart.
Halifax, N. S*	30.25	768.3	30.39	771.9	27	— 2.8	96	nw.	3	1.3	.....	.....	sk.	.....	.....	0	0	smoky	A. Allison.
Kingston, Ontario*	29.66	751.8	29.94	760.5	34	1.1	79	sw.	18	8.0	.....	.....	10 ks	.....	w.	0.21	5.3	cloudy	A. P. Knight, M. A
Montreal, Quebec*	29.65	753.1	29.86	758.4	28	— 2.2	88	s.	16	7.2	.....	.....	10 s	.....	.....	0.23	5.8	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.09	738.9	29.81	757.2	33	0.6	88	w.	28	12.5	.....	.....	10 n	.....	w.	0.18	4.6	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.31	744.5	30.04	763.0	29	— 1.7	89	calm	0	0	.....	.....	10 cs	.....	sw.	0.02	0.5	cloudy	H. Morgan.
Port Stanley, Ontario	29.34	745.2	30.02	762.5	28	— 2.2	77	w.	16	7.2	.....	0	2 k	.....	w.	0.02	0.5	clear	M. Payne.
Quebec, Quebec*	29.57	751.1	29.92	760.0	19	— 7.2	100	e.	.....	.....	5	.....	10 n	.....	e.	0.22	5.6	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.25	742.9	29.73	755.1	23	— 5.0	88	calm	0	0	.....	.....	10 s	.....	w.	0.71	18.0	light snow	W. H. McIntyre.
Saugeen, Ontario*	29.13	739.9	29.87	758.7	30	— 1.1	96	sw.	17	7.6	.....	.....	10 ks	.....	.....	0.06	1.5	cloudy	
St. Andrews, N. B	30.08	764.0	30.13	765.3	37	2.8	90	sw.	15	6.7	.....	.....	10 n	.....	.....	0	0	cloudy	
Sydney, C. B*	29.39	746.5	30.46	773 7	25	— 3.9	84	se.	1	0.4	.....	.....	10 ks	.....	sw.	0	0	fair	T. C. Hill, C. E
Toronto, Ontario*	29.60	751.8	30.00	762.0	31	— 0.6	85	w.	20	8.9	.....	.....	10 ks	.....	w.	0.15	3.8	cloudy	Magnetic Observatory.
Yarmouth, N. S*	30.20	767.1	30.27	768.8	37	2.8	89	s.	6	2.7	.....	.....	10 k	.....	sw.	0.04	1.0	cloudy	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.50	723.9	29.97	761.2	28.0	— 2.2	94	w.	.....	.....	8	.....	10kn	.....	w.	0.207	5.2	.....	Wm. Wylie.
St. Johns, Newfoundland	30.13	765.3	30.40	772.1	25	— 3.9	100	sw.	1	0.4	.....	.....	0	.....	.....	0.03	0.8	clear	John Delany
Cape Colony.																			
Cape St. Francis Lt. House	30.14	765.5	30.17	766.3	68.0	20.0	73	sw.	16.2	7.2	0	0	2 k	.....	.....	0	0	hazy	John Duthie.
Cape Town, C G.H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D.Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
												Upper	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.62	625.3	.....	.....	29.3	— 1.5	.....	w.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....
Tchang-kia-tchouang	29.93	760.1	30.04	762.9	32.0	0.0	81	calm	0.9	0.4	.....	0	0	.....	.....	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.02	762.6	30.05	763.2	48.2	9.0	86	w.	4.9	2.2	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.38	746.2	29.43	747.4	25.0	— 3.9	76	ene.	36	16	.....	.....	9	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanoe	29.35	745.5	29.37	746.0	25.5	— 3.6	100	ene.	.....	.....	6	.....	10	.....	.....	.....	.....	snowing	Overloerer Lauridsen.
Godthaab, Greenland	28.89	733.8	28.93	734.9	31.3	— 0.4	94	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	S. Kleinschmidt.
Ivigtut, Greenland	29.32	744.8	29.34	745.3	30.0	— 1.1	.....	ssw.	.....	.....	3	.....	10	.....	.....	.....	.....	snowing	
Jacobshavn, Greenland	29.04	737.6	29.09	738.8	33.1	0.6	.....	se.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.70	754.3	29.74	755.4	36.7	2.6	87	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.86	758.5	29.90	759.4	35.2	1.8	90	ne.	9	4	.....	.....	7	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.41	747.1	29.51	749.5	24.1	— 4.4	98	ene.	.....	.....	6	.....	10	.....	.....	.....	.....	snowing	Loerrer Oesterboi.
Upernavik, Greenland	29.16	740.7	29.21	741.9	0.0	—17.8	.....	n.	.....	.....	2	.....	0	.....	.....	.....	.....	misty	
FRENCH.																			
Agen, Normal School	28.99	736.3	29.65	753.1	43.9	6.6	91	w.	.....	.....	1	2 c	n	.....	nw.	0.445	11.3	.....	M. Labrone, Director.
Alençon, Normal School	28.71	729.1	29.26	743.1	39.0	4.2	93	sw.	.....	.....	1	.....	10 n	n.	n.	.....	.....	light rain	M. Nicot, Director.
Arras, Engineer School	28.82	731.9	29.07	738.4	37.8	3.2	53	sw.	.....	.....	.....	.....	sn	.....	sw.	0.189	4.8	.....	M. Fénéon, Command't.
Avignon, Normal School	29.43	747.4	29.50	749.4	47.8	8.8	70	nw.	.....	.....	1	.....	0	.....	.....	0.35	9.	clear	M. Giraud, Director.
Bar-sur-Seine	28.79	731.3	29.35	745.4	41.0	5.0	81	sw.	.....	.....	2	0	8 kn	.....	wsw.	0.012	0.3	very cloudy	M. Saillard, Director.
Beauvais, Normal School	28.91	734.3	29.17	741.0	40.3	4.6	84	sw.	.....	.....	2	.....	10	.....	wsw.	0.24	6.	covered	M. Frère Eugène Marié.
Besançon, Normal School	28.51	724.2	29.41	747.0	37.4	3	89	ssw.	.....	.....	1	.....	10 n	.....	sw.	0.409	10.4	snowing	M. Gobin, Director.
Bordeaux, Observatory	29.26	743.2	29.52	749.8	46.0	7.8	76	w.	.....	.....	1	.....	10	.....	.....	0.650	16.5	covered	M. Rayet, Director.
Bourges, Normal School	28 95	735 2	29.50	749.4	43.7	6.5	78	ssw.	.....	.....	4	.....	n	.....	ssw.	0.059	1.5	.....	M. Malet, Director.
Brest, Naval Observatory	29.13	740.0	29.38	746.2	45.0	7.2	83	nw.	.....	.....	3	.....	10	.....	nw.	0.098	2 5	raining	M. de Kermarec, Dir.
Caen, Normal School	29.04	737.7	29.12	739.6	42.8	6	82	wsw.	.....	.....	1	.....	8	.....	wsw.	0.134	3.4	very cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	28.96	735 5	29.28	743.7	40.5	4.7	80	sw.	.....	.....	4	.....	8	sw.	w.	0.094	2.4	very cloudy	M. Jadot, Director.
Charleville, Normal School	28.71	729.2	29.22	742.2	37.4	3	76	se.	.....	.....	2	.....	10	.....	.....	0.12	3.	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.07	713.0	29.43	747.4	45.0	7.2	63	s.	.....	.....	2	.....	5	.....	.....	0.433	11.0	½ covered	M. Allnard, Director.
Cluny, Normal School	28.61	720.7	29.46	748 3	40.6	4.8	84	sw.	.....	.....	1	.....	7	sw.	sw.	0.166	2.7	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.47	723.1	29.34	745.2	38.7	3.7	83	sw.	.....	.....	3	.....	kn	sw.	sw.	0.16	4.	.....	Dr. Coulet, Director.
Gap, Normal School	27.00	685.8	29.58	751.4	37.4	3	97	nw.	.....	.....	1	.....	5	.....	se.	0.138	3.5	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.37	720.5	29.50	749.4	43.3	6.3	56	sw.	.....	.....	2	.....	7	.....	sw.	0.39	10.	.....	M. Kina, Director.
Grenoble, Normal School	28.71	729.3	29.50	749.2	44.2	6.8	77	se.	.....	.....	1	ck	0	nnw.	.....	0.28	7.	.....	M. Ablard, Director.
Guéret	27.81	706.4	29.43	747.4	35.2	1.8	93	sw.	.....	.....	4	.....	cn	.....	sw.	0.87	22.	.....	M. Delorme, Dir.
Lamballe, Normal School	28.99	736.3	29.26	743.1	38.3	3.5	37	w.	.....	.....	4	.....	10	.....	w.	0.43	11.	raining	M. Ollitrault, Director.
Lescar, Normal School	29.00	738.2	29.64	752.9	42.4	5.8	82	sw.	.....	.....	1	.....	10	.....	.....	0.787	20.0	raining	M. Chauvin, Director.
Lorient, Naval Observatory	29.26	743.3	29.37	745 9	51.4	10.8	86	w.	.....	.....	1	.....	5	.....	nw.	0.071	1.8	½ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.43	722.0	29.49	749.0	42.3	5.7	70	se.	.....	.....	1	.....	10	.....	w.	0.024	0.6	covered	M. André, Director.
Mans, Normal School	28.97	735.9	29.28	743.8	43.0	6.1	83	sw.	.....	.....	3	.....	10	.....	.....	0.012	0.3	covered	M. Pibeau, Director.
Marseille, Observatory	29.26	743.2	29.53	750.1	46.2	7.9	50	nw.	.....	.....	2	.....	8	.....	var.	0.039	1.0	.....	M. Stephan, Director.
Mt. Louis	24.38	619.3	29.22	742.3	35.2	1.8	80	w.	7.4	3.3	.....	.....	6	sw.	.....	0.307	7.8	.....	M. Carré for Dr. Fines.
Montpellier, Normal School	29.58?	751.3?	29.74?	755.5?	47.5	8.6	70	wnw.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Gaizin, Director.
Nancy, Normal School	28.46	722.9	29.24	742 8	38.1	3.4	76	ssw	.....	.....	1	.....	n	.....	.....	0.209	5.3	.....	M. Husse, Director.
Nantes, Observatory	29.21	741.9	29.37	746.0	48.2	9.0	85	wsw.	.....	.....	1-2	c;ck	kn;n	w.	wsw.	0.047	1.2	.....	M. Larocque, Director.
Perpignan, Observatory	29.47	748.6	29.56	751.4	51.6	10.9	42	nw.	16.8	7.5	.....	.....	3	.....	nnw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.68	525.2	.....	.....	8.2	—13.2	.....	nw.	.....	.....	2-3	.....	10	.....	nw.	0.866	22.0	snowy	M. Vaussenat.
Privas, Normal School	28.43	722.1	29.50	749.4	43.5	6.4	79	s.	.....	.....	1	.....	13	.....	.....	.....	.....	light rain	M. Taillen.
Puy de Dôme Obs'y, Summit	24.45	620.9	.....	.....	25.2	— 3.8	100	wsw.	.....	.....	8	.....	10	.....	.....	1.059	26.9	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.39	746.5	29.42	747.3	49.6	9.8	76	sw.	.....	.....	2	.....	8	.....	w.	0.79	20.	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.41	746.9	29.38	746.3	43.9	6 6	88	w.	.....	.....	1	.....	5	.....	se.	0.24	6.	cloudy	M. Brotier, Director.
Rodez, Normal School	27 60	701.1	29.80	757.0	37.4	3	75	se.	.....	.....	1	.....	5	.....	s.	c.480	12.2	very cloudy	M. Seger, Director.
Rouen, Normal School	29.10	739.2	29.15	740.4	40.0	4.8	90	wsw.	.....	.....	1	.....	8	sw.	sw.	0.189	4.8	cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	39.4	4.1	99	nw.	.....	.....	1	.....	5	.....	w.	0.295	7.5	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.05	737.8	29.21	742.0	39.4	4.1	91	ssw.	.....	.....	2	.....	10	.....	sw.	0.012	0.3	.....	M. Renou, Director.
Toulouse, Observatory	28.95	735.3	29.66	753.4	43.7	6.5	76	w.	.....	.....	4	.....	8	w.	.....	0.079	2.0	very cloudy	M. Ballland, Director.
Tours	29.11	739.5	29.29	744.0	45.7	7.6	77	s.	.....	.....	3	.....	8	w.	sw.	0	0	very cloudy	M. de Tastes.
Versailles, Observatory	28.71	729.2	29.20	741.7	38.8	3.8	87	sw.	.....	.....	4	.....	.....	.....	.....	0.055	1.4	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.49	749.1	29.64	752.9	45.1	7.3	88	w.	25.5	11.4	.....	.....	.....	.....	w.	0.689	17.5	.....	M. Cartier, Director.
GERMAN.																			
Ansbach	27.89	708 5	29.36	745.8	36.0	2.2	87	calm	.....	.....	0	.....	10	sw.	.....	0.201	5.1	.....	Prof. Jaedt.
Bamberg	28.49	723.7	29.32	744.6	36.5	2.5	84	calm	.....	.....	0	.....	0	.....	.....	0.157	4.0	raining	Prof. Dr. Hoh.
Berlin	29.06	738.2	29.24	742.8	38.5	3.6	82	sw.	.....	.....	2	.....	8	.....	.....	0.354	9.0	.....	Prof. Dr. Arndt.
Breslau	28.85	732.7	29.37	745.9	38.8	3.8	72	ssw.	.....	.....	2	.....	0	wsw.	.....	0.067	1.7	.....	Royal University Obs'y.
Carlsruhe	28.89	733.9	29.33	744.9	40.6	4.8	84	sw.	.....	.....	2	.....	10	sw.	.....	0.138	3.5	.....	Albert Senz.
Cassel	28.51	724.2	29.22	742.3	37.2	2.9	84	s.	.....	.....	2	.....	8	s.	.....	c.118	3.0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	28.95	735.2	29.32	744 6	39.0	3.9	85	ssw.	.....	.....	1	.....	9	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	27.89	708.4	29.33	745.0	40.3	4.6	78	ssw.	.....	.....	1	.....	10	w.	.....	0.220	5.6	.....	Wilhelm, Chief Tel.
Hamburg	29.19	741.5	29.28	743.8	22.6	— 5.2	96	ene.	.....	.....	3	.....	10	.....	.....	0.252	6.4	snowing	E. Preller.
Kiel	29.28	743.8	29.30	744.2	28.4	— 2.0	89	ese.	.....	.....	3	.....	10	.....	.....	0.020	0.5	snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.88	733.6	29.31	744.5	38.5	3.6	77	ssw.	.....	.....	3	.....	8	w.	.....	0.307	7.8	.....	H. Leppig, Asst.
Magdeburg	29.08	738.5	29.26	743.3	37.8	3.2	80	s.	.....	.....	1	0	9 k;ks	.....	sw.	0.232	5.9	.....	Weather Observatory.
Memel	29.47	748.4	29.51	749.5	15.1	— 9.4	87	e.	.....	.....	4	.....	10	.....	.....	.....	.....	snowing	Issermann.
Munich	27.52	699.0	29.34	745.2	39.0	3.9	72	e.	.....	.....	2	.....	9	ne.	.....	0.035	0.9	.....	Central Station.
Neufahrwasser	29.37	746.1	29.39	746.5	21.6	— 5.8	95	se.	.....	.....	1	.....	10	.....	.....	0.142	3.6	light snow	A. Lothes.
Neustadt, Palatinate	28,76	730.6	29.28	743.7	41.9	5.5	79	wsw.	.....	.....	1	.....	10	w.	.....	0	0	.....	Dicknether.
Stuttgart	28.39	721.1	29.29	744.0	38.3	3.5	83	w.	.....	.....	1	.....	10	.....	.....	0.043	1.1	.....	Prof. Dr. Schoder.
Wustrow	29.34	745.2	29.36	745.8	26.2	— 3.2	90	ene.	.....	.....	1	.....	10 8	.....	.....	0.185	4.7	snowing	Profs. Brandes & Reimer
GREEK.																			
Athens	29.56	750.7	29.94	760.5	59.5	15.3	.....	w.	.....	.....	1.0	.....	1	.....	.....	0	0	misty	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	30.00	762.0	30.05	763.3	84.0	28.9	54	e.	15.0	6.7	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.50	749.3	29.97	761.3	84.1	28.9	35	n.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.90	759.5	29.94	760.5	78.6	25.9	71	wnw.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.08	713.2	29.93	760.2	79.8	26.6	20	e.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.64	752.7	29.92	759.8	81.4	27.4	64	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Belgaum	27.38	695.5	29.92	760 0	77.0	25.0	23	ene.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.28	743.8	30.06	763.5	60.6	15.9	55	sw.	0	0	.....	.....	0	.....	.....	0	0	.....	
Roorkee	29.09	738.8	30.01	762.3	68.2	20.1	60	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Agra	29.46	748.2	30.04	762.9	70.7	21.5	40	w.	.....	.....	.....	.....	0	.....	.....	0	0	d. clouds	
Nagpur	28.92	734.4	29.97	761.2	76.5	24.7	37	calm	2.0	0.9	.....	.....	5	e.	.....	0	0	blue sky	
Jubbulpore	28.64	727.5	30.04	762.9	68.7	20.4	62	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.63	752.6	30.01	762.3	75.2	24.0	44	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.69	754.1	30.02	762.4	61.8	16.6	72	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.83	757.6	30.02	762.4	70.7	21.5	59	ne.	2.3	1.0	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.94	709.7	30.02	762.4	63.7	17.6	65	n.	5.3	2.4	.....	.....	0	.....	.....	0	0	d. clouds	
Cuttack	29.86	758.5	29.95	760.6	71.4	21.9	72	ne.	2.0	0.9	.....	.....	2	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.92	760.0	29.94	760.6	71.7	22.1	71	nnw	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.84	757.9	29.96	761.0	71.3	21.8	76	e.	3.8	1.7	.....	.....	0	.....	.....	0	0	.....	
Chittagong	29.85	758.2	29.94	760 5	75.6	24.2	92	e.	1.1	0.5	.....	.....	9	.....	.....	0	0	d. clouds	
Sibsagar	29.63	752.6	29.98	761.4	67.0	19.4	88	n.	2.0	0.9	.....	.....	4	.....	e.	0	0	blue sky	
Jeypore	28.57	725.7	30.04	763.0	72.6	22.6	53	ne.	2.7	1.2	.....	.....	0	.....	.....	0	0	blue sky	
ITALIAN.																			
Udine	29.08	738.7	29.50	749.3	40.1	4.5	92	.....	.....	.....	.....	.....	10	.....	.....	0.154	3.9	.....	Prof. Giovanni Clodig.
Milan	28.94	735.1	29.48	748.8	33.1	0.6	85	ne.	1.8	0.8	.....	.....	10	.....	.....	0	0	.....	Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.			0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Padua	29.34	745.2	29.45	748.0	32.4	0.2	98	nne.	4.3	1.9			10			0.140	3 7		Prof. Dott. Lorenzoni.
Moncalieri	28.54	724.9	29.48	748.9	32.0	0.0	94	nw.	3.1	1.4			10		s.	0.020	0.5		Prof. G. M. Garibaldi
Genoa	29.19	741.4	29.38	746.2	51.3	10.7	66	e.	6.3	2.8			10			0	0		Prof. D. C. Bruno.
Mondovi	27.49	698.2	29.47	748.6	29.7	— 1.3	76	w.			2		2			0	0		Prof. Luigi Guidi.
Pesaro	29.37	746.1	29.43	747.4	39.6	4.2	93	sw.	5.6	2.5			10			0.240	6.1		Prof. Costantino Pittei.
Florence	29.20	741.7	29.46	748.3	49.1	9.5	83	sw.			2		10		sw.	0.917	23.3		Prof. P. Monte.
Leghorn	29.31	744.5	29.40	746.7	53.6	12.0	73	sw.	20.6	9.2			10			0.244	6.2		Prof. P. Tachini.
Rome	29.34	745.2	29.52	749.7	54.7	12.6	85	sw.	3.1	1.4			10			0.677	17.2		Prof. C. de Giorgi.
Lecce	29.46	748.3	29.72	754.8	59.4	15.2	68	wnw.	10.1	7.2			7		w.	0	0		Prof. D. Conti.
Cosenza	28.88	733.6	29.78	756.4	56.8	13.8	78	wsw.	3.1	1.4			4		w.	0	0		Prof. A. Pacinotti.
Cagliari	29.37	746.0	29.56	750.9	56.5	13.6	86	nw.			2		10			0.020	0.5		Prof. G. Cacciatore.
Palermo	29.43	747.6	29.69	754.0	66.7	19.3	47	wsw.	14.3	6.4						0	0		Sig. Vincenzo Giuliano.
Syracuse	29.76	755.9	29.80	757.0	63.7	17.6	63	sw.	5.6	2.5			7		wsw.	0	0		
Sub-aerias.																			
Naples, S. R	29.09	738.9	29.61	752.0	59.0	15.0	81	sw.	18.6	8.3			10		wsw.	0.382	9.7		Prof. F. Briosehi.
Stelvio	21.49	545.8			17.6	— 8.0	82	sw.			2		8			0.400	10.3	covered	Prof. P. F. Denza.
Valdobbia	21.51	546.4			16.3	— 8.7	70	ne.			2		3			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.99	761.8	30.02	762.6	32.4	0.2	73	calm			0	0	7 ck		w.	0	0	cloudy	Hattori.
Awomori	29.96	761.0	30.00	762.0	33.3	0.7	76	w.	9.5	4.2			10 ks			0	0	gloomy	K. Ogawa.
Hakodate	29.96	761.1	29.97	761.3	30.0	— 1.1	96	nw.	18.0	8.0		0	7		w.	0	0		
Hamamatsu	29.91	759.7	29.94	760.4	45.5	7.5	85	calm			0	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					43.9	6.6	78	nne.	9.5	4.2		0	0			0	0	clear	
Kanazawa	29.88	759.0	29.99	761.6	40.3	7.9	87	ese.	8.7	3.8		0	1			0	0	fair	S. Endo.
Kioto	29.77	756.1	29.95	760 7	40.0	4.4	93	nw.	0.4	0.2		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.75	755.6	29.96	760.9	48.3	9.1	92	ne.	0.9	0.4		0	1 s			0.230	5.8	clear	S. Takahayashi.
Nilgata	30.00	762.0	30.04	763.0	38.6	3.7	86	se.	0.7	0.3		0	3 ck		w.	0.020	0.5	fair	M. Morita.
Nobiru	29.97	761.3	29.99	761.7	36.6	2.6	74	nnw.	15.5	6.9		0	1 s			0	0	fair	H. Midzushima.
Numazu	29.90	759 4	29.93	760 3	49.0	9.4	60	e.			4	0	0			0	0	clear	R. Kaneda.
Osaka	29.94	760.4	29.95	760.8	43.7	6.5	87	e.	4.2	1.9		0	0			0	0	clear	H. Omura.
Supporo					21.5	— 5.8	88	ne.	6.0	2.7			10		w.	0.189	4.8	covered	
Tokei Obs'y, Yeddo	29.87	758.8	29.95	760.8	46.5	8.1	82	n.	4.9	2.1		5 cs	3 s	sw.	sw.	0	0	cloudy	The Staff.
Wakayama	29.88	758.9	29.94	760.4	43.6	6.4	85	e.	4.5	2.0		0	0			0	0	clear	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.80	756 9	29.98	761.5	82.0	27.8	71	nnw.	14.0	6.3		1 cs	6 ks	ku	nne	0.22	5.6	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.69	601.8	29.91	759.8	46.8	8.2	84	s.	inap.	inap.		3 c	1 k	sw.	sw.	0	0	fair	Prof. Vicente Fernandez.
Leon	24.35	618.5	30.24	768.1	42.8	6.0	81	ne.			1	5 c	1 s	sw.		0	0	cloudy	Prof. M. Leal.
Mazatlan	29.76	755.8	30.02	762.4	67.0	19.4	79	nnw.	1.6	0.8			10 n		sw.	inap.	inap.	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.6	30.29	769.4	41.0	5.0	71	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.17	613.8	30.01	762.2	43.7	0.5	70	se.			1	1 c	2 c	s.	se.	0	0	½ cloudy	M. Tena, M. D.
Pabellon, Aguascallentes	23.93	607.8	30.08	764.1	42.8	6.0	83	wnw.			1	3 cs	0	ssw.		0	0	clear	M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.46	595.5	30.30	769.6	48.0	8.9	43	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.50	571.5	30.24	768.1	43.0	6.1	79	sw.	6.5	2.9		0	1 s		sw.	0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.08	738.5	29.08	738.5	38.5	3.6		s.			4					0.220	5.6		
Groningen	29.09	738.8	29.14	740.2	35.8	2.1		s.			2					0.236	6.0		
Helder	29.07	738.3	29.07	738.3	39.4	4.1		s.			2					0.055	1.4		
Hellevoetsluis	29.10	739.0	29.10	739.0	38.8	3.8	93	sw.			3					0.484	12.3		
Utrecht	29.09	738 9	29.14	740.1	39.0	3.9	90	ssw.			2		10			0.091	2.3	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.73	755.1	29.79	756.7	25.5	— 3.6	35	e.	16	7			1			0	0		
Brono	30.16	766.0	30.20	767.0	17.8	— 7.9	68	calm	0	0			0			0	0		
Christiania	29.69	754.1	29.85	758.1	20.3	— 6.5	73	nne.	20	9			6			0	0		
Gjæsvær	30.11	764.9	30.14	765.5	25.3	— 3.7		calm			0		5						
Lodingen	30.17	766.2	30.21	767 4	26.1	— 3.3	91	calm			0		10			0.161	4.1	snowing	
PORTUGUESE.																			
Angra, Azores	30.22	767.5	30.37	771.5	62.6	17.0	78	nw.	4.9	2.2			5			0	0		Dr. J. A. Sampaio.
Campo Major	28.99	736.4	30.00	762.1	53.6	12.0	54	wnw.	8.7	3.9			4			0.028	0.7		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.17	766.4	30.26	768.6	68.9	20.5	60	wsw.	7.4	3.3			1	n.		0	0		Capt. D. A. da Cunha.
Lisbon, Observatory	29.74	755.4	30.10	764.6	54.9	12.7	58	nnw.	15.4	6.9			5			0.047	1.2		The Staff.
Ponta Delgada, Azores	30.33	770.4	30.40	772.2	62.6	17.0	90	nw.	5.6	2.5			10			0.003	1.6	light rain	
Saint Paul de Loando	29.03	752.5	29.83	757.6	79.0	26.1	78	w.	1.8	0.8			1	se.		0	0		
Serra da Estrella	25.09	637.3	29.99	761.8	28.8	— 1.8	100	nw.			4		10					fogky	
RUSSIAN.																			
Akmolinski																0	0		Major K. Lasarew.
Archangel	30.44	773.2	30.46	773.7	1.0	—17.2	88	e.	4	2			10						Capt. Sseljwerstow.
Astrakhan	30.22	767.5	30.14	765.5	33.1	0.6	96	calm	0	0			10			blank	blank	heavy cl'ds.	Capt. Wisganow.
Barnaul	30.13	765.3	30.73	780.5	—21.6	—29.8	79	sw.	4	2			0			0	0		Meteorological Obs'y.
Bielosersk	29.48	748.8	29.99	761.7	11.7	—11.3	92	ene.	9	4			10 n			0.012	0.3	snowing	
Dorpat	29.48	748.8	29.74	755 5	10.4	—12.0	93	ese.	7	3			10 ks			0.039	1.0		Observatory.
Ekaterinburg	29.60	751.7	30.71	780.0	—12.1	—24.5	84	calm	0	0		0	3 s			0	0	light clouds	Meteorological Obs'y.
Ellisawetgrad	29.42	747.3	29.91	759.6	18.0	— 7.8	97	sse.	9	4		c	7 n			0	0		
Kasan	29.87	758.0	30.16	766.1	13.1	—10.5	52	e.	20	9			10					sleeting	Observatory.
Kem	30.29	769.4			10.2	—12.1	96	e.	13	6			10			0.098	2.5	heavy cl'ds.	
Kertch	29.97	761.2	29.99	761.7	36.1	2.3	92	e.	7	3		0	8 n			0	0		Lagorio & Sastyrez.
Kieff	29.02	737.0	29.69	754.2	17.8	— 7.9	100	se.	16	7			10 ks	n				light snow	Observatory.
Liban	29.50	749.4	29.53	750.0	13.3	—10.4	71	ene.			2		10			0.016	0.4		E. Quaas.
Lugan	29.89	759.1	30.11	764 8	13.5	—10.3	70	ssw.	9	4			7			0	0	light clouds	Meteorological Obs'y.
Nikolaiev	29.80	756.9	29.87	758.8	35.2	1.8	93	se.	13	6			10 n			0	0		Capt. Kurdakow.
Pekin, China	29.82	757.5	29.97	761.1	30.0	— 1.1	98	calm	0	0		0	0						Physical Observatory.
Petrozavodsk	29.78	756 4	30.00	761.9	15.4	— 9.2	94	ese.	45	20			10			0.224	5.7		Dr. Bergmann.
Pinsk																			
St. Petersburg	29.83	757.6	29.84	758.0	9.7	—12.4	81	ese.	9	4			10 n			0.031	0.8		Central Physical Obs'y.
Sevastopol																			
Semipalatinsk	30.06	763.6	30.84	783.2	—15.2	—26.2	85	n.	4	2			0			0	0		Major Lasarew.
Starol Bykhov	29.30	744.2	29.80	750.8	12.2	—11.0	72	se.	13	6			10						
Tashkend, Laboratory	28.50	723.9	30.09	764.3	50.4	10.2	51	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.55	725.1	29.98	761.5	48.9	9.4	71	nw.	11	5			9 cs			0	0		Physical Observatory.
Tomsk	30.34	770.5	30.67	779.1	—31.5	—35.3	79	calm	0	0			0						
Vladivostock	30.00	762.0	30.07	763.7	16.2	— 8.8	47	e.	2	1			0			0	0		
Warsaw	28.95	735.3	29.34	745.3	33.8	1.0	81	sw.	7	3			10					heavy cl'ds.	Astronomical Obs'y.
Wilna	29.13	739.8	29.58	751.2	16.0	— 8.9	85	se.	4	2			10					heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.25	768 4	30.60	777.2	—29.2	—34.0	80	calm	0	0			0						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.70	754.4	39	3.9	91	e.			4	0	0			0	0	clear	J. Youngclause.
North Unst			29.78	756.4				ne.			6	2	7	e.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.50	749 3	29.61	752.0	53.6	12.0	46	w.	6.0	2.7		0	0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.71	754.7	29.77	756.2	45.1	7.3	87	nw.	6.0	2.7			10			0.717	18.2	covered	Prof. Manuel de Naveras.
Burgos, Met. Obs'y	26.82	681.1	29.87	758.6	39.2	4.0	67	w.	12.5	5.6			4			0	0	light clouds	Domingo Martin.
Madrid, Royal Obs'y	27.61	701.2	29.86	758.5	45.7	7.6	45	nw.	19.2	8.6		0	2			0.012	0.3	cloudy	The Staff.
Murcia, Met. Obs'y	29.66	753.4	29.81	757.1	53.2	11.8	65	ssw.	4.9	2.2		2	4	ene.		0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.00	736.6	29.80	758.4	42.8	6.0	82	e.	18.8	8.4		9 n	8 n	w.	calm	0.268	6.8	covered	Prof. L. G. Fradee.
Santiago, Met. Obs'y	28.97	735.9	29.88	758.9	50.2	10.1	78	wsw.	6.3	2.8			8			0.461	11.7	almost cov.	R. Gil Villanueva, Dir.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.			0–10	0–10	0–10	From	From.	Inch.	Mill		
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.82	757.4	29.87	758.8	81.4	27.4	85	nne.	1.1	0.5	.....	0	3 k	.....	.....	0	0	clear.....	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.99	761 7	30.09	764.2	54.0	12.2	87	nw.	7.5	3.4	.....	.....	10	.....	sw.	0.023	0.6	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.97	761.2	30.06	763.5	80.2	26.8	72	e.	12.5	5.6	.....	0	6 k	.....	e.	0.020	0.5	cloudy.....	Manuel Maese.
Tuguegarao, Philippine Id's	29.78	756.5	29.91	759.8	77.3	25.2	89	nnw.	9.4	4.2	.....	0	0	.....	.....	0	0	clear.....	José L. Yrastorza.
SWEDISH.																			
Hapsranda	30.31	769.9	30.35	770.9	— 8.0	—22.2	100	ne.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	30.10	764.5	30.15	765.8	16.9	— 8.4	91	ne.	.....	.....	4	.....	8	.....	.....	0.228	5.8	.....	
Hernosand	29.95	760.8	30.00	762.1	20.8	— 6.2	90	ne.	.....	.....	6	.....	10	.....	.....	0.031	0.8	.....	
Stockholm	29.51	749.6	29.69	754.1	17.6	— 8.0	83	ne.	.....	.....	7	.....	10	.....	.....	0.051	1.3	.....	
Wisby	29.48	748.9	29.54	750.4	21.6	— 5.8	95	e.	.....	.....	4	.....	10	.....	.....	0.098	2.5	snowing.....	
Sub-series.																			
Upsala	29.64	752.8	29.72	755.0	19.9	— 6.7	87	ne.	14.0	6.3	.....	.....	10	.....	.....	0.012	0.3	snowing.....	S. G. Fineman.
SWISS.																			
Geneva	28.06	712.8	29.52	749.9	42.8	6.0	60	w.	.....	.....	3	.....	7	.....	.....	0.484	12.3	cloudy.....	The Observatory.
TURKISH.																			
Constantinople	.....	.....	29.96	761.0	49.5	9.7	56	sw.	10	4.5	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	29.85	758.2	63.1	17.3	.....	s.	.....	.....	1	.....	5	.....	.....	0	0	cloudy.....	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.94	760.5	64.9	18.3	61	nw.	.....	.....	2	.....	5 ks	.....	nw.	0.57	14.5	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.01	762.2	30.10	764.5	37	2.8	66	s.	12	5.4	.....	.....	10 s	.....	w.	0.01	0.3	cloudy.....	J. O. Barnes.
Alpena, Michigan	29.20	741.7	29.91	759.7	29	— 1.7	88	sw.	4	1.8	.....	.....	10 s	.....	.....	0.06	1.5	cloudy.....	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.96	634.0	30.04	763.0	37	2.8	58	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	W. C. Barnes.
Assinnaboine, Ft., Montana	27.30	693.4	30.32	770.1	11	—11.7	64	sw.	1	0.4	.....	.....	10 n	.....	w.	0.12	3.0	light snow..	B. O. Lenoir.
Atlanta, Georgia	29.00	736.6	30.23	767.8	42.0	5.6	65	e.	10	4.5	.....	.....	10ks	.....	s.	0	0	cloudy.....	H. C. Smith.
Atlantic City, New Jersey	30.19	766.8	30.20	767.1	40	4.4	73	sw.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy.....	Jas. M. Watson.
Augusta, Georgia	30.10	764.5	30.30	769.6	34	1.1	88	calm	0	0	.....	0	5s;fg	.....	s.	0	0	fair.....	John Healy.
Baltimore, Maryland	30.16	766.1	30.21	767.3	37	2.8	61	sw.	4	1.8	.....	4 cs	sk.	w.	.....	0	0	fair.....	Geo W Felger.
Barnegat, New Jersey	30.18	766.6	30.20	767.1	39.0	3.9	73	sw.	14	6.3	.....	7 c	0	.....	.....	0	0	fair.....	G. A. Hill.
Bennett, Fort, Dakota	28.49	723.6	30.25	768.3	20	— 6.7	87	ne.	3	1.3	.....	.....	10 n	.....	.....	inap.	inap.	light snow..	A. Pritchard.
Benton, Fort, Montana	27.34	694.4	30.34	770.6	14	—10.0	67	calm	0	0	.....	0	6 s	.....	.....	0.01	0.3	fair.....	S. Wheaton.
Bismarck, Dakota	28.27	718.0	30.28	769.1	5	—15.0	76	nw.	20	8.9	.....	0	0	.....	.....	0.02	0.5	clear.....	Cyrus Cramer.
Block Island, Rhode Island	30.17	766.3	30.20	767.1	42	5.6	82	w.	14	6.3	.....	4 cs	0	w.	.....	0.02	0.5	fair.....	J. T. Elker.
Boise City, Idaho	27.36	694.9	30.34	770.6	31	— 0.6	92	n.	3	1.3	.....	0	6 s	.....	.....	0.02	0.5	fair.....	B. E. Light.
Boston, Massachusetts	29.98	761.5	30.14	765.5	38.0	3.3	82	sw.	8	3.6	.....	0	5 s	.....	sw.	0	0	fair.....	O. B. Cole.
Brownsville, Texas	29.91	759.7	29.96	761.0	68.0	20.0	78	s.	6	2.7	.....	0	2 s	.....	.....	0	0	clear.....	M. McCarty.
Buffalo, New York	29.25	742.9	30.05	763.3	32	0.0	78	sw.	12	5.4	.....	0	9 ks	.....	sw.	0.03	0.8	cloudy.....	W. Finn.
Buford, Fort, Dakota	28.18	715.8	30.42	772.7	3	—16.1	76	nw.	12	5.4	.....	0	0	.....	.....	0.02	0.5	clear.....	F. A. Mellen.
Burlington, Vermont	29.67	753.6	29.98	761.5	31.0	— 0.6	88	s.	22	9.8	.....	.....	10 n	.....	w.	inap.	inap.	light snow..	G. C. Schaeffer.
Cairo, Illinois	29.44	747.8	29.86	758.4	46.7	8.2	95	s.	12	5.4	.....	.....	10 n	.....	s.	1.45	36.8	light rain.....	W. H. Ray.
Cape Henry, Virginia	30.24	768.1	30.26	768.6	42	5.6	92	sw.	12	5.4	.....	3 c	3 s	sw.	.....	0	0	fair.....	A. K. Alderson.
Cape May, New Jersey	30.19	766.8	30.22	767.6	47.0	8.3	86	sw.	22	9.8	.....	2 cs	6 s	.....	sw.	0	0	cloudy.....	W. E. Smith.
Cape Mendocino, California	29.41	747.0	30.09	764.3	58	14.4	69	nw.	16	7.2	.....	0	0	.....	.....	0	0	clear.....	J. J. McLean.
Cedar Keys, Florida	30.24	768.1	30.26	768.6	48	8.9	86	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	F. W. Mixer.
Champaign, Illinois	29.06	738.1	29.93	760.2	35.0	1.7	66	nw.	8	3.6	.....	.....	10 s	.....	nw.	0	0	cloudy.....	L. A. Welsh.
Charleston, S. Carolina	30.21	767 3	30.27	768.8	45	7.2	93	n.	4	1.8	.....	0	8 s	.....	sw.	0	0	cloudy.....	J. H. Smith.
Charlotte, N. Carolina	29.34	745.2	30.24	768.1	34.0	1.1	79	w.	2	0.9	.....	0	fg.	.....	.....	0	0	clear.....	D. O'Donoghue.
Chattanooga, Tennessee	29.30	744.2	30.16	766.1	45.0	7.2	60	se.	4	1.8	.....	0	9 ks	.....	sw.	0	0	cloudy.....	B. L. Goulding.
Cheyenne, Wyoming	23.97	608.8	30.25	768.3	31.2	— 0.4	74	nw.	8	3.6	.....	3 c	0	.....	.....	0	0	clear.....	E. McGovern.
Chicago, Illinois	29.22	742.2	29.98	761.5	30.0	— 1.1	84	sw.	4	1.8	.....	4 k	0	calm	.....	0	0	fair.....	J. Mitchell.
Chincoteague, Virginia	30.21	767 3	30.23	767.8	42	5.6	92	s.	6	2.7	.....	4 c	3 s	.....	.....	0	0	fair.....	C. F. Dickens.
Cincinnati, Ohio	29.36	745.7	30.06	763.5	46	7.8	83	e.	11	4.9	.....	.....	10 n	.....	s.	inap.	inap.	light rain.....	R. B. Watkins.
Cleveland, Ohio	29.31	744.5	30.10	764.5	30.6	— 0.8	72	s.	6	2.7	.....	10 cs	0	.....	.....	0	0	cloudy.....	J. B. Newlin.
Coleman City, Texas	28.09	713.5	29.99	761.7	49	9.4	93	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	L. Dorman.
Columbus, Ohio	29.18	741.2	30.09	764.3	39	3.9	82	s.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy.....	D. Cuthbertson.
Concho, Fort, Texas	27.96	710.2	29.98	761.5	45.0	7.2	93	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	J. McGlone.
Custer, Fort, Montana	26.87	682.5	30.27	768.8	28	— 2.2	77	ne.	7	3.1	.....	.....	10 s	.....	.....	0.06	1.5	cloudy.....	W. B. Lamar.
Davenport, Iowa	29.29	744 0	30.00	762.0	31	— 0.6	68	ne.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy.....	R. R. Martin.
Davis, Fort, Texas	25.17	639.3	30.11	764.8	45	7.2	65	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	J. Williams.
Dayton, Washington T'y	28.41	721.6	30.24	768.1	42.3	5.7	92	s.	1	0.4	.....	2 c	0	.....	.....	0.04	1.0	clear.....	D. Moore.
Deadwood, Dakota	25.31	642.9	30.30	769.6	26	— 3.3	88	ne.	8	3.6	.....	.....	10 n	.....	.....	0.27	6.9	light snow..	F. Willson.
Delaware Breakwater, Del	30.20	767.1	30.22	767.6	40	4.4	89	sw.	16	7.2	.....	7 cs	0	w.	.....	0	0	fair.....	T. S. Townsend.
Denison, Texas	29.09	738.9	29.94	760.5	52.0	11.1	80	sw.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	F. M. Neal.
Denver, Colorado	24.71	627.6	30.23	767.8	32.0	0.0	74	s.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	J. W. Byram.
Des Moines, Iowa	29.01	736.8	29.99	761.7	34	1.1	79	se.	6	2.7	.....	.....	10 s	.....	se.	0	0	cloudy.....	F. W. Conrad.
Detroit, Michigan	29.29	744.0	30.05	763.3	34.0	1.1	79	s.	8	3.6	.....	0	0	.....	.....	0.04	1.0	clear.....	C. F. R. Wappenhans.
Dodge City, Kansas	27.39	695.7	30.19	766.8	29	— 1.7	84	nw.	14	6.3	.....	6 c	0	w.	.....	inap.	inap.	fair.....	V. P. Temple.
Dubuque, Iowa	29.17	740.9	29.94	760.5	24.5	— 4.2	73	calm	0	0	.....	.....	10 s	.....	w.	0	0	cloudy.....	J. Harvey Smith.
Duluth, Minnesota	29.21	741.9	30.02	762.5	14	—10.0	80	w.	10	4.5	.....	.....	10 s	.....	w.	0	0	cloudy.....	N. B. Conger.
Eagle Pass, Texas	29.14	740.1	29.98	761.5	47.0	8.3	86	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	F. Belford.
Eagle Rock, Idaho	25.33	643.4	30.25	768.3	35	1.7	72	sw.	16	7.2	.....	0	6 s	.....	sw.	0	0	fair.....	J. M. Clifford.
Eastport, Maine	30.10	764.5	30.16	766.1	38.0	3.3	86	s.	23	10.3	.....	.....	10 s	.....	s.	0	0	cloudy.....	D. C. Murphy.
Elliott, Fort, Texas	27.19	690.6	30.15	765.8	39	3.9	65	n.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	W. J. Cundall.
El Paso, Texas	26.26	667.0	30.12	765.0	38.0	3.3	82	w.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	J. O'Dowd.
Erie, Pennsylvania	29.31	744.5	30.08	764.0	33	0.6	68	sw.	8	3.6	.....	0	0	.....	.....	0.01	0.3	clear.....	Peter Wood.
Escanaba, Michigan	29.17	740.9	29.89	759.2	25.0	— 3.9	88	sw.	2	0.9	.....	.....	10 s	.....	.....	0.06	1.5	cloudy.....	George Heathcote.
Fredericksburg, Texas	28.14	714.7	29.96	761.0	59	15.0	93	w.	10	4.5	.....	5 k	0	.....	.....	0	0	fair.....	Frank Hulwegler.
Galveston, Texas	29.94	760.5	29.99	761.7	65	18.3	93	sw.	12	5.4	.....	0	8 ks	.....	sw.	0.06	1.5	cloudy.....	E. O'C. Machnerney.
Grand Haven, Michigan	29.23	742.4	29.94	760.5	31.0	— 0.6	88	w.	12	5.4	.....	0	9 ks	.....	w.	0.04	1.0	clearing.....	J. E. Mueller.
Grant, Fort, Arizona	25.30	642.6	30.18	766.6	41	5.0	54	e.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	Robert C. Lord.
Hatteras, North Carolina	30.26	768.6	30.28	769.1	50	10.0	86	ne.	6	2.7	.....	9 k	0	e.	.....	0	0	cloudy.....	R. M. Crawford.
Helena, Montana	25.74	653.8	30.12	765.0	41	5.0	52	sw.	9	4.0	.....	5 k	0	.....	.....	0	0	fair.....	N. C. Smith.
Henrietta, Texas	28.92	734.6	30.00	762 0	40	4.4	82	n.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	J. P. Sherry.
Huron, Dakota	28.65	727.7	30.19	766.8	17	— 8.3	67	n.	10	4.5	.....	.....	10 s	.....	.....	0.02	0.5	cloudy.....	S. W. Glenn.
Indianapolis, Indiana	29.12	739.6	29.97	761.2	38	3.3	75	se.	2	0.9	.....	.....	10s;fog	.....	.....	0	0	cloudy.....	O. Schutze.
Indianola, Texas	29.94	760.5	29.97	761.2	63.0	17.2	90	s.	12	5.4	.....	0	0	.....	.....	inap.	inap.	clear.....	I. A. Reed.
Jacksboro, Texas	28.75	730.2	29.99	761.7	49	9.4	63	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	D. J. Carr.
Jacksonville, Florida	30.21	767.3	30.26	768.6	47	8.3	93	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog....	J. W. Smith.
Keogh, Fort, Montana	27.60	701.0	30.30	769.6	19	— 7.2	87	n.	10	4.5	.....	.....	10 s	.....	nw.	inap.	inap.	cloudy.....	A. Schneider.
Keokuk, Iowa	29.23	742.4	29.94	760.5	35.0	1.7	64	ne.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy.....	F. Z. Gosewisch.
Key West, Florida	30.11	764.8	30.13	765.3	65.0	18.3	87	ne.	14	6.3	.....	0	0	.....	.....	0	0	clear.....	R. H. Paxton.
Kittyhawk, North Carolina	30.27	768.8	30.29	769.4	43	6.1	96	sw.	1	0.4	.....	1 c	2 s	ne.	sw.	0	0	clear.....	H. Mc P. Baldwin.
Knoxville, Tennessee	29.10	739.1	30.18	766.6	42.8	6.0	67	e.	3	1.3	.....	.....	10 s	.....	sw.	0	0	cloudy.....	J. A. Cody.
La Crosse, Wisconsin	29.15	740.4	30.00	762.0	15	— 9.4	83	n.	12	5.4	.....	.....	10 s	.....	.....	inap.	inap.	cloudy.....	S. C. Emery.
Leavenworth, Kansas	29.01	736.8	29.97	761.2	43	6.1	93	n.	4	1.8	.....	.....	10 n	.....	.....	0.12	3.0	light rain....	A. W. Browne.
Lewiston, Idaho	29.36	745.7	30.24	768.1	39.5	4.2	89	n.	1	0.4	.....	0	0	.....	.....	0.08	2.0	clear.....	W. Bell.
Little Rock, Arkansas	29.53	750.0	29.80	758.4	58	14.4	80	calm	0	0	.....	.....	10 s	.....	w.	inap.	inap.	cloudy.....	W. U. Simons.
Los Angeles, California	29.62	752.3	30.02	762.5	54	12.2	36	ne.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	T. S. Collins.
Louisville, Kentucky	29.38	746.2	29.98	761.5	46	7.8	85	e.	10	4.5	.....	.....	10 n	.....	.....	0.20	5.1	light rain....	L. M. Dey.
Lynchburg, Virginia	29.50	749.3	30.23	767.8	38.8	3.8	65	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy.....	Lewis Duane.
Mackinaw City, Michigan	29.18	741.2	29.88	758.9	32.0	0.0	88	nw.	10	4.5	.....	.....	10 s	.....	nw.	0.53	13.5	cloudy.....	F. R. Day.
Macon, Fort, North Carolina	30.25	768.3	30.26	768.6	46	7.8	100	ne.	5	2.2	.....	3 cs	0	.....	.....	0	0	clear.....	C. A. Shaw.
Madison, Wisconsin	28.88	733.5	29.98	761.5	23	— 5.0	88	nw.	10	4.5	.....	5 c	0	w	.....	0.01	0.3	fair.....	F. P. Chaffee.
Maginnis, Fort, Montana	25.57	649.5	30.11	764.8	18	— 7.8	70	nw.	8	3.6	.....	.....	10 s	.....	nw.	0.09	2.3	cloudy.....	F. Burke.

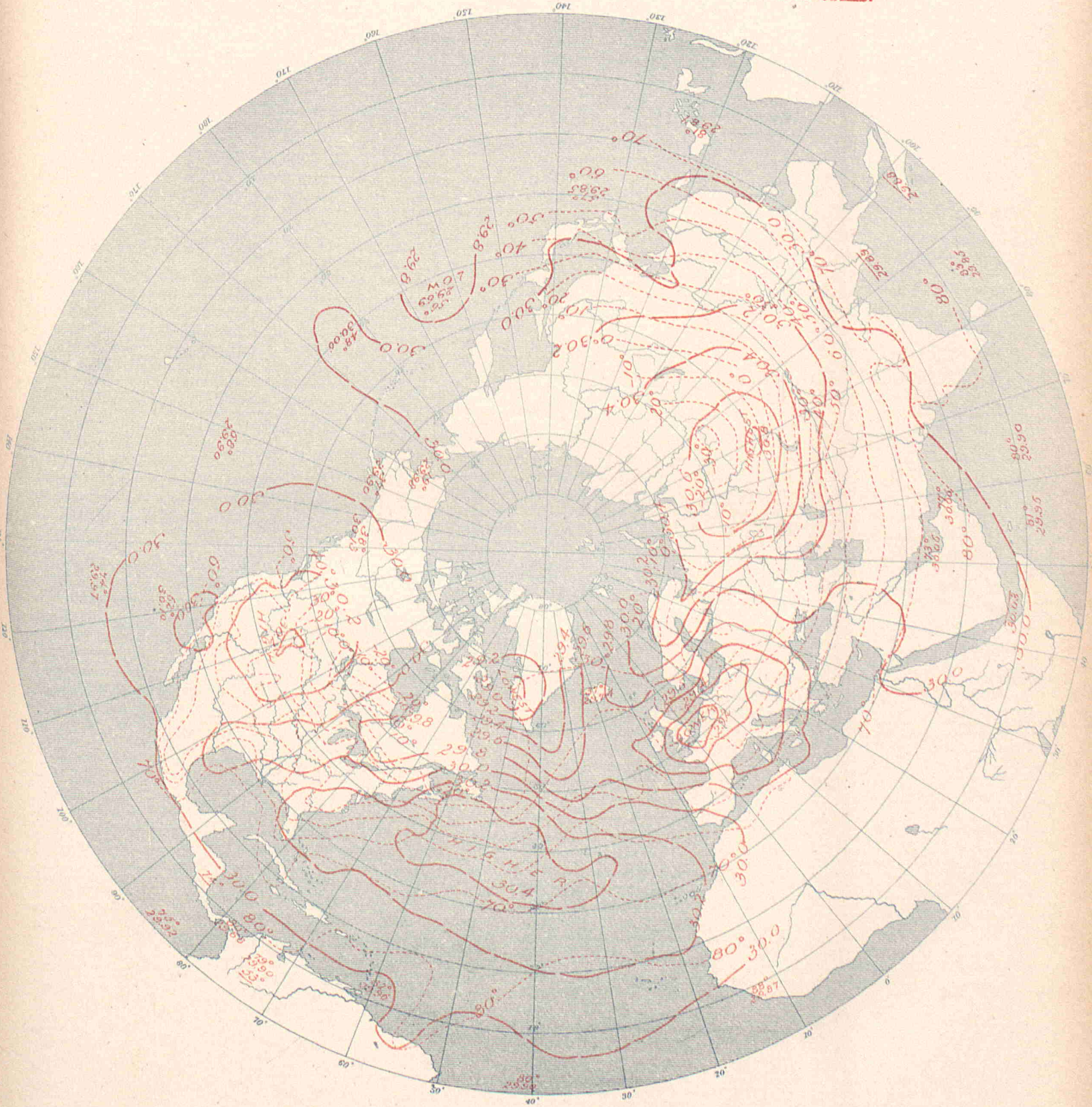
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
McKavett, Fort, Texas	27.60	701.0	29.98	761.5	45	7.2	76	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.03	737.3	29.81	757.2	20	— 3.3	76	w.	15	6.7	.....	10 k	0	w.	.....	0.10	2.5	cloudy	J. Gilligan.
Memphis, Tennessee	29.53	750.0	29.89	759.2	56	13.3	74	s.	2	0.9	.....	.....	10 s	.....	s.	0 10	2.5	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.16	740.7	29.96	761.0	21	— 6.1	70	w.	3	1.3	.....	0	1 s	.....	.....	0.01	0.3	clear	W. Line
Missoula, Fort, Montana	26.78	680.2	30.24	768.1	30	— 1.1	81	nw.	3	1.3	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	J. H. Young.
Mobile, Alabama	30.09	764.3	30.13	765.3	53	11.7	93	e.	3	1.3	.....	0	1 ks	.....	.....	0	0	clear	C. A. Read.
Montgomery, Alabama	29.93	760.2	30.17	766.3	43	6.1	93	calm	0	0	.....	0	8 k	.....	w.	0	0	cloudy	J. B. McLaughlin.
Moorhead, Minnesota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Bessant.
Morgantown, W. Virginia	29.11	739.4	30.18	766.6	43.5	6.4	81	s.	5	2.2	.....	0	fg.	.....	.....	0	0	clear	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.50	596.9	30.13	765.3	15.0	— 9.4	87	w.	63	28.2	.....	.....	fg	.....	w.	0	0	dense fog	B. S. Pague.
Nashville, Tennessee	29.35	745.5	29.96	761.0	46.0	7.8	93	se.	8	3.6	.....	.....	10 ks	.....	sw.	0.34	8.6	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.05	763.3	30.17	766.3	38	3.3	72	sw.	7	3.1	.....	3 cs	0	.....	.....	0	0	clear	J. H. Sherman.
New London, Connecticut	30.15	765.8	30.20	767.1	40	4.4	82	sw.	8	3.6	.....	5 k	0	.....	.....	0	0	fair	J. G. Lynch.
New Orleans, Louisiana	30.03	762.7	30.09	764.3	58.3	14.6	80	se.	4	1.8	.....	.....	10 s	.....	sw.	0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.14	765.5	30.19	766.8	44.2	6.8	82	sw.	12	5.4	.....	1 c	1 s	w.	sw.	0.02	0.5	clear	W. McGillivray.
New York, New York	30.03	762.7	30.22	767.6	36	2.2	79	s.	6	2.7	.....	6 cs	0	sw.	.....	0.07	1.8	fair	J. B. Merrill.
Norfolk, Virginia	30.24	768.1	30.27	768.8	41	5.0	82	calm	0	0	.....	0	9ks;fg	.....	.....	0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.04	686.8	30.20	767.1	31.6	— 0.2	86	w.	8	3.6	.....	0	0	.....	.....	0.01	0.3	clear	E. F. Brady.
Olympia, Washington T'y	30.19	766.8	30.23	767.8	47.0	8.3	93	n.	1	0.4	.....	.....	10 n	.....	.....	0.06	1.5	light rain	J. Dascomb.
Omaha, Nebraska	28.72	729.5	30.01	762.2	42.1	5.6	82	nw.	1	0.4	.....	.....	10n;fg	.....	.....	0.06	1.5	light rain	A. Pollak.
Oswego, New York	29.66	753.4	30.01	762.2	37.0	2.8	61	w.	12	5.4	.....	hz.	5 s	.....	w.	0.05	1.3	fair	J. G. Linsley.
Palestine, Texas	29.41	747.0	29.99	761.7	63.5	17.5	87	sw.	13	5.8	.....	.....	10 ks	.....	sw.	0	0	cloudy	L. M. Pindell.
Pensacola, Florida	30.12	765.0	30.15	765.8	56.3	13.5	92	ne.	8	3.6	.....	.....	10 s	.....	s.	0.07	1.8	cloudy	M. McGauran.
Philadelphia, Pa	30.09	764.3	30.20	767.1	37.5	3.1	82	sw.	6	2.7	.....	5 cs	0	.....	.....	c	0	fair	T. T. Townsend.
Pike's Peak, Colorado	17.62	447 5	30.28	769.1	5	—15.0	69	nw.	36	16.1	.....	0	0	.....	.....	0	0	clear	H. Hall.
Pioche, Nevada	24.13	612.9	30.30	769.6	40.2	4.6	52	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.28	743 7	30.14	765.5	41.0	5.0	65	s.	7	3.1	.....	0	6 s	.....	s.	0	0	fair	W. A. Reid.
Poplar River, Montana	.....	.....	.....	.....	.....	.....	.....	nw.	.....	.....	1	0	0	.....	.....	0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.11	764.8	30.12	765.0	64.5	18.1	80	s.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	H. B. Boyer.
Port Huron, Michigan	29.30	744.2	30.03	762.7	26.2	— 3.2	86	s.	10	4.5	.....	2 cs	5 s	w.	s.	0.09	2.3	fair	W. O. Bailey.
Portland, Maine	30.04	763.0	30.09	764.3	33	0.6	78	w.	6	2.7	.....	2 cs	0	.....	.....	0.02	0.5	clear	W. W. Eichelberger.
Portland, Oregon	30.10	764 5	30.18	766 0	51.4	10.8	96	calm	0	0	.....	.....	10 n	.....	.....	0.16	4.1	light rain	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	52	11.1	93	ne.	.....	.....	1	5 k	4 ks	sw.	sw.	0	0	cloudy	F. S. Coburn.
Prescott, Arizona	24.82	630.4	30.19	766.8	31.5	— 0.3	61	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.13	765.3	30.16	766.1	43	6.1	93	sw.	10	4.5	.....	2 cs	4 s	sw.	sw.	0	0	fair	P. T. Jenkins.
Punta Rassa, Florida	30.18	766.6	30.19	766.8	55.5	13.1	80	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. J. Evans.
Red Bluff, California	29.74	755.4	30.11	764.8	42	5.6	73	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. R. Williams.
Rochester, New York	29.30	744.2	30.01	762.2	30.5	— 0.8	81	w.	15	6.7	.....	0	7 k	w.	.....	0	0	fair	E. W. McGann
Roseburg, Oregon	29.68	753.9	30.25	768.3	41.2	5.1	91	s.	1	0.4	.....	0	fg.	.....	.....	0	0	clear	J. J. Naury.
Sacramento, California	30.03	762.7	30.11	764.8	45.4	7.4	93	e.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.24	742.7	29.89	759.2	41.0	5.0	100	se.	8	3.6	.....	.....	10 n	.....	.....	0.26	6.6	light rain	J. H. Weber.
St. Michael, Fort, Alaska	29.94	760.5	29.98	761.5	19	— 7.2	100	se.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	A. P. Leavitt.
St. Paul, Minnesota	29.10	739.1	30.06	763.5	15.0	— 9.4	83	w.	7	3.1	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.17	740.9	30.16	766.1	— 3	—19.4	100	nw.	11	4.9	.....	.....	10 n	.....	.....	0.02	0.5	light snow	O. B Dilley.
Salt Lake City, Utah	25.78	654.8	30.32	770.1	30	2.2	58	calm	0	0	.....	3 k	0	.....	.....	0	0	clear	J. Craig.
San Antonio, Texas	29.23	742.4	29.95	760.7	60.5	15.8	93	se.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	T. J. Kenan.
San Diego, California	29.93	760.2	30.00	762.0	49.9	9.9	61	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.35	745.5	30.08	764.0	32.2	0.1	78	sw.	8	3.6	.....	5 cs	0	.....	.....	0	0	fair	M. H. Perry.
Sandy Hook, New Jersey	30.17	766.3	30.20	767.1	36.0	2.2	79	s.	3	1.3	.....	5 c	0	.....	.....	0	0	fair	B. A. Blundon.
San Francisco, California	30.01	762.2	30.08	764.0	53	11.7	75	w.	7	3.1	.....	0	0	.....	.....	0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.20	589.3	30.19	766.8	33	0.6	74	ne.	8	3.6	.....	3 c	0	.....	.....	0	0	clear	H. U. Jones.
Savannah, Georgia	30.16	766.1	30.26	768.6	44	6.7	80	n.	4	1.8	.....	0	fg.	.....	.....	0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.38	670.0	30.22	767.6	16	— 8.9	70	e.	3	1.3	.....	6 cs	0	.....	.....	0	0	fair	A. L. Mathews.
Shreveport, Louisiana	29.73	755.1	29.98	761.5	57	13.9	93	s.	3	1.3	.....	0	8 s	s.	.....	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.67	728.2	30.00	762.0	35.5	1.9	91	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.32	617.7	30.16	766.1	39.0	3.9	50	nw.	8	3.6	.....	3 c	0	.....	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	30.06	763.5	30.13	765.3	37.7	3.2	88	e.	4	1.8	.....	.....	10 ks	.....	e.	inap.	inap.	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.40	746.7	29.90	759.4	51.3	10.7	72	s.	3	1.3	.....	0	3 s	.....	.....	0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.22	767.6	30.26	768.6	45	7.2	100	ne.	4	1.8	.....	1 k	fg.	.....	.....	0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.13	714.5	30.26	768.6	36	2.2	92	nw.	1	0.4	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	H. Clifford.
Springfield, Illinois	29.20	741.7	29.92	760.0	38.5	3.6	77	ne.	5	2.2	.....	.....	10 n	.....	.....	inap.	inap.	light rain	T. B. Jennings.
Springfield, Massachusetts	30.05	763.3	30.19	766.8	20.5	— 6.4	78	calm	.....	.....	0	hz	4 n	.....	.....	0	0	fair	Charles Mayr.
Springfield, Mo.	28.35	720.1	29.88	758.9	45	7.2	96	n.	11	4.9	.....	.....	fg.	.....	.....	0.67	17.0	dense fog	J. B. Marbury.
Starkville, Miss.	29.55	750.6	30.05	763.3	52	11.1	86	s.	11	4.9	.....	.....	10 s	.....	s.	0	0	cloudy	C. Dill.
Stevenson, Fort, Dakota	28.25	717.5	30.31	769.9	6	—14.4	76	nw.	18	8.0	.....	.....	10 s	.....	.....	0.03	0.8	cloudy	W. Burrows
Stockton, Fort, Texas	26.92	683.8	30.06	763.5	48	8.9	52	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	30.12	765.0	30.18	766.6	41.2	5.1	73	s.	26	11.6	.....	3 c	0	w.	.....	0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.26	692.4	30.08	764.0	35	1.7	85	se.	.....	.....	1	0	0	.....	.....	0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.30	744.2	30.04	763.0	31	— 0.6	57	s.	4	1.8	.....	3 cs	0	sw.	.....	0	0	clear	A. Buell.
Tucson, Arizona	27.58	700.5	30.08	764.0	42	5.6	68	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.84	757.9	30.23	767.8	43	6.1	93	se.	5	2.2	.....	2 c	0	.....	.....	0	0	clear	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	34	1.1	65	nw.	.....	.....	1	0	0	.....	.....	0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.78	756.4	30.05	763.3	55.8	13.2	84	se.	6	2.7	.....	.....	10 n	.....	s.	0.02	0.5	light rain	James Kenealy.
Visalia, California	29.71	754.6	30.00	764.3	42.4	5.8	92	calm	0	0	.....	0	0	.....	.....	0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.41	620.0	30.18	766.6	24.9	— 3.9	84	se.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	T. M. Ambler.
Washington, D. C.	30.11	764.8	30.23	767.8	35.3	1.8	67	s.	2	0.9	.....	0	3 s	.....	.....	0	0	clear	B. M. Pursell.
West Las Animas, Colorado	26.07	662.2	30.23	767.8	25	— 3.9	82	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.50	749.3	30.13	765.3	28	— 2.2	88	calm	0	0	.....	hz.	4 k	.....	w.	inap.	inap.	fair	B. F. Hough.
Wilmington, N. Carolina	30.22	767.6	30.28	769.1	40	4.4	89	n.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog	Samuel A. Haney.
Winnemucca, Nevada	25.80	655.3	30.33	770.4	26.5	— 3.1	72	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. Grover.
Yankton, Dakota	28.66	728.0	30.09	764.3	26	— 3.3	61	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	J. H. Atfield.
Yuma, Arizona	29.80	756.9	29.95	760.7	51.0	10.6	52	calm	0	0	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8	.....	.....	53.0	11.7	76	e.	1	0.4	.....	2 ck	0	nw.	.....	0.14	3.6	fair	Joaquin Gomez.
Havana, Cuba, W. I.	30.01	762.2	30.08	764.0	61.5	16.4	92	calm	0	0	.....	1cs;ck	2ks;k	w.	e.	0	0	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	72	22.2	72	n.	5	2.2	.....	0	0	.....	.....	0	0	fine	Robert Johnston.
Paramaribo, S. A.	30.03	762.7	30.03	762.7	78	25.6	86	e.	.....	.....	2	5 ck	3 s	e.	.....	0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.90	759.4	79	26.1	95	calm	.....	.....	0	.....	9 ks	.....	calm	0.02	0.5	foggy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	74	23.3	92	ne.	.....	.....	2	0	0	.....	.....	0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.84	757.9	29.90	759.4	37	2.8	82	ne.	.....	.....	3	.....	10 n	.....	.....	0.18	4.6	light rain	W. J. Fisher.
St. Thomas, W. I.	29.96	761.0	30.08	764.0	79	26.1	69	e.	.....	.....	.....	0	4 k	.....	e.	0.04	1.0	fine	Aug. Walloe.
York Factory H. B. A.	30.00	762.0	30.07	763.8	—28.0	—33.3	.....	s.	5	2.2	.....	0	0	.....	.....	inap.	inap.	clear	Forrestone & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
BRITISH NAVAL.																		
H. M. S. Amethyst, Montevideo, Uruguay †	30.16	766.1	67	19.4	84	ene.			3-4		6	s.						squally.
H. M. S. Audacious, N. 5° 38′, E. 85° 40′	29.85	758.2	83	28.3	87	nw.			1		1	w.				2	nw.	blue sky.
H. M. S. Beacon, Lake Timsah, Egypt			72	22.2	49	wsw.			2-3		4	wsw.				1	wsw.	d. clouds.
H. M. S. Boadecia, Simon's Bay, Cape Colony	30.11	764.8	...	..		ese.			2-3									blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.03	762.7	72	22.2	63	wnw.			3		5	wnw.						d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.00	762.0	52.5	11.4	82	wsw.			1		0							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B.C.	30.23	767.8	43	6.1	91	calm			0		10							misty.
H. M. S. Curacoa, N. 35° 20′, E. 139° 39′	29.82	757.4	55.5	13.1	80	calm			0									d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.70	754.4	68	20.0	60	ne.			1-2		8							showery.
H. M. Dock-Yard, Bermuda, W. I.	30.29	769.4	65	18.3	66	nne.			1		5	nne.						d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.86	758.4	73.5	23.1	93	sse			2		10							d. clouds.
H. M. S. Flamingo, N. 17° 01′ W. 61° 34′	30.01	762.2	83	28.3	91	ne.			3-4		3	ne.				3	ene.	d. clouds.
H. M. S. Gannet, S. 29° 50′, W. 71° 20′	29.96	761.0	59	15.0	87	calm			0		10							misty.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	29.94	760.5	68	20.0	94	calm			0		0							blue sky.
H. M. S. Kingfisher, N. 2° 22′ W. 85° 32′	29.92	760.0	75	23.9		ssw.			2-3		5	s.				3	s.	d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	29.93	760.2	67.3	19.6	81	n.			1		9					2	n.	showery
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.92	760.0	61	16.1		calm			0									d. clouds.
H. M. S. Magpie, N. 34° 44′ E. 128° 04′	29.94	760.5	53.5	11.9	68	wsw.			1		0							misty.
H. M. S. Monarch, N. 38° 40′, E. 15° 29′			65	18.3		sse.			3		5	sse.				2	sse.	d. clouds.
H. M. S. Northampton, N. 17° 20′, W. 62° 10′	30.01	762.2	79.5	26.4	72	e.			4		2	e.				1	e.	d. clouds.
H. M. S. Rocket, Callao, Peru	29.95	760.7	67	19.4	94	calm			0		2					2-3	sw.	d. clouds.
H. M. S. Swiftsure, Ancon Bay, Peru	29.98	761.5	65	18.3	100	e.			1		2							d. clouds.
H. M. S. Sylvia, Peckett Harbor, Patagonia	29.95	760 7	51.5	10.8	73	wnw.			2-3		5	calm						d. clouds.
H. M. S. Tourmaline, Aden, Arabia	30.03	762.7				e.			3		1	e.						blue sky.
H. M. S. Woodlark, N. 20° 12′, E. 50° 41′	29.96	761.0	72.5	22.5	59	se.			4-5		8	sse.				2	se.	d. clouds.
H. M. S. Zephyr, Chee-foo, China	29.92	760.0	42.5	5.8	83	var.			1		10					2	e	overcast.
PORTUGUESE NAVAL																		
Tamega, Macao, China	30.02	762.4	71.2	21.8	80	calm			0		0							blue sky.
UNITED STATES NAVAL.																		
Navy Yard, Pensacola, Fla	30.13	765.3	56	13.3	87	ne.	4	1.8			10		ne.	0	0			cloudy.
Navy Yard, Portsmouth, N. H.	30.10	764.5	35	1.7	80	s.	11	4.9			0			0	0			hazy.
Naval Hospital, Yokohama, Japan*	29.81	757.2	49	9.4	74	calm			0		2		w.	0	0			clear.
Adams, Sitka, Alaska*†	30.22	767.6	37	2.8	90	calm			0		10							cloudy.
Alaska, N. 31° 38′, W. 149° 13′	29.90	759.4	68	20.0	79	sse.			4		5		s.	0.15	3.8	long	se.	fair.
Alliance, Hampton Roads, Va	30.23	767.8	44	6.7	100	w.			1		8			0	0			fair.
Ashuelot, Nagasaki, Japan	29.97	761.2	56	13.3	87	calm			0		2							clear.
Brooklyn, Keel Point, Patagonia	29.93	760.2	59	15.0	87	ese.	16	7.2			8		w.	0	0	sm'h		fair.
Colorado, New York, N. Y	30.28	769.1	38	3.3	54	se.	1	0.4			5		calm	0	0			misty.
Enterprise, Norfolk, Va	30.29	769.4	45	7.2	92	sw.			1		8		calm					cloudy.
Essex, Callao, Peru	29.93	760.2	67	19.4	90	sse.			1		5		se.			sm'h		fair.
Franklin, Norfolk, Va	30.23	767.8	43	6.1	83	sw.	6	2.7			2			0	0			fair.
Galena, Montevideo, Uruguay	30.00	762.0	67	19.4	90	ne.			3		5		ne.			sm'h		fair.
Hartford, Savoy Point, Patagonia*	29.80	756.9	50	10.0	93	n.			2		10		n.	sh's	sh's	sm'h		cloudy
Independence, Mare Island, Cal.	30.10	764.5	45	7.2	92	calm			0		0			0	0			clear.
Iroquois, Callao, Peru	29.92	760.0	68	20.0	79	s.			1		10							cloudy.
Jamestown, Boston, Mass.	30.12	765.0	36	2.2	100	sw.			1		2							foggy.
Juniata, N. 35° 42′, W. 55° 38′*	30.39	771.9	67	19.4	90	ene.			5		10		calm	0	0	sm'h	e.	overcast.
Kearsarge, Norfolk, Va	30.26	768.6	47	8.3	85	calm			0		5							fair.
Lackawanna, Callao, Peru*	29.89	759.2	67	19.4	90	se.			1		10		s.			sm'h	se.	cloudy.
Lancaster, Naples, Italy*	29.51	749.5	63	17.2	100	sw.			6		10		sw.			sm'h		squally.
Michigan, Erie, Pa	29.86	758.4	41	5.0	100	s			2		10		s.					cloudy.
Minnesota, New York, N. Y.	30.23	767.8	35	1.7	90	sw.	2	0.9			8		sw.					hazy.
Monocacy, Kobe, Japan	29.94	760.5	52	11.1	86	calm			0		0							clear.
New Hampshire, Newport, R. I.	30.22	767.6	46	7.8	92	sw.			4		2		sw.			sm'h	sw.	fair.
Nipsic, Lisbon, Portugal*	30.04	763.0	57	13.9	62	n.			3		8					sm'h		cloudy.
Onward, Callao, Peru	30.07	763.8	65	18.3	94	sse.			2		10		n.			long	w.	cloudy.
Palos, Tien-Tsin, China*	29.93	760.2	30	— 1.1	89	calm			0		0							clear.
Pensacola, Callao, Peru*	29.87	758.7	60	15.6	90	sse.	4	1.8			10			0	0	sm'h		cloudy.
Powhatan, Boston, Mass.	30.13	765.3	35	1.7	90	ssw.			1		5							foggy.
Quinnebaug, Villefranche, France*	29.42	747.3	52	11.1	59	wnw.			2		10		wnw.			sm'h	sw.	cloudy.
Ranger, N. 16° 11′, W. 95° 08′	29.99	761.7	70	21.1	66	n.			1		0					gr'd		clear.
Richmond, Yokohama, Japan*	29.86	758.4	52	11.1	79	nw.			2		2		nw.	0	0			fair.
Saratoga, Newport, R. I.	30.09	764.3	43	6.1	100	sw.			2		2		s.	light	light	sm'h		fair.
St. Louis, League Island, Pa.	30.39	771.9	36	2.2	80	sw.			4		5		ne.	0	0			fair.
Swatara, Hampton Roads, Va*	30.12	765.0	43	6.1	83	s.			2		5		calm			sm'h		hazy.
Tennessee, Fort Monroe, Va	30.28	769.1	45	7.2	68	ssw.	3	1.3			8			0	0			cloudy.
Vandalia, Hampton Roads, Va*	30.23	767.8	43	6.1	100	sw.			1		5		calm					fair.
Wabash, Boston, Mass	30.15	765.8	36	2.2	70	sw.	2	0.9			5		sw.	0	0			fair.
Wachusetts, Mare Island, Cal*	30.02	762.5	44	6.7	100	var.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.28	769.1	54	12.2	86	sw.			1		10		w.	0	0			cloudy.
Yantic, Norfolk, Va	30.31	769.9	43	6.1	100	s.			1		5							fair.
MERCHANT MARINE.																		
S. S. Grecian, S. 12° 30′, W. 36° 00′*	29.92	760.0	80	26.7	82	nnw.			1		6		n.	1 h'r	1 h'r	light	ne.	cloudy.
S. S. Polynesian, N. 37° 56′, W. 72° 43 *	30.14	765.5	50	13.3		wsw.			4		4		sw.	0	0	mod.	w.	fair.
S. S. Scandinavian, N. 47° 32′ W. 45° 37′	30.41	772.4	32	0.0		nw.			6		10		nw.	rain	rain	high	sw.	overcast.
S. S. British Crown, N. 53° 35′, W. 35° 42′†	29.43	747.5	40	4.4		nw.			7		9		wnw.	sleet	slee.	cf'd	'var.	raining.
S. S. British Prince, N. 48° 33′, W. 43° 29′†	30.24	768.1	34	1.1		nnw.			6		9		wnw.	3 h'r	3 h'r	high	wnw.	cloudy.
S. S. Indiana, Liverpool, Eng †	29.22	742.2	40	4.4	82	ne.			3		8		ne.					cloudy.
S. S. Lord Clive, Philadelphia, Pa*†	30.05	763.3				w.			2		4		w.	1 h'r	1 h'r			fine.
S. S. Ohio, Philadelphia, Pa			35	1.7	90	w.			3		7							clear.?
S. S. Pennsylvania, Philadelphia, Pa†	30.11	764.8	35	1.7		s.			2		8		s.					clear ?
S. S. Castor, N. 41° 10′, W. 66° 15′*	30.27	768.8	48.2	9		wnw.			3		5		nnw.	0	0	3	wnw.	fair.
S. S. Stella, N. 46° 18′ W. 38° 58′	30.17	766.4	46.4	8		nw.			3		8		nw	0	0	6	nw.	squally.
S. S. Bolivia, N. 55° 09′, W. 11° 46′ *†	29.69	754.1	45	7.2	92	e.			4		3		nnw.	rain	rain	mod.	nnw.	clear.
S. S. Dorian, N. 51° 00′, W. 16° 20′ *	29.70	754.4	50	10.0		nw.			6		4		n.	snow	snow	r'gh	wnw.	cloudy.
S. S. Ethiopia, New York, N. Y	30.19	766.8	36.5	2.5		sw.			2		2		sw	0	0			clear.
S. S. Galatia, N. 13° 16′, E. 52° 44′†..	30.14	765.5	78.3	25.7	95	sw.			2		0			0	0	sm'h	se.	clear.
S. S. Ailsa, N. 18° 32′, W. 75° 38′†	30.22	767.6	76	24.4	91	nne.			4		10		ne.	0	0	sm'h		cloudy.
S. S. Alvo, off Greytown, Nicaragua	30.01	762.2	73	22.8		calm			0	6 ck	0			2 h'r	2 h'r	long	ne.	squally.
S. S. Antillas, Kingston, Jamacia, W. I.						calm			0					0	0	sm'h		clear.
Bk. Coppename, N. 8° 38′, W. 48° 22′	29.94	760.5	80.5	26.9	78	ene.			4		6							blue sky.
S. S. Gordon Castle, N. 21° 20′, E. 113° 31′	29.98	761.5	70.5	21.4	80	calm			0		0							blue sky.
S. S. Inchkeith, S. 41° 30′, E. 46° 11′	29.67	753.6	48.2	9.0	85	wsw.			7-8		8							squally.
Mertola, N. 42° 20′, W. 12° 37′	30.04	763 0	53.8	12.1	87	nw.			6		7							squally.
S. S. Marathon, Smyrna, Turkey	30.03	762.7	50	10.0		sw.			2		2		sw.	1 h'r	1 h'r			fine.
S. S. Parthia, off Liverpool, England*†	29.35	745.5	42	5.6		n.			7		6		n.	rain	rain	sli't	n.	squally.
S. S. Scythia, N. 50° 44′, W. 17° 00′	29.71	754.6	53	11.7		wnw.			6		4?		wnw.	2 h'r	2 h'r	h'vy	nw.	cloudy.?
S. S. Colina, Glasgow, Scotland	29.40	746.7				nne.			4		2		ne.	1 h'r	1 h'r			snowing
S. S. Canada, N. 42° 07′ W. 66° 10′	30.34	770.5	46.4	8.0		s.			3		3		wsw.	0	0	sm'h	w.	clear.
S. S. France, N. 49° 20′, W. 18° 19′†	29.79	756.7	44.6	7		ne.			5	ck	0	ene.		rain	rain	hv'y	ene.	hailing
S. S. Abyssinia, N. 41° 43′, W. 64° 22′*	30.30	769.6	53	11.7	80	sse.			3		10		w.	0	0	sm'h		overcast.
S. S. Wisconsin, N. 51° 10′, W 17° 40′	29.60	751.8	48	8.9		wnw.			7		1		n.	0	0	h'vy	wnw.	clear.
S. S. Wyoming, N. 51° 06′, W. 25° 06′	29.82	757.4	46	7.8		se.			6		8		sse.	0	0	r'gh	nw.	threatening
S. S. Bohemia, N. 46° 33′, W. 44° 51′†	30.24	768.1				wnw.			3		9		nw.	10 h'r	10 h'r	r'gh	wnw.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Frisia, N. 49° 51′, W. 16° 21′	29.76	755.9	47	8.3		nw.			6-7		7		w.	rain	rain	h'vy	wnw.	cloudy.
S. S. Gellert N. 42° 04′, W. 60° 32′	30.51	774.9	42	5.0		ene.			3		3		se.	0	0	sm'h	wsw.	clear.
S. S. Silesia, N. 53° 30′, E. 5° 03′			38	3.3	100	ese.			4-6		10		e.			5	e.	raining.
S. S. Vandalia, N. 50° 19′, W. 0° 34′	29.20	741.7	49.3	9.6	90	wnw.			4		5		w.	0	0	mod.		fair.
S. S. Mentmore, N. 39° 10′, W. 63° 06′*	30.45	773.4				sw.			2		2		w.	0	0	mod.	e.	clear.
S. S. Archimedes, N. 38° 59′, W. 9° 37′	29.93	760.2				n.			4		3		n.	0	0	sm'h		hazy.
S. S. Hevelius, N. 32° —′ W. 15° —′ *†	30.28	769.1	69	20.6		nne.			4		8?		nne.	1 h'r	1 h'r	sm'h		clear?
S. S. Sirius, N. 20° 40′, W. 20° 30′ *	30.12	765.0				ne.			5		0			0	0	r'gh	ne.	clear.
S. S Colorado, Galveston, Texas†	30.00	762.0	60	15.6		w.			2		10		w.	8 h'r	8 h'r			cloudy.
S. S. Rio Grande, Galveston, Texas†	30.00	762.0	67	19.4		se.			1		7?		sw.	0	0			overcast.
S. S. San Marcos, Galveston, Texas			70	21.1		ssw.			4				ssw.					
S. S. Archimede, N. 36° 03′, W. 65° 20′†	30.41	772.4	62	16.7	72	nw.			2		6		wnw.	2 h'r	2 h'r	long	wnw.	cloudy.
S. S. Hermod, N. 46° 15′, W. 38° 22′†	30.24	768.1	59.0	15.0		nw.			10		9		wnw.	4 h'r	4 h'r	high	nw.	threatening.
S. S. John Hopkins, Chesapeake Bay			38	3.3		sw.			2		0?			0	0			overcast.?
S. S. Glenapp, S. 11° 30′, W. 35° 00′†	29.80	756.9				nnw.			2		9		se.	9 h'r	9 h'r	cross	var.	heavy rain.
S. S. Glenfyne, S. 0° 28′, W. 44° 36′ *†	29.56	750.8				ene.			3		2		ene.	0	0	mod.	ene.	fair.
S. S. Toronto, N. 44° 34′, W. 61° 19′			32.0	0.0		s.			4		6		sw.	0	0	sm'h		cloudy.
S. S. Chalmette, N. 38° 30′, W. 74° 22′†	30.21	767.3	50	10.0		sw.			5		3		sw.	0	0	mod.	sw.	clear.
S. S. Lone Star, N. 27° 30′, W. 87° 00′†	30.14	765.5	70	21.1		ese.			1		1		calm	0	0	sm'h		clear.
S. S Denmark, London, Eng †	29.06	738.1	40	4.4		w.			2		10			0	0			overcast.
S. S. Egypt, N. 41° 32′, W. 55° 11′ *†	30.50	774.7				ese.			1		10		ese	0	0	h'vy	nw.	cloudy.
S. S. Erin, N. 48° 53′, W. 36° 27′	29.96	761.0	47	8.3		nw.			0		6		nw.	3 h'r	3 h'r	high	nw.	sleeting.
S. S. Greece, N. 44° 49′, W. 41° 19′ *†	30.32	770.1	49	9.4		nw.			7		8		nnw.	3 h'r	3 h'r	r'gh	nw.	cloudy.
S. S. Helvetia, N. 50° 55′, W. 14° 15′	29.58	751.3	53	11.7		nw.			6		5		wnw.	3 h'r	3 h'r	h'vy	wnw.	raining.
S. S. City of Alexandria, N. 20° 42′, W. 93° 41′ †	30.18	766.6	78	25.0		ene.			4		3		ne.	0	0	small	ene.	clear.
S. S. City of Merida, N. 23° 09′, W. 82° 22′*†	30.12	765.0	75.2	24.0		ne.			3		0			0	0	mod.	ne.	fine.
S. S. Amsterdam, N. 49° 34′, W. 7° 50′			47	8.3		nnw.			5							5	wnw.	squally.
S. S. Olbers, N. 1° 10′ W. 41° 00′ *†	29.80	756.9	80	26.7		ene.			4								ne.	fine.
S. S. State of Nebraska, N. 55° 21′ W 15 00′†	29.60	751.8	49	9.4		nne.			2-3							high	nw.	d clouds.
S. S. Western Texas, N. 32° 04′ E. 80° 30*†.	30.38	771.6				n.			5									gale.
S. S. Donau, N. 42° 29′, W. 55° 15′	30.57	776.5				ene.			1-2		8		e.	2 h'r	2 h'r	mod.	wnw.	cloudy.
S. S. Hohenstaufen, N. 17° 56′, W. 24° 23′	30.14	765.5	82.4	28.0		e.			6		3		e.	0	0	light	e.	fair.
S. S. Ohio, Newport News, Va	30.21	767.3				sw.			2		5		sw.	0	0			fair.
S. S. Rhein, N 53° 52′ E. 7° 55′	29.29	744.0				ese.			4		10		se.	6 h'r	6 h'r	sm'h	ese.	cloudy.
S. S. Sailer, N. 48° 22′, W. 41° 50′	30.20	767.1	42.8	6.0		nnw.			7		8		nnw.	3 h'r	3 h'r	h'vy	nnw.	fair.
S. S. Strassburg, S. 0° 20′ W. 30° 59′	29.93	760.2	82.5	28.1	89	se.			3		5		se.	0	0	mod.	se.	fair.
S. S. Belgic, N. 42° 43′, E. 164° 57′†	29.79	756.7	56	13.3	69	s.			5		7			0	0	mod.	sw.	cloudy.
S. S. Coptic, N. 38° 47′, W. 177° 55′	30.06	763.5	47.5	8.6	85	ne.			3		5?		ne.	0	0	long	w.	clear.?
S. S. Oceanic, N. 30° 30′ W. 129° 05′*	29.90	759.4	63	17.2	78	sw.			3		9		wsw.			sm'h		drizzling.
S. S. Mississippi, Seattle, Wash. Ter *†	30.27	768.8	50	10.0	80	w.			1		10		w.					light fog.
S. S. Oregon, San Francisco, Cal†	30.05	763.3	50	10.0	80	calm			0		0							clear.
S. S. Ancon, San Francisco, Cal †	30.01	762.2	52	11.1	79	n.			3		0							clear.
S. S. City of Chester, off San Francisco, Cal. *†	30.06	763.5	52	11.1	86	nw.			2		0							clear.
S. S. Dakota, Seattle, Wash. Ter †	30.04	763.0	48	8.9	92	se.			3		8		sw.	4 h'r	4 h'r	sm'h		cloudy.
S. S. Orizaba, N. 34° 52′ W. 120° 38′*†	29.89	759.2	64	17.8	62	nw.			3		0					mod.	sw.	clear.
S. S. State of California, Astoria, Oregon *†	30.16	766.1	47	8.3		calm			0		10			0	0			foggy.
S. S. Australia, S. 35° 04′. E. 176° 00′	29.82	757.4	61	16.1	94	s.			3		10		s.	2 h'r	2 h'r	mod.	s.	clear.
S. S. City of New York, Sydney, N. S. W †	29.88	758.9	74	23.3	72	ne.			1		10		se.	0	0			cloudy.
S. S. City of Pekin, N. 27° 16′, E. 124° 26′†	30.01	762.2	66	18.9	64	nnw.			4		10		s.	0	0	small	n.	cloudy.
S. S. City of Rio de Janeiro, Panama, Panama †	29.88	758.9	80	26.7	77	se.			2		5		se.	0	0	sm'h		fair.
S. S. Colima, N. 25° 51′ W. 114° 02′†	30.01	762.2	65	18.3	94	calm			0		0			0	0	sm'h	w.	misty.
S. S. Grenada, N. 11° 33′, W. 87° 17′†	29.90	759.4	77	25.0	82	ne.			5		0			0	0	sm'h	ne.	clear.
S. S. Zealandia, S. 10° 37′, W. 169° 33′	29.87	758.7	83	28.3	96	ene.			2		1		ne.			mod.	ne.	fine
S. S. Muriel, Barbadoes, W. I.	29.96	761.0	82	27.8		ene.			3		0			0	0	sm'h		clear.
S. S. Carnea, N. 17° 22′, W. 67° 47′†	30.12	765.0	81	27.2	78	ene.			6		2		e.	2 h'r	2 h'r	mod.	e.	fair.
S. S. Claudius, N. 16° —′, W. 87° 15′†	30.12	765.0				sw.			3		5		ne	5 h'r	5 h'r	short	wsw.	fair.
S. S. Valencia, N. 28° 09′, W. 70° 10′ †	30.28	769.1	71	21.7	85	nne.			6		9		nne.	4 h'r	4 h'r	h'vy	n.	squally.
S. S. Belgenland, N. 49° 06′, W. 11° 40′	29.71	754.6	50	10.0	86	nw.			9		8		nw.	sqll's	sqll's	h'vy	wnw.	squally.
S. S. Nederland, N. 42° 05′, W. 57° 34′			40	4.4		ssw.			1		2?		s.	0	0	mod.	wsw.	cloudy.?
S. S. Pennland, N. 47° 54′, W. 44° 30′	30.37	771.4	36	2.2	80	w.			6		8		w.	4 h'r	4 h'r	long	nw.	fine.
S. S. Rhynland, N. 50° 05′, W. 3° 30′	29.14	740.1	44	6.7	92	n.			8		8		nne.	6 h'r	6 h'r	sm'h		stormy.
S. S. Waesland, Antwerp, Belgium	29.19	741.4	41	5.0	82	ssw.			5		10		ssw.	0	0			cloudy.
S. S. P. Culand, N. 46° 50′, W. 41° 12′	30.35	770.9	45.1	7.3	85	wnw.			7		7		nw.			7	wnw.	cloudy.
S. S. Schiedam, N. 41° 29′, W. 63° 56′	30.37	771.4	49.1	9.5	89	sse.			4		3		sw.	0	0	sm'h		fair.
S. S. W. A. Scholten, Brouwershaven, Germany	29.22	742.2	49.3	4.0	97	ssw.			7		10		sw.	rain	rain	sm'h		squally.
S. S. Zaandam, N. 40° 28′, W. 71° 10′	30.21	767.3	54.5	12.6	78	sw.			3		2 k		ne.	0	0	2	sw	fine.
S. S. State of Florida, N. 42° 31′, W. 62° 00′	30.34	770.6	45	7.2		s.			4		3			0	0	sm'h		fine.
S. S. Iowa, N. 43° 09′, W. 54° 12′			40	4.4		s.			1		2			0	0	con.		clear.
S. S. Britannic, N. 42° 10′, W. 51° 57′†	30.57	776.5	48	8.9	?	nne.			2		9		ne.	0	0	sm'h	w.	overcast.
S. S. Celtic, Liverpool, Eng†	29.23	742.4	40	4.4		nne.			5		10		ne.	12 h'r	12 h'r			cloudy.
S. S. Germanic, N. 49° 36′, W. 35° 13′ †	29.90	759.4	47	8.3		nw.			7		6		nw.	5 h'r	5 h'r	high	w.	d. clouds.
S. S. Marengo, N. 40° 49′, W. 69° 05′	30.23	767.8				s.			5		6?		s.	2 h'r	2 h'r	r'gh	s.	clear?
S. S. Salerno, N. 43° 36′, W. 9° 25′						nw.			9		10		nw.	4 h'r	4 h'r	h'vy	nw.	squally.
S. S. Catherine Whiting, Philadelphia, Pa†	30.26	768.6	48	8.9		w.			1				w.	0	0			
S. S. Saxon, Boston, Mass †	30.05	763.3	30	— 1.1		wsw.			5		0							
MISCELLANEOUS.																		
Bg. Alcira, N. 10° 57′, W. 71° 46′	29.92	760.0	80	26.7		ene.			4		2		ene.	0	0			clear.
Schr. Annie Lewis, Tampico, Mexico †	30.13	768.3	69	20.6		sw.			2		5?			0	0	long	ne.	cloudy.?
S. Annie M Law, N. 28° 49′ E. 134° 04′*†	29.85	758.2	67	19.4		w.			1		0?			1 h'r	1 h'r	sm'h		rainy.?
Bk Anna Thormann, S. 25° 42′, E. 61° 50′*	29.98	761.4	79.0	26.1	83	w.			4		4 k		n.	sh'rs	sh'rs	mod.	var.	fair.
S. S. Antonio Lopez, Havana, Cuba, W. I.*	30.12	765.0	61	16.1	94	calm			0		4			0	0			hazy.
Bgt. Arthur, N. 37° 17′, W. 46° 19 *†	30.52	775.2				ene.			4				ene.	0	0		var.	cloudy.
Bk. Champion, N. 21° 31′, W. 3° 36′			73.0	22.8		ene.			4		5		ne.	0	0	mod.	ne.	fair.
Schr. Chas. F. Heyer, N. 27° 09′, W. 79° 44′	30.24	768.1	71	21.7	62	ne.			1	0	2 k		se.	0	0		ene.	clear.
Bg. Clara M. Goodrich, Sagua la Grande, Cuba, W.I.*†	30.00	762.0				ne.			0		5?		ne.	0	0			cloudy.?
S. Cornelius, N. 49° 48′, W. 5° 41′			48.2	9.0		n.			5		8		nne.			mod.	wnw.	rainy.
S. S. D. J. Foley, N. 33° 51′, W. 74° 45′ *†	30.27	768.8	67	19.4		sse.			5		2		sse.	0	0	sm'h		clear.
Bkt. David Preston, Pensacola, Fla			66.0	18.9		w.					8		w.	0	0			fine.
Bk. E. L. Pettingill, N. 24° 46′, W. 122° 25′ *†	30.20	767.1	62	16.7		n.			3		0			0	0	sm'h	wsw.	clear.
Bk. E. D. Bigelow, Bordeaux, France *†	29.45	748.0				ssw.			6				ssw.	rain	rain			
S. E. J. Spicer, N. 40° 39′, W. 49° 27′ *.	30.52	775.2	60	15.6		ene.			5		10		nw.	rain	rain	mod.	nw.	cloudy.
Bk. Eliza Barss, Bermuda, W. I†	30.29	769.4				ne.			2		2		ene.	0	0			clear.
S. Enoch Train, N. 25° 34′, W. 73° 33′ *†	30.30	769.6				nne.			4		4		une.	0	0	light	ne.	clear.
Bk. Essex, Muscat, Arabia*†	29.96	761.0	77.0	25.0		ne.			7					0	0		ne.	threatening.
Schr. F. E. McDonald, Belfast, Maine†	30.17	766.3				ssw.			1		0			0	0			fine.
S. S. Foscolin, N. 32° 07′, W. 68° 59′						nne.			5		8		ene.	0	0	cross		dull.
Bk Freya, N. 19° 30′, W. 57° 20′			82	27.8		n.			4		5		ese.	4 h'r	4 h'r	mod.	e.	squally.
S. J. W. Gildemeister, N. 40° 46′, W. 54° 14′ *	30.45	773.4	50.9	10.5	51	e.			1-5		5		se.	½h'r	½h'r	2-3	w.	d. clouds.
Bg. George, N. 43° 00′, W. 61° 58′*†	30.52	775.2				sse.			5				s			mod.	sw.	cloudy.
Bk. Gronsvaer, Wellington, N. Zealand†	29.78	756.3	67.8	19.9	95	nw.			4		5		nw.	0	0			fair.
Bk. Godeffroy, S. 42° 29′, W. 57° 01′ †	30.09	764.3	55.6	13.1	90	ne.			3-4		0			0	0	sm'h	n.	clear.
Bk. Great Surge n, S. 13° 59′, E. 99° 17′*†	29.98	761.5	80	26.7		sse.			4		3		sse.	0	0	long	sse.	fair.
Bk. Grey Eagle, N. 17° 01′, W. 35° 05′*†	30.00	762.0				e.			3		10		e.	2 h'r	2 h'r	long	ne.	squally.
Bk. Hattie G. McFarland, New York, N. Y†	30.21	767.3	40	4.4		w.			1		6		sw.	0	0			clearing.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Schr. Hattie Weston, N. 23° 45′ W. 70° 10′*†	30.20	767.1	80	26.7	.....	se.	.....	.....	3	.....	10	.....	ese.	0	0	hv'y	ne.	cloudy.
Bk. Heinrich & Tonio, N. 51° 35′, E. 2° 00′*†	29.21	741.9	45	7.2	80	nnw.	.....	.....	2	.....	10	.....	.....	4 h'r	4 h'r	sm'h	.....	rainy.
Schr. Isabel Alberto, N. 24° 09′, W. 81° 42′†	30.11	764.8	.....	.....	.....	ne.	.....	.....	3	.....	3	.....	ne.	0	0	mod.	ene.	fair.
Schr. James Slater, N. 32° 20′, W. 73° 42′†	30.28	769.1	72	22.2	.....	se.	.....	.....	2	.....	0	.....	.....	0	0	light	ne.	fair.
Schr. Jennie N. Huddell, Savannah, Ga†	30.25	768.3	40	4.4	.....	nnw	.....	.....	1	.....	fg.	.....	.....	e	0	.....	.....	
Schr. John L. Thomas, N. 33° 58′, W. 76° 12′*†	30.30	769.6	.....	.....	.....	nne.	.....	.....	1	.....	6	.....	sse.	0	0	light	n.	threatening.
Bg. John Wesley, N. 35° 56′, W. 73° 47′†	30.14	765.5	.....	.....	.....	w.	.....	.....	7	.....	3	.....	nw.	2 h'r	2 h'r	rg'h	sw.	hazy.
Bk. Joseph A. Ropes, N. 80 56′ E. 55° 18′*†	29.96	761.0	81	27.2	83	ne.	.....	.....	4	.....	4	.....	ne.	0	0	mod.	ne.	fair.
Bkt. Josephine, N. 35° 55′, W. 54° 16′†	30.40	772.1	69	20.6	76	ene.	.....	.....	5	.....	10	.....	.....	0	0	cross	nw;e	misty.
Bk. Julia H, N. 39° 44′, W. 53° 20′	30.54	775.7	55.0	12.8	62	calm	.....	.....	0	.....	10	.....	.....	shr's	shr's	5	con	overcast.
Light House Tender Laurel, Key West, Fla†	30.11	764.8	66	18.9	.....	ene.	.....	.....	1	.....	1	.....	ene.	0	0	sm'h	.....	clear.
Bg. Lilian, N. 33° 33′, W. 74° 55′†	30.31	769.9	70	21.1	.....	sse.	.....	.....	4	.....	2	.....	s.	0	0	sm'h	e.	clear.
Bg. L. & W. Armstrong, N. 34° 25′, W. 62° 42′*†	30.44	773.2	.....	.....	.....	e.	.....	.....	3	.....	9	.....	ene.	0	0	mod.	nw.	overcast.
S. S. Malabar, N. 41° 16′. E. 9° 48′†	29.49	749.0	.....	.....	.....	w.	.....	.....	10	.....	10	.....	w.	0	0	.....	.....	squally.
Bk. Matilda C. Smith, N. 27° 23′, W. 56° 27′*†	30.32	770.1	.....	.....	.....	se.	.....	.....	4	.....	0	.....	.....	0	0	mod	nw.	fine.
Schr. Minnie A. Bonsall, St. John's, Fla†	30.28	769.1	68	20.0	.....	nnw.	.....	.....	1	.....	fg.	.....	.....	.....	.....	light	ne.	foggy.
S. Minnie N. Gerow, N. 32° 50′, W. 26° 30′ *†	30.38	771.6	.....	.....	.....	nw.	.....	.....	2	.....	10	.....	n.	.....	.....	sm'h	.....	fair.
S. M. P. Grace, S. 3° 26′, W. 127° 29′*†	29.98	761.5	74	23.3	.....	ese.	.....	.....	5	.....	5	.....	ese.	0	0	r'gh	ese.	squally.
Bg. O. C. Clary, Demerara, British Guiana, S. A *†...	29.90	759.4	84	28.9	91	e.	.....	.....	2	.....	1	.....	ne.	hv'y	hv'y	.....	.....	clear.
S. Orealla, N. 17° 57′, E. 92° 45′ *	29.89	759.2	.....	.....	.....	ese.	.....	.....	2	.....	2	.....	e.	.....	.....	sli't	sw.	fine.
S. Paramita, San Francisco, Cal†	30.00	762.0	50	10.0	.....	ne.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	
S. S. Peconic, N. 26° 57′, W. 79° 55′*†.	30.14	765.5	70	21.1	.....	e.	.....	.....	4	.....	8	.....	e.	.....	.....	sm'h	e.	cloudy.
Bk. Pilgrim, N. 1° 45′, W. 35° 40′ *†	29.98	761.5	.....	.....	.....	e.	.....	.....	2	.....	.....	.....	nne.	0	0	high	nne.	fair.
S. S. Radnorshire, N. 5° 17′, E. 97° 21′*†	29.88	758.9	.....	.....	.....	w.	.....	.....	2	.....	10	.....	wnw.	8 h'r	8 h'r	mod.	w.	cloudy.
S. S. Raleigh, N. 34° 10′, W. 77° 00′ *†	30.16	766.1	60	15.6	.....	ne.	.....	.....	1	.....	2	.....	sw.	0	0	sm'h	.....	
Bk. Rebus, N. 38° 36′, W. 64° 51′ *	30.28	769.1	60	15.6	.....	ssw.	.....	.....	2	.....	1	.....	ssw.	½ h'r	½ h'r	sm'h	nnw.	fair.
S. St. Francis, N. 160 00′ W. 125° 45′†	29.97	761.2	74	23.3	.....	n.	.....	.....	4	.....	3	.....	ne.	0	0	mod.	ne.	fair.
S. S. Sunbeam, N. 19° 57′, W. 49° 52′	30.11	764.8	78	25.6	86	ese.	.....	.....	4	.....	5	.....	ese.	0	0	3	ese.	d. clouds.
S. S. Strathleven, N. 9° 29′ E. 63° 15′	29.90	759.4	80.0	26.7	93	ne.	.....	.....	4	.....	3	.....	ene.	0	0	3	ene.	d. clouds.
Schr. T. S. McLellan, N. 27° 45′, W. 79° 45′*†	30.25	768.3	69	20.6	.....	calm	.....	.....	0	.....	.....	.....	ne.	.....	.....	h'vy	n.	cloudy.
U.S.F.C.S. S. Fish Hawk, Washington, D. C†	30.34	770.6	38	3.3	81	wsw.	.....	.....	3	.....	8	.....	sw.	0	0	.....	.....	fair.
Bk. Usko, N. 54° 53′, W. 9° 52′*....	29.46	748.3	46	7.8	.....	e.	.....	.....	2–5	.....	7	.....	e.	4 h'r	4 h'r	long	w.	cloudy.
Bk. Vincenzo Accame, N. 34° 30′, W. 32° 45′†	30.56	776.3	71.6	22.0	.....	ne.	.....	.....	2	.....	0	.....	.....	0	0	mod.	.....	clear.
Schr. Walter L. Plummer, N. 28° 50′, W. 75° 30′*†.....	30.30	769.6	.....	.....	.....	e.	.....	.....	4	.....	1	.....	ese.	0	0	mod	n.	fine.
Bk. Wandering Jew, Montevideo, Uruguay †	30.14	765.5	67	19.4	.....	e.	.....	.....	6	.....	5	.....	e.	0	0	.....	.....	fair.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.05	763.3	.....	.....	.....	nne.	.....	.....	1	.....	1	.....	s.	.....	.....	sm'h	wsw.	fair.
S. Wm. Woodbury, N. 44° 17′, W. 31° 14′*.....	30.07	763.8	62	16.7	.....	n.	.....	.....	6	.....	8?	.....	n.	.....	.....	long	nnw.	clear †

International Chart I. December 5, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 6, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer, corrected for instrumental error and for temperature.		Barometer, reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mil.	Inch.	Mil.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mil.		
Algerian.																			
Nemours	.....	.....	30.02	762.5	57.2	14.0	80	ne.	.....	.....	2	.....	3	.....	.....	0	0	very fair	Malaterre.
Algiers	.....	.....	29.88	758.9	58.6	14.8	47	sw.	.....	.....	4	.....	0	.....	.....	0.402	10.2	clear	Thève.
La Calle	.....	.....	29.76	755.8	52.2	11.2	85	wnw.	.....	.....	4	.....	5	.....	.....	0	0	cloudy	Fonfréde.
Tunis	.....	.....	29.74	755.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.02	762.4	60.8	16.0	93	nw.	.....	.....	2	.....	4	.....	.....	0.055	1.4	cloudy	Pérès.
Tebessa	.....	.....	29.92	760.0	48.9	9.4	63	w.	.....	.....	3	.....	2	.....	.....	0	0	fair	Dognon.
Gerlville	.....	.....	.....	.....	55.8	13.2	28	w.	.....	.....	3	.....	1	.....	.....	0	0	very fair	Lonchamp.
Laghouat	.....	.....	29.93	760.1	59.0	15.0	34	ssw.	.....	.....	0	.....	4	.....	.....	0	0	cloudy	Abraham.
Biskra	.....	.....	29.92	760.0	63.0	17.2	35	nw.	.....	.....	1	.....	8	.....	.....	0	0	very cloudy	Malau.
Australian.																			
Melbourne, Victoria	29.83	757.7	29.92	759.9	60.0	15.6	87	sse.	4	1.8	.....	.....	9	.....	.....	0.18	4.6	dull	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	28.90	734.0	29.46	748.2	39.2	4.0	97	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.62	727.0	29.41	746.9	33.8	1.0	96	nnw.	1.8	0.8	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.50	723.8	29.39	746.5	34.9	1.6	100	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.19	716.0	29.46	748.2	37.0	2.8	90	s.	.....	.....	2	.....	10	.....	.....	0.134	3.4	.....	Andreas Rospini.
Hermannstadt	28.03	712.0	29.44	747.7	52.0	11.1	64	s.	.....	.....	4	.....	5	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.02	711.8	29.41	747.1	28.4	— 2.0	98	calm	.....	.....	0	.....	2	.....	.....	0	0	clear	The Staff.
Lemberg	28.39	721.0	29.39	746.5	36.0	2.2	85	se.	.....	.....	0	.....	10	.....	.....	0.134	3.4	.....	Dr. T. Stanecki.
Pola	29 35	745.4	29.46	748.3	47.3	8.5	77	nnw.	.....	.....	2	.....	8	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	28.94	735.1	29.40	746.7	42.4	5.8	93	o.	.....	.....	1	.....	10	.....	.....	0.067	1.7	.....	Joseph Midlinszky, S. J.
Szegedin	29.13	739.9	29 41	747.1	41.7	5.4	100	w.	.....	.....	1	.....	10	.....	.....	0	0	foggy	Karl Stancel.
Trieste	29.37	746.1	29.48	748.7	47.3	8.5	85	w.	.....	.....	1	.....	8	.....	.....	0.047	1.2	.....	Royal Academy.
Vienna	28.71	729.2	29.45	747.9	32.7	0.4	92	calm	.....	.....	0	.....	10	.....	.....	0.012	0.3	foggy	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.53	750.0	29.64	752.8	33.4	0.8	56	ne.	25	11.2	.....	.....	6	.....	.....	0.360	9.1	snowy	W. Boswell
Armagh, Observatory	29.34	745.2	29.59	751.6	27.7	— 2.4	97	n.	5	2.2	.....	.....	8	.....	.....	.....	.....	d. clouds	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.40	746.7	33.3	0 7	88	nne.	25	11.2	.....	.....	10	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	28.79	731.3	29.33	745.0	34.9	1.6	80	nne.	24	10.7	.....	.....	10	.....	.....	.....	.....	snowing	Thomas Mackereth.
Bradford, Yorkshire	28.92	734.6	29 32	744.7	32.1	0.1	86	ne.	.....	.....	5	.....	10	.....	.....	1.61	40.9	snowing	McLandsborough & Preston.
Bridgetown, Barbadoes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	34.0	1.1	90	n.	.....	.....	3.0	.....	10	.....	.....	.....	.....	snowing	John McLaren.
Chatham, School M. E	29.04	737.6	29.17	740.9	34.7	1.5	87	nw.	.....	.....	1	.....	9	.....	.....	.....	.....	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.11	739.4	29.34	745.2	36.4	2.4	70	n.	.....	.....	4	.....	2	.....	.....	.....	.....	blue sky	The Staff.
Fort Napier, Natal	27.74	704.6	29.94	760.5	80.2	26.8	43	se.	.....	.....	1	.....	5	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	81.0	27.2	83	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	29.88	758.9	29.93	760.2	58.0	14.4	95	nw.	.....	.....	3	.....	9	.....	.....	.....	.....	gloomy	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.40	746.7	29.60	751.8	30.0	— 1.1	96	nne.	.....	.....	4	.....	7	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.01	736.8	29.19	741.4	34.4	1.3	90	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	snowing	The Staff.
Guernsey	28.98	736.1	29.28	743.7	37	2.8	81	nnw.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	A. Collenette, F. M. S
Kew, Observatory	29.17	740.9	29.21	741.9	34.1	1.2	80	nw.	15	6.7	.....	.....	10	.....	.....	.....	.....	threatening	The Staff.
Leicester, Museum	28.98	736.1	29.24	742.7	32.0	0.0	96	n.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	J. C. Smith.
Malta, Mediterranean	29.44	747.8	29.52	749.8	58.8	14.9	89	sw.	.....	.....	1	.....	6	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.12	765.0	30.16	766 1	75.5	24.2	78	ne.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	28.74	730.0	29.28	743 7	29.9	— 1.2	98	nnw.	.....	.....	4	.....	10	.....	.....	.....	.....	snowing	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.01	736.8	29.24	742.7	33.0	0.6	86	nw.	.....	.....	4	.....	4	.....	.....	.....	.....	snowing	The Staff.
Plymouth	29.25	742.9	29.33	745.0	36.4	2.4	76	nnw.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky	John Merrifield.
Sandwick Manse, Orkneys	29.65	753.1	29.76	755.9	29.2	— 1.6	97	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	blue sky	Rev. C. Clouston, L L D.
Scutari Cemetery, Turkey	29.62	752.3	29.08	753.9	55.4	13.0	56	se.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	W. H. Lyne.
Sheffield	29.00	736.6	29.28	743.7	33.3	0.7	96	nne.	.....	.....	3	.....	10	.....	.....	0.34	8.6	snowing	W. F. Cooper.
Silloth Rectory	29.46	748.3	29.49	749.0	31.2	— 0.4	90	ne.	.....	.....	3	.....	10	.....	.....	.....	.....	snowing	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.37	746.0	30.2	— 1.0	86	n.	15	6.7	.....	.....	10	.....	.....	.....	.....	snowing	I. New.
Straitfield Turgiss	29.05	737.9	29.27	743.4	33.7	0.9	86	n.	.....	.....	3	.....	8	.....	.....	.....	.....	snowing	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.30	744.2	29.34	745.2	40	4.4	73	n.	.....	.....	6	.....	4	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	29.55	750.6	29.57	751.1	33.9	1.1	76	ne.	20	8.9	.....	.....	2	.....	.....	.....	.....	misty	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.02	762.5	30.07	763.8	36	2.2	91	se.	13	5.8	.....	.....	10 n	.....	calm	0.020	0.5	light rain	H. J. Cundall, C. E
Chatham, N. B*	29.97	761.2	30.03	762.7	29	— 1.7	92	se.	1	0.4	.....	.....	10 n	.....	se.	0.07	1.8	light snow	G. A. Blair.
Father Point, Quebec*	29.80	756.9	29.83	757.7	31	— 0.6	92	ne.	12	5.4	.....	.....	10 n	.....	calm	0.15	3.8	heavy snow	J. McWilliams.
Fort Garry, Manitoba*	29.43	747.5	30.38	771.6	—11	—23.9	50	w.	7	3.1	.....	.....	1C n	.....	.....	0	0	hazy	James Stewart.
Halifax, N. S*	29.96	761.0	30.09	764.3	44	6.7	.....	se.	12	5.4	.....	.....	10 n	.....	s.	0.100	2.5	light rain	A. Allison.
Kingston, Ontario*	29.50	749.3	29.84	757.9	32	0.0	92	w.	9	4.0	.....	.....	10 s	.....	w.	0.16	4.1	cloudy	A. P. Knight, M. A
Montreal, Quebec*	29.40	746.7	29.61	752.1	31	— 0.6	100	calm	0	0	.....	.....	10 n	.....	.....	0.57	14.5	light snow	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.14	740.1	29.86	758.4	32	0.0	88	w.	15	6.7	.....	.....	10 n	.....	ne.	0.03	0.8	light snow	Rev. R. Mosley.
Port Dover, Ontario	29.35	745.5	30.08	764.0	25	— 3.9	100	sw.	9	4.0	.....	.....	10 os	.....	sw.	0.26	6.6	cloudy	H. Morgan.
Port Stanley, Ontario	29.42	747.3	30.10	764.5	27	— 2.8	88	sw.	7	3.1	.....	.....	10 n	.....	sw.	0.22	5.6	cloudy	M. Payne.
Quebec, Quebec*	29.32	744.7	29.65	753.1	30	— 1.1	100	e.	.....	.....	8	.....	10 n	.....	e.	0.50	12.7	heavy snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.32	744.7	29.80	756.9	28.	— 2.2	84	calm	0	0	.....	.....	10 s	.....	w.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.20	741.7	29.94	760.5	31	— 0.6	96	n.	32	14.3	.....	.....	10 ks	.....	.....	0	0	cloudy	
St. Andrews, N. B	29.67	753.6	29.72	754.9	46	7.8	96	sse.	33	14.8	.....	.....	10 n	.....	.....	0.44	11.2	heavy rain	
Sydney, C. B*	30.20	767.1	30.26	768.6	37	2.8	100	e.	2	0.9	.....	.....	fg.	.....	.....	0.03	0.8	foggy	T. C. Hill, C. E
Toronto, Ontario*	29.60	751.8	30.00	762.0	30	— 1.1	85	w.	10	4.5	.....	.....	10 s	.....	w.	0.19	4.8	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.88	758.9	29.95	760.7	50	10.0	96	s.	20	11.6	.....	.....	10 n	.....	sw.	0.36	9.1	heavy rain	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.55	725.2	30.03	762.7	25.0	— 3.9	100	nw.	.....	.....	4	.....	10 s	.....	nw.	0.080	2.0	overcast	Wm. Wylie.
St. Johns, Newfoundland	30.27	768.8	30.53	775.4	38	3.3	100	s.	1	0.4	.....	5 k	5 s	.....	.....	0.02	0.5	overcast	John Delany
Cape Colony.																			
Cape St. Francis Lt. House	29.98	761.5	30.01	762.2	72.0	22.2	81	e.	8.8	3.9	.....	0	0	.....	.....	0	0	clear	John Duthie.
Cape Town, C G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.58	624.2	.....	.....	32.7	0.4	.....	w.	.....	.....	3	.....	fg	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	29.71	754.6	29.82	757.3	36.3	2.4	79	ne.	5.8	2.6	.....	0	0	.....	.....	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.02	762.6	30.05	763.2	46.0	7.8	94	ese.	5.6	2.5	.....	0	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.48	748.8	29.53	750.0	25.3	— 3.7	76	e.	31	14	.....	.....	5	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanoe	29.45	748.0	29.47	748.5	26.1	— 3.3	91	ene.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.99	761.8	30.04	762.9	9.3	—12.6	92	calm	.....	.....	0	.....	4	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.96	760.9	29.98	761.4	19.8	— 6.8	.....	nw.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.90	759.4	29.95	760.6	10.0	—12.2	.....	e.	.....	.....	2	.....	3	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.93	760.1	29.97	761.2	36.7	2.6	84	se.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.93	760.3	29.97	761.2	35.4	1.9	73	ene.	20	9	.....	.....	5	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.49	749.1	29.59	751.5	23.2	— 4.9	86	ene.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	Loerarer Oesterbol.
Upernavik, Greenland	29.94	760.4	29.98	761.6	7.2	—13.8	.....	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	28.78	731.0	29.42	747.3	47.8	8.8	76	wsw.	.....	.....	1	ck	n	.....	w.	1.177	29.9	.....	M. Labroue, Director.
Alençon, Normal School	28.75	730.3	29.30	744.3	38.1	3.4	100	sw.	.....	.....	1	.....	kn	.....	n.	0.008	0.2	.....	M. Nicot, Director.
Arras, Engineer School	28.92	734.5	29.17	741.0	36.7	2.6	59	sw.	.....	.....	1	.....	10	.....	sw.	0.043	1.1	foggy	M. Fénéon, Command't.
Avignon, Normal School	29.44	747.7	29.52	749.7	45.3	7.4	75	sw.	.....	.....	1	.....	5	.....	wnw.	0	0	cloudy	M. Giraud, Director.
Bar-sur-Seine	28.78	731.1	29.34	745.3	39.0	3.9	86	ssw.	.....	.....	1	.....	10	.....	wsw.	0.295	7.5	covered	M. Saillard, Director.
Beauvais, Normal School	29.00	736.6	29.27	743.5	38.3	3.5	87	w.	.....	.....	1	.....	10	.....	w.	0.161	4.1	covered	M. Frère Eugène Marie.
Besançon, Normal School	28.48	723.4	29.38	746.2	40.6	4.8	80	sw.	.....	.....	1	.....	n	.....	ssw.	0.322	8.2	.....	M. Gobin, Director.
Bordeaux, Observatory	29.05	737.9	29.31	744.5	46.2	7.9	83	s.	.....	.....	1	.....	10	.....	.....	0.429	10.9	covered	M. Rayet, Director.
Bourges, Normal School	28.80	731.4	29.35	745.4	45.5	7.5	72	ssw.	.....	.....	1	.....	k	.....	ssw.	0.04	1.	.....	M. Malet, Director.
Brest, Naval Observatory	29.08	738.6	29.32	744.8	41.0	5.0	74	nne.	.....	.....	2	.....	2	.....	nne.	0.087	2.2	.....	M. de Kermarec, Dir.
Caen, Normal School	29.14	740.2	29.22	742.1	38.1	3.4	76	nw.	.....	.....	1	.....	10	.....	w.	0.35	9.	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	28.95	735.4	29.27	743.4	37.6	3.1	91	wsw.	.....	.....	1	.....	10	.....	.....	0.417	10.6	covered	M. Jadot, Director.
Charleville, Normal School	28.74	730.1	29.27	743.5	35.2	1.8	82	wsw.	.....	.....	1	.....	10	.....	.....	0.12	3.	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.00	711.1	29.30	744.2	47.5	8.6	63	sw.	.....	.....	1	8 ck	o	.....	.....	0.051	1.3	¾ covered	M. Allnard, Director.
Cluny, Normal School	28.57	725.6	29.42	747.3	41.5	5.3	66	sw.	.....	.....	1	.....	9	sw.	sw.	0.532	13.5	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.46	722.8	29.32	744.8	36.1	2.3	87	w.	.....	.....	3	.....	n	w.	w.	0.63	16.	.....	Dr. Coulet, Director.
Gap, Normal School	26.98	685.3	29.56	750.8	37.4	3	66	.....	.....	.....	.....	.....	4	.....	s.	0.374	9.5	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.39	721.2	29.53	750.1	44.8	7.1	71	w.	.....	.....	2	.....	5	.....	w	0	0	.....	M. Kiaa, Director.
Grenoble, Normal School	28 69	728.7	29.47	748.4	45.7	7.6	69	se.	.....	.....	1	cs	o	n.	.....	0.020	0.5	.....	M. Ablard, Director.
Guéret	27.76	705.0	29.42	747.2	38.3	3.5	87	sw.	.....	.....	1	.....	10 n	.....	sw.	0.08	2.	raining	M. Delorme, Dir.
Lamballe, Normal School	29.03	737.3	29.30	744.1	37.8	3.2	93	wnw.	.....	.....	2	.....	5	.....	wnw.	0.264	6.7	cloudy	M. Olitrault, Director.
Lescar, Normal School	28 79	731.3	29.35	745.5	51.8	11.0	43	w.	.....	.....	3	.....	10	.....	.....	2.346	59.6	covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.20	741.7	29.30	744.3	42.4	5.8	56	nne.	.....	.....	1	.....	10	.....	n.	0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.39	721.0	29.45	747 9	42.6	5.9	74	se.	.....	.....	2	.....	10 cn	.....	sw.	0	0	covered	M. André, Director.
Mans, Normal School	29.01	736.9	29.32	744.8	39.0	3.9	81	sw.	.....	.....	4	.....	5	.....	sw.	0.16	4.	cloudy	M. Piboën, Director.
Marseille, Observatory	29.26	743.2	29.53	750.1	49.1	9.5	54	wnw.	.....	.....	1.2	.....	8	.....	wnw.	0.189	4.8	.....	M. Stephan, Director.
Mt. Louis	24.26	616.3	29.11	739.3	29.8	— 1.2	80	wsw.	20.6	9.2	.....	.....	5	w.	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.34	745.3	29.51	749.6	49.5	9.7	84	s.	.....	.....	2	.....	5	.....	.....	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	28.46	722.9	29.26	743.3	35.2	1.8	89	ssw.	.....	.....	1	.....	n	.....	.....	0.150	3.8	.....	M. Hasse, Director.
Nantes, Observatory	29.17	740.9	29.33	745.0	44.2	6.8	74	se.	.....	.....	0–1	.....	10 kn;n	.....	wsw.	0.134	3.4	.....	M. Larocque, Director.
Perpignan, Observatory	29.39	746.6	29.50	749.4	53.6	12.0	53	s.	5.6	2.5	.....	.....	9	nw.	nnw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.60	523.2	.....	.....	17.6	— 8.0	.....	w.	.....	.....	3	.....	.....	.....	w.	0.386	9.8	.....	M. Vaussenat.
Privas, Normal School	28.40	721.4	29.52	749.9	41.4	5.2	93	s.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Tailleu.
Puy de Dôme Obs'y, Summit	24.46	621.5	.....	.....	26.8	— 2.9	100	wsw.	.....	.....	4	.....	10	.....	.....	0.576	14.6	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.23	742.4	29.27	743.4	43.5	6.4	91	sse.	.....	.....	1	.....	10	.....	sse.	1.89	48.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.08	738.6	29.30	744.2	41.7	5.4	91	nw.	.....	.....	1	.....	10	.....	.....	0.24	6.	covered	M. Brotier, Director.
Rodez, Normal School	27.41	696.3	29.63	752.7	29.3	— 1.5	89	s.	.....	.....	2	.....	10	.....	s.	0.177	4.5	snowing	M. Seger, Director.
Rouen, Normal School	29.19	741.5	29.24	742.7	38.8	3.8	90	wsw.	.....	.....	1	.....	8	wsw.	.....	0.307	7.8	raining	M. Mouillot.
Saint Lô	.....	.....	.....	.....	37.4	3	87	w.	.....	.....	1	.....	10	w.	.....	0.087	2.2	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.11	739.5	29.28	743.7	38.1	3.4	90	ssw.	.....	.....	1	.....	10	.....	wsw.	0.075	1.9	.....	M. Renou, Director.
Toulouse, Observatory	28.77	730.8	29.48	748.8	49.3	9.6	64	se.	.....	.....	1	.....	5	w.	.....	0.327	8.3	cloudy	M. Baillaud, Director.
Tours	29.13	740.0	29.31	744.5	44.6	7.0	71	s.	.....	.....	1	.....	5	sw.	s.	0.039	1.0	cloudy	M. de Tastes.
Versailles, Observatory	28.76	730.6	29.26	743.1	37.8	3.2	90	w.	.....	.....	1	.....	.....	.....	.....	0.035	0.9	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.21	742.0	29.36	745.8	48.2	9.0	76	s.	9.8	4.4	.....	.....	10 k	.....	.....	1.815	46.1	raining	M. Cartier, Director.
GERMAN.																			
Ansbach	27.89	708.5	29.37	746.0	34.2	1.2	90	sw.	.....	.....	4	.....	10	sw.	.....	0.067	1.7	.....	Prof. Jnedt.
Bamberg	28.46	722.8	29.28	743.7	37.6	3.1	82	se.	.....	.....	1	.....	6	s.	.....	0.079	2.0	raining	Prof. Dr. Hoh.
Berlin	29.15	740.4	29.33	745.0	36.9	2.7	100	e.	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	28.89	733 7	29.41	746.9	32.7	0.4	92	wsw.	.....	.....	1	.....	10	.....	.....	0.039	1.0	foggy	Royal University Obs'y.
Carlsruhe	28.89	733.8	29.33	744 9	35.2	1.8	94	sw.	.....	.....	4	.....	10	sw.	.....	0.492	12.5	rain & snow	Albert Senz.
Cassel	28 52	724.5	29.24	742.6	33.4	0.8	96	se.	.....	.....	2	.....	10	s.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	28.93	734.7	29.30	744.2	37.2	2.9	90	ssw.	.....	.....	1	.....	10	.....	.....	0.165	4.2	.....	Physical Society.
Friedrichshafen	27.99	711.0	29.45	747.9	38.1	3.4	87	ssw.	.....	.....	6	.....	8	wsw.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.26	743.2	29.35	745.5	30.6	— 0.8	92	ese.	.....	.....	2	.....	10	.....	.....	0.335	8.5	light fog	E. Preller.
Kiel	29.38	746.3	29.40	746.7	32.7	0.4	84	ene.	.....	.....	4	.....	10	.....	.....	0.043	1.1	snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	28.93	734.9	29.34	745.3	34.5	1.4	89	se.	.....	.....	2	.....	10	.....	.....	.....	.....	snowy	H. Leppig, Asst.
Magdeburg	29.12	739.7	29.31	744.5	37.6	3.1	54	ese.	.....	.....	1	o	5 k	.....	sw.	0	0	.....	Weather Observatory.
Memel	29.52	749.7	29.56	750.8	21.0	— 6.1	95	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	Issermann.
Munich	27.57	700.2	29.39	746.5	37.2	2.9	76	nw.	.....	.....	1	.....	9	w.	.....	0.177	4.5	.....	Central Station.
Neufahrwasser	29.85?	758.2?	29.87?	758.6?	32.0	0.0	92	ne.	.....	.....	2	.....	10	.....	.....	0.209	5.3	snowing	A. Lothes.
Neustadt, Palatinate	28.75	730.2	29.26	743.2	37.4	3.0	90	wsw.	.....	.....	1	.....	10	wsw.	.....	0.189	4.8	light snow	Dicknether.
Stuttgart	28 38	720.9	29.28	743.8	38.3	3.5	78	sw.	.....	.....	6	.....	4	w.	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	29.44	747.7	29.86	748.3	32.0	0.0	94	e.	.....	.....	1	.....	10	.....	.....	0.008	0.2	.....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.20	741.7	29.59	751.6	57.7	14.3	.....	s.	.....	.....	3.5	.....	10	.....	.....	1.024	26.0	raining	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	29.98	761.4	30.03	762.7	84.0	28.9	31	sse.	13.0	5.8	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.48	748.8	29.96	760.8	81.4	27.4	31	nnw.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.86	758.5	29.90	759.5	78.7	25.9	72	nnw.	18.0	8.0	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.04	712.3	29.89	759.1	82.9	28.3	15	ne.	8.0	3.6	.....	.....	1	e.	.....	0	0	d. clouds	
Trichinopoly	29.61	752.1	29.89	759.2	80.4	26.9	72	calm	0	0	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.35	694.6	29.89	759.2	75.6	24.2	31	ne.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.18	741.1	29.95	760.8	60.6	15.9	55	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	28.99	736.3	29.91	759.8	67.6	19.8	43	calm	0.5	0.2	.....	.....	0	.....	.....	0	0	.....	
Agra	29.37	746.1	29.95	760.8	71.7	22.1	41	nw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.90	733.9	29.96	761.0	71.2	21.8	48	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.62	726.8	30.00	762.1	68.9	20.5	63	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.56	750.7	29.94	760.5	70.2	21.2	51	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.62	752.4	29.95	760.7	61.6	16.4	73	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.78	756.4	29.97	761.2	66.8	19.3	66	nw.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.84	707.0	29.90	759.4	64.7	18.2	60	wnw.	5.3	2.4	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.84	757.8	29.92	759.9	71.2	21.8	73	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.88	758.8	29.90	759.4	70.1	21.2	73	n.	0.5	0.2	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.78	756.5	29.90	759.4	69.8	21.0	73	calm	0.1	0.04	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.79	756.7	29.88	759.0	75.4	24.1	92	calm	1.0	0.4	.....	.....	8	.....	.....	0	0	d. clouds	
Sibsagar	29.59	751.6	29.94	760.4	65.0	18.3	89	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jeypore	28.51	724.2	29.98	761.4	74.4	23.6	45	nw.	7.0	3.1	.....	.....	0	.....	.....	0	0	blue sky	
ITALIAN.																			
Udine	29.06	738.0	29.47	748.6	41.4	5.2	88	.....	.....	.....	.....	.....	6	.....	.....	0.110	2.8	.....	Prof. Giovanni Clodig.
Milan	28.96	735.6	29.50	749.3	34.2	1.2	89	sw.	3.1	1.4	.....	.....	9	sw.	.....	0	0	.....	Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Padua	29.37	746.0	29.48	748.8	34.3	1.3	96	w.	1.8	0.8			10			0.039	1.0		Prof. Dott. Lorenzoni.
Moncalieri	28.56	725.5	29.51	749.5	36.3	2.4	77	ene.	2.5	1.1			1	s.		0	0		Prof. F. F. Denza.
Genoa	29.22	742.3	29.42	747.2	50.5	10.3	55	e.	1.8	0.8			0			0	0		Prof. G. M. Garibaldi
Mondovi	27.52	699.0	29.50	749.4	31.1	— 0.5	87	w.			2		10			0	0		Prof. D. C. Bruno.
Pesaro	29.37	746.1	29.43	747.4	43.2	6.2	70	ne.	6.3	2.8			10			0.283	7.2		Prof. Luigi Guidi.
Florence	29.22	742.1	29.48	748.7	44.2	6.8	87	sw.			2		10	sw.		0.598	15.2		Prof. Costantino Pittei.
Leghorn	29.32	744.6	29.40	746.8	53.8	12.1	62	sw.	17.4	7.8			8			0.067	1.7		Prof. P. Monte.
Rome	29.35	745.6	29.53	750.1	53.1	11.7	59	w.	1.3	0.6			1			0.012	0.3		Prof. P. Tachini.
Lecce	29.19	741.5	29.45	748.0	59.0	15.0	74	w.	19.2	8.6			7	w.		0.008	0.2		Prof. C. de Giorgi.
Cosenza	28.65	727.7	29.55	750.5	56.5	13.6	77	sw.	2.5	1.1			10	s.		0.701	17.8		Prof. D. Conti.
Cagliari	29.42	747.3	29.61	752.2	57.2	14.0	52	nw.			4		7	nw.		0.118	3.0		Prof. A. Pacinotti.
Palermo	29.38	746.3	29.63	752.7	54.1	12.3	60	nw.	13.6	6.1			10	nw.		0.169	4.3		Prof. G. Cacciatore.
Syracuse	29.48	748.8	29.52	749.9	58.3	14.6	56	w.	22.4	10.0			10	wsw.		0.039	1.0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.02	737.1	29.54	750.4	52.2	11.2	83	nw.	1.8	0.8			7	se.		0.823	20.9		Prof. F. Brioschi.
Stelvio	21.49	545.8			10.4	—12.0	78	sw.			2		0			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.47	545.3			15.8	— 9.0	70	n.			0		6			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.69	754.2	29.72	755.0	40.2	4.6	80	calm			0		10 n		w.	0.142	3.6	rainy	Hattori.
Awomori	29.70	754.4	29.74	755.4	35.0	1.7	82	n.	3.4	1.5			10 s			0.519	13.2	covered	K. Ogawa.
Hakodate	29.76	755.8	29.77	756.1	33.5	0.6	94	n.	3.0	1.3			10			0.323	8.2		
Hamamatsu	29.78	756.4	29.81	757.1	45.0	7.2	85	calm			0	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					54.0	12.2	87	nne.	4.8	1.9		0	0			0.010	0.3	clear	
Kanazawa	29.70	754.3	29.80	756.9	49.6	9.8	87	ssw.	6.8	3.0			10			0.376	9.5	raining	S. Endo.
Kioto	29.66	753.3	29.84	757.9	43.2	6.2	92	ssw.	0.7	0.3		0	1 ck			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.76	755 8	29.96	761.0	52.1	11.2	79	nnw.	3.0	1.3		0	0			0.190	4.8	clear	S. Takehayashi.
Nagasaki	29.70	754.4	29.74	755.4	45.9	7.7	90	sw.	4.7	2.1		...	10 n			0.000	1.5	light rain	M. Morita.
Niigata	29.75	755.7	29.77	756.1	41.7	5.4	85	nnw.	4.8	2.1			10 s			0	0	covered	H. Midzushima.
Nobiru	29.74	755.4	29.78	756.3	44.0	6.7	98	nne.			2	0	0			0	0	clear	R. Kaneda.
Numazu	29.83	757.6	29.84	758.0	46.5	8.1	89	nw.	1.9	0.8		0	0			0	e	clear	H. Omura.
Osaka					25.0	— 3.9	77	se.	2.1	1.0		0	6		se.	0.005	0.1	cloudy	
Sapporo	29.70	754.3	29.77	756.2	44.8	7.1	96	nnw.	3.5	1.5		1 cs	s	w.		0	0	clear	The Staff.
Tokei Obs'y, Yeddo	29.79	756.6	29.85	758.1	49.3	9.6	82	ne.	0.0	2.7		0	0			0	0	clear	Y. Kuwamuea.
Wakuyama																			
MAURITIUS.																			
Mauritius Observatory	29.78	756.4	29.96	761.0	81.6	27.6	70	n.	12.5	5.6		2 cs	5 k;n		w.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.69	601.8	29.91	759.8	47.1	8.4	83	s.	inap.	inap.		4 c;ck	2 k	sw.	sw.	0	0	fair	Prof. Vicente Fernandez.
Leon	24.85	618.5	30.22	767.6	44.2	6.8	89	e.			1	7 c	1 s	s.		inap	inap.	cloudy	Prof. M. Leal.
Mazatlan	29.75	755.6	30.01	762.3	66.5	19.2	66	sw.	0.9	0.4		0	1 k			inap	inap.	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.8	30.29	769.4	41.9	5.5	81	calm	0	0		4 ck	5 ks	sw.		0	0	cloudy	The Staff.
Morelia	24.21	615.0	30.02	762.5	39.6	4.2	75	se.			3	2 c	1 k	s.	s.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.95	608.2	30.04	763.0	48.2	9.0	77	w.			2	0	1 ks		s.	0.030	0.8	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.44	595.4	30.27	768.7	49.6	9.8	40	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.50	571.5	30.24?	769.3?	42.6	5.7	80	nw.	4.1	1.8		2 ck	2 s	ne.	s.	0	0	½ cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.15	740.5	29.15	740.5	37.8	3.2		s.			4					0.039	1.0		
Groningen	29.20	741.0	29.25	743.0	31.1	— 0.5		e.			2					0.213	5.4		
Helder	29.19	741.4	29.19	741.4	34.3	1.3		e.			2					0.008	0.2		
Hellevoetsluis	29.15	740.5	29.15	740.5	36.0	2.2	91	se.			2					0.004	0.1		
Utrecht	29.10	740.7	29.21	741.9	35 1	1.7	87	sse.			2		10			0.031	0.8	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.69	754.0	29.75	755.6	21.2	— 6.0	39	e.	20	9			0			0	0		
Brono	29.95	760.7	29.99	761.7	16.7	— 8.5	55	calm	0	0			2			0	0		
Christiania	29.67	753.6	29.83	757.6	16.5	— 8.6	70	ne.	18	8			0						
Gjesvær	30.09	764.2	30.11	764.8	27.9	— 2.3		se.			6		0						
Lodingen	30.05	763.2	30.10	764.4	21.2	— 6.0	71	e.			2		0			0	0		
PORTUGUESE.																			
Angra, Azores	30.14	765.6	30.30	769.6	59.9	15.5	66	n.	3.1	1.4			4			0.157	4.0		Dr. J. A. Sampaio.
Campo Major	28.59	726.1	29.59	751.6	50.2	10.1	100	ssw.	6.9	3.1			10			0.079	2.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.04	763.1	30.13	765.3	66.7	19.3	64	sw.	7.4	3.3			2	n.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.31	744.4	29.66	753.4	57.0	13.9	87	w.	19.9	8.9			10			0.657	16.7		The Staff.
Ponta Delgada, Azores	30.20	767.1	30.27	768.9	61.2	16.2	50	n.	8.7	3.9			4	wnw.		0.079	2.0		
Saint Paul de Loando	29.03	752.5	29.83	757.6	78.1	25.6	85	w.	1.8	0.8			5	s.		0	0		
Serra da Estrella	24.67	626.6	29.43	747.5	35.1	1.7	100	nw.	53.5	23.9			10			3.410	*80.6*	rain & fog	
RUSSIAN.																			
Akmolinski	29.41	747.1	30.06	778.7	— 7.1	—21.7	85	e.	7	3		0	0			0	0		Major K. Lasarew.
Archangel	30.22	767.5	30.24	768.0	— 4.7	—20.4	84	ne.	4	2			9 ks			0	0		Capt. Sseliwerstow.
Astrakhan	30.36	771.1	30.28	769.1	27.3	— 2.6	100	ne.	7	3			10			0	0	dense fog	Capt. Wisganow.
Barnaul	30.39	771.8	30.97	786.7	—10.1	—23.4	83	calm	0	0			0			0	0		Meteorological Obs'y.
Bielosersk	29.91?	759.7?	30.42?	772.7?	12.6	—10.8	94	ene.	2	1			10 n			0.004	0.1	light snow	
Dorpat	29.48	748.7	29.74	755.3	17.2	— 8.2	100	ese.	9	4			10 n			0.120	3.2		Observatory.
Ekaterinburg	29.38	746.3	30.45	773.5	4.5	—15.3	86	se.	11	5			10			0.007	1.7	snowing	Meteorological Obs'y.
Elissawetgrad	29.32	744.7	29.78	756.4	36.7	2.6	89	se.	7	3			10 s			0	0		
Kasan	29.96	760.9	30.25	768.4	15.3	— 9.3	80	sse.	0	4			10					snowing	Observatory.
Kem	30.07	763.8			9.7	—12.4	92	e.	4	2			10 ks			0	0	heavy cld's.	
Kertch	29.84	757.9	29.86	758.4	45.0	7.2	73	e.	4	2		0	7 n			0	0		Lagorio & Sastyrez.
Kieff	28.92	734.6	29.57	751.1	36.0	2.2	100	se.	16	7			10k;n					light rain	Observatory.
Libau	29.02	752.3	29.64	752.9	18.5	— 7.5	80	ne.			1		8			0	0		E. Quaas.
Lugan	29.85	758.3	30.07	763.8	29.1	— 1.6	88	ese.	13	6			10			0	0		Meteorological Obs'y.
Nikolaiev	29.69	754 0	29.76	755.9	41.2	5.1	90	sse.	22	10			10 n			0	0		Capt. Kurdakow.
Pekin, China	29.72	754.8	29.86	758.4	32.2	0.1	94	calm	0	0		0	0						Physical Observatory.
Petrozavodsk	29.70	756.0	29.98	761.5	13.3	—10.4	90	sw.	0	0			10			0.236	6.0		Dr. Bergmann.
Pinsk																			
St. Petersburg	29.86	758.5	29.88	758.9	12.7	—10.7	86	ese.	13	6			10 s;n			inap	inap.		Central Physical Obs'y.
Sevastopol																			
Semipalatinsk	30.20	767.0	30.96	786.4	— 9.4	—23.0	84	calm	0	0			10			0	0		Major Lasarew.
Staroi Bykhov	29.24	742.7	29.72	754.9	27.1	— 2.7	98	e.	7	3			10			0.094	2.4		
Tashkend, Laboratory	28.61	726.7	30.21	767.4	48.7	9.3	50	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.73	729.8	30.17	766.4	49.5	9.7	74	calm	0	0			10			0	0		Physical Observatory.
Tomsk	30.61	777.6	30.95	786.2	—27.8	—33.2	82	s.	2	1			10						
Vladivostock	29.74	755.4	29.81	757.1	25.9	— 3.4	81	calm	0	0			10 k			0.008	0.2		
Warsaw	28.96	735.6	29.35	745.6	31.1	— 0.5	94	s.	9	4			10					heavy clouds	Astronomical Obs'y.
Wilna	29.13	739.9	29.57	751.0	26.2	— 3.2	96	e.	2	1			10					heavy clouds	Berg, Assistant.
Yeniseisk	30.54	775.8	30.89	784.7	—35.0	—37.2	80	calm	0	0			0						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.74	755.4	33	0.6	89	e.			4	0	0			0	0	clear	J. Youngclause.
North Unst			29.79	756.7				e.			7	2	4	ne.		blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.40	746.7	29.50	749.4	54.7	12.6	47	sw.	5.4	2.4		0	4			0	0		Antonio Reve, Director.
Bilbao, Met. Obs'y	29.24	742.6	29.30	744.1	49.3	9.6	76	s.	7.2	3.2			10			0.173	4.4	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.52	673.6	29.55	750.6	34.5	1.4	96	s.	22.4	10.0			10			0.197	5.0	foggy	Domingo Martin.
Madrid, Royal Obs'y	27.35	694.8	29.63	752.5	41.4	5.2	94	s.	14.5	6.5			10			0.079	2.0	rainy	The Staff.
Murcia, Met. Obs'y	29.59	751.5	29.72	754.9	53.6	12.0	67	se.	2.2	1.0		4	4	ne.		0	0	cloudy	Olayo Diaz, Director.
Oviedo	28.34	719.9	29.22	742.2	53.6	12.0	74	se.	22.6	10.1		10 n	9 n	ne.	nw.	0.010	15.5	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.34	719.9	29.22	742.3	49.5	9.7	83	sw.	18.1	8.1			10			0.768	19.5	raining	R. Gil Villanueva, Dir.

*Total for 2 days.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind			Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
								Direction	Velocity.		Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill	
Spanish.—(*Sub-series.*)																		
Manilla, Philippine Islands	29.80	757.0	29.86	758.4	80.5	26.9	82	e.	2.6	1.2	0	3 k			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.82	757.5	29.92	760.0	56.1	13.4	91	w.	15.7	7.0		10		sw.	0.447	11.4	raining	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.96	760.9	30.05	763.2	78.1	25.6	80	se.	2.2	1.0	0	4 k;n		se.	0.047	1.2	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.75	755.7	29.89	759.1	75.2	24.0	89	n.	8.1	3.6	0	3 k		nne.	0	0	slightly cl'dy	José L. Yrastorza.
Swedish.																		
Hapsranda	30.08	763.9	30.11	764.9	5.7	—14.6	100	ne.			4		10		0	0		
Umea	29.93	760.3	29.98	761.6	8.2	—13.2	100	ne.			4		10		0.130	3.3		
Hernosand	29.83	757.7	29.88	759.0	14.0	—10.0	94	ne.			6		10		0.169	4.3		
Stockholm	29.53	750.0	29.71	754.5	16.2	— 8.8	88	nne.			2		10		0.248	6.3		
Wisby	29.52	749.8	29.58	751.3	21.6	— 5.8	85	e.			4		5		0.118	3.0		
Sub-series.																		
Upsala	29.63	752.7	29.72	754.9	16.7	— 8.5	95	n.	2.5	1.1			9		0.016	0.4		S. G. Fineman.
Swiss.																		
Geneva	28.02	711.8	29.49	749.0	40.6	4.8	72	s.			2		5		0.185	4.7	cloudy	The Observatory.
Turkish.																		
Constantinople			29.74	755.4	55.2	12.9	65	se.	16	7.0			10		0.075	1.9	raining	The Observatory.
Valona			29.48	748.9	57.6	14.2		se.			1		10		0	0	covered	A. Bertrand.
Sub-series.																		
Beirut, Lee Obs'y, Syria			30.01	762.3	66.9	19.4	63	wsw.			1	9 cs		sw.	0	0		Prof. C. V. A. van Dyck.
United States.																		
Albany, New York	29.72	754.9	29.82	757.4	48	8.9	63	w.	10	4.5			10 s	w.	0.09	2.3	cloudy	J. O. Barnes.
Alpena, Michigan	29.32	744.7	30.03	762.7	23	— 5.0	88	w.	10	4.5			10 n		0.02	0.5	light snow	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.10	637.5	30.18	766.6	27	— 2.8	70	ne.	1	0.4	0	0			0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.90	708.6	30.93	785.6	—11	—23.9	54	w.	12	5.4	0	0			0.52	13.2	clear	B. O. Lenoir.
Atlanta, Georgia	28.99	736.3	30.22	767.6	50.3	10.2	84	w.	3	1.3			10s;fg		0.18	4.6	cloudy	H. C. Smith.
Atlantic City, New Jersey	29.99	761.7	30.00	762.0	49	9.4	63	w.	14	6.3		5cs;ck	4 s	w.	0.10	2.5	cloudy	Jas. M. Watson.
Augusta, Georgia	29.99	761.7	30.19	766.8	54	12.2	93	s.	2	0.9			10 s	sw.	0.12	3.0	cloudy	John Healy.
Baltimore, Maryland	30.06	763.5	30.11	764.8	46	7.8	54	nw.	8	3.6		9 cs	0	w.	0.01	0.3	cloudy	Geo W Felger.
Barnegat, New Jersey	29.94	760.5	29.96	761.0	50.0	10.0	72	w.	28	12.5		7 c	0	w.	0.26	6.6	fair	G. A. Hill.
Bennett, Fort, Dakota	28.88	733.5	30.04	778.2	1	—17.2	83	nw.	36	16.1		0	4 s	nw.	0.01	0.3	fair	A. Pritchard.
Benton, Fort, Montana	27.96	710.2	30.96	786.4	— 4	—20.0	100	ne.	4	1.8			10 n	ne.	0.07	1.8	light snow	S. Wheaton.
Bismarck, Dakota	28.66	728 0	30.07	779.0	—13	—25.0	100	nw.	32	14.3		0	0		0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	29.83	757.7	29.86	758.4	54	12.2	80	sw.	26	11.6			10 ks	w.	0.34	8.6	cloudy	J. T. Elker.
Boise City, Idaho	27.43	696.7	30.41	772.4	32	0.0	88	w.	1	0.4			10 s		0	0	cloudy	B. E. Light.
Boston, Massachusetts	29.60	751.8	29.76	755.9	52.0	11.1	80	sw.	19	8.5			10 ks	sw.	0.11	2.8	cloudy	O. B. Cole.
Brownsville, Texas	30.02	762.5	30.07	763.8	63.4	17.4	97	calm	0	0			fg.		0	0	dense fog	M. McCarty.
Buffalo, New York	29.25	742.9	30.05	763.3	31.5	— 0.3	80	sw.	29	13.0			10 s	sw.	0.79	20.1	cloudy	W. Finn.
Buford, Fort, Dakota	28.46	722 9	30.70	779.8	—15	—26.1	46	nw.	28	12.5		0	0		inap.	inap.	clear	F. A. Mellen.
Burlington, Vermont	29.36	745 7	29.67	753.6	37.0	2.8	89	sw.	6	2.7			10 n	sw.	0.38	9.7	light rain	G. C. Schaeffer.
Cairo, Illinois	29.88	758.9	30.30	769.6	37.8	3.2	84	se.	4	1.8			10 s	se.	0.22	5.6	cloudy	W. H. Ray.
Cape Henry, Virginia	30.11	764.8	30.13	765.3	54	12.2	80	sw.	18	8.0			10 s		0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.04	763.0	30.07	763.8	48.0	8.9	71	w.	34	15.2		5 cs	0	s.	0.10	2.5	fair	W. E. Smith.
Cape Mendocino, California	29.42	747 3	30.10	764.5	48	8.9	77	n.	18	8.0		0	0		0	0	clear	J. J. McLean.
Cedar Keys, Florida	30.20	767.1	30.22	767.6	55	12.8	86	e.	3	1.3		6 c	0		0	0	fair	F. W. Mixer.
Champaign, Illinois	29.42	747 3	30.29	769.4	20.0	— 6.7	70	nw.	9	4.0		0	3 s	nw	0.26	6.6	clear	L. A. Welsh.
Charleston, S. Carolina	30.13	765.3	30.19	766.8	57.5	14.2	86	sw.	3	1.3			10s:fg		0	0	threatening	J. H. Smith.
Charlotte, N. Carolina	29.27	743.4	30.16	766.1	51.4	10.8	93	sw.	2	0.9			10s;fg	sw.	0	0	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.38	746.2	30.24	768.1	42.5	5.8	88	nw.	5	2.2		3 cs	2 s	nw.	0.12	3.0	fair	B. L. Goulding.
Cheyenne, Wyoming	24.05	610.9	30.33	770.4	11.8	—11.2	70	n.	20	8.9		0	hz.		0.01	0.3	clear	E. McGovern.
Chicago, Illinois	29.51	749.5	30.27	768.8	15.0	— 9.4	73	nw.	5	2.2		0	0		0	0	clear	J. Mitchell.
Chincoteague, Virginia	30.05	763.3	30.07	763.8	52	11.1	86	w.	10	4.5		0	7 ks	w.	0	0	fair	C. F. Dickens.
Cincinnati, Ohio	29.59	751.6	30.29	769.4	37	2.8	82	nw.	6	2.7			10 s	w.	1.10	27.9	cloudy	R. B. Watkins.
Cleveland, Ohio	29.41	747.0	30.20	767.1	28.9	— 1.7	84	w.	16	7.2			10 s	w.	0.92	23.4	cloudy	J. B. Newlin.
Coleman City, Texas	28 34	719.8	30.24	768.1	42	5.6	93	n.	7	3.1		6 ck	0	w.	0	0	fair	L. Dorman.
Columbus, Ohio	29.34	745.2	30.24	768.1	33	0.6	68	w.	8	3.6			10 s	w.	0.97	24.6	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28 24	717.3	30.26	768.6	40.0	4.4	73	w.	3	1.3		0	0		0	0	clear	J. McGlone.
Custer, Fort, Montana	27.39	695.7	30.79	782.1	4	—15.6	100	n.	8	3.6			10 n		0.06	1.5	heavy snow	W. B. Lamar.
Davenport, Iowa	29.59	751.6	30.30	769.6	19	— 7.2	70	nw.	4	1.8		hz.	4 s	nw.	0.02	0.5	fair	R. R. Martin.
Davis, Fort, Texas	25.28	642.1	30.22	767.6	33	0.6	74	calm	0	0		0	0		0	0	clear	J. Williams.
Dayton, Washington T'y	28.50	723.9	30.33	770.4	39	3.9	100	ne.	1	0.4			fg.		0	0	dense fog	D. Moore.
Deadwood, Dakota	25.64	651.2	30.02	777.7	— 1	—18.3	100	e.	6	2.7			10 n		0.44	11.2	light snow	F. Willson.
Delaware Breakwater, Del.	30.03	762.7	30.05	763.3	50	10.0	64	nw.	25	11.2		7 cs	2 s	nw.	nw.	0.02	0.5	cloudy	T. S. Townsend.
Denison, Texas	29.38	746.2	30.23	767.8	41.0	5.0	82	ne.	4	1.8		0	0		0	0	clear	J. W. Byram.
Denver, Colorado	24.74	628.4	30.26	768.6	24.0	— 4.4	76	w.	1	0.4			sk.		0	0	dense smoke	F. M. Neal.
Des Moines, Iowa	29.30	744.2	30.28	769.1	16	— 8.9	67	e.	3	1.3		7 ck	0	nw.	0.06	1.5	fair	F. W. Conrad.
Detroit, Michigan	29.41	747.0	30.17	766.3	29.8	— 1.2	77	w.	9	4.0			10 k	w.	0.08	2.0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.46	697.5	30.26	768.6	31	— 0.6	81	s.	4	1.8		0	0		0	0	clear	V. P. Temple.
Dubuque, Iowa	29.51	749.5	30.28	769.1	9.2	—12.7	55	w.	5	2.2		0	0		0	0	clear	J. Harvey Smith.
Duluth, Minnesota	29.39	746.5	30.20	767.1	0	—17.8	68	s.	9	4.0			10 s		0	0	cloudy	N. B. Conger.
Eagle Pass, Texas	29.33	745.0	30.17	766.3	50.0	10.0	77	nw.	5	2.2		0	0	s.	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25.42	645.7	30.34	770.6	36	2.2	82	sw.	20	8.9			10 s		0	0	clear	J. M. Clifford.
Eastport, Maine	29.68	753.9	29.75	755.6	47.0	8.3	100	s.	36	16.1			10n;fog	sw.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.31	693.7	30.27	768.8	30	1.1	80	calm	0	0		c	0	s.	1.14	29.0	heavy rain	W. J. Cundall.
El Paso, Texas	26.38	770.0	30.24	768.1	35.0	1.7	72	nw.	2	0.9		0	0		0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.33	745.0	30.10	764.5	34	1.1	79	w.	17	7.6			10 s	w.	0.64	16.3	cloudy	Peter Wood.
Escanaba, Michigan	29.39	746.5	30.11	764.8	9.0	—12.8	76	w.	4	1.8		0	1 s	w.	0	0	clear	George Heathcote.
Fredericksburg, Texas	28.37	720.6	30.19	766.8	56	13.3	64	ne.	3	1.3		10 cs	0	s.	0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.05	763.3	30.10	764.5	63	17.2	93	ne.	6	2.7			fg		0.09	2.3	dense fog	E. O'C. Macinerney.
Grand Haven, Michigan	29.46	748.3	30.16	766.1	25.0	— 3.9	88	w.	14	6.3			10 s	nw.	0	0	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.38	644.6	30.26	768.6	42	5.6	48	ne.	4	1.8		0	0		0	0	clear	Robert C. Lord.
Hatteras, North Carolina	30.10	764.5	30.12	765.0	56	13.3	93	w.	20	8.9		6 k	3 ks	sw.	0.25	6.3	cloudy	R. M. Crawford.
Helena, Montana	26 26	667.0	30.64	778.2	8	—13.3	83	sw.	8	3.6			10 n		0.17	4.3	light snow	N. C. Smith.
Henrietta, Texas	29.19	741.4	30.27	768.8	34	1.1	88	ne.	1	0.4		0	0		0	0	clear	J. P. Sherry.
Huron, Dakota	28.93	734.8	30.47	773.9	10	—12.2	58	nw.	6	2.7			10 n		0.02	0.5	light snow	S. W. Glenn.
Indianapolis, Indiana	29.41	747.0	30.26	768.6	30	— 1.1	81	nw.	4	1.8			10 s	nw.	0.93	23.6	cloudy	O. Schutze.
Indianola, Texas	30.06	763.5	30.10	764.8	62.1	16.7	93	ne.	6	2.7		0	0		0.01	0.3	clear	I. A. Reed.
Jacksboro, Texas	28.99	736.3	30.23	767.8	35	1.7	53	calm	0	0		0	0		0	0	clear	D. J. Carr.
Jacksonville, Florida	30.16	766.1	30.21	767.3	54	12.2	86	se.	1	0.4		5 cs	0	w.	0	0	fair	J. W. Smith.
Keogh, Fort, Montana	28.12	714.2	30.82	782.8	— 4	—20.0	68	nw.	16	7.2			10 s		0.05	1.3	cloudy	A. Schneider.
Keokuk, Iowa	29.59	751.6	30.30	769.6	15.0	— 9.4	83	nw.	1	0.4		0	0	nw.	0.20	5.1	clear	F. Z. Gosewisch.
Key West, Florida	30.12	765.0	30.14	765.5	67.0	19.4	93	ne.	5	2.2		0	0		0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.10	764.5	30.12	765.0	55	12.8	93	w.	12	5.4		0	8 ks		0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.18	741.2	30.26	768.6	39	3.9	84	n.	3	1.3		9 cs	0	w.	0.10	2.5	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.44	747.8	30.29	769.4	3	—16.1	72	w.	4	1.8		0	0		0	0	clear	S. C. Emery.
Leavenworth, Kansas	29.32	744.7	30.28	769.1	33	0.6	88	e.	4	1.8			10 n		0.11	2.8	light snow	A. W. Browne.
Lewiston, Idaho	29.46	748.3	30.34	770.6	41.0	5.0	92	s.	1	0.4			10 s		0	0	cloudy	W. Bell.
Little Rock, Arkansas	29.92	760.0	30.24	768.1	44	6.7	83	calm	0	0		0	0		0	0	clear	W. U. Simons.
Los Angeles, California	29.69	754.1	30.09	764.3	47	8.3	68	ne.	3	1.3		0	0		0	0	clear	T. S. Collins.
Louisville, Kentucky	29.65	753.1	30.25	768.3	43	6.1	68	w.	4	1.8			10 s		0.88	22.4	cloudy	L. M. Dey.
Lynchburg, Virginia	29.44	747.8	30.16	766.1	46.5	8.1	55	w.	4	1.8		3 cs	4 s	w.	w.	0	0	fair	Lewis Duane.
Mackinaw City, Michigan	29.35	745.5	30.05	763.3	25.0	— 3.9	88	nw.	12	5.4		10 k	0	nw.		0.13	3.3	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.15	765.8	30.16	766.1	54	12.2	86	w.	4	1.8		0	8 k		w.	0	0	cloudy	C. A. Shaw.
Madison, Wisconsin	29.17	740.9	30.27	768.8	8	—13.3	76	w.	6	2.7		0	2 s		w.	0	0	clear	F. P. Chaffee.
Maginnis, Fort, Montana					—10	—23.3	57	nw.	12	5.4		5 ck	0	nw.		0.13	3.3	fair	F. Burke.

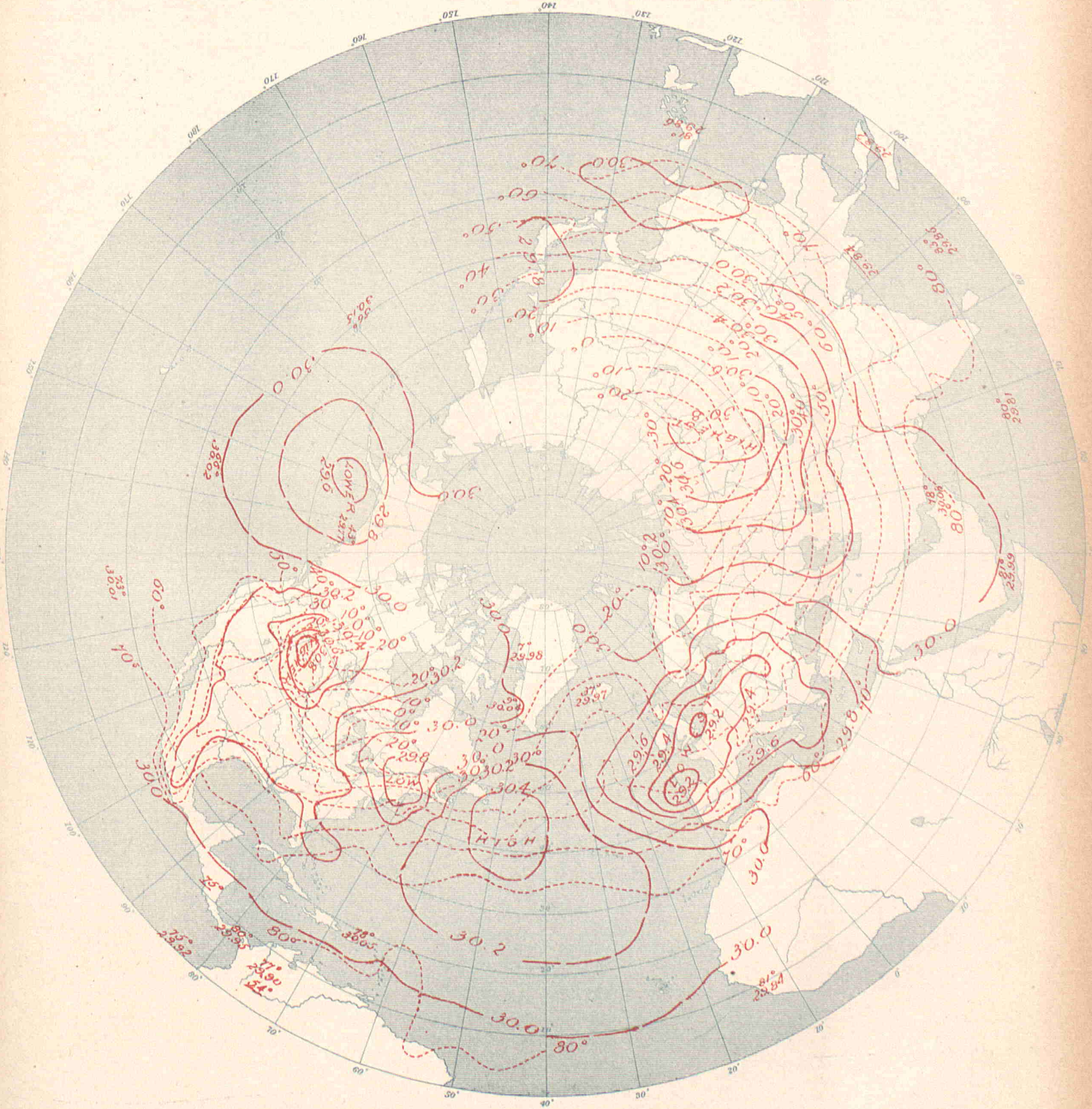
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
McKavett, Fort, Texas	27.88	708.1	30.26	768.6	41	5.0	76	ne.	2	0.9		0	0			0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.26	743.2	30.04	763.0	13	—10.6	44	sw.	2	0.9		0	0			0	0	clear	J. Gilligau.
Memphis, Tennessee	29.93	760.2	30.29	769.4	43	6.1	83	ne.	2	0.9			10 s			0.05	1.3	cloudy	D. T. Flannery
Milwaukee, Wisconsin	29.43	747.5	30.24	768.1	8	—13.3	76	w.	11	4.9		0	0			0	0	clear	W. Line
Missoula, Fort, Montana	27.02	686.3	30.48	774.2	19	— 7.2	70	e.	32	14.3			10 s		e.	0	0	cloudy	J. H. Young.
Mobile, Alabama	30.13	765.3	30.17	766.3	59	15.0	96	sw.	1	0.4		4 ck	5 ks	nw		0.26	6.6	cloudy	C. A. Read.
Montgomery, Alabama	29.92	760.0	30.16	766.1	58.7	14.8	97	w.	2	0.9			10 s		w.	0.24	6.1	cloudy	J. B. McLaughlin.
Moorhead, Minnesota	29.23	742.4	30.34	770.6	— 9	—22.8	100	nw.	28	12.5			10 s		nw.	0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.16	740.7	30.23	767.8	42.5	5.8	72	sw.	8	3.6		0	9 s		w.	0.27	6.9	cloudy	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.30	591.8	29.93	760.2	26.0	— 3.3	100	sw.	70	31.2			10n;fg		sw.	0.04	1.0	light snow	B. S. Pague.
Nashville, Tennessee	29.67	753.6	30.28	769.1	42.0	5.6	82	n.	1	0.4			10 ks		n	0.17	4.3	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	29.71	754.6	29.83	757.7	49	9.4	71	sw.	20	8.9			10 s		sw.	0.27	6.9	cloudy	J. H. Sherman.
New London, Connecticut	29.82	757.4	29.87	758.7	49	9.4	86	sw.	14	6.3			10 s		sw.	0.10	2.5	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.08	764.0	30.14	765.5	60.0	15.6	87	sw.	4	1.8			10 s		sw.	0.61	15.5	cloudy	L. Dunne.
Newport, Rhode Island	29.78	756.4	29.83	757.7	51.8	11.0	91	sw.	23	10.3			10 s		sw.	0.42	10.7	cloudy	W. McGillivray.
New York, New York	29.74	755.4	29.93	760.2	46	7.8	83	sw.	26	11.6		6 cs	2 k	sw.	sw.	0.06	1.5	cloudy	J. B. Merrill.
Norfolk, Virginia	30.09	764.3	30.12	765.0	54	12.2	80	w.	13	5.8			10 s			0.01	0.3	cloudy	Wm. Davis.
North Platte, Nebraska	27.15	689.6	30.31	769.9	35.1	1.7	89	sw.	7	3.1			10 n			0.03	0.8	light snow	E. F. Brady.
Olympia, Washington T'y	30.17	766.3	30.21	767 3	47.0	8.3	93	calm	0	0			10 n			0.04	1.0	light rain	J. Dascomb.
Omaha, Nebraska	29.00	736.6	30.29	769.4	25.3	— 3.7	84	s.	8	3.6			10 s			0.01	0.3	cloudy	A. Pollak.
Oswego, New York	29.54	750.3	29.89	759.2	39.0	3.9	82	w.	22	9.8			10 s		w.	0.48	12.2	cloudy	J. G. Linsley.
Palestine, Texas	29.59	751.6	30.17	766.3	52.0	11.1	59	ne.	12	5.4		0	0			0	0	clear	L. M. Pindell.
Pensacola, Florida	30.15	765.8	30.18	766.6	61.3	16.3	92	w.	3	1.3			10 s		sw.	0.02	0.5	cloudy	M. McGauran.
Philadelphia, Pa	30.02	762.5	30.13	765.3	48	8.9	56	w.	11	4.9		10cs;ck	0	s.		0.02	0.5	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.63	447.8	30.29	769.4	8	—13.3	83	nw.			9	0	2 s			0	0	clear	H. Hall.
Ploche, Nevada	24.19	614.4	30.36	771.1	34	1.1	60	nw.	2	0.9		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.34	745.2	30.20	767.1	36.0	2.2	79	w.	12	5.4		0	8 s		sw.	0.19	4.8	cloudy	W. A. Reid.
Poplar River, Montana	28.30	718.8	30.66	778.7				nw.			7	0	0			0.06	1.5	clear	W. D. Maxwell.
Port Eads, Louisiana	30.16	766.1	30.16	766.1	63.0	17.2	93	n.	2	0.9		0	fg.			0.47	11.9	clear	H. B. Boyer.
Port Huron, Michigan	29.39	746.5	30.12	765.0	26.0	— 3.3	88	w.	16	7.2			10 s		w.	0.02	0.5	cloudy	W. O. Bailey.
Portland, Maine	29.62	752.3	29.66	753 4	47.0	8.3	93	sw.	11	4.9			10ks;fg		sw.	0.76	19.3	cloudy	W. W. Eichelberger.
Portland, Oregon	30.10	764.5	30.17	766.3	51.6	10.9	100	calm	0	0			fg.			0.10	2.5	dense fog	M. L. Hearne.
Portsmouth, N. C.					55	12.8	86	sw.			1	3 cs	5 ks	nw.		0.04	1.0	cloudy	F. S. Coburn.
Prescott, Arizona	24.90	632.4	30.27	768.8	30.2	— 1.0	80	w.	2	0.9		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	29.77	756.1	29.80	756.9	53	11.7	86	sw.	20	8.9			10 s		sw.	1.17	29.7	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.16	766.1	30.17	766.3	59.5	15.3	87	ne.	8	3.6		2 c	0	w.		0	0	clear	W. J. Evans.
Red Bluff, California	29.75	755.6	30.11	765.0	44	6.7	83	nw.	4	1.8		0	0			0	0	clear	J. R. Williams.
Rochester, New York	29.28	743.7	29.99	761.7	33	0.6	78	w	28	12.5			10 k		w.	0.46	11.7	cloudy	E. W. McGann
Roseburg, Oregon	29.68	753 9	30.25	768.3	41.5	5.3	92	nw.	2	0.9			fg.			0	0	dense fog	J. J. Nanry.
Sacramento, California	30.06	763.5	30.14	765.5	42.4	5.8	93	e.	1	0.4		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.67	753.6	30.32	770.1	33.4	0.8	98	nw.	4	1.8			10s;sk			0.32	8.1	cloudy	J. H. Weber
St. Michael, Fort, Alaska	29.96	761.0	30.00	762.0	18	— 7.8	100	ne.	1	0.4			10 s			inap.	inap.	cloudy	A. P. Leavitt.
St. Paul, Minnesota	29.32	744.7	30.28	769.1	4.0	—15.6	72	sw.	6	2.7			10 n			0.01	0.3	light snow	P. F. Lyons.
St. Vincent, Minnesota	29.38	746.2	30.37	771.4	— 4	—20.0	100	nw.	20	8.9		0	0			inap.	inap.	clear	C. B. Dilley.
Salt Lake City, Utah	25.81	655.6	30.35	770.9	40	4.4	67	calm	0	0			10 s			0	0	cloudy	J. Craig.
San Antonio, Texas	29.39	746.5	30.11	764.8	57.5	14.2	86	n.	6	2.7			10 s			0	0	cloudy	T. J. Kenan.
San Diego, California	29.97	761.2	30.04	763.0	44.1	6.7	96	s.	2	0.9		0	fg.			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.47	748.5	30.20	767.1	30	— 1.1	77	w.	16	7.2			10 s		w.	0.19	4.8	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.91	759.7	29.94	760.5	48.0	8.9	71	w.	25	11.2			10 s		w.	0.05	1.3	cloudy	B. A. Blundon.
San Francisco, California	30.06	763.5	30.12	765.0	52	11.1	86	n.	8	3.6		0	0			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.30	591.8	30.29	769.4	29	— 1.7	61	ne.	2	0.9		2 c	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.12	765.0	30.22	767.6	57.5	14.2	68	sw.	4	1.8		10 cs;ck	fg.	w.		0	0	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.97	685.0	30.80	782.3	1	—17.2	100	ne.	2	0.9			10 n			0.07	1.8	light snow	A. L. Mathews.
Shreveport, Louisiana	29.95	760.7	30.20	767.1	48	8.9	71	ne.	4	1.8		0	1 s			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	28.93	734.8	30.26	768.6	35.5	1.9	77	n.	1	0.4		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.40	619.7	30.24	768.1	32.5	0.3	80	calm	0	0		0	1 s			0	0	clear	N. D. Lane.
Sitka, Alaska	29.70	754.4	29.77	756.1	43.2	6.2	56	se.	32	14.3			10 s		se.	0	0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.76	755.9	30.26	768.6	35.0	1.7	89	e.	4	1.8		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.14	765.5	30.18	766.6	55	12.8	93	w.	7	3.1			9 s		w.	0.08	2.0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.26	717.8	30.39	771.9	33	0.6	92	nw.	2	0.9			10 s			0.02	0.5	cloudy	H. Clifford.
Springfield, Illinois	29.60	751.8	30.33	770.4	23	— 5.0	73	nw.	4	1.8		0	2 s		nw.	0.66	16.8	clear	T. B. Jennings.
Springfield, Massachusetts	29.64	752.8	29.78	756.4	47.0	8.3	93	sw.			3		10 n		sw.	0.67	17.0	cloudy	Charles Mayr.
Springfield, Mo	28.76	730.5	30.28	769.1	38.4	3.6	96	e.	3	1.3			fg.			0	0	dense fog	J. B. Marbury.
Starkville, Miss	29.76	755.9	30.26	768.6	44	0.7	83	n.	7	3.1		0	4 s			0.48	12.2	fair	C. Dill.
Stevenson, Fort, Dakota	28.64	727.4	30.70	779.8	—16	—26.7	44	nw.	40	17.9		0	0			0.01	0.3	clear	W. Burrows.
Stockton, Fort, Texas	27.11	688.6	30.25	768.3	32	0.0	81	sw.	3	1.3		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.74	755.4	29.80	756.9	46.5	8.1	80	sw.	15	6.7		8 k	0	w.		0.55	14.0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.36	694.9	30.18	766.6	34.5	1.4	83	ne.			1	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.44	747.8	30.17	766.3	30	— 1.1	78	sw.	10	4.5			10 s		w.	0.25	6.3	cloudy	A. Buell.
Tucson, Arizona	27.67	702.8	30.17	766.3	42	5.6	76	se.	4	1.8		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.90	759.4	30.29	769.4	39.5	4.2	94	nw.	4	1.8			10 s			0	0	cloudy	J. Daly.
Verde, Fort, Arizona					33.4	0.8	71	n.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.94	760.5	30.21	767.3	50.0	10.0	82	ne.	2	0.9		0	0			0.52	13.2	clear	James Kenealy.
Visalia, California	29.76	755.9	30.14	765.5	41.7	5.4	87	calm	0	0		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.60	624.8	30.37	771.4	16.1	— 8.8	87	e.	18	8.0			10 n			inap	inap.	light snow	T. M. Ambler.
Washington, D. C.	30.01	762.2	30.13	765.3	45.0	7.2	53	nw.	7	3.1		4 c	2 s	sw.	sw.	0	0	fair	B. M. Pursell.
West Las Animas, Colorado	26.06	661.9	30.22	767.6	10.5	— 8.6	74	w.	4	1.8		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.41	747.0	30.04	763.0	41.5	5.3	68	w.	6	2.7		6 c	4 ks		w.	0.19	4.8	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.12	765.0	30.18	766.6	57	13.9	86	sw.	5	2.2			10 s			inap.	inap.	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.83	656.1	30.36	771.1	25.5	— 3.6	72	ne.	4	1.8		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.95	735.3	30.38	771.6	10	—12.2	100	n.	2	0.9			10 n			0.20	5.1	light snow	J. H. Atfield.
Yuma, Arizona	29.89	759.2	30.04	763.0	49.5	9.7	54	ne.	4	1.8		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.99	558.5			53.5	11.9	79	ne.	1	0.4		5 k	2 ks	s.	w.	0.01	0.3	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.96	761.0	30.02	762.5	64.9	18.3	90	calm	0	0		1 c	1 k	w.	e.	0	0	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	69	20.0	69	n.	1	0.4		0	0			0	0	fine	Robert Johnston.
Paramaribo, S. A.	30.00	762.0	30.01	762.2	79	26.1	87	se.			2	5 ck	4 k	e.	e.	0.470	11.9		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.90	759.4	77	25.0	94	s.			1	5 c	fg.	calm		0.06	1.5	foggy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75.2	24.0	94	ne.			2	0	8 ks		ne.	0	0	cloudy	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.43	747.5	29.49	749.0	37	2.8	89	e.			5		10 n			0.93	23.6	heavy rain	W. J. Fisher.
St. Thomas, W. I.	29.94	760.5	30.06	763.5	78	25.6	74	e.				0	1 k		e.	0.05	1.3	fine	Aug. Walloe.
York Factory, B. A.	30.21	767.3	30.28	769.1	—24.0	—31 1		s.	8	3.6		3 ck	2 s	s.	s.	inap.	inap.	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.12	765.0	67	19.4	87	e.			2–5		7	sw.						misty.
H. M. S. Audacious, N. 5° 44′, E. 88° 09′	29.86	758.4	83	28.3	83	w.			2		1	w.				2	nw.	blue sky.
H. M. S. Beacon, Lake Timsah, Egypt			73	22.8	54	wsw.			1		0					1	wsw.	blue sky.
H. M. S. Boadecia, Table Bay, Cape Colony	29.89	759.2				var.			1–3									blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.04	763.0	76	24.4	64	calm			0		0							blue sky.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.02	762.5	51	10.6	86	sse.			1–2		0							misty.
H. M. S. Comus, Esquimalt, Vancouver Island, B. C.	30.19	766.8	44	6.7	100	calm			0		10							misty.
H. M. S. Curacoa, Yokohama, Japan	29.64	752.8	52.5	11.4	86	nnw.			1		3	n.						d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.58	751.3	63	17.2	52	ssw.			4–6		9	ne.						raining.
H. M. Dock-Yard, Bermuda, W. I.	30.19	766.8	67	19.4	90	nne.			1–2		3	nne.						d. clouds.
H. M. S. Fawn, S. 23° 38′ E. 43° 38′	29.88	758.9	77.5	25.3	77	s.			4–5		3	s.						d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.93	760.2	59	15.0	81	n.			1		1							blue sky.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	29.95	760.7	68	20.0	94	calm			0		0							blue sky
H. M. S. Kingfisher, N. 1° 30′ W. 84° 02′	29.92	760.0	75	23.9		ssw.			2–3		10					3	s.	showery.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	29.81	757.2	65.5	18.6	92	s.			4		10					2	s.	raining.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.88	758.9	60	15.6		calm			0		1							blue sky.
H. M. S. Magpie, N. 34° 44′, E. 128° 04′	29.94	760.5	50.5	10.3	50	wnw.			3–5		0					1	ne.	misty
H. M. S. Monarch, N. 37° 00′, E. 15° 20′			58	14.4		ssw.			4		6	ssw.				3	sse.	squally.
H. M. S. Northampton, St. John's Antigua, W. I.	29.98	761.5	79	26.1	86	ese.			2		3	e.						d. clouds.
H. M. S. Rocket, Callao, Peru	29.98	761.5	66	18.9	100	calm			0		2					2–3	sw.	d. clouds.
H. M. S. Swiftsure, Ancon Bay, Peru	30.02	762.5	65	18.3	94	calm			0		10							overcast.
H. M. S. Sylvia, Peckett Harbor, Patagonia	29.96	761 0	53	11.7	61	wnw.			3–5		3							squally.
H. M. S. Tourmaline, N. 12° 45′ E. 45° 35′	29.93	760.2				e.			3		2	e.				1	e.	d. clouds.
H. M. S. Woodlark, N. 28° 45′ E 50° 46′	29.99	761.7	70.5	21.4	80	nw.			1–2		6	nw.				2	nnw	showery.
H. M. S. Zephyr, Chee-foo, China	29.82	757.4	44.5	6.9	60	sw.			1		3	n.						misty.
Portuguese Naval.																		
Tamega, Macao, China	30.06	763.6	70.7	21.5	76	se.			2		0							blue sky
United States Naval.																		
Navy-Yard, Pensacola, Fla	30.00	762.0	63	17.2	94	sw.	2	0.9			8		sw.	0.3	8.			cloudy.
Navy Yard, Portsmouth, N. H.	29.72	754.9	48	8.9	92	sw.	12	5.4			10		sw.	0.4	10.			cloudy.
Naval Hospital, Yokohama, Japan*	29.67	753.6	48	8.9	88	calm			0		0			0	0			clear.
Adams, Sitka, Alaska *†	29.84	757.9	41	5.0	56	e.			5		10							cloudy
Alaska, N. 33° 26′, W. 146° 29′	30.02	762.5	66	18.9	84	se.			2		5		s.	0	0	long	se.	fair.
Alliance, Hampton Roads, Va.	30.06	763.5	51	10.6	100	sw.			1–2		8			0	0			cloudy.
Ashuelot, Nagasaki, Japan	29.97	761.2	57	13.9	81	nw.			1		2		n.					clear.
Brooklyn, Keel Point, Patagonia	29.97	761.2	58	14.4	93	s	12	5.4			10		calm	0	0	sm'h		cloudy.
Colorado, New York, N. Y.	30.05	763.3	47	8.3	100	wsw.	10	4.5			8		calm	0.14	3.6			cloudy.
Enterprise, Norfolk, Va	30.12	765.0	57	13.9	75	w.			2		8		sw.					cloudy.
Essex, Callao, Peru	29.95	760.7	66	18.9	90	sse.			1		8					sm'h		cloudy.
Franklin, Norfolk, Va.	30.00	764.3	55	12.8	80	wsw.	9	4.0			8		calm	0	0			fair.
Galena, Montevideo, Uruguay	29.97	761.2	66	18.9	94	ene.			2		2		e.			sm'h	e.	clearing.
Hartford, Sandy Point, Patagonia*	29.66	753.4	50	10.0	32	n.			3		10		n.	sh'rs	shr's	sm'h		cloudy.
Independence, Mare Island, Cal.	30.13	765.3	46	7.8	92	calm			0		0			0	0			clear.
Iroquois, Callao, Peru	29.98	761.5	67	19.4	90	calm			0		8							fair.
Jamestown, Boston, Mass	29.75	755.6	51	10.6	93	sw.			3		10							cloudy.
Juniata, N. 34° 00′, W. 54° 31′*	30.35	770.9	71	21.7	95	ene.			2		8		s;e	0	0	long	se.	cloudy.
Kearsarge, Norfolk, Va.	30.09	764.3	55	12.8	93	wsw.			2		10							cloudy
Lackawanna, Callao, Peru*	29.92	760.0	67	19.4	84	se.			1		5		se.					fair.
Lancaster, Naples, Italy*	29.44	747.8	52	11.1	93	wsw.			1		10		calm			sm'h		cloudy
Michigan, Erie, Pa.	30.12	765.0	32	0.0	100	sw.			3		10		n.					cloudy.
Minnesota, New York, N. Y	29.94	760.5	47	8.3	85	wsw.	12	5.4			10		w.					squally.
Monocacy, Kobe, Japan	29.79	756.7	55	12.8	93	wnw.			1		0							clear.
New Hampshire, Newport, R. I.	29.86	758.4	53	11.7	100	sw.			6		10		sw.			mod.	sw.	cloudy.
Nipsic, Lisbon, Portugal*	29.60	751.8	59	15.0	88	wnw.			4		10		w.			sm'h		squally.
Onward, Callao, Peru	30.07	763.8	66	18.9	94	sse.			1		10		n.			long	w.	cloudy.
Palos, Tientsin, China*	29.71	754.6	33	0.6	100	ene.			1		0							hazy.
Pensacola, Callao, Peru*	29.89	759.2	66	18.9	90	sse.	1	0.4			5		s.	0	0	sm'h		fair.
Powhatan, Boston, Mass	29.77	756.1	52	11.1	93	s.			2		10		sw.					cloudy.
Quinnebaug, Villafranche, France*	29.44	747.8	57	13.9	40	sw.			3		0					sm'h	sw.	clear.
Ranger, N. 16° 11′, W. 94° 40′	29.98	761.5	74	23.3	76	n.			3		2					gr'd		clear.
Richmond, N. 34° 27′, E. 138° 21′*	29.69	754.1	61	16.1	66	w.			3		0					mod.	wnw.	clear.
Saratoga, Newport, R. I.	29.72	754.9	53	11.7	100	sw.			5		10			0	0	sm'h		threatening.
St. Louis, League Island, Pa.	30.23	767.8	45	7.2	67	wnw.			5		8		e.	0.04	1.0			cloudy.
Swatara, Hampton Roads, Va*	29.92	760.0	52	11.1	79	w.			3		10		calm			sm'h		cloudy.
Tennessee, Fort Monroe, Va.	30.09	764.3	53	11.7	73	sw.	5	2.2			2			0	0			clear.
Vandalia, Hampton Roads, Va*	30.08	764.0	49	9.4	93	sw.			2		5		calm					fair.
Wabash, Boston, Mass.	29.74	755.4	52	11.1	79	sw.	17	7.6			10		sw.	0.47	11.9			cloudy.
Wachusetts, Mare Island, Cal*	30.04	763.0	46	7.8	100	var.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C.	30.28	769.1	56	13.3	74	nw.			2		5		nw.	0	0			fair.
Yantic, Hampton Roads, Va.	30.17	760.3	50	10.0	100	sw.			1		8							cloudy.
Merchant Marine.																		
S. S. Grecian, S. 8° 20′, W. 34° 18′*	29.93	760.2	81	27.2	74	nne.			5		9		nne.	2 h'r	2 h'r	mod.	ne.	cloudy.
S. S. Scandinavian, N. 45° 48′, W. 50° 02′	30.55	776.0	41	5.0		nw.			2		1		sw.	sh'rs	sh'rs	long	nw.	blue sky.
S. S. British Crown, N. 52° 00′, W. 40° 58′†	30.34	770.6	39	3.9		wsw.			0		10		w.	0	0	r'gh	wnw	overcast.
S. S. British Prince, N. 49° 54′, W. 35° 47′†	30.30	769.6	42	5.6		nnw.			0		9		var.	0	0	high	nw.	cloudy.
S. S. Indiana, Liverpool, Eng †	29.21	741.9	34	1.1	90	ne.			5		10		ne.	snow	snow			squally.
S. S. Lord Clive, Philadelphia, Pa*†	30.00	762.0				w.			2		0			0	0			fine.
S. S. Ohio, Philadelphia, Pa			46	7.8	92	wsw.			4		8		w.					fair.
S. S. Pennsylvania, Philadelphia, Pa†	30.03	762.7	46	7.8		w.			3		5		w.					fair.
S. S. Castor, N. 40° 29′ W. 69° 15′*	29.92	759.9	50.0	10		nnw.			5		9		nw.			3	nnw.	sprinkling.
S. S. Stella, N. 46° 47′, W. 33° 45′	30.28	769.1	48.2	9		nnw.			5		8		n.	0	0	5	nw.	squally.
S. S. Bolivia, N. 55° 21′, W. 5° 09′*†	29.70	754.4	37	2.8	90	ene.			0		6?		ene.	snow	snow	sm'h		clear. ?
S. S. Dorian, N. 51° 03′, W. 11° 19′*	29.40	746.7	44	6.7		ene.			6		6		e.	0	0	mod.	nw.	cloudy.
S. S. Ethiopia, New York, N. Y	29.89	759 2	45	7.2		wsw.			4		9		w.	0	0			cloudy.
S. S. Galatia, N. 13° 07′, E. 48° 19′†	30.09	764.3	81	27.2	91	ne.			2		0			0	0	sm'h	se.	clear.
S. S. Ailsa, N. 17° 58′, W. 76° 46′†	30.19	766.8	80	26.7	82	nne.			3		2		ne.	0	0	sm'h		fair.
S. S. Alvo, Greytown, Nicaragua	29.99	761.7	78	25.6		calm			0	6 ck	0			2 h'r	2 h'r	long	ne.	fine.
Bk. Coppename, N. 6° 33′, W. 50° 30′	29.90	759.4	80.1	26.7	83	e.			4		4							blue sky.
S. S. Gordon Castle, N. 17° 51′, E. 111° 14′	29.95	760.7	76.5	24.7	73	nne.			3–4		2							d. clouds.
Inchkeith, S. 42° 13′, E. 56° 35′	29.45	748.0	52.8	11.6	95	wnw.			0		10							drizzling.
Mertola, N. 43° 26′, W. 12° 00′	29.07	738.4	51.8	11.0	100	wnw			10		10							raining.
S. S. Marathon, Smyrna, Turkey	29.75	755 6	51	10.6	....	sse.			4		8		sse.	1 h'r	1 h'r			cloudy.
S. S. Scythia, N. 50° 10′, W. 24° 14′	29.72	754.9	51	10.6		n.			5		5		nnw.	6 h'r	6 h'r	h'vy	nw.	cloudy.
S. S. Colina, Fith of Clyde, Scotland†	29.52	749.8				n.			5		1		ne.	0	0			clear.
S. S. Canada, N. 40° 38′, W. 72° 25′	29.99	761.7	41.0	5.0		w.			5		2		w	0	0	sm'h	wsw.	clear.
S. S. France, N. 49° 10′, W. 24° 50′ †	29.67	753.6	50.0	10		nne.			6	ck	0	nne.		rain	rain	h'vy	ene.	raining.
S. S. Abyssinia, N. 40° 25′, W. 70° 40′*	29.87	758.7	56	13.3	87	wsw.			6		10		wsw.	0	0	r'gh	wsw.	gloomy.
S.S. Arizona, N. 40° 48′, W 68° 21′	29.97	761.2	52	11.1		ssw.			4		10		sw.	sh's	sh's	mod.	sw.	overcast.
S. S. Wisconsin, N. 50° 55′ W. 23° 35′	29 53	759.6	43	6.1		n.			6		8		n.	3 h'r	3 h'r	h'vy	n.	showery.
S. S. Wyoming, N. 51° 13′, W. 17° 21′	29.69	754.1	47	8.3		ene.			5		4		ne.	8 h'r	8 h'r	long	ne.	fair.
S. S. Bohemia, N. 45° 32′, W. 44° 36′†	30.44	773.2				nne.			2		8		nne.	0	0	long	nw.	cloudy.
S. S. Frisia, N. 49° 52′, W. 22° 50′	29.69	754.1	50	10.0		nne.			6		6		n.	6 h'r	6 h'r	h'vy	nw.	cloudy.
S. S. Gellert, N. 43° 50′, W. 53° 30′	30.52	775.2	50	10.0		sse.			3		5		se.	0	0	mod	s.	fair.
S. S. Silesia, Hamburg, Germany†	29.50	749 3	37	2.8	90	e.			4		7		ese.	0	0			d. clouds.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE —Continued.																		
S. S. Vandalia, N. 49° 42′, W. 6° 24′	29.41	747.0	46.4	8.0	97	nne.			5–6		8		ne.	0	0	mod	ne.	cloudy.
S. S. Mentmore, N. 40° 22′, W 57° 25′*	30.37	771.4				ese.			3		2		e.	0	0	sm'h	e.	fair.
S. S. Archimedes, Lisbon, Portugal						wsw.			6		10		w.	5 h'r	5 h'r			raining.
S. S. Hevelius, N. 36° —′, W. 13° —′*†	29.99	761.7	67	19.4		w.			7		9		wsw.	0	0	long	nnw.	cloudy.
S. S. Sirius, N. 16° 30′, W. 22° 20′*	29.97	761.2				ne.			5		1		ne.	0	0	mod.	ne.	hazy
S. S. Colorado, Galveston, Texas†	30.10	764.5	60	15.0		ne.			1		fg.		w.	4 h'r	4 h'r			foggy.
S. S. Rio Grande, Galveston, Texas†	30.08	764.0	68	20.0		e.			1		7		e.	4 h'r	4 h'r			overcast?
S. S. San Marcos, Galveston, Texas			70	21.1		ssw.			1		fg.							foggy.
S. S. Archimede, N. 38° 13′, W. 70° 33′†	30.04	763.0	66	18.9	74	sw.			4		7		wsw.	0	0	rg'h	w.	cloudy.
S. S. Hermod, N. 46° 53′, W. 33° 33′†	30.32	770.1	50.0	10.0		nnw.			6		8		nnw.	6 h'r	6 h'r	high	n.	threaten ing
S. S. John Hopkins, Baltimore, Md			44	6.7		w.			4		2		w.	0	0			fair.
S. S. Glenapp, S. 9° 00′, W. 34° 00′†	29.81	757.2				ne.			4		0		e.	2 h'r	2 h'r	high	cross	cloudy.
S. S. Glenfyne, S. 1° 18′ W. 41° 52′ *†	29.58	751.3				e.			4		2		e.	0	0	mod.	e.	clear.
S. S. Toronto, N. 46° 09′, W. 54° 36′*†	30.61	777.5	40.0	4.4		e.			4		0			0	0	sm'h		fine.
S. S. Chalmette, New York, N. Y †	29.87	758.7	51	10.6		sw.			5		10		sw.	2 h'r	2 h'r			cloudy.
S. S. Denmark, London, Eng †	29.15	740.4	35	1.7		nw.			4		8		nw.	0	0			cloudy.
S. S. Egypt, N. 42° 40′, W. 48° 53′*†	30.54	775.7				ne.			4		2		ne.	0	0	sm'h	ne.	clear.
S. S. Erin, N. 47° 46′, W. 41° 20′	30.45	773 4	46	7.8		wnw.			4		2		nw.	0	0	long	w.	fine.
S. S. Greece, N. 46° 30′, W. 34° 47′*†	30.38	771.6	49	9.4		nnw.			6		6		nnw.	2 h'r	2 h'r	h'vy	nnw.	cloudy.
S. S. Helvetia, off Mine Head, Ireland	29.50	749.3	38	3.3		n.			5		5		nw.	0	0			fair.
S. S. City of Alexandria, Progresso Roads, C. A †	30.22	767.6	77	25.0		ene.			4		5		e.	0	0	small	ene.	fine.
S. S. City of Merida, N. 23° 09′, W. 82° 22′*†	30.00	762.0	71.6	22.0		calm			0		2			0	0	mod.	ne.	clear.
S. S. Amsterdam, N. 59° 19′, W. 14° 20′*	29.51	749.5	45	7.2		ne.			4–5							4	nne.	cloudy.
S. S. Knickerbocker, Mississippi River	30.10	764.5	61	16.1		ese.			3								ene.	fine.
S. S. Olbers, N. 4° 05′, W. 45° 00′*†	29.75	755.6	80	26.7		e.			5							high	nw.	squally.
S. S. State of Nebraska, N. 54° 34′, W. 23° 06′†	29.81	757.2	50	10.0		sse.			4									threaten ing
S. S. Western Texas, N. 30° 40′ W. 81° 27′						sw.			1									cloudy.
S. S. Donau, N. 43° 41′, W. 48° 10′	30.65	778.5				n.			3		8		n.	0	0	sm'h	n.	cloudy.
S. S. Gen. Werder, N. 49° 47′ W. 9° 55′	29.42	747.3	42.8	6.0		nne.			6		4		nne.	rain	rain	long	nnw.	fair.
S. S. Ohio, Newport News, Va	30.12	765 0				ssw.			2		4		ssw.	0	0			fair.
S. S. Rhein, N. 51° 36′, E. 2° 04′	29.17	740.9				w.			3		6		w.	3 h'r	3 h'r	sm'h	w.	fair.
S. S. Salier, N. 46° 19′, W. 47° 25′	30.57	776.5	39.2	4.0		w.			3		10		w.	0	0	long	n.w.	cloudy.
S. S. Strassburg, S. 4° 12′, W. 32° 26′	29.90	759.4	82.0	27.8	91	ese.			3		5		se.	0	0	mod.	se.	fair.
S. S. Belgic, N. 42° 42′, E. 171° 28′†	30.00	762.0	55	12.8	74	calm			0		5		sw.	0	0	mod.	sw.	fair.
S. S. Coptic, N. 38° 39′ E. 175° 59′	30.15	765.8	55.5	13.1	87	se.			3		5					sm'h	w.	clear.
S. S. Oceanic N. 25° 06′, E. 124° 51′*	30.04	763.0	65	18.3	58	nw.			5		0					slt	nw.	clear.
S. S. Mississippi, Seattle, Wash. Ter*†	30.25	768.3	49	9.4	85	sw.			1		10		sw.					rain & fog.
S. S. Oregon, San Francisco, Calif	30.07	763.8	50	10.0	93	calm			0		0					sm'h		clear.
S. S. Ancon, N. 35° 27′, W. 121° 10′†	30.02	762.5	57	13.9	94	se.			2		0							clear.
S. S. City of Chester, off San Francisco, Cal *†	30.09	764 3	49	9.4	93	n.			3		0					sm'h		clear.
S. S. Dakota, Seattle, Wash. Terf	30.03	762.7	41	5.0	82	sw.			2		8		sw.	12 h'r	12 h'r	sm'h		cloudy.
S. S. Orizaba, N. 37° 12′, W. 119° 40′*†	30.06	763.5	58	14.4	76	nnw.			0		0					cross	var.	clear.
S. S. State of California, Portland, Oregon *†	30.19	766.8	50	10.0		calm			0		10			0	0			foggy.
S. S. Australia, S. 30° 59′, E. 179° 22′	29.89	759.2	64	17.8	94	nnw.			2		10		nw.	0	0	sm'h		clear.
S. S. City of New York, Sydney, N. S. W †	29.67	753.6	73	22.8	72	se.			3		10		se.	20 h'r	20 h'r			cloudy.
S. S. City of Pekin, N. 28° 58′, E. 129° 20′†	30.00	762.0	65	18.3	73	nw.			0		0			0	0	small	nnw.	clear.
S. S City of Rio de Janeiro Panama, Panama †	29.95	760.7	80	26.7	78	nw.			2		2		n.	0	0	sm'h		fine.
S. S Colima, N. 23° 18′, W. 110° 36′ †	30.02	762.5	70	21.1	90	nne.			4		1			0	0	sm'h	wnw.	misty.
S. S. Grenada, N. 13° 28′, E. 89° 35′†	29.92	760 0	78	25.6	82	calm			0		1			0	0	sm'h	ssw.	clear.
S. S. Zealandia, S. 15° 31′, W. 172° 32′	29.90	759.4	84	28.9	90	ese.			3		2		se.			sm'h		fine.
S. S. Muriel, off Tobago, W. I	29.94	760.5	82	27.8		ene.			3		0			light	light	sm'h		clear.
S. S. Caracas, N. 12° 54′, W. 68° 35′†	30.02	762.5	81.5	27.5	83	e.			5		2		e.	1½h'r	1½h'r	mod.	ene.	fine.
S. S. Claudius, N. 15° 30′, W. 83° 30′†	30.08	764.0				ne.			0		10		ne.	sqll's	sqll's	short	ne.	squally.
S. S. Valencia, N. 32° 28′ W. 71° 25′†	30.29	769.4	73	22.8	81	se.			5		7		sw.	3 h'r	3 h'r	mod.	se.	clearing.
S. S. Belgenland, N. 48° 28′, W. 17° 35′	29.54	750.3	50	10.0	86	nnw.			5		10		nw.	2 h'r	2 h'r	long	wnw.	
S. S. Nederland, N. 43° 56′, W. 52° 10′ †	30.49	774.4	43	6.1		se.			3		8		sse.	2 h'r	2 h'r	mod.	w.	cloudy.
S. S. Pennland, N. 46° 02′, W. 50° 26′	30.50	774.7	42.5	5.8	91	sw.			4		2		wsw.	0	0	long	wsw.	fine.
S. S. Rhynland, N. 51° 26′, E. 3° 30′	29.07	738.4	44	6.7	68	s.			5		7		sw.	6 h'r	6 h'r	sm'h		rainy.
S. S. Waesland, Antwerp, Belgium	29.22	742.2	38	3.3	90	sse.			4		10		se.	4 h'r	4 h'r			light rain
S. S. P. Oaland, N. 45° 52′, W. 45° 43′	30.54	775.7	41.5	5.3	74	var.			1		8		wsw.				wnw.	cloudy.
S. S. Schiedam, N 42° 45′ W. 58° 45′	30.30	769.6	52.2	11.2	87	sse.			5		5		s.	0	0	long	s.	fair.
S. S. W. A. Scholten, Brouwershaven, Germany	29.32	744.7	37.6	3.1	93	s.			5		10		s.	4 h'r	4 h'r	sm'h	nw.	light fog.
S. S. State of Florida, N. 41° 27′, W. 67° 00′	29.91	759.7	54	12.2		s.			5		8		ssw.	1 h'r	1 h'r	mod.	s.	cloudy.
S. S. Iowa, N. 44° 46′, W. 48° 15′*†	30.68	779.3	39	3.9		n.			2		3		ene.	0	0	slt	nnw.	clear
S. S. Britanic, N. 44° 43′, W. 44° 40′ †	30.52	775.2	48	8.9	100	nne.			1		5		w.	0	0	mod	n.	cloudy.
S. S Celtic, Queenstown, Ireland†	29.49	749.0	42	5.6		ne.			5		1		ne.	snow	snow	sm'h		fine.
S. S. Germanic, N. 47° 43′, W. 41° 40′†	30.62	777.7	41	5.0		wnw.			6		6		nw.	shr's	shr's	high	nw.	d. clouds.
S. S. Marengo, N. 40° 26′, W. 73° 35′	30.07	763.8				ssw.			6		4?		ssw.	7 h'r	7 h'r	r'gh	ssw.	cloudy.?
S. S. Salerno, N. 45° 56′ W. 7° 41′						ese.			9		10		nw.	6 h'r	6 h'r	hv'y	nw.	
S. S. Aries, N. 41° 22′, W. 71° 25′*†	29.80	756.9				ssw.			7		9		wsw.	4 h'r	4 h'r	long	sw.	cloudy.
S. S. Catherine Whiting, Philadelphia, Pa †	30.06	763.5	58	14.4		wnw.			1				nw.	0	0			
S. S. Saxon, Boston, Mass †	29.76	755.9	48	8.9		wsw.			5		3							
MISCELLANEOUS.																		
Bg. Alcira, N. 10° 57′, W. 71° 46′	29.92	760.0	81	27.2		ene.			4		2		ene.	0	0			clear.
Schr. Annie Lewis, Tampico, Mexico †	30.18	766.6	72	22.2		w.			2		8		w.	0	0	long	e.	cloudy.
S. S. Annie M. Law, N. 27° 36′, E. 133° 08′*†	30.00	762.0	70	21.1		n.			2		5?		wsw.	0	0	sm'h		clear.?
Bk. Anna Thormann, S. 26° 26′, E. 61° 23′*	29.91	759.6	78.3	25.7	87	calm			0		10 n		w.	sh'rs	sh'rs	mod.	w.	overcast.
S. S. Antonio Lopez, N. 23° 06′, W. 79° 53′*	30.12	765.0	75	23.9	93	ene.			4		8			0	0	mod.	ene.	squally.
Bgt. Arthur, N. 36° 27′, W. 45° 16′ *†	30.41	772.4				ene.			6				s.	rain	rain		var.	showery.
Bk. Champion, N. 21° 28′, W. 40° 13′			72.0	22.2		e.			4		5		ene.	0	0	mod.	e.	fair.
Schr. Chas. F. Heyer, N. 28° 32′, W. 79° 58′	30.22	767.6	73.5	23.1	78	ene.			1	0	2 k			0	0		ese.	clear.
Br. Clara M. Goodrich, Sagua la Grande, Cuba, W.I*†	30.00	762.0				ene.			5		5?		ene.	0	0			cloudy?
S. Cornelius, N. 50° 10′, W. 2° 42′*†	29.45	748.0	39.9	4.4		n.			3		8		ne.	0	0	sm'h	n.	cloudy.
S. S. D. J. Foley, N. 31° 00′, W. 74° 20′*†	30.20	767.1	70	21.1		wnw.			2		0			0	0	sm'h	se.	clear.
Bkt. David Preston, Pensacola, Fla			65.0	18.3		nnw.					10		nnw.					threatening.
Bk. E. L. Pettingill, N. 23° 01′, W. 121° 56′*†	30.20	767.1	64	17.8		ne.			2		0			0	0	sm'h	wsw.	clear.
Schr. Edith R. Seward, Baltimore, Md*†	30.31	769.9	46	7.8		nw.			2		8			0	0			cloudy.
S. E. J. Spicer, N. 40° 02′, W. 47° 35′*†	30.47	773 9	58	14.4		e.			3		7		wsw.	0	0	mod.	nnw.	clear.
Bk. Eliza Barss, N. 32° 50′, W. 66° 15′†	30.19	766.8				ene.			5		8		ene.	0	0	mod.	ne.	cloudy.
S Enoch Train, N. 27° 19′, W. 75° 30′ *†	30.40	772.1				nne.			2		0			0	0	light	ese.	clear.
Bk. Essex, Muscat, Arabia*†	29.98	701.5	78	25.6		ne.			4									threatening.
Schr. F. E. McDonald, Camden, Maine †	29.73	755.1				ssw.			5					½h'r	½h'r			threatening.
S. S. Foscolia, N. 34° 45′, W. 71° 14′						s.			5		8		w.	0	0	sm'h	e.	dull.
Bk. Freya, N. 19° 36′, W. 59° 40′			82	27.8		e.			4		1		e.	0	0	mod.	e.	fine.
S. J. W. Gildemeister, N. 42° 15′, W. 53° 07′*	30.45	773.4	52.7	11.5	53	e.			4–5		2 s		sw.	¾h'r	¾h'r	3	var.	d. clouds.
Bg. George, N. 42° 20′, W. 62° 42′ *†	30.30	769.6				sse.			5		2		sw.	0	0	mod.	sw.	fair.
Bk. Godeffroy, S. 44° 17′, W. 58° 11′†	30.09	764.3	55.2	12.9	83	nnw.			3–4		4		wsw.	0	0	sm'h	n	fair.
Bk. Great Surgeon, S. 15° 01′, E. 96° 41′ *†	29.98	761.5	80	26.7		sse.			5		3		sse.	0	0	long	sse.	fair.
Bk. Grey Eagle, N. 15° 29′ W. 34° 30′						e.			0		5		e.	4 h'r	4 h'r	long	ne.	squally.
Bk Hattie G. McFarland, New York, N. Y †	30.02	762.5	50	10.0		wsw.			5		8		w.	4 h'r	4 h'r			
Schr. Hattie Weston, N. 25° 10′, W. 71° 00′ *†	30.24	768.1	80	26.7		e			4		0			7 h'r	7 h'r	h'vy	ne.	clear.
Bk. Heinrich & Tonio, N. 52° 18′, E. 2° 50′*†	29.15	740.4	40	4.4	91	ese.			5		10		ese.	5 h'r	5 h'r	long	n.	hazy.
Schr. Isabel Alberto, N. 24° 10′, W. 81° 26†	30.11	764.8				ene.			2		2		ene.	0	0	mod	ene.	fair.
Schr. James Slater, N. 34° 43′, W. 74° 27′ *†	30.11	764.8	71	21.7		w.			5		5		wnw.	1 h'r	1 h'r	r'gh	sw.	threatening

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Schr. Jennie N. Huddell, Savannah, Ga †	30.19	766.8	56	13.3	.....	sw.	.....	.....	1	.....	10	....	w.	0	0	.....	.....	threatening.
Schr. John L. Thomas, N. 35° 52′, W. 75° 20′*†	30.14	765.5	.....	.....	.....	wnw.	.....	.....	2	.....	2	.....	nw.	6 h'r	6 h'r	mod.	sse.	threatening.
Bg. John Wesley, N. 37° 17′, W. 73° 26′†	30.09	764.3	.....	.....	.....	sw.	.....	.....	1	.....	6	.....	sw.	0	0	sm'h	sw.	clear.
Bk. Joseph A. Ropes, N. 6° 52′, E. 54° 31½′†..	29.94	760.5	83	28.3	83	nne.	.....	.....	4	.....	8	.....	ne.	0	0	mod.	ne.	cloudy.
Bkt. Josephine, N. 34° 34′, W. 53° 19′†	30.28	769.1	73	22.8	76	ene.	.....	.....	2	.....	10	.....	ese.	0	0	mod.	ene.	cloudy.
Bk. Julia H, N. 39° 35′, W 52° 40′	30.44	773.2	63.3	17.4	72	ese.	.....	.....	2	.....	3	.....	.....	0	0	5	e.	d. clouds.
Light House Tender, Laurel, Tortugas, Fla†	30.12	765.0	71	21.7	.....	ene.	.....	.....	1	.....	1	.....	ene.	0	0	sm'h	.....	clear.
Bg. Lilian, N. 35° 55′, W. 75° 04′†	30.17	766.3	57	13.9	.....	w.	.....	.....	6	.....	2	.....	wsw.	6 h'r	6 h'r	mod.	s.	clear.
Bg. L. & W. Armstrong, N. 32° 00′, W. 61° 44′ *†	30.22	767.6	.....	.....	.....	ene.	.....	.....	5	.....	5	.....	ene.	3 h'r	3 h'r	mod.	ne.	light rain.
S. S. Malabar, N. 43° 10′, E. 8° 05′†	29.42	747.3	.....	.....	.....	w.	.....	.....	10	.....	1	.....	w.	0	0	h'vy	w.	clear.
Bk. Matilda C. Smith, N. 27° 23′. W. 58° 20′ *†	30.32	770.1	.....	.....	.....	se.	.....	.....	3	.....	0	.....	.....	0	0	mod.	con.	fine.
Schr. Minnie A. Bonsall, St. John's, Fla †	30.26	768.6	70	21.1	.....	sw.	.....	.....	1	.....	2	.....	sw.	.....	.....	light	ne.	fair.
S. Minnie N. Gerow, N. 32° 18′, W. 27° 45′*†	30.30	769.6	... .	.....	.....	nw.	.....	.....	2	.....	10	.....	nw.	.....	.....	sm'h	n.	fair.
S. M. P. Grace. S. 6° 48′, W. 128° 43′ *†	29.99	761.7	74	23.3	.....	ese.	.....	.....	5	.....	2	.....	ese.	0	0	r'gh	ese.	squally.
Bg. O. C. Clary, Demerara, British Guiana, S. A*†	29.90	759.4	85	29.4	87	e.	.....	.....	2	.....	.....	.....	.....	0	0	. .....	.....	clear.
S. Oresalla, N. 18° 32′, E. 92° 45′*	29.84	757.9	.....	.....	.....	ese.	.....	.....	2	.....	2	.....	nw.	.....	.....	sm'h	.....	fine.
S Paramita, San Francisco, Cal †	30.05	763.3	51	10.6	.....	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	
S. S. Peconic, N. 24° 20′, W. 82° 20′*†	30.12	765.0	74	23.3	.....	nne.	.....	.....	3	.....	.....	.....	.....	.....	.....	sm'h	ne.	fair.
Bk. Pilgrim, N. 3° 30′, W. 36° 30′*†	29.90	759.4	.....	.....	.....	se.	.....	.....	2	.....	.....	.....	nne.	snow	snow	high	cross	fair.
S. S. Radnorshire, N. 3° 09′, E. 100° 05′ *†	29.82	757.4	.....	.....	.....	nw.	.....	.....	4	.....	10	.....	nw.	5 h'r	5 h'r	sm'h	w.	cloudy.
S. S. Raleigh, N. 36° 55′. W. 75° 00′*†	29.99	761.7	55	12.8	.....	wsw.	.....	.....	4	.....	5	....	w.	0	0	mod.	se.	fair
Bk. Rebus, N. 39° 05′, W. 62° 21 *	30.07	763.8	61	16.1	.....	s.	.....	.....	3	.....	7	.....	sw.	0	0	sm'h	sw.	fair.
S. St. Francis, N. 18° 51′, W. 127° 00′†	30.01	762.2	73	22.8	.....	ne.	.....	.....	4	.....	3	.....	ne.	0	0	mod.	ne.	fair.
Bk. Scud, N. 7° 10′ W. 58° 05′ *†	29.88	758.9	.....	.....	.....	ene.	.....	.....	3	.....	2	.....	ene.	0	0	short	ne.	clear.
S. S. Sunbeam, N. 18° 21′, W. 53° 52′	30.06	763.5	78	25.6	91	se.	.....	.....	5	.....	6	.....	se.	9 h'r	9 h'r	4	ese.	showery.
S. S. Strathleven, N. 8° 38′, E. 67° 02′	29.81	757.2	80.2	26.8	91	ne.	.....	.....	2	.....	2	.....	ene.	0	0	2	ene.	d. clouds.
Schr. T. S. McLellan, N. 28° 50′, W. 79° 50′ *†	30.20	767.1	70	21.1	.....	ne.	.....	.....	.....	.....	.....	.....	sw.	.....	.....	h'vy	n.	cloudy.
U. S. F. C. S. S. FishHawk, Washington, D. C†..	30.27	768.8	45	7.2	61	wsw.	.....	.....	3	.....	8	.....	sw.	0	0	.....	.....	fair
Bk. Usko, N. 54° 51′, W. 9° 46′ *	29.62	752.3	37	2.8	.....	nne.	.....	.....	.....	.....	5	.....	ne.	snow	snow	cross	n.	squally.
Bk. Vincenzo Accame, N. 34° 34′, W. 33° 52′†	30.45	773 3	71.6	22.0	.....	ne.	.....	.....	3	.....	6	.....	n.	1¼ h'r	1¼ h'r	mod.	n.	
Schr. Walter L. Plummer, N. 30° 50′, W. 75° 30′*†	30.30	769.6	.....	.....	.....	ssw.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	.....	fine.
Bk. Wandering Jew, Montevideo, Uruguay †	30.09	764.3	67	19.4	.....	e.	.....	.....	6	....	5	.....	e.	0	0	.....	.....	fair.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.06	763.5	.....	.....	.....	calm	.....	.....	0	.....	2	.....	wnw.	.....	.....	sm'h	wsw.	fair.
S. Wm. Woodbury, N. 44° 19′, W. 27° 15′*	30.17	766.3	54	12.2	.....	n.	.....	.....	8	.....	9	.....	n.	.....	.....	high	n.	squally.

International Chart I. December 6, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 7, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.81	757.2	57.9	14.4	87	e.	.....	.....	5	.....	3	.....	.....	0	0	pretty fair...	Malaterre.
Algiers	.....	.....	29.65	753.0	64.8	18.2	52	wsw.	.....	.....	5	.....	4	.....	.....	0.098	2.5	cloudy.	Thève.
La Calle	.....	.....	29.60	751.8	55.4	13.0	40	wsw.	.....	.....	4	.....	4	.....	.....	0	0	cloudy..	Fonfréde.
Tunis	.....	.....	29.73	755.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.80	756.9	64.0	17.8	92	w.	.....	.....	2	.....	2	.....	.....	0	0	fair.....	Pérès.
Tebessa	.....	.....	29.92	760.0	63.3	17.4	38	ssw.	.....	.....	4	.....	1	.....	.....	0	0	very fair....	Dognon.
Geriville	.....	.....	.....	.....	57.9	14.4	20	w.	.....	.....	2	.....	8	.....	.....	0	0	very cloudy	Lonchamp.
Laghouat	.....	.....	29.98	761.4	57.9	14.4	20	ssw.	.....	.....	0	.....	3	.....	.....	0	0	pretty fair...	Abraham.
Biskra	.....	.....	29.98	761.4	57.9	14.4	38	se.	.....	.....	4	.....	2	.....	.....	0	0	fair.....	Malau.
Australian.																			
Melbourne, Victoria	29.82	757.4	29.91	759.7	65.0	18.3	70	se.	15	6.7	.....	.....	1	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	28.95	735.2	29.50	749.2	39.2	4.0	90	ne.	.....	.....	2	.....	7	.....	.....	0.787	20.0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.79	731.3	29.58	751.3	33.4	0.8	87	wnw.	1.8	0.8	.....	.....	6	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.73	729.8	29.63	752.7	35.6	2.0	93	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.26	717.8	29.54	750.3	35.1	1.7	89	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.24	717.3	29.68	753.9	44.6	7.0	73	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	27.97	710.3	29.34	745.3	29.5	— 1.4	95	e.	.....	.....	1	.....	10	.....	.....	0	0	foggy.....	The Staff.
Lemberg	28.61	726.7	29.62	752.3	37.2	2.9	91	se.	.....	.....	1	.....	4	.....	.....	0.039	1.0	.....	Dr. T. Stanecki.
Pola	29.27	743.5	29.38	746.3	55.8	13.2	85	ssw.	.....	.....	4	.....	10	.....	.....	0.709	18.0	thund'rst'm	I. R.Hydrographic Office.
Szathmar	29.34	745.3	29.80	757.0	35.8	2.1	94	w.	.....	.....	1	.....	10	.....	.....	0.089	1.5	.....	Joseph Midlinszay, S. J.
Szegedin	29.35	745.4	29.63	752.7	36.3	2.4	100	calm	.....	.....	0	.....	10	.....	.....	0.130	3.3	foggy.....	Karl Stancel.
Trieste	29.30	744.2	29.40	746.8	51.1	10.6	79	se.	.....	.....	1	.....	7	.....	.....	0.024	0.6	.....	Royal Academy.
Vienna	28.75	730.3	29.48	748.9	34.2	1.2	96	ese.	.....	.....	2	.....	10	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.53	750.0	29.63	752.6	36.6	2.6	57	ne.	25	11.2	.....	.....	10	.....	.....	0.300	7.6	snowy.....	W. Boswell
Armagh, Observatory	29.29	744.0	29.54	750.3	32.5	0.3	67	n.	10	4.5	.....	.....	10	.....	.....	blank	blank	overcast.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.29	744.0	35.5	1.9	92	nne.	15	6.7	.....	.....	10	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	28.74	730.0	29.27	743.4	34.0	1.1	98	ene.	24	10.7	.....	.....	10	.....	.....	.....	.....	squally.....	Thomas Mackereth.
Bradford, Yorkshire	28.89	733.8	29.28	743.7	34.7	1.5	93	ne.	.....	.....	4	.....	10	.....	.....	0.19	4.8	snowing.....	McLandsborough&Preston.
Bridgetown, Barbadoes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Corpl.J.Surgenor, A. H C.
Cardington	.....	.....	.....	.....	33.4	0.8	92	ne.	.....	.....	1.0	.....	10	.....	.....	.....	.....	snowing.....	John McLaren.
Chatham, School M. E	29.02	737.1	29.15	740.4	32.6	0.3	99	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	snowing.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.02	737.1	29.26	743.2	35.9	2.2	63	nnw.	.....	.....	5	.....	5	.....	.....	.....	.....	squally.....	The Staff.
Fort Napier, Natal	27.49	668.2	29.70	754.4	93.0	33.9	27	e.	.....	.....	1	.....	1	.....	.....	.....	.....	blue sky.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.57	751.1	29.83	757.7	86.0	30.0	76	nw.	.....	.....	1	.....	2	.....	.....	.....	.....	blue sky.....	Sergt. John Robinson.
Gibraltar, Mediterranean	29.84	757.9	29.89	759.2	59.0	15.0	97	sw.	.....	.....	2	.....	9	.....	.....	.....	.....	raining.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.34	745.2	29.54	750.3	34.0	1.1	95	ne.	.....	.....	4	.....	7	.....	.....	.....	.....	d. clouds.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	28.99	736.3	29.17	740.9	32.6	0.3	93	n.	.....	.....	1	.....	10	.....	.....	.....	.....	snowing.....	The Staff.
Guernsey	28.76	730.5	29.05	737.9	37	2.8	90	nw.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing.....	A. Collenette, F. M. S.
Kew, Observatory	29.15	740 4	29.19	741.4	32.5	0.3	87	n.	8	3.6	.....	.....	10	.....	.....	.....	.....	snowing.....	The Staff.
Leicester, Museum	28.98	736.1	29.24	742.7	33.5	0.8	84	n.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	29.73	755.1	29.81	757.2	66.0	18.9	97	sw.	.....	.....	3	.....	.....	.....	.....	.....	.....	blue sky.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.10	764.5	30.14	765.5	74.0	23.3	88	ne.	.....	.....	2	.....	8	.....	.....	.....	.....	overcast.....	C. S. Duncombe.
Oscott, St. Mary's College	28.76	730.5	29.24	742.7	32.0	0.0	95	n.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast.....	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	28.98	736 1	29.21	741.9	31.0	— 0.6	86	n.	.....	.....	2	.....	8	.....	.....	.....	.....	d. clouds....	The Staff.
Plymouth	29.12	739.6	29.19	741.4	32.7	0.4	82	n.	.....	.....	4	.....	10	.....	.....	.....	.....	snowing.....	John Merrifield.
Sandwick Manse, Orkneys	29.51	749 5	29.62	752.3	33.5	0.8	95	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	snowy.....	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.58	751.3	29.65	753.1	55.4	13.0	84	wsw.	.....	.....	2	.....	10	.....	.....	.....	.....	gloomy.....	W. H. Lyne.
Sheffield	29.00	736.6	29.29	744.0	35.6	2.0	95	ene.	.....	.....	1	.....	10	.....	.....	0.38	9.7	gloomy.....	W. F. Cooper.
Silloth Rectory	29.32	744 7	29.36	745.7	36.1	2.3	90	ene.	.....	.....	5	.....	5	.....	.....	0.050	1.3	d. clouds....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.32	744.7	36.8	2.7	83	ne.	11	4.9	.....	.....	7	.....	.....	.....	.....	d. clouds....	I. New.
Stratfield Turgiss	28.98	736.1	29.20	741.7	33.2	0.7	84	ne.	.....	.....	1	.....	9	.....	.....	.....	.....	snowing.....	Rev.C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.23	742.4	29.26	743.2	39	3.9	73	n.	.....	.....	4	.....	8	.....	.....	.....	.....	gloomy.....	W. Newcombe.
Valencia, Observatory	29.58	751.3	29.61	752.1	38.6	3.7	61	ne.	18	8.0	.....	.....	5	.....	.....	.....	.....	blue sky.....	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson
Charlottetown, P. E. Island	30.02	762.5	30.06	763.5	31	— 0.6	84	calm	0	0	.....	0	0	.....	.....	0.550	14.0	clear.....	H. J. Cundall, C. E
Chatham, N. B*	29.92	760 0	29.99	761.7	24	— 4.4	92	s.	1	0.4	.....	0	0	.....	.....	0.62	15.7	clear.....	G. A. Blair.
Father Point, Quebec*	29.88	758.9	29.90	759.4	22	— 5.6	87	s.	6	2.7	.....	.....	10 8	.....	calm	0.30	7.6	cloudy..	J. McWilliams.
Fort Garry, Manitoba*	29.82	757.4	30.82	782.8	—28	—33.3	55	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	James Stewart.
Halifax, N. S*	29.97	761.2	30.11	764.8	30	— 1.1	100	calm	0	0	.....	5 k	sk	w.	.....	0.435	11.1	smoky.....	A. Allison.
Kingston, Ontario*	29.37	746.0	29.73	755.1	22	— 5.6	92	sw.	19	8.5	.....	.....	10 8	.....	sw.	0.30	7.6	cloudy	A. P. Knight, M. A
Montreal, Quebec*	29.39	746.5	29.66	751.8	28	— 2.2	92	se.	18	8.0	.....	.....	10	.....	.....	0.02	0.5	light snow.	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.00	736.6	29.74	755 4	12	—11.1	83	w.	18	8.0	.....	.....	10 n	.....	w.	0.36	9.1	light snow..	Rev. R. Mosley.
Port Dover, Ontario	29.31	744.5	30.07	763.8	7	—13.9	100	w.	24	10.7	.....	0	0	.....	.....	0.43	10.9	clear.....	H. Morgan.
Port Stanley, Ontario	29.40	746.7	30.11	764.8	8	—13.3	73	w.	24	10.7	.....	.....	8 k	.....	w.	0.35	8.9	cloudy.....	M. Payne.
Quebec, Quebec*	29.48	748.8	29.82	757.4	25	— 3.9	76	e.	.....	.....	3	.....	10 k	.....	e.	0.30	7.6	cloudy	Capt. Ashe, R N.
Rockliffe, Ontario*	29.05	737.9	29.52	749.8	22	— 5.6	88	w.	3	1.3	.....	.....	10 k8	.....	sw.	0.05	1.3	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.10	739.1	29.87	758.7	15	— 9.4	100	nw.	64	28.6	.....	.....	10 8	.....	.....	0.25	6.3	heavy snow	
St. Andrews, N .B	29.95	760.7	30.01	762.2	35	1.7	79	sw.	1	0.4	.....	2 k	2 8	w.	.....	0.14	3.6	fair	
Sydney, C. B*	30.02	762.5	30.08	764.0	34	1.1	89	w.	6	2.7	.....	0	2 k	.....	w.	0.11	2.8	clear.....	T C. Hill, C. E
Toronto, Ontario*	29.49	749.0	29.90	759.4	12	—11.1	87	sw.	30	13.4	.....	0	0	.....	.....	0.18	4.6	clear.....	Magnetic Observatory.
Yarmouth, N. S*	30.00	762.0	30.07	763.8	32	0.0	85	e	2	0.9	.....	0	0	.....	.....	0.29	7.4	clear.....	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.41	721.6	29.98	761.5	11.0	—11.7	100	nw.	.....	.....	7	.....	10 8	.....	nw.	0.537	13.6	overcast.....	Wm. Wylie.
St. Johns, Newfoundland	29.82	757.4	30.08	764.0	47	8.3	100	sw.	2	0.9	.....	5 k	5 8	.....	.....	0.03	0.8	raining.....	John Delany
Cape Colony.																			
Cape St. Francis Lt. House	29.92	760 0	29.95	760.7	71.0	21.7	88	sw.	19.5	8.7	.....	0	3 k	.....	.....	0	0	hazy.....	John Duthie.
Cape Town, C G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D.Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower 0–10	Direction Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
Chinese (Sub-series).																			
Sung-shu-chwang	24.73	628.1	.....	.....	21.0	— 6.1	.....	calm	.....	.....	0	.....	fg	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.22	767.6	30.33	770.4	31.6	— 0.2	81	ne.	6.3	2.8	.....	0	0	.....	.....	0	0	foggy	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.04	763.1	30.07	763.7	53.8	12.1	73	nnw.	3.4	1.5	.....	0	0	.....	.....	0	0	clear.....	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.63	752.5	29.67	753.7	22.1	— 5.5	73	e.	27	12	.....	.....	9	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanoe	29.58	751.2	29.60	751.7	27.0	— 2.8	89	ene.	.....	.....	6	.....	9	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.88	759.0	29.93	760.1	12.6	—10.8	83	ne.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.73	755.2	29.75	755.7	11.1	—11.6	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	30.06	763.6	30.11	764.8	5.0	—15 0	.....	e.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	30.00	762.1	30.05	763.2	32.5	0.3	89	calm	.....	.....	0	.....	2	.....	.....	.....	.....	snowing	
Thorshavn	29.82	757.4	29.85	758.3	34.0	1.1	89	ne.	18	8	.....	.....	5	.....	.....	.....	.....	.....	A. O. Thorlacius.
Vestervig	29.63	752.6	29.72	755.0	20.3	— 6.5	84	ene.	.....	.....	6	.....	1	.....	.....	.....	.....	.....	Overloerer Bergh.
Upernavik, Greenland	30.12	765.0	30.17	766.2	4.8	—15.1	.....	sw.	.....	.....	7	.....	10	.....	.....	.....	.....	snowing.....	Loearer Oesterbol.
French.																			
Agen, Normal School	28.83	732.3	29.50	749.2	39.2	4	93	nnw.	.....	.....	1	.....	k	.....	w.	0.224	5.7	.....	M. Labroue, Director.
Alençon, Normal School	28.63	727.3	29.19	741.3	35.2	1.8	93	sw.	.....	.....	1	.....	ku	ne.	ne.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	28.85	732.7	29 11	739 3	32.9	0.5	93	e.	.....	.....	1	.....	10	.....	.....	.....	.....	snowing.....	M. Fénéon, Command't.
Avignon, Normal School	29.22	742.2	29.30	744.2	51.1	10.6	77	sw.	.....	.....	2	.....	5	.....	sw.	0.051	1.3	cloudy	M. Giraud, Director.
Bar-sur-Seine	28.55	725.1	29.10	739.2	41.9	5.5	91	s.	.....	.....	1	.....	10	.....	sw.	0.079	2.0	raining.....	M. Saillard, Director.
Beauvais, Normal School	28.84	732.5	29.11	739.3	35.2	1.8	96	w.	.....	.....	1	.....	10	.....	.....	0.140	3.7	covered.....	M. Frère Eugène Marie
Besançon, Normal School	28.28	718.2	29.16	740.6	45.3	7.4	83	ssw.	.....	.....	1	.....	n	.....	sw.	0.16	4.	.....	M. Gobin, Director.
Bordeaux, Observatory	29.16	740.7	29.42	747.3	44.4	6.9	59	sse.	.....	.....	1	.....	2	.....	n.	0.319	8.1	slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	28.78	730.9	29.34	745.1	37.4	3	74	w.	.....	.....	2	.....	10	.....	w.	0.142	3.6	snowing.....	M. Malet, Director.
Brest, Naval Observatory	29.03	737.3	29.27	743.5	38.8	3.8	70	nw.	.....	.....	2	.....	6	.....	nw.	0.012	0.3	snowing.....	M. de Kermaïde, Dir.
Caen, Normal School	28.99	736.3	29.06	738.2	36.9	2.7	66	sw.	.....	....	1	. .....	10	.....	.....	0.12	3.	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	28.73	729.8	29.06	738.0	40.8	4.9	93	calm	.....	.....	0	.....	10	.....	.....	0.063	1.6	covered.....	M. Jadot, Director.
Charleville, Normal School	28.58	725.8	29.09	738.9	35.8	2.1	86	e.	.....	.....	1	.....	10	.....	.....	0.079	2.	raining.....	M. Grimard, Director.
Clermont-Ferrand Obs'y	27.95	709.9	29.33	744.9	35.2	1.8	85	w.	.....	.....	1	.....	10	.....	.....	0.028	0.7	snowy.....	M. Allnard, Director.
Cluny, Normal School	28.37	720 7	29.22	742.2	36.5	2.5	96	w.	.....	.....	1	.....	10	w.	w.	0.106	2.7	rain & snow	M. de Villemontée, Dir.
Commercy, Normal School	28.26	717.9	29.13	739.8	39.9	4.4	88	se.	.....	.....	1	.....	ks	se.	se.	0.232	5.9	.....	Dr. Coulet, Director.
Gap, Normal School	26.70	678.1	29.26	743.1	36.7	2.6	89	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	.....	M. Jeangirard, Director.
Grénsque, du Rhone	28.20	716.2	29.31	744.5	48.7	9.3	69	w.	.....	.....	2	.....	7	.....	w.	0.598	15.2	.....	M. Kina, Director.
Grenoble.Normal School	28.41	721.7	29.19	741.4	45.0	7.2	80	ese.	.....	.....	1	.....	cn	.....	s.	0.102	2.6	.....	M. Abbard, Director.
Guéret	27.67	702.9	29.29	743.9	35.6	2	89	w.	.....	.....	1	.....	n	.....	w.	0.130	3.3	.....	M. Delorme, Dir.
Lamballe, Normal School	28.89	733 9	29.16	740.7	36.1	2.3	89	wnw.	.....	.....	3	.....	10	.....	wnw.	.....	.....	snowing.....	M. Ollitrault, Director.
Lescar, Normal School	28.91	734.2	29.48	748.9	38.8	3.8	90	sw.	.....	.....	3	.....	8	.....	.....	0.425	10.8	very cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.16	740.7	29.29	744 0	40.3	4.6	65	w.	... ...	.....	6	.....	10	nw.	w.	0.016	0.4	covered.....	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.16	715.2	29.21	741.8	45.3	7.4	88	ssw.	.....	.....	3	.....	10	.....	w.	0.008	0.2	sprinkling...	M. André, Director.
Mans, Normal School	28.92	734.5	29.23	742.5	36.5	2.5	96	nw.	.....	.....	4	.....	5	.....	nw.	0.134	3.4	cloudy	M. Pibeën, Director.
Marseille, Observatory	29.05	737.8	29.32	744.6	51.4	10.8	62	wnw.	.....	.....	4	.....	7	.....	Wnw.	0.087	2.2	.....	M. Stephan, Director.
Mt. Louis	24.24	615.6	29.08	738.6	26.6	— 3.0	94	w.	18.6	8.3	.....	.....	9	s.	.....	0	0	.....	M. Carè for Dr. Fines.
Montpellier, Normal School	29.21	741.8	29.37	746.1	46.4	8	81	w.	.....	.....	3	.....	5	.....	w.	0	c	cloudy.....	M. Galzin, Director.
Nancy, Normal School	28.34	719.9	29.13	739.8	38.8	3.8	90	sw.	.....	.....	1	.....	n	.....	.....	0.224	5.7	.....	M. Husse, Director.
Nantes, Observatory	29.13	740.0	29.30	744.1	43.5	6.4	56	wsw.	.....	.....	2–3	0	5k;kn;n	.....	w.	0.020	0.5	.....	M. Lurocque, Director.
Perpignan, Observatory	29.24	742.8	29.36	745.7	46.8	8.2	57	nw.	31.8	14.2	.....	.....	9	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.54	521.7	.....	.....	14.9	—10.0	.....	nw.	.....	.....	2	.....	10	.....	nw.	0.118	3.0	snowy.....	M. Vaussenat.
Privas, Normal School	28.18	715.8	29.24	742.6	46.8	8.2	74	s.	.....	.....	1	.....	10	.....	.....	0	0	covered.....	M. Taillen.
Puy de Dôme Obs'y, Summit	24.23	615.4	.....	.....	20.3	— 6.5	100	w.	.....	.....	9	.....	10	.....	.....	0.035	0.9	snowing.....	M. Allnard, Director.
Rochefort, Naval Obs'y	29.30	744 2	29.33	745.0	41.7	5.4	84	w.	.....	.....	2	.....	8	nw.	sw.	1.46	37.	¾ covered...	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.07	738.3	29.29	743.9	38.8	3.8	97	wsw.	.....	.....	1	.....	10	.....	.....	0.409	10.4	covered.....	M. Brotier, Director.
Rodez, Normal School	27.15	689.5	29.32	744.6	36.5	2.5	80	s.	.....	.....	1	.....	5	.....	.....	0.126	3.2	cloudy.....	M. Seger, Director.
Rouen, Normal School	29.09	738.8	29.13	740.0	35.6	2	93	sw.	.....	.....	1	.....	10	sw.	.....	0.059	1.5	covered.....	M. Mouillot.
Saint Lô	.....	.....	.....	.....	35.6	2	89	w.	.....	.....	1	.....	5	sw.	w.	0	0	cloudy.....	M. Delaplanche, Dir.
Saint Maur, Observatory	28.96	735.6	29.13	739 8	34.0	1.1	95	w.	.....	.....	1	.....	10	.....	.....	0.354	9.0	.....	M. Renou, Director.
Toulouse, Observatory	28.80	731.6	29.51	749.6	42.4	5.8	63	w.	.....	.....	3	.....	8	nw.	.....	0.185	4.7	very cloudy	M. Baillaud, Director.
Tours	29.08	738.5	29.25	743.0	40.3	4.6	67	wsw.	.....	.....	2	.....	5	.....	w.	0.390	9.9	cloudy.....	M. de Tastes.
Versailles, Observatory	28.63	727.3	29.13	739.8	33.4	0.8	92	n.	.....	.....	1	.....	.....	.....	.....	0.358	9.1	.....	Dr. A. Bérigny, Director.
Sub-sertes.																			
St. Martin du Hinx	29.34	745.3	29.49	749.1	41.5	5.3	84	w.	7.8	3.5	.....	0	7 k	.....	wsw.	0.398	10.1	.....	M. Cartier, Director.
German.																			
Ansbach	27.81	706.4	29.29	743.9	32.0	0.0	73	se.	.....	.....	4	.....	9	se.	.....	0.173	4.4	.....	Prof. Juedt.
Bamberg	28.48	723.4	29.30	744.3	34.7	1.5	70	calm	.....	.....	e	.....	5	.....	.....	0	0	.....	Prof. Dr. Hon.
Berlin	29.29	744.0	29.47	748.6	37.6	3.1	98	e.	.....	.....	2	.....	10	.....	.....	0.016	0.4	.....	Prof. Dr. Arndt.
Breslau	29.00	736.5	29.52	749.8	30.9	— 0.6	88	se.	.....	.....	2	.....	0	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	28.76	730.4	29.19	741.4	37.8	3.2	69	ne.	.....	.....	1	.....	10	ne.	.....	0.142	3.6	.....	Albert Senz.
Cassel	28.56	725.3	29.27	743.4	35.2	1.8	71	ne.	.....	.....	2	.....	5	n.	.....	0.063	1.6	snowing.....	Dr. H. Möhl.
Frankfort-on-the-Main	28.87	733.3	29.24	742.7	37.2	2.9	71	e.	.....	.....	1	.....	8	.....	.....	0.008	0.2	.....	Physical Society.
Friedrichshafen	27.78	705.5	29.22	742.2	37.8	3.2	97	se.	.....	.....	2	.....	5	sw.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.40	746.8	29.49	749.1	31.1	— 0.5	94	e.	.....	.....	3	.....	10	.....	.....	0	0	light fog.....	E. Preller.
Kiel	29.50	749.4	29.52	749.8	33.4	0.8	84	e.	.....	.....	4	.....	10	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.98	736.1	29.41	747.0	32.9	0.5	83	e.	.....	.....	2	.....	2	.....	.....	0	0	.....	R. Leppig, Asst.
Magdeburg	29.23	742.4	29.42	747.3	32.9	0.5	87	ene.	.....	.....	1	3 cs	0	sse.	.....	0.106	2.7	.....	Weather Observatory.
Memel	29.63	752.6	29.68	753.8	29.7	— 1.3	100	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	Issermann.
Munich	27.41	696.2	29.22	742.2	31.1	— 0.5	73	e.	.....	.....	2	.....	9	ne.	.....	0	0	.....	Central Station.
Neufahrwasser	29.66	753.3	29.67	753.7	31.1	— 0.5	88	se.	.....	.....	1	.....	10	.....	.....	0.008	0.2	.....	A. Lothes.
Neustadt, Palatinate	28.67	728.2	29.19	741.4	37.4	3.0	81	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy.....	Dicknether.
Stuttgart	28.26	717.8	29.16	740.7	36.9	2.7	82	w.	.....	.....	1	.....	8	w.	.....	0.008	0.2	.....	Prof. Dr. Schoder.
Wustrow	29.58	751.3	29.60	751.9	32.2	0.1	78	e.	.....	.....	2	.....	8 s	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.39	746.6	29.78	756.4	59.5	15.3	.....	w.	.....	.....	3.0	.....	7	.....	.....	0.055	1.4	misty.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.95	760.8	30.00	762.1	77.5	25.3	64	wsw.	11.0	4.9	.....	.....	2	.....	.....	0	0	d. clouds	
Deesa	29.45	748.0	29 93	760.1	81.2	27.3	35	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Bombay	29.84	757.8	29.97	761.3	80.5	26.9	63	nnw.	10.0	4.5	.....	.....	0	.....	.....	0	0	blue sky.....	
Poona, Yarrowda	28.02	711.8	29.87	758.6	82.2	27.9	13	e.	10.0	4.5	.....	.....	0	.....	.....	0	0	blue sky.....	
Trichinopoly	29.60	752.0	29.89	759.2	77.4	25.2	80	calm	0	0	.....	.....	10	.....	.....	0	0	overcast.....	
Belgaum	27.33	694.1	29.86	758.3	78.2	25.7	47	e.	3.0	1.3	.....	.....	4	se.	.....	0	0	d. clouds.....	
Lahore	29.19	741.4	29.97	761.2	60.4	15.8	52	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Roorkee	29.00	736.7	29.93	760.3	65.2	18.4	40	sw.	.....	.....	.....	.....	3	w.	.....	0	0	.....	
Agra	29.38	746.2	29.96	760.9	71.2	21.8	42	nw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Nagpur	28.89	733.9	29.95	760.8	74.7	23.7	35	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Jubbulpore	28.59	726.3	29.98	761.4	71.8	22.1	45	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Lucknow	29.55	750.6	29.94	760.6	64.3	17.9	37	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Allahabad	29.62	752.3	29.95	760.6	62.5	16.9	70	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Patna	29.76	755.8	29.95	760.6	67.6	19.8	60	w.	3.1	1.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Hazaribagh	27.88	708.1	29.96	760.9	61.5	16.4	55	nw.	7.6	3.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Cuttack	29.84	758.0	29.93	760.2	71.6	22.0	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Calcutta, Alipore	29.88	759.0	29.90	759.5	68.0	20.0	68	nnw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Dhubri	29.78	756.3	29.90	759.3	70.1	21.2	74	wnw.	1.5	0.7	.....	.....	0	.....	.....	0	0	blue sky.....	
Chittagong	29.78	756.3	29.87	758.6	71.6	22.0	77	wsw.	1.8	0.8	.....	.....	0	.....	.....	0	0	blue sky.....	
Sibsagar	29.59	751.6	29.94	760.3	66.7	19.3	76	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Jeypore	28.50	723.8	29.96	761.0	73.8	23.2	48	nw.	4.1	1.8	.....	.....	0	.....	.....	0	0	blue sky.....	
Italian.																			
Udine	28.99	736.3	29.41	746.9	44.4	6.9	93	ne.	5.6	2.5	.....	.....	10	.....	.....	0.980	24.9	.....	Prof. Giovanni Clodig.
Milan	28.91	734.4	29.45	748.1	34.9	1.6	91	sw.	3.1	1.4	.....	.....	10	.....	.....	0.106	2.7	.....	Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Padua	29.27	743.5	29.38	746.3	42.3	5.7	94	nnw.	9.4	4.2	.....	.....	9	sw.	.....	0.610	15.5	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.50	723.9	29.45	747.9	35.6	2.0	96	nnw.	0	0	.....	.....	9	ne.	.....	0.311	7.9	.....	Prof. F. F. Denza.
Genoa	29.18	741.1	29.37	746.0	42.1	5.6	72	n.	6.3	2.8	.....	.....	10	sw.	.....	1.130	28.7	.....	Prof. G. M. Garibaldi
Mondovi	27.47	697.8	29.46	748.2	35.4	1.9	66	w.	.....	.....	2	.....	8	.....	.....	0.161	4.1	.....	Prof. D. C. Bruno.
Pesaro	29.29	743.9	29.34	745.2	54.0	12.2	70	se.	7.4	3.3	.....	.....	9	.....	.....	0.110	2.8	.....	Prof. Luigi Guidi.
Florence	29.13	740.0	29.39	746.6	53.6	12.0	80	sw.	.....	.....	2	.....	10	wsw.	.....	0.264	6.7	.....	Prof. Costantino Pittei.
Leghorn	29.26	743.2	29.35	745.4	54.3	12.4	83	w.	11.9	5.3	.....	.....	10	.....	.....	0.236	6.0	.....	Prof. P. Monte.
Rome	29.34	745.1	29.51	749.6	58.6	14.8	85	ssw.	21.0	9.4	.....	.....	10	.....	.....	0.250	6.5	.....	Prof. P. Tachini.
Lecce	29.52	749.8	29.78	756.3	58.6	14.8	62	s.	19.2	8.6	.....	.....	3	s.	.....	0.051	1.3	.....	Prof. C. de Giorgi
Cosenza	28.89	733.9	29.79	756.7	54.7	12.6	77	ssw.	3.1	1.4	.....	.....	6	sw.	.....	0.291	7.4	.....	Prof. D. Conti.
Cagliari	29.34	745.1	29.53	750.0	59.5	15.3	63	sw.	.....	.....	6	.....	8	w.	.....	0.110	2.8	.....	Prof. A. Pacinotti.
Palermo	29.47	748.6	29.72	755.0	64.2	17.9	45	sw.	16.1	7.2	.....	.....	9	w.	.....	0.220	5.6	.....	Prof. G. Cacciatore.
Syracuse	29.77	756.2	29.82	757.3	61.5	16.4	62	wnw.	11.9	5.3	.....	.....	7	wnw.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R.	29.13	739.8	29.64	752.9	57.7	14.3	73	nne.	6.3	2.8	.....	.....	10	ssw.	.....	0.079	2.0	.....	Prof. F. Brioschi.
Stelvio	21.47	545.3	.....	.....	17.8	— 7.9	94	e.	.....	.....	2	.....	3	.....	.....	0.244	6.2	misty	Prof. F. F. Denza.
Valdobbia	21.47	545.4	.....	.....	16.2	— 8.8	70	e.	.....	.....	2	.....	10	.....	.....	0.472	12.0	misty	Prof. F. F. Denza.
JAPANESE.																			
Akita	29.88	759.0	29.91	759.8	34.8	1.6	92	calm	.....	.....	0	0	0	.....	.....	0.201	5.1	clear	Hattori.
Awomori	29.85	758.2	29.89	759.2	32.6	0.3	90	calm	0	0	.....	0	0	.....	.....	0.227	5.6	clear	K. Ogawa.
Hakodate	29.86	758.5	29.87	758.8	31.0	— 0.6	87	calm	0	0	.....	0	8	.....	.....	0.320	8.1	.....	
Hamamatsu	30.01	762.2	30.04	762.9	45.4	7.4	81	calm	.....	.....	0	0	0	.....	.....	0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y	.....	.....	.....	.....	44.9	7.2	90	n.	4.8	2.1	.....	0	0	.....	.....	0	0	clear	
Kanazawa	29.87	758.7	29.98	761.4	43.0	6.1	83	se.	1.6	0.7	.....	0	0	.....	.....	0.110	2.8	clear	S. Endo.
Kioto	29.89	759.2	30.07	763.8	38.4	3.6	95	ssw.	0.8	0.4	.....	0	0	.....	.....	0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.90	759.5	30.11	764.8	48.5	9.2	90	calm	0	0	.....	0	0	.....	.....	0	0	clear	S. Takehayashi.
Niigata	29.91	759.7	29.95	760.7	46.5	8.1	83	ssw.	2.8	1.2	.....	0	5	ck	sw.	0.005	1.6	cloudy	M. Morita.
Nobiru	29.92	759.9	29 93	760.2	40.1	4.5	90	nw.	3.3	1.5	.....	0	0	.....	.....	0	0	clear	H. Midzushina.
Numazu	29.96	760.8	29.99	761.8	43.2	6.2	96	ene.	.....	.....	2	0	0	.....	.....	0	0	clear	R. Kaneda.
Osaka	30.04	763.1	30.06	763.5	43.1	6.2	88	w.	1.7	0.7	.....	0	0	.....	.....	0	0	clear	H. Omura.
Supporo	.....	.....	.....	.....	26.9	— 2.8	73	s.	7.2	3.2	.....	.....	9	.....	w.	0.070	1.8	overcast	
Tokei Obs'y, Yeddo	29.90	759.5	29.98	761.5	40.3	7.9	87	sw.	3.3	1.4	.....	0	0	.....	.....	0	0	clear	The Staff.
Wakayama	30.01	762.3	30.07	763.8	44.1	6.7	81	nw.	5.4	2.4	.....	0	0	.....	.....	0	0	clear	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.74	755.4	29.93	760.2	79.5	26.4	78	wsw.	8.5	3.8	.....	.....	9	ha ku	wnw.	0.09	2.3	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.73	602.6	29.95	760.6	50.9	10.5	77	ne.	2.4	1.2	.....	8	c;ck	0	.....	.....	inap.	cloudy	Prof. Vicente Fernandez.
Leon	24.41	620.0	30.27	768.8	45.0	7.2	87	wnw.	.....	.....	1	5	c	3 kns	sw.	sw.	0	0	cloudy
Mazatlan	29.76	755.9	30.02	762.6	68.0	20.0	70	e.	0.9	0.4	.....	0	0	.....	.....	0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.17	588.5	30.37	771.3	43.0	6.1	85	nw.	1.7	0.8	.....	3	c	0	.....	0	0	clear	The Staff.
Morelia	24.22	615.2	30.02	762.0	39.7	4.3	71	se.	.....	.....	2	1	c	1 k	s.	s.	0	0	½ cloudy	M. Tena, M. D.
Pabellon, Aguascalientes	24.02	610.0	30.13	765.2	50.5	10.3	82	nnw.	.....	.....	2	0	8	kn	.....	s.	0.080	2.0	cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.44	595.3	30.487	768.27	50.9	10.5	41	calm	0	0	.....	0	5	.....	.....	.....	0	0	⅛ cloudy	Prof. P. Spina.
Zacatecas	22.54	572.5	30.30	769.7	41.2	5.0	94	nne.	6.1	2.7	.....	1	ck	5 ns	sw.	se.	0.280	7.0	½ cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.14	740.1	29.14	740.1	36.1	2.3	.....	e.	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Grontingen	29.30	744.2	29.35	745.6	33.1	0.6	.....	e.	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Helder	29.26	743.8	29.28	743.8	33.8	1.0	.....	e.	.....	.....	5	.....	.....	.....	.....	0.193	4.9	.....	
Hellevoetsluis	29.17	741.0	29.17	741.0	35.8	2.1	87	ene.	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Utrecht	29.18	741.1	29.22	742.3	35.8	2.1	84	ene.	.....	.....	3	.....	10	.....	.....	0.024	0.6	dull	H. van der Brink
NORWEGIAN.																			
Bergen	29.71	754.6	29 77	756.2	20.5	— 6.4	58	s.	4	2	.....	.....	0	.....	.....	0	0	.....	
Brono	30.03	762.1	30.04	763.1	18.0	— 7.8	66	ene.	18	8	.....	.....	7	.....	.....	0	0	.....	
Christiania	29.70	754.4	29.80	758.4	13.3	—10.4	77	nnw	7	3	.....	.....	2	.....	.....	0	0	.....	
Gjæsvær	30.06	763.6	30.09	764.2	22.5	— 5.3	.....	se.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	
Lodingen	30.08	763.9	30.12	765.1	19.6	— 6.9	70	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.15	765.9	30.31	769.8	57.2	14.0	63	n.	9.8	4.4	.....	.....	4	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	28.65	727.6	29.06	753.3	48.2	9.0	80	sw.	0.7	0.3	.....	.....	9	.....	.....	0.494	12.5	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.96	761.0	30.05	763.2	66.2	19.0	51	calm	0	0	.....	.....	6	n.	.....	0	0	.....	Capt. D. A. de Ounha.
Lisbon, Observatory	29.34	745.1	29.09	754.3	50.4	10.2	79	w.	13.6	6.1	.....	.....	fo	.....	.....	0.154	3.9	raining	The Staff.
Ponta Delgada, Azores	30.20	767.0	30.27	768.8	59.7	15.4	64	n.	14.3	6.4	.....	.....	4	.....	.....	0	0	.....	
Saint Paul de Loando	29.01	752.2	29.81	757.2	83.8	28.8	68	wsw.	2.5	1.1	.....	.....	2	s.	.....	c	0	.....	
Serra da Estrella	24.81	630.2	29.62	752.4	29.8	— 1.2	100	nw.	.....	.....	3	.....	10	.....	.....	.....	.....	foggy	
RUSSIAN.																			
Akmolinski	29.10	739.0	30.26	768 7	16.3	— 8.7	69	s.	7	3	.....	.....	10	n	.....	.....	.....	.....	Major K. Lasarew.
Archangel	30.41	772 4	30.43	772.9	—18.8	—28.2	80	ese.	2	1	.....	0	5	ks	.....	0	0	.....	Capt. Sseliwerstow.
Astrakhan	30.15	765.8	30.07	763.8	39.4	4.1	82	ese.	20	9	.....	.....	9	s	.....	0	0	.....	Capt. Wisganow.
Barnaul	30.12	765.0	30.72	780.2	—21.3	—29.6	80	ne.	4	2	.....	.....	2	.....	.....	0	0	.....	Meteorological Obs'y.
Bielosersk	29.48	748.9	29.98	761.6	18.3	— 7.6	95	ese.	13	6	.....	.....	10	n	.....	0.232	5.9	snowing	
Dorpat	29.45	748.1	29.71	754.6	24.1	— 4.4	100	se.	4	2	.....	.....	10	n	.....	0	0	.....	Observatory.
Ekaterinburg	29.29	744.0	30.33	770.4	19.2	— 7.1	95	wnw.	9	4	.....	.....	10	.....	.....	0.004	0.1	snowing	Meteorological Obs'y.
Elissawetgrad	29.34	745.3	29.81	757.2	33.0	0.9	98	se.	4	2	.....	.....	10	.....	.....	0	0	.....	
Kasan	30.09	764.2	30.39	771.8	13.3	—10.4	74	sse.	11	5	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kem	30.17	766.4	.....	.....	7.2	—13.8	90	e.	4	2	.....	.....	10	.....	.....	0	0	heavy cl'ds	
Kertch	29.65	753.1	29.67	753.6	45.5	7.5	83	e.	4	2	.....	0	7	n	.....	0	0	.....	Lagorio & Sastyres.
Kieff	29.02	737.2	29.68	753.8	33.8	1.0	100	se.	9	4	.....	.....	10	n	.....	.....	.....	raining	Observatory.
Libau	29.61	752.0	29.63	752.6	30.4	— 0.9	90	sse.	.....	.....	1	.....	10	.....	.....	0.197	5.0	.....	E. Quaas.
Lugan	29.71	754.5	29.92	759.9	29.8	— 1.2	88	ene.	22	10	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	29.69	754.1	29.76	756.0	34.9	1.6	100	ene.	0	0	.....	.....	10	n	.....	0	0	.....	Capt. Kurdakow.
Pekin, China	30.24	768.2	30.39	771.8	27.0	— 2.8	23	nw.	20	9	.....	2	cs	0	.....	.....	.....	.....	Physical Obsservatory.
Petrozavodsk	29.73	755.2	29.95	760.6	17.6	— 8.0	94	ese.	27	12	.....	.....	10	.....	.....	0.256	6.5	.....	Dr. Bergmann.
Pinsk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
St. Petersburg	29.75	755.6	29.76	756.0	20.8	— 6.2	84	ese.	11	5	.....	.....	10	n	.....	0.028	0.7	.....	Central Physical Obs'y.
Sevastopol	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Semipalatinsk	29.89	759.3	30.05	778.5	— 6.2	—21.2	86	e.	13	6	.....	.....	10	.....	.....	0	0	.....	Major Lasarew.
Staroi Bykhov	29.30	744.3	29.78	756.3	34.2	1.2	98	se.	10	7	.....	.....	10	.....	.....	0.130	3.3	.....	
Tashkend, Laboratory	28.49	723.6	30.07	763.8	52.5	11.4	42	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.52	724 3	29.93	760.3	53.2	11.8	65	se.	7	3	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.52	775.1	30.85	783.7	—30.3	—34.6	82	calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	
Vladivostock	29.84	757.8	29.90	759.5	18.7	— 7.4	90	ne.	13	6	.....	0	3	k	.....	0	0	.....	
Warsaw	29.20	741.7	29.64	752.8	31.0	— 0.2	89	e.	4	2	.....	.....	10	.....	.....	.....	.....	hv'y clouds	Astronomical Obs'y.
Wilna	29.28	743.7	29.72	754.8	31.3	— 0.4	98	s.	2	1	.....	.....	10	.....	.....	.....	.....	hv'y clouds	Berg, Assistant.
Yeniseisk	30.67	779.1	31.03	788.1	—42.5	—41.4	78	calm	0	0	.....	.....	0	.....	.....	.....	.....	dense fog	M. O. Marks.
SCOTTISH.																			
Monach Lt.	.....	.....	29.74	755.4	37	2.8	90	ne.	.....	.....	4	5	5	n.	.....	.....	.....	showery	J. Youngclause.
North Unst	.....	.....	29.04	752.8	.....	.....	.....	ne.	.....	.....	4	0	5	.....	.....	blank	blank	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.34	745.2	29.45	747.9	53.1	11.7	56	w.	5.4	2.4	.....	2	c;cs	0	.....	0	0	.....	Antonio Rzve, Director.
Bilbao, Met. Obs'y	29.49	749.1	29.55	750.6	47.7	8.7	79	se.	7.6	3.4	.....	1	.....	8	n.	0.445	11.3	almost cov.	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.54	674.2	29.56	750.9	38.3	3.5	83	w.	9.8	4.4	.....	.....	1	.....	.....	0.315	8.0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	27.33	694.1	29.57	751.0	46.4	8.0	75	w.	9.4	4.2	.....	.....	9	.....	.....	0.079	2.0	almost cov.	The Staff.
Murcia, Met. Obs'y	29.46	748.3	29.61	752.1	60.3	15.7	64	sw.	2.0	0.9	.....	3	4	ne.	.....	0	0	cloudy	Olayo Diaz, Director.
Oviedo	28.68	728.4	29.54	750.4	41.4	5.2	86	se.	11.2	5.0	.....	10	n	9 n	nw.	nw.	0.390	9.9	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.71	729.2	29.02	752.3	43.9	6.6	65	nnw.	11.9	3.3	.....	.....	3	.....	.....	0.469	11.9	cloudy	R. Gil Villanueva, Dir.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill		
Spanish.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.83	757.6	29.88	759.0	79.0	26.1	83	ne.	4.4	2.0	.....	.....	9 ks	.....	.....	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.63	752.7	29.73	755.2	58.6	14.8	74	w.	7.0	3.1	.....	.....	10	.. ..	w.	0.678	17.2	....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.91	759.8	30.00	762.1	74.5	23.6	98	calm	0	0	.....	0	5 ks	.....	e.	0.543	13.8	cloudy.....	Manuel Maese.
Tuguegarao, Philippine Id's	29.84	757.9	29.97	761.2	73.0	22.8	85	nw.	11.2	5.0	.....	.....	10ks	.....	nne.	0.08	2.0	covered	José L. Yrastorza.
Swedish.																			
Haparanda	30.17	766.3	30.21	767.3	2.1	—16.6	100	e.	.....	.....	2	.....	2	.....	.....	0	0	.....	
Umea	29.97	761.1	30.02	762.4	17.2	— 8.2	94	ne.	.....	.....	4	.....	10	.....	.....	0.154	3.9	.....	
Hernosand	29.83	757.6	29.88	758.9	21.9	— 5.6	96	ne.	.....	.....	6	.....	10	.....	.....	0.102	2.6	.....	
Stockholm	29.45	748.0	29.63	752.5	22.8	— 5.1	93	nnw.	.....	.....	2	.....	10	.....	.....	0.067	1.7	snowing.....	
Wisby	29.53	750.1	29.59	751.6	29.1	— 1.6	84	nw.	.....	.....	6	....	7	.....	.....	0.098	2.5	.....	
Sub-series.																			
Upsala	29.55	750.5	29.63	752.7	22.3	— 5.4	97	nnw.	7.6	3.4	.....	.....	10	.....	.....	0.087	2.2	snowing....	S. G. Fineman.
Swiss.																			
Geneva	27.84	707.0	29.32	744.7	34.9	1.6	96	w.	.....	.....	1	.....	10	.....	.....	0.323	8.2	raining.....	The Observatory.
Turkish.																			
Constantinople	.....	.....	29.68	753 8	56.3	13.5	82	w.	3	1.5	.....	.....	10	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	29.84	757.9	59.2	15.1	.....	s.	.....	.....	1	.....	5	.....	.....	1.18	30.	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.82	757.5	64.0	17.8	78	sw.	.....	.....	3	.....	10 n	.....	sw.	0.08	2.0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	29.72	754.9	29.81	757.2	38	3.3	64	s.	11	4.9	.....	.....	10 s	.....	.....	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.31	744.5	30.02	762.5	7	—13.9	76	nw.	21	9.4	.....	.....	10 n	.....	.....	0.07	1.8	light snow...	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.18	639.6	30.26	768.6	25	— 3.9	58	ne.	4	1.8	.....	0	0	.. ..	.....	0	0	clear.....	W. C. Barnes.
Assinnaboine, Ft., Montana	27.38	695.4	30.41	772.4	— 6	—21.1	64	sw.	5	2.2	.....	.....	10 s	.....	w.	0	0	cloudy	B. O. Lenoir.
Atlanta, Georgia	29.04	737.6	30.28	769.1	42.0	5.6	78	w.	18	8.0	.....	.....	10 s	.....	w.	0	0	cloudy.....	H. C. Smith.
Atlantic City, New Jersey	29.93	760 2	29.94	760.5	46	7.8	83	s.	12	5.4	.....	.....	9 s	.....	.....	inap.	inap.	cloudy	Jas. M. Watson.
Augusta, Georgia	29.99	761.7	30.19	766.8	48	8.9	93	calm	0	0	.....	0	8 s;fg	.....	.....	0.01	0.3	cloudy.....	John Healy.
Baltimore, Maryland	29.92	760.0	29.97	761.2	39	3.9	82	w.	2	0.9	.....	.....	10s;fg	.....	.....	0	0	cloudy	Geo W Felger.
Barnegat, New Jersey	29.91	759.7	29.93	760.2	45.0	7.2	83	sw.	14	6.3	.....	8 ck	0	w.	.....	0	0	cloudy	G. A. Hill.
Bennett, Fort, Dakota	29.21	741.9	30.97	786.6	—14	—25.6	73	calm	0	0	.....	.....	0	.....	.....	0	0	clear.....	A. Pritchard.
Benton, Fort, Montana	27.39	695.7	30.39	771.9	— 1	—18.3	72	e.	4	1.8	.....	.....	10 s	.....	ne.	0.01	0.3	cloudy.....	S. Wheaton.
Bismarck, Dakota	28.85	732.8	30.86	783.8	—15	—26.1	100	w.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	Cyrus Cramer.
Block Island, Rhode Island	29.96	761.0	29.99	761.7	45	7.2	83	s.	18	8.0	.....	0	6 s	.....	w.	0	0	fair	J. T. Eiker.
Boise City, Idaho	27.39	695.7	30.37	771.4	29	— 1.7	88	w.	1	0.4	.....	0	4 s	.....	.....	0	0	fair	B. E. Light.
Boston, Massachusetts	29.80	756.9	29.96	761.0	33.0	0.6	78	se.	12	5.4	.....	5 cs	3 s	.....	s.	0	0	cloudy.....	O. B. Cole.
Brownsville, Texas	30.13	765.3	30.18	766.6	64.2	17.9	93	calm	0	0	.....	0	4 s	.....	.....	0.05	1.3	fair.....	M. McCarty.
Buffalo, New York	29.19	741.4	29.99	761 7	12.5	—10.8	82	sw.	36	16.1	.....	.....	10 s	.....	sw.	0.10	2.5	cloudy	W. Finn.
Buford, Fort, Dakota	28.56	725.4	30.80	782.3	—14	—25.6	53	s.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	F. A. Mellen.
Burlington, Vermont	29.39	746.5	29.70	754.4	30.0	— 1.1	78	s.	11	4.9	.....	.....	10 n	.....	s.	inap	inap.	light snow..	G. C. Schaeffer.
Cairo, Illinois	30.41	772.4	30.83	783.1	9.0	—12.8	76	n.	28	12.5	.....	0	0	.....	.....	0.01	0.3	clear.....	W. H. Ray.
Cape Henry, Virginia	30.03	762.7	30.05	763.3	44	6.7	100	sw.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy.....	A. K. Alderson.
Cape May, New Jersey	29.94	760.5	29.97	761.2	55.0	12.8	80	s.	22	9.8	.....	.....	10 s	.....	sw.	0	0	cloudy.....	W. E. Smith.
Cape Mendocino, California	29.46	748.3	30.14	765.5	53	11.7	61	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	J. J. McLean.
Cedar Keys, Florida	30.20	767.1	30.22	767.6	57	13.9	86	e.	1	0.4	.....	8 ck	0	.....	.....	0	0	cloudy	F. W. Mixer.
Champaign, Illinois	29.85	758.2	30.72	780.3	—11.5	—24.2	76	w.	19	8.5	.....	.....	10 s	.....	w.	0.16	4.1	cloudy.....	L. A. Welsh.
Charleston, S. Carolina	30.09	764.3	30.15	765.8	56	13.3	93	sw.	5	2.2	.....	0	8 s	.....	sw.	0.03	0.8	cloudy.....	J. H. Smith.
Charlotte, N. Carolina	29.20	741.7	30.09	764.3	42.0	5.6	83	w.	4	1.8	.....	0	fg.	.....	.....	0	0	clear.....	D. O'Donoghue.
Chattanooga, Tennessee	29.58	751.3	30.44	773.2	31.5	— 0.3	73	nw.	18	8.0	.....	0	9 ks	.....	nw.	0	0	cloudy.....	B. L. Goulding.
Cheyenne, Wyoming	24.33	618.0	30.61	777.5	1.4	—17.0	75	sw.	12	5.4	.....	.....	10 s	.....	.....	0.08	2.0	cloudy.....	E. McGovern.
Chicago, Illinois	29.82	757.4	30.58	776.7	— 5.2	—20.7	69	w.	14	6.3	.....	0	0	.....	.....	0.03	0.8	clear.....	J. Mitchell.
Chincoteague, Virginia	29.97	761.2	29.99	761.7	47	8.3	100	s.	10	4.5	.....	0	4 s	.....	.....	0	0	fair.....	C. F. Dickens.
Cincinnati, Ohio	29.89	759.2	30.59	777.0	7	—13.9	52	nw.	6	2.7	.....	5 k	0	w.	.....	0.04	1.0	fair.....	R. B. Watkins.
Cleveland, Ohio	29.48	748.8	30.27	768.8	7.3	—13.7	100	sw.	24	10.7	.....	.....	10 n	.....	.....	0.19	4.8	light snow..	J. B. Newlin.
Coleman City, Texas	28.79	731.3	30.69	779.5	21	— 6.1	48	n.	40	17.9	.....	.....	10 s	.....	n.	0	0	cloudy.....	L. Dorman.
Columbus, Ohio	29.53	750.0	30.43	772.9	6	—14.4	52	w.	26	11.6	.....	hz.	4 s	.....	.....	0.09	2.3	fair.....	D. Cuthbertson.
Concho, Fort, Texas	28.71	729.2	30.73	780.5	20.3	— 6.5	73	n.	24	10.7	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. McGlone.
Custer, Fort, Montana	27.06	687.3	30.46	773.7	9	—12.8	80	e.	4	1.8	.....	.....	10 s	.....	.....	inap.	inap.	cloudy.....	W. B. Lamar.
Davenport, Iowa	30.10	764.5	30.81	782.6	— 8	—22.2	78	w.	18	8.0	.....	0	hz	.....	.....	0.14	3.6	clear.....	R. R. Martin.
Davis, Fort, Texas	25.54	648.7	30.48	774.2	18	— 7.8	73	ne.	8	3.6	.....	.....	10 s	.....	ne.	0	0	threatening.	J. Williams.
Dayton, Washington T'y	28.38	720.8	30.21	767.3	40.2	4.6	95	w.	3	1.3	.....	.....	10 s	.. ..	sw	0	0	cloudy	D. Moore.
Deadwood, Dakota	25.63	651.0	30.62	777.7	— 6	—21.1	100	calm	0	0	.....	0	0	.....	.....	0.03	0.8	clear.....	F. Willson.
Delaware Breakwater, Del.	29.96	761.0	29.98	761.5	43	6.1	93	s.	14	6.3	.....	.....	8 s	.....	sw.	0	0	cloudy	T. S. Townsend.
Denison, Texas	29.94	760.5	30.79	782.1	15.8	— 9.0	83	n.	18	8.0	.....	.....	10 s	.....	.....	0	0	cloudy	J. W. Byram.
Denver, Colorado	25.02	635.5	30.54	775.7	10.6	—11.9	72	nw.	1	0.4	.....	0	0	.....	.....	inap.	inap.	clear.....	F. M. Neal.
Des Moines, Iowa	29.93	760.2	30.91	785.1	—13	—25.0	47	n.	6	2.7	.....	0	0	.....	.....	0.20	5.1	clear.....	F. W. Conrad.
Detroit, Michigan	29.49	749.0	30.25	768.3	9.0	—12.8	70	w.	23	10.3	.....	0	0	.....	.....	0.08	2.0	clear.....	C. F. R. Wappenhans.
Dodge City, Kansas	28 14	714.7	30.94	785.9	2	—16.7	100	n.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	V. P. Temple.
Dubuque, Iowa	29.96	761.0	30.73	780.5	—12.2	—24.6	24	w.	10	4.5	.....	0	0	.....	.....	0.11	2.8	clear.....	J. Harvey Smith.
Duluth, Minnesota	29.88	758.9	30.69	779.5	—20	—28.9	100	nw.	24	10.7	.....	0	0	.....	.....	inap.	inap.	clear.....	N. B. Conger.
Eagle Pass, Texas	29.71	754.6	30.55	776.0	37.1	2.8	61	nw.	34	15.2	.....	.....	10 s	.....	.....	0.09	2.3	cloudy.....	F. Belford.
Eagle Rock, Idaho	25.42	645.7	30.34	770.6	32	0.0	81	n.	3	1.3	.....	5 cs	2 s	.....	sw.	0	0	fair.....	J. M. Clifford.
Eastport, Maine	29.97	761.2	30.04	763.0	37.0	2.8	72	se.	8	3.6	.....	0	6 s	.....	w.	0.61	15.5	fair.....	D. C. Murphy.
Elliott, Fort, Texas	27.84	707.1	30.80	782.3	5	—15.0	31	n.	16	7.2	.....	0	0	.....	.....	0	0	clear.....	W. J. Cundall.
El Paso, Texas	26.65	676.9	30.51	774.9	30.0	— 1.1	59	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	J. O'Dowd.
Erie, Pennsylvania	29.34	745.2	30.11	764.8	14	—10.0	80	w.	36	16.1	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	Peter Wood.
Escanaba, Michigan	29.57	751.1	30.29	769.4	1.5	—16.9	85	w.	22	9.8	.....	0	2 s	.....	.....	0.05	1.3	clear.....	George Heathcote.
Fredericksburg, Texas	28.73	729.7	30.55	776.0	29	— 1.7	88	n.	25	11.2	.....	.....	10 s	.....	.....	0	0	cloudy.....	Frank Halwegler.
Galveston, Texas	30.22	767.6	30.27	768.8	61	16.1	93	n.	32	14.3	.....	.....	10 n	.....	n.	0.10	2.8	light rain....	E. O'C. Machuerney.
Grand Haven, Michigan	29.62	752.3	30.33	770.4	8.0	—13.3	70	w.	29	13.0	.....	.....	10 n	.....	.....	0.19	4.8	light snow..	J. E. Mueller.
Grant, Fort, Arizona	25.42	645.7	30.30	769.6	43.5	6.4	51	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	Robert C. Lord.
Hatteras, North Carolina	30.06	763.5	30.08	764.0	48	8.9	100	s.	2	0.9	.....	hz.	3 s	.....	.....	0.21	5.3	clear.....	R. M. Crawford.
Helena, Montana	25.97	659.6	30.35	770.9	11	—11.7	80	calm	0	0	.....	.....	10 s	.....	calm	0.06	1.5	cloudy.....	N. C. Smith.
Henrietta, Texas	29.76	755.9	30.84	783.3	14	—10.0	80	n.	26	11.6	.....	.....	10 ks	.....	n.	0	0	cloudy	J. P. Sherry.
Huron, Dakota	29.41	747.0	30.95	786.1	—12.7	—24.8	70	nw.	7	3.1	.....	0	0	.....	.....	0.03	0.8	clear.....	S. W. Glenn.
Indianapolis, Indiana	29.78	756.4	30.62	777.7	— 4	—20.0	83	nw.	10	4.5	.....	0	0	.....	.....	0.20	5.1	clear.....	O. Schutze.
Indianola, Texas	30.26	768.6	30.29	769.4	51.0	10.6	93	n.	46	20.6	.....	.....	10 n	.....	.....	0.07	1.8	light rain....	I. A. Reed.
Jacksboro, Texas	29 61	752.1	30.85	783.6	17	— 8.3	67	n.	18	8.0	.....	.....	10 s	.....	n.	0	0	cloudy.....	D. J. Carr.
Jacksonville, Florida	30.16	766.1	30.21	767.3	57	13.9	86	calm	0	0	.....	4 cs	fg.	.....	.....	0	0	fair.....	J. W. Smith.
Keogh, Fort, Montana	27.94	709.7	30.64	778.2	— 7	—21.7	61	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	A. Schneider.
Keokuk, Iowa	30.17	763.3	30.88	784.3	—10.0	—23.3	74	w.	4	1.8	.....	0	0	.....	.....	0.14	3.6	clear.....	F. Z. Gosewisch.
Key West, Florida	30.09	764.3	30.11	764.8	69.0	20.6	93	ne.	8	3.6	.....	3 c	0	w.	.....	0	0	clear.....	R. H. Paxton.
Kittyhawk, North Carolina	30.06	763.5	30.08	764.0	46.5	8.1	100	sw.	6	2.7	.....	.....	fg.	.....	.....	0	0	dense fog....	H. Mc P. Baldwin.
Knoxville, Tennessee	29.32	744.7	30.40	772.1	31	— 0.6	68	nw.	23	10.3	.....	.....	10 s	.....	nw.	0	0	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.91	759.7	30.76	781.3	—18	—27.8	100	w.	12	5.4	.....	0	0	.....	.....	0.03	0.8	clear.....	S. C. Emery.
Leavenworth, Kansas	30.05	763.3	31.01	787.6	— 5	—20.6	79	nw.	6	2.7	.....	0	0	.....	.....	0.12	3.0	clear.....	A. W. Browne.
Lewiston, Idaho	29.36	745.7	30.24	768.1	43.0	6.1	93	s.	2	0.9	.....	.....	10 n	.....	.....	0.01	0.3	light rain....	W. Bell.
Little Rock, Arkansas	30.40	772.1	30.73	780.5	27	— 2.8	54	n.	20	8.9	.....	0	6 ks	.....	n.	0	0	fair.....	W. U. Simons.
Los Angeles, California	29.72	754.9	30.12	765.0	43	6.1	74	n.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	T. S. Collins.
Louisville, Kentucky	30.02	762.5	30.62	777.7	8	—13.3	55	nw.	20	8.9	.....	0	3 s	.....	sw.	inap.	inap.	clear.....	L. M. Dey.
Lynchburg, Virginia	29.30	744.2	30.03	762.7	37	2.8	91	nw.	2	0.9	.....	3 ck	3 s	w.	.....	0	0	fair.....	Lewis Dunne.
Mackinaw City, Michigan	29.38	746.2	30.08	764.0	10.0	—12.2	80	nw.	25	11.2	.....	7 k	0	nw.	.....	0.56	14.2	fair.....	F. K. Day.
Macon, Fort, North Carolina	30.09	764.3	30.10	764.5	45	7.2	100	nw.	3	1.3	.....	.....	fg.	.....	.....	0.18	4.6	dense fog....	U. A. Shaw.
Madison, Wisconsin	29.50	749.3	30.60	777.2	—12	—24.4	47	nw.	25	11.2	.....	.....	10 s	.....	nw.	0.09	2.3	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	.....	.....	.....	.....	22	— 5.6	73	nw.	4	1.8	.....	.....	10 s	.....	.....	0.04	1.0	cloudy	F. Burke.

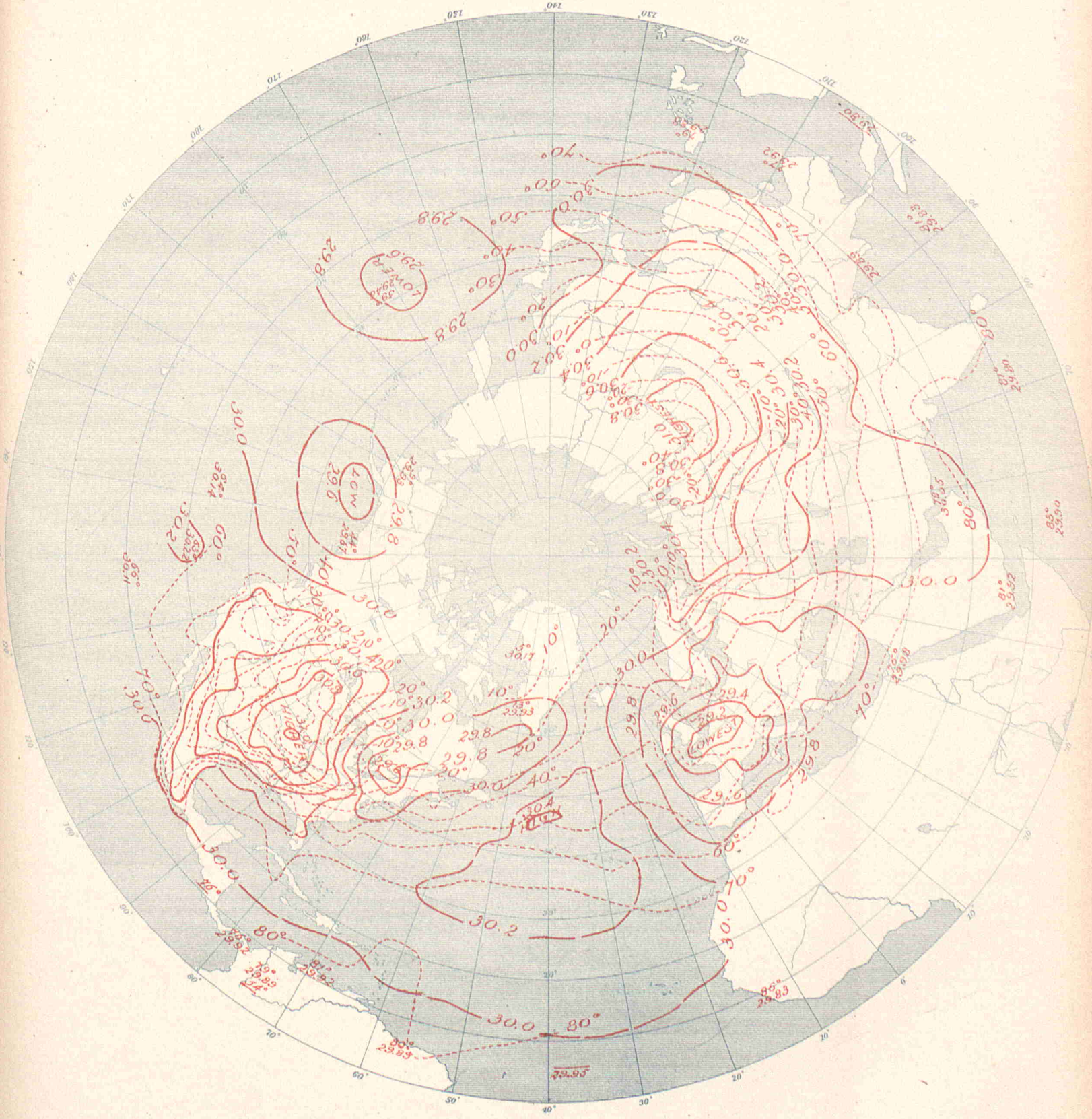
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—(Cont'd.																			
McKavett, Fort, Texas	28.30	718.8	30.68	779.3	21	— 6.1	87	n.	18	8 0			10 s			0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.47	748.5	30.25	768.3	4	—15.6	72	nw.	26	11.6			10 n			0.03	0.8	light snow	J. Gilligan.
Memphis, Tennessee	30.44	773.2	30.80	782.3	22	— 5.6	73	nw.	24	10.7		0	0			0	0	clear	D. T. Flannery
Milwaukee, Wisconsin	29.72	754.9	30.53	775.4	—10	—23.3	100	w.	23	10.3		0	2 s		w.	0.06	1.5	clear	W. Line
Missoula, Fort, Montana	26.92	683.8	30.38	771.6	17	— 8.3	70	nw.	6	2.7			10 s			0.03	0.8	cloudy	I. H. Young.
Mobile, Alabama	30.20	767.1	30.24	768.1	57	13.9	93	ne.	4	1.8			10 s		ne.	0	0	cloudy	C. A. Read.
Montgomery, Alabama	30.03	762.7	30.27	768.8	51	10.6	37	nw.	10	4.5			10 n			trap.	trap.	light rain	J. B. McLaughlin.
Moorhead, Minnesota	29.76	755.9	30.87	784.1	—27	—32.8	100	w.	6	2.7		0	0			0.14	3.6	clear	H. Bessant.
Morgantown, W. Virginia	29.24	742.7	30.31	769.9	23.5	— 4.7	61	nw.	36	16.1			10 s		w.	0.02	0.5	cloudy	J. C. Sprigg, Jr.
Mt. Washington, N. H.	23.34	592.8	29.97	761.2	11.0	—11.7	83	s.	56	25.0			fg.		s.	0.04	1.0	dense fog	B. S. Pague.
Nashville, Tennessee	30.00	762.0	30.62	777.7	18.0	— 7.8	67	n.	32	14.3		10 cs	0		nw.		0	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	29.82	757.4	29.94	760.5	41	5.0	82	s.	10	4.5		10 cs	sk.		sw.		0	cloudy	J. H. Sherman.
New London, Connecticut	29.93	760.2	29.98	761 5	40	4.4	72	s.	11	4.9			10 s		s.		0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.17	766.3	30.23	767.8	60.7	15.9	85	n.	4	1.8			10 s		n		0	cloudy	L. Dunne.
Newport, Rhode Island	29.93	760.2	29.98	761.5	44.6	7.0	78	s.	13	5.8		3 k	3 s		s.		0	fair	W. McGillivray.
New York, New York	29.77	756.1	29.96	761.0	40	4.4	89	s.	13	5.8		6 cs	2 s		s.		0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.04	763.0	30.07	763.8	44	6.7	100	sw.	9	4.0			fg.				0	dense fog	Wm. Davis.
North Platte, Nebraska	27.73	704.3	30.89	784.6	— 4.4	—20.2	68	calm	0	0		0	0			0.04	1.0	clear	E. F. Brady.
Olympia, Washington T'y.	30.10	764.5	30.14	765.5	50.0	10.0	93	s.	4	1.8			10 n			0.29	7.4	light rain	J. Dascomb.
Omaha, Nebraska	29.70	754.4	30.98	786.9	— 8.8	—22.7	72	nw.	8	3.6		0	0			0.06	1.5	clear	A. Pollak.
Oswego, New York	29.46	748.3	29.82	757.4	28.2	— 2.1	72	w.	32	14.3			10 s		w.	0.09	2.3	cloudy	J. G. Limsley
Palestine, Texas	30.03	762.7	30.61	777.5	31.5	— 0.3	60	n.	16	7.2		0	5 ks		n.	0	0	fair	L. M. Pindell.
Pensacola, Florida	30.21	767.3	30.24	768.1	60.0	15.6	93	calm	0	0			10 s		sw.	0	0	cloudy	M. McGauran.
Philadelphia, Pa	29.86	758.4	29.97	761.2	43	6.1	74	sw.	3	1.3			10s:fg		sw.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.78	451.6	30.44	773.2	12	—11.1	76	nw.	26	11.6		0	1 s			0	0	clear	H. Hall.
Pioche, Nevada	24.22	615.2	30.39	771.9	34	1.1	60	w.	1	0.4		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.39	746.5	30.25	768.3	16.0	— 8.9	83	w.	20	8.9			10 n			0.03	0.8	light snow	W. A. Reid.
Poplar River, Montana								sw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.22	767.6	30.23	767.8	63.2	17.3	93	ne.	5	2.2			10 s			0	0	cloudy	H. B. Boyer.
Port Huron, Michigan	29.32	744 7	30.05	763.3	7.5	—13.6	74	w.	29	13.0		0	3 s		w.	0.09	2.3	clear	W. O. Bailey.
Portland, Maine	29.88	758.9	29.92	760.0	37.0	2.8	72	w.	4	1.8			10 s			0	0	cloudy	W. W. Eichelberger.
Portland, Oregon	30.06	763.5	30.13	765.3	48.5	9.2	92	calm	0	0			10 n			trap.	trap.	light rain	M. L. Hearne.
Portsmouth, N. C.					49	9.4	100	sw.			2	fg.	fg.			0.09	2.3	light fog	F. S. Coburn.
Prescott, Arizona	24.97	634.2	30.34	770.6	28.5	— 1.9	80	w.	2	0.9		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	29.96	761.0	29.99	761.7	40	4.4	82	se.	19	8.5		1 cs	8 s		sw.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.15	765.8	30.16	766.1	65	18.3	90	ne.	6	2.7		9 ck	0			0	0	cloudy	W. J. Evans.
Red Bluff, California	29.83	757.7	30.20	767.1	40	4.4	82	nw.	6	2.7		0	0			0	0	clear	J. R. Williams.
Rochester, New York	29.20	741.7	29.91	759.7	15	— 9.4	83	w.	40	17.9			10 n			0.02	0.5	light snow	E. W. McGann
Roseburg, Oregon	29.66	753.4	30.23	767 8	38	3.3	89	se.	2	0.9			fg.			0	0	dense fog	J. J. Nanry.
Sacramento, California	30.12	765.0	30.20	767.1	43.0	6.1	93	nw.	4	1.8		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	30.23	767.8	30.88	784.3	— 4.1	—20.1	68	nw.	20	8.9		0	sk.			0.04	1.0	clear	J. H. Weber.
St. Michael, Fort, Alaska	29.90	759.4	29.93	760.2	9	—12.8	100	n.	3	1.3		0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.83	757.7	30.79	782.1	—12.0	—24.4	70	w.	11	4.9		0	0			0.01	0.3	clear	P. F. Lyons.
St. Vincent, Minnesota	29.78	756.4	30.78	781.8	—25	—31.7	100	nw.	7	3.1		0	0			0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.83	656.1	30.37	771.4	38	3.3	65	w.	4	1.8		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.73	755.1	30.45	773 4	37.5	3.1	75	nw.	18	8.0		0	5 s		nw.	0	0	fair	T. J. Kenan.
San Diego, California	30.02	762.5	30.09	764.3	43.4	6.3	95	n.	1	0.4		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.60	751.8	30.32	770.1	10	—12.2	80	w.	26	11.6			10 s			0.12	3.0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.02	762.5	30.05	763.3	43.0	6.1	93	s.	17	7.6		1 k	0			0	0	clear	B. A. Blandon.
San Francisco, California	30.11	764.8	30.18	766.6	52	11.1	80	n.	9	4.0		0	fg.			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.44	595.4	30.43	772.9	21	— 6.1	64	n.	4	1.8		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.06	763.5	30.10	766.1	61	16.1	70	sw.	6	2.7		5 ck	1 ks		sw.	trap.	trap.	fair	H. W. Ford.
Shaw, Fort, Montana	26.44	671.6	30.27	768.8	7	—13.9	80	ne.	2	0.9		0	8 s			0.02	0.5	cloudy	A. L. Mathews.
Shreveport, Louisiana	30.30	769.6	30.55	776.0	39	3.9	54	ne.	20	8.9		0	5 s		ne.	trap.	trap.	fair	E. N. Meekins.
Sill, Fort, Indian Territory	29.53	750.6	30.88	784.3	12.0	—11.1	80	n.	32	14.3		0	4 s		n.	0	0	fair	W. M. Mattingly.
Silver City, New Mexico	29.56	750.8	30.40	772.1	29.5	— 1.4	86	calm	0	0		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.60	751.8	29.67	753.6	44.2	6.8	63	se.	22	9.8			10 ks		se.	0.02	0.5	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	30.35	770.9	30.85	783.6	13.0	—10.6	80	n.	16	7.2		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.09	764.3	30.13	765.3	59	10.0	93	sw.	3	1.3			10s;fg			0.08	2.0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.15	715.0	30.28	769.1	28	— 2.2	96	ne.	6	2.7			10 n			0.08	2.0	light snow	H. Clifford.
Springfield, Illinois	30.07	763.8	30.80	782.3	— 4	—20.0	71	nw.	11	4.9		0	0			0.31	7.9	clear	T. B. Jennings.
Springfield, Massachusetts	29.78	756.4	29.92	760.0	31	— 0.6	88	se.			1		10 n		sw.	trap.	trap.	cloudy	Charles Mayr.
Springfield, Mo	29.33	745.0	30.86	783.8	— 3	—19.4	81	n	17	7.6		0	0			0.01	0.3	clear	J. B. Marbury.
Starkville, Miss.	30.02	762.5	30.52	775.2	30	— 1.1	68	nw.	25	11.2			10 s		nw.	0	0	cloudy	O. Dill.
Stevenson, Fort, Dakota	28.77	730.7	30.83	783.1	—19	—28.3	100	nw.	1	0.4		0	0			0	0	clear	W. Burrows.
Stockton, Fort, Texas	27.55	699.8	30.69	779.5	21	— 6.1	87	n.	20	8.9		0	8 ks		n.	0	0	cloudy	J. F. Marshall.
Thatcher's Island, Mass.	29.82	757.4	29.88	758.9	31.0	— 0.6	78	sw.	27	12.1			10 k		sw.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27 45	697.2	30.27	768.8	34.5	1.4	90	sw.			1	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.56	750.8	30.30	769.6	10	—12.2	80	sw.	22	9.8		0	0			0.06	1.5	clear	A. Buell.
Tucson, Arizona	27.70	703.6	30.20	767.1	45	7.2	63	s.	4	1.8		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.81	757.2	30.20	767.1	42	5.6	92	e.	3	1.3			10 s			0	0	cloudy	J. Daly.
Verde, Fort, Arizona					32.7	0.4	70	nw.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	30.23	767.8	30.50	774.7	39.0	3.9	77	n.	22	9.8			10 n			0.20	5.1	light rain	James Kenealy.
Visalia, California	29.79	756.7	30.17	766.3	41.8	5.4	87	ne.	1	0.4		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.64	625.8	30.41	772.4	0.9	—17.3	75	nw.	1	0.4		0	2 s			0.01	0.3	clear	T. M. Ambler.
Washington, D. C.	29.86	758.4	29.98	761.5	37.0	2.8	84	s.	2	0.9			9 s		sw.	0	0	cloudy	B. M. Purssell.
West Las Animas, Colorado	26.57	674.9	30.73	780.5	— 2	—18.9	91	ne.	4	1.8		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.31	744.5	29.94	760.5	31	— 0.6	57	w.	28	12.5			10 s			0.02	0.5	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.07	763.8	30.13	765.3	49	9.4	93	sw.	5	2.2			10 s			0.08	2.0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.82	655.8	30.35	770 9	21	— 6.1	80	ne.	4	1.8		0	1 s			0	0	clear	J. Grover.
Yankton, Dakota	29.52	749.8	30.95	786.1	— 1.5	—18.6	41	calm	0	0		0	0			0.12	3.0	clear	J. H. Atfield.
Yuma, Arizona	29.92	760.0	30.07	763.8	53.8	12.1	44	ne.	4	1.8		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.99	558.5			53.5	11.9	79	nw.	1	0.4		1 c	2 s			0	0	fair	Joaquin Gomez.
Havana, Cuba, W. I.	30.01	762.2	30.08	764.0	68.7	20.4	91	calm	0	0		1 c	2ks:k	w.	e.	0	0	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.01	762.2	30.02	762.5	72	22.2	89	n.	1	0.4		1 c	0			0	0	fine	Robert Johnston.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	80	26.7	87	se.			2	3 c	5 k	e.		0.720	18.3	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.33	745.0	29.89	759.2	79	26.1	89	calm			0	2 c	1 s	n.	calm	0	0	clear	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					76.2	24.6	90	ne.			2	0	5 ks		ne.	0	0	fair	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.42	747.3	29.48	748.8	38	3.3	89	ne.			5		10 n			0.69	17.5	light rain	W. J. Fisher.
St. Thomas, W. I.	29.94	760.5	30.06	763.5	79	26.1	82	e.				1 k	3 k	e.	e.	0.18	4.6	fine	Aug. Walloe.
York Factory H. A.	30.36	771.1	30.43	772.9	—21.0	—29.4		w.	16	7.2		2 c	1 s	w.	w.	0	0	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
BRITISH NAVAL.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.12	765.0	66	18.9	87	ese.			6		3	se.				2	se.	squally.
H. M. S. Audacious, N. 5° 55′, E. 91° 22′	29.83	757.7	81	27.2	87	nw.			2		2	sw.						d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			69	20.6	65	wsw.			1		0					1	wsw	blue sky.
H. M. S. Boadaica, Table Bay, Cape Colony	29.96	761.0				calm			0									blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	29.98	761.5	76	24.4	64	sse.			1		0							blue sky.
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.06	763.5	57	13.9	75	calm			0		0							misty.
H. M. S. Comus, Esquimalt, Vancouver Island	30.03	762.7	45	7.2	92	calm			0		10					3	ne.	raining.
H. M. S. Curacoa, Yokohama, Japan	29.94	760.5	53.5	11.9	86	calm			0		0							misty.
H. M. S. Diamond, Sydney, N. S. W*†	29.71	754.6	67	19.4	64	calm			0		3							d. clouds.
H. M. Dock Yard, Bermuda, W. I.	30.15	765.8	68	20.0	79	nne.			1-2		3	nne.						d. clouds.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.84	757.9	78.5	25.8	82	s.			3-4		3	ssw.						d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.91	759.7	60	15.6	85	n.			1		10							misty.
H. M. S. Iron Duke, N. 21° 32′, E. 113° 53′	29.98	761.5	69	20.6	90	e.			2-3		9	ene.				3	ne.	d. clouds.
H. M. S. Kingfisher, S. 0° 30′, W. 83° 30′	29.95	760.7	74	23.3		s.			2-3		5	s.				3	s.	d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	30.02	762.5	72.3	22.4	74	s.			4		8							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.87	758.7	61	16.1		n.			1		10							d. clouds.
H. M. S. Magpie, N. 34° 52′, E. 128° 12′	30.00	762.0	58.5	14.7	68	sw.			1-2		4					2	sw.	misty.
H. M. S. Northampton, St. John's, Antigua, W. I.	29.98	761.5	79.5	26.4	82	ne.			2		4	ene.						d. clouds.
H. M. S. Rocket, Callao, Peru	29.95	760.7	67	19.4	94	calm			0		2					2-3	sw.	d clouds.
H. M. S. Swiftsure, Ancon Bay, Peru	29.96	761.0	68	20.0	84	sw.			3		5					3		d. clouds.
H. M. S. Sylvia, Peckett Harbor, Patagonia	29.57	751.1	50	10.0	78	wnw.			3-5		10							misty.
H. M. S. Tourmaline, N. 13° 10′ E. 47° 30′	29.93	760.2				ese.			2		0					1	e.	blue sky.
H. M. S. Woodlark, Bushire, Persia	30.02	762.5	68.5	20.3	70	w.			4		2	calm						d. clouds.
H. M. S. Zephyr, Chee-foo, China	30.10	766.1	34.5	1.4	70	n.			4-5		1	n.				* 3	n.	blue sky.
PORTUGUESE NAVAL.																		
Tamega, Macao, China	30.03	762.7	73.4	23.0	84	calm			0		10							overcast.
UNITED STATES NAVAL.																		
Navy Yard, Pensacola, Fla	30.07	763 8	61	16.1	94	nw.	1	0.4			10		nw.	0	0			cloudy.
Navy Yard, Portsmouth, N. H.	29.94	760.5	38	3.3	63	se.	14	6.3			10		s.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	29.81	757.2	50	10.0	74	calm			0		0			0	0			clear.
Adams, Sitka, Alaska *†	29.64	752.8	42	5.6	65	e.			2		10							cloudy.
Alaska, N. 34° 20′, W. 144° 20′	30.15	765.8	64	17.8	83	nne.			1		5		ne.	0.05	1.3	long	se.	fair.
Alliance, Hampton Roads, Va	30.02	762.5	47	8.3	?	ssw.			2-3		0			0	0			foggy.
Ashuelot, Nagasaki, Japan	30.12	765 0	56	13.3	87	calm			0		1							clear.
Brooklyn, Keel Point, Patagonia	29.69	754.1	58	14.4	87	nw.	9	4.0			10		nw.	0	0	sm'h		cloudy.
Colorado, New York, N. Y.	30.07	763.8	41	5.0	83	s.	6	2.7			5		s.	0	0			cloudy.
Enterprise, Norfolk, Va	30.08	764.0	44	6.7	67	s.			1		10		sw.					cloudy.
Essex, Callao, Peru	29.91	759.7	66	18.9	84	sse.			1		8		sse.			sm'h	sse.	cloudy.
Franklin, Norfolk, Va	30.03	762.7	46	7.8	100	sw.	7	3.1			10			0	0			cloudy.
Galena, Montevideo, Uruguay	29.96	761.0	65	18.3	94	e.			4		5		ene.			mod	ese.	fair.
Hartford, Sandy Point, Patagonia*	29.47	748.5	50	10.0	93	wnw.			3		10		w.	8 h'r	8 h'r	sm'h		cloudy.
Independence, Mare Island, Cal.	30.19	766.8	45	7.2	100	e.			1		0			0	0			clear.
Iroquois, Callao, Peru	29.94	760.5	67	19.4	90	se.			1		8							fair.
Jamestown, Boston, Mass.	30.02	762.5	36	2.2	70	s.			2		8		s.					fair.
Juniata, N. 34° 33′, W. 54° 24′*	30.24	768.1	70	21.1	95	ssw.			2		5		s.	0	0	sm'h	s.	fair.
Kearsarge, Norfolk, Va	30.04	763.0	49	9.4	100	sw.			2									foggy.
Lackawanna, Callao, Peru*	29.89	759.2	67	19.4	90	sse.			1		8		se.					cloudy.
Lancaster, Naples, Italy*	29.57	751.1	65	18.3	89	ssw.			6		10		wsw.			sm'h		heavy rain.
Michigan, Erie, Pennsylvania	30.15	765.8	17	— 8.3	34	nw.			8		10		w.					snowing.
Minnesota, New York, N. Y.	29.98	761.5	41	5.0	100	sw.	2	0.9			8		sw.					cloudy.
Monocacy, Kobe, Japan	29.99	761.7	53	11.7	93	calm			0		0							clear.
New Hampshire, Newport, R. I.	30.04	763.0	47	8.3	92	ssw.			4		8		calm			mod.	ssw.	cloudy.
Nipsic, Lisbon, Portugal*	29.62	752.3	55	12.8	73	nw.			4		10					sm'h		raining.
Onward, Callao, Peru†	30.05	763.3	66	18.9	94	calm			0		10		n.			long	w.	cloudy.
Palos, Tientsin, China*	30.23	767.8	32	0.0	60	n.			2		0							clear.
Pensacola, Callao, Peru*	29.84	757.9	66	18.9	90	sse.	1	0.4			10			0	0	sm'h		cloudy.
Powhatan, Boston, Mass	30.01	762.2	32	0.0	?	s.			2		5		s.					cloudy?
Quinnebaug, Villafranche, France*	29.36	745.7	51	10.6	78	ese.			2-4		5		se			sm'h	sw.	fair.
Ranger, N. 16° 09′, W. 94° 22′	29.98	761.5	73	22.8	85	n.			2		2		calm			g 'd		fair.
Richmond, N. 33° 29′, E. 135° 40′ *	29.98	761.5	66	15.6	59	wnw.			1		8		wnw.	0	0	mod.	wnw.	fair.
Saratoga, Newport, R. I	29.93	760.2	42	5.6	83	s.			2		8		e.	0	0	sm'h		cloudy.
St. Louis, League Island, Pa	30.20	767.1	43	6.1	75	s.			3		5		s.	0	0			fair.
Swatara, Hampton Roads, Va*	29.89	759.2	50	10.0	78	sw.			5		10		calm			sm'h		foggy.
Tennessee, Fort Monroe, Va	30.05	763.3	47	8.3	85	wsw.	17	7.6			10			0	0			foggy.
Vandalia, Hampton Roads. Va*	30.25	768.3	45	7.2	100	sw.			2		10							foggy.
Wabash, Boston, Mass.	29.99	761.7	34	1.1	79	se.	5	2.2			8		se.	0	0			cloudy
Wachusetts, Mare Island, Cal*	30.08	764.0	47	8.3	92	var.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.45	773.4	28	— 2.2	?	nw.			7		0			0	0			clear.
Yantic, Hampton Roads, Va	30.10	764.5	45	7.2	100	ssw.			3		10							foggy.
MERCHANT MARINE.																		
S. S. Grecian, S. 4° 10′ W. 32° 23′*	29.93	760.2	80	26.7	78	e.			5		2		e.	0	0	light	e.	clear.
S. S. Scandinavian, N. 44° 30′, W. 55° 09′	30.05	763.3	47	8.3		nw.			3		10		wnw.	9 h'r	9 h'r	high	sse.	drizzling.
S. S. British Crown, N. 49° 52′ W. 46° 48′ †	29.98	761 5	43	6.1		s.			6		10		wsw.	7 h'r	7 h'r	r'gh	sw.	raining.
S. S. British Prince, N. 50° 48′ W. 27° 51′ †	30.19	766.8	45	7.2		n.			6		8		n.	0	0	h'vy	var.	fair.
S. S. Indiana, Ballyotton, Ireland			37	2.8	81	n.			5		2		n.			mod.	n.	fine.
S. S. Lord Clive, Philadelphia, Pa*†	29.88	758.9				sw.			2		5		sw.	0	0			fine.
S. S. Ohio, Philadelphia, Pa			40	4.4	91	s.			2		7?		sw.					clear.?
S. S. Pennsylvania, Philadelphia, Pa.	29.85	758.2	40	4.4		s.			2		10		s.					cloudy.
S. S. Stella, N. 47° 26′ W. 28° 21′	30.17	766.2	46.4	8		n.			6		6		n.	0	0	5	nnw.	squally.
S. S. Bolivia, Glasgow, Scotland*†	29.70	754.4	33	0.6	89	ne.			4		5			light	light			
S. S. Dorian, N. 52° 03′, W. 6° 50′*	29.24	742.7	41	5.0		n.			7		4?		n.	0	0	r'gh	n.	cloudy.?
S. S. Ethiopia, N. 40° 45′ W. 69° 59′	30.04	763.0	45	7.2		s.			4		2		sw.	0	0	sli't	s.	clear.
S. S. Galatia, N. 12° 45′, E. 45° 02′†	30.07	763.8	81	27.2	87	se.			4		0			0	0	sm'h	se.	clear.
S. S. Ailsa, N. 17° 58′, W. 76° 46′†	30.12	765.0	82	27.8	91	nne.			2		2		ne.	0	0	sm'h		fair.
S. S. Alvo, Port Limon, Costa Rica	29.92	760.0	74	23.3		e.			3		3 k			3 h'r	3 h'r	long	ene.	fine.
S. S. Gordon Castle, N. 13° 40′, E. 109° 42′	29.92	760.0	76.5	24.7	98	n.			4		3							blue sky.
Inchkeith, S. 40° 48′ E. 50° 39′	29.63	752.6	48.8	9.3	85	wsw.			6		8							gloomy.
Mertola, N. 43° 14′ W. 11° 50′	29.72	754 9	49.3	9.6	89	n.			6		5							squally.
S. S. Mexico, N. 35° 37′, W. 121° 41′†	30.18	766 6	54	12.2	87	nw.			1		fg.					mod.	nw.	dense fog.
S. S. Gallia, N. 40° 28′, W. 69° 19′	30.07	763.8	51	10.6	77	s.			4		0			0	0	sm'h		fine.
S. S. Marathon, Smyrna, Turkey	29.72	754 9	56	13.3		s.			4		5		s.	20 h'r	20 h'r			showery
S. S. Scythia, N. 49° 07′, W. 31° 01′	30.33	770.4	44	6.7		nw.			4		4		nw.	2 h'r	2 h'r	mod.	nw.	clear.
S. S. Colina, N. 55° 15′, W. 12° 12′†	29.70	754.4				ne.			3		5?		nne.	0	0	sm'h	ne.	clear?
S. S. France, N. 48° 32′, W. 31° 00′†	30 27	768.8	46.4	8		nw.			4	ck	0	nw.		rain	rain	hv'y	ene.	hailing.
S. S. Arizona, N. 42° 56′ W. 60° 20′	30.14	765 5	43	6.1		n.			2		5		ne.	1 h'r	1 h'r	sm'h		fair.
S. S. Wisconsin, N. 56° 25′, W. 30° 50′	30.14	765.5	42	5.6		nne.			6		10		n.	0	0	mod	n.	hazy.
S. S. Wyoming, N. 51° 25′, W 9° 00′	29.64	752.8	36	2.2		nnw.			7		4		n.	2 h'r	2 h'r	r'gh	nw.	threatening.
S. S. Bohemia, N. 44° 19′, W. 50° 49′†	30.04	763.0				sse.			6		7		sw.	0	0	mod.	sw.	cloudy.
S. S. Frisia, N. 49° 50′, W. 29° 40′	30.35	770.9	47	8.3		nw.			6		9		nw.	sq'lls	sq'lls	long	nw.	cloudy
S. S. Gellert, N. 46° 01′, W. 47° 12′	30.19	766.8	46	7.8		sse.			5		6		wsw.	0	0	mod.	sse.	fair.
S. S. Silesia, Hamburg, Germany†	29.65	753.1	37	2.8	90	e.			6		6		e.	0	0			d. clouds.
S. S. Vandalia, N. 49° 36′, W. 13° 06′	29.79	750.7	47.5	8.6	94	n.			6		2		n.	0	0	mod.	n.	squally.
S. S. Mentmore, N. 41° 43′, W. 51° 57′ *	30.11	764.8				ese.			4		8		e.	0	0	sm'h	e.	hazy.
S. S. Archimedes, Lisbon, Portugal	29.79	756.7				nw.			5		4		nw.	0	0			fine.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Hevelius, N. 38° —', W. 10° —'*†	29.75	755.6	60	15.6		wnw.			6		8		nw.	1 h'r	1 h'r	long	n.	showery.
S. S. Sirius, N. 13° 00', W. 24° 30'*	29.91	759.7				ne.			4		1		ne.	0	0	mod.	ne.	clear.
S. S. Bulgarian, N. 42° 47', W. 65° 01'*	30.19	766.8				ese.			4					0	0	light	sw.	clear.
S. S. Colorado, N. 28° 25', W. 92° 08'†	30.10	764.5	66	18.9		ne.			3		10		ne.	0	0	small	e.	cloudy.
S. S. Rio Grande, Galveston, Texas †	30.31	769.9	64	17.8		nnw.			5		8		n.	0	0			overcast.
S. S. San Marcos, Galveston, Texas			61	16.1		nw.			0									
S. S. Archimede, New York, N. Y			48	8.9	?	sw.			4		6		wsw.	0	0	sm'h	sw.	cloudy.
S. S. Hermod, N. 47° 41' W. 28° 53'†	30.29	769.4	50.0	10.0		n.			6		6		n.	4 h'r	4 h'r	high	n.	clearing.
S. S. John Hopkins, Baltimore, Md			36	2.2		wnw.			7		5		nw.	snow	snow			fair.
S. S. Glenapp, S. 6° 10, W. 32° 30' †	29.81	757.2				e.			3		0			0	0	long	ese.	fine.
S. S. Glenfyne, S. 2° 18', W. 39° 14'*†	29.56	750.8				e.			4		2		e.	0	0	mod.	e.	clear.
S. S. Toronto, N. 48° 10' W. 48° 38'			37.0	2.8		sse.			5		8			0	0	mod.	sse.	hazy.
S. S. Chalmette, New York, N.Y†	29.91	759.7	43	6.1		sw.			2		10		sw.	0	0			cloudy.
S. S. New York, N. 38° 15', W. 74° 25' †.	29.97	761.2	54	12.2		sw.			5		8		w.			sm'h		cloudy.
S. S. Denmark, London, Engt	29.08	738.6	32	0.0		ssw.			3		10		ssw.	snow	snow			overcast.
S. S. Egypt, N. 45° 01', W. 42° 46' *†	30.43	772.9				sse.			4		10		ssw.	0	0	long	nne.	cloudy.
S. S. Erin, N. 46° 12', W. 47° 39'	30.23	767.8	47	8.3		sse.			6		8		sw.			sm'h		fine.
S. S. Greece, N. 47° 55', W. 28° 53'*†	30.24	768.1	42	5.6		nnw.			6		5		nnw.	3 h'r	3 h'r	h'vy	n.	fair.
S. S. Helvetia, off Great Anns Head, Eng	29.25	742.9	42	5.6		nne.			6		10		ne.	rain	rain	short	nne.	cloudy.
S. S. City of Alexandria, N. 22° 50', W. 87° 10' †	30.24	768.1	76	24.4		ene.			2		8		e.	2 h'r	2 h'r	small	ene.	rainy.
S. S. City of Merida, N. 22° 40', W. 85° 04' *†	30.00	762.0	78.8	26.0		ene.			3		5		ene.	1 h'r	1 h'r	mod.	ne.	cloudy.
S. S. Amsterdam, N. 49° 18', W. 20° 59'*	29.98	761.5	48	8.9		nw.			4–5							4	nw.	hailing.
S. S. Knickerbocker, N. 26° 40' W. 86° 02'	30.18	766.6	69	20.6		ese.			6								wnw.	rainy.
S. S. Olbers, N. 7° 34', W. 47° 00'			80	26.7		ene.			5–6								ne.	squally.
S. S. State of Nebraska, N. 53° 12', W. 30° 16'†	30.24	768.1	42	5.6		nw.			5							high	nw.	squally.
S. S. Western Texas, N. 30° 40', W. 81° 27'*†	30.34	770.6	68	20.0		sse.			1									
S. S. Donau, N. 45° 14', W. 41° 32'	30.48	774.2				s.			3		8		ssw.	0	0	mod.	n.	cloudy.
S. S. Gen. Werder, N. 49° 37', W. 17° 38'	29.86	758.4	44.6	7.0		nw.			5		7		nnw.	1 h'r	1 h'r	long	nnw.	cloudy.
S. S. Ohio, Newport News, Va	30.05	763.3				sw.			3		fg.			0	0			foggy.
S. S. Salier, N. 44° 16', W. 53° 32'	30.10	764.5	51.8	11.0		w.			3		10		w.	1 h'r	1 h'r	mod.	w.	light rain.
S. S. Strassburg, S. 8° 12'. W. 33° 50	29.92	760.0	82.0	27.8	96	ese.			3		5		ese.	0	0	mod.	ese.	fair
S. S. Belgic, N. 43° 39', E. 177° 36'†	29.90	759.4	52	11.1	86	se.			4		10		e.	3 h'r	3 h'r	mod.	se.	misty.
S. S. Coptic, N. 38° 20', E. 109° 09'	29.46	748.3	58.5	14.7	88	ese.			7		10		e.	0 h'r	0 h'r	mod.	se.	overcast.
S. S. Oceanic, N. 25° 50', E. 120° 36' *	30.02	762.5	70	21.1	70	ese.			5		0					slt	se.	clear.
S. S. Mississippi, N. 47° 22', W. 124° 46'*†	30.10	764.5	50	10.0	93	se.			3		10		s.			long	w.	stormy.
S. S. Columbia, N. 41° 00' W. 124° 41' †	30.19	766.8	47	8.3	100	n.			2		10		n.			sm'h	n.	foggy.
S. S. Oregon, San Francisco, Cal †	30.13	765.3	50	10.0	86	calm			0		0							hazy.
S. S. Ancon, N. 34° 57', W. 118° 54' †	30.06	763.5	53	11.7	93	e.			2		10		e.			sm'h		dense fog.
S. S. City of Chester, Mendocino, Cal *†	30.19	766.8	48	8.9	70	nw.			6		fg.		nw.			mod.	nw.	dense fog.
S. S. Dakota, New Tacoma, Wash. Ter.†	29.93	760.2	41	5.0	82	sw.			4		10		sw.	15 h'r	15 h'r	sm'h		cloudy.
S. S. State of California, Portland, Oregon*†	30.11	764.8	49	9.4		calm			0		10							raining.
S. S. Australia, S. 26° 50', W. 177° 59'	29.92	760.0	70	21.1	90	w.			3		1f		w.	0	0	sm'h		cloudy.?
S. S. City of New York, Sydney, N. S. W†	29.90	759.4	71	21.7	75	ne.			1		0			4 h'r	4 h'r			clear.
S. S. City of Pekin, N. 31° 41', E 133° 52' †	30.01	762.2	61	16.1	66	nw.			3		0			e	0	sm'h		clear.
S. S. City of Rio de Janeiro, Panama, Panamat	29.92	760.0	76	24.4	82	nnw.			2		2		n.	0	0	sm'h		fine.
S. S. State of Tokei, N. 31° 37', W. 131° 55'†	30.32	770.1	63	17.2		nnw.			3		8		n.	0	0	small	nnw.	overcast.
S. S. Colima, N. 23° 08', W. 106° 34' †	30.02	762.5	70	21.1	90	ene.			2		0			0	0	sm'h	n.	clear.
S. S. Grenada, Champerico, Mexico†	29.90	759.4	73	22.8	85	ne			1		0			0	0	mod.		clear.
S. S. Zealandia, S. 20° 02', W. 173° 20	29.92	760.0	82	27.8	?	se.			3		5		se.					fine.
S. S. Muriel, Trinidad, W. I.	29.97	761.2	80	26.7		calm			0		0			0	0	sm'h		clear.
S. S. Caracas, Curacon, W. I†	30.02	762.5	80.5	26.9	85	ne.			2		8		ne.	3 h'r	3 h'r	sm'h		cloudy.
S. S. Claudius, N. 12° 10', W. 83° 35' †	30.05	763.3				ne.			3		10		n.	sq'lls	sq'lls	short	e.	squally.
S. S. Valencia, N. 36° 47', W. 72° 39' †	30.13	765.3	65	18.3	78	ssw.			4		3		wsw.	2 h'r	2 h'r	light	e.	fine.
S. S. Belgenland, N. 48° 17', W. 24° 10'	30.19	766.8	47	8.3	92	nw.			9		7		nw.	3 h'r	3 h'r	h'vy	wnw.	hail squalls.
S. S. Nederland, N. 45° 58' W. 46° 40'†	30.39	771.9	46	7.8		sse.			3		8		se.	0	0	mod.	se.	cloudy.
S. S. Pennland, N 44° 33', W. 57° 27'	30.14	765.5	45	7.2	100	nw.			3		10		nnw.	snow	snow	long	s.	raining.
S. S. Rhynland, Antwerp, Belgium	29.14	740.1	42	5.6	83	e.			5		10		e.	16 h'r	16 h'r			rain & snow
S. S. Waesland, Antwerp, Belgium	29.21	741.9	36	2.2	90	ese.			4		10		se.	snow	snow			heavy snow.
S. S. P. Oaland, N. 44° 29', W. 51° 23'	30.13	765.3	48.6	9.2	92	s.			4		8		sw.			2	s.	cloudy.
S. S. Schiedam, N. 43° 55', W. 53° 28'	30.05	763.3	55.0	12.8	90	w.			4		8		wsw.	2 h'r	2 h'r	mod.	sw.	hazy.
S. S. W. A. Scholten, New Waterway, Germany			40.0	4.4	91	e.			7		10		e.	rain	rain			
S. S. State of Florida, N. 40° 31', W. 72° 30'	29.92	760.0	47	8.3		s.			4		8		sw.	0	0	sm'h		cloudy.
S. S. Iowa, N. 46° 58', W. 42° 22' *†	30.50	774.7	54	12.2		ese.			4		2		sse.	0	0	slt	ese.	clear.
S. S. Britannic, N. 47° 13', W. 36° 59' †	30.52	775.2	45	7.2	92	wsw.			2		3		nne.	0	0	sm'h	n.	fair.
S. S. Celtic, N. 51° 13', W. 15° 20' †	29.81	757.2	50	10.0		n.			5		5		ne.	0	0	long	nw.	fair.
S. S. Germanic, N. 45° 30', W. 49° 30'†	30.19	766.8	48	8.9		s.			5		8		sw.	0	0	sm'h	s.	squally.
S. S. Salerno, N. 47° 31', W. 6° 27'						n.			9		10		nw.	6 h'r	6 h'r	h'vy	nw.	
S. S. Aries, N. 39° 12', W. 74° 30' *†	29.94	760.5				s.			5		8		s.	0	0	short	s.	cloudy.
S. S. Catherine Whiting, Barnegat, N. J†	30.06	763.5	74	23.3		ssw.			5				s.	0	0	light	ssw.	
S. S. Saxon, N. 41° 10', W. 71° 15'†	29.90	759.4	50	10.0		s.			6		5		sw.			sm'h		
MISCELLANEOUS.																		
Bg. Alcira, N. 13° 51', W. 71° 01'	29.95	760.7	81	27.2		ene.			6		2		ene.	0	0	mod.	ne.	clear
Schr. Annie Lewis, Tampico, Mexico †	30.29	769.4	71	21.7		ne.			3		10		ne.	18 h'r	18 h'r	long	ene.	raining.
S. Annie M. Law, N. 25° 42', E. 131° 44'*†	30.10	764.5	70	21.1		nne.			2		5		sw.	0	0	sm'h		hazy.
Bk. Anna Thormann, S. 26° 16' E. 60° 35'*	29.96	761.0	72.7	22.6	71	ssw.			5		4 k		s.	sh'rs	sh'rs	short	sw.	fair.
S. S. Antonio Lopez, N. 21° 10', W. 75° 30' *	30.07	763.8	77.5	25.3	82	ene.			4		3			1 h'r	1 h'r	mod.	ene.	fair.
Bgt. Arthur, N. 36° 25', W. 47° 25' *†	30.30	769.6				var.							e; s.	rain	rain		var.	showery.
Bk. Champion, N. 21° 33', W. 43° 04'			75.0	23.9		e.			4		5		e.	0	0	mod.	e.	fair.
Schr. Chas. F. Heyer, N. 29° 36', W. 86° 11'	30.20	767.1	73	22.8	76	nw.			1	3 ck	3 k			0.03	0.8		se.	fair.
Bg. Clara M. Goodrich, Sagua la Grande, Cuba, W.I*†	30.00	762.0				ene.			5		7		ene.	0	0			cloudy.
S. Cornelius, N. 50° 20', W. 0° 42' *†	29.25	742.9	39.9	4.4		ene.			4		10		ne.	snow	snow	sm'h	ne.	cloudy.
S. S. D. J. Foley, N. 27° 30', W. 74° 00' *†	30.15	765.8	75	23.9		ene.			2		4		e.	0	0	sm'h	ese.	fair.
Bkt. David Preston, Pensacola, Fla			56.0	13.3		nne.					0			0	0			
Bk. E. L. Pettingill, N. 21° 00', W. 121° 45'*†	30.20	767.1	68	20.0		ne.			2		5		ene.	0	0	sm'h	wsw.	
Schr. Edith R. Seward, Baltimore, Md.*†	30.57	776.5												0	0			clear.
S. E. J. Spicer, N. 41° 00', W. 45° 50'*	30.30	769.6	64	17.8		sse.			5		5?		ese.	0	0	mod.	ne.	clear ?
Bk. Eliza Barss, N. 33° 15', W 67° 15'†	30.14	765.5				nw.			2		0			0	0	mod.	ese.	clear.
S. Enoch Train, N. 28° 40', W. 76° 00'						ne.			1		0			0	0	light	ese	clear.
Bk. Essex, Muscat, Arabia*†	29.95	760.7	78	25.6		wnw.			3		0			0	0			fine
Schr. F. E. McDonald, Camden, N. J†	29.93	760 2				ssw.			5					0	0			
S. S. Foscolia, N. 37° 16' W. 73° 25'						var.			3		8		w.	0	0	cross		dull.
Bk. Freya, N. 19° 59', W. 61° 33'			83	28.3		e.			3		1		e.	2 h'r	2 h'r	mod	e.	fine.
S. J. W. Gildemeister, N. 43° 50' W. 50° 00'*	30.21	767.3	45.5	7.5	46	sse.			4	7 c		sw.		0	0	1–2	se.	misty.
Bg. George, N. 41° 58', W. 63° 02' *†	30.20	767.1				nne.			5		2		ne.	sh'rs	sh'rs	cross	var.	fair.
Bk. Gronsvaer, Wellington, New Zealandt	30.04	763.0	76.0	24.4	93	nw.			2		0			0	0			fine
Bk. Godeffroy, S. 46° 30', W. 60° 58' †	29.84	757.9	51.8	11.0	90	w.			5		9		w.	driz	driz	sm'h	nnw.	foggy.
Bk. Great Surgeon, S. 16° 07', E. 93° 47'*†	30.04	763.0	78	25.6		se.			4		1		se.	½h'r	½h'r	long	ssw.	clear.
Bk. Grey Eagle, N. 13° 37', W. 33° 10'						e.			6		5		e.	2 h'r	2 h'r	long	ne.	fair.
Bk. Hattie G. McFarland, New York, N. Y†	29.96	761.0	46	7.8		s.			4		10		s.	0	0			threatening.
Schr. Hattie Weston, N. 27° 30' W. 72° 05'*†	30.24	768.1	78	25.6		ese.			2		2		ese.	0	0	mod.	e.	fair.
Bk. Heinrich & Tonio, N. 53° 37', E. 4° 00' *†	29.37	746.0	39	3.9	86	e.			6		10		e.	3 h'r	3 h'r	r'gh	ene.	cloudy.
Schr. Isabel Alberto, N. 24° 26', W. 80° 58' †	30.09	764.3				ene.			4		3		ene.	slight	slight	sharp	ene.	fair.
Schr. James Slater, N. 35° 45', W. 73° 40'*†	30.05	763.3	70	21.1		wsw.			6		10		wnw.	¼ h'r	¼ h'r	sm'h	ne.	squally.
Schr. Jennie N. Huddell, Savannah, Ga†	30.15	765.8	55	12.8		sw.			1		5		w.	0	0			fair.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bg. John Wesley, N. 36° 47′ W. 73° 59′						nnw.			7		7		nnw.	¼ h'r	¼ h r	h'vy	nnw.	cloudy.
Bk. Joseph A. Ropes, N. 4° 54′ E. 53° 27′ *†	29.90	759.4	83	28.3	83	nne.			4		6		ne.	o	o	mod.	se.	cloudy.
Bkt. Josephine, N. 34° 32′, W. 53° 04′†	30.14	765.5	73	22.8	76	s.			4		10			4 h'r	4 h'r	long	ne.	light rain.
Bk. Julia H., N. 40° 47′, W 50° 57′	30.21	767.3	65.3	18.5	89	se.			5		8					4	con.	d clouds.
Light House Tender, Laurel, Key West, Florida†	30.10	764.5	71	21.7		ne.			1		3		ene.	o	o	sm'h		clear.
Bg. Lilian, N. 37° 30′, W. 75° 00′ †	30.04	763.0	54	12.2		s.			4		0			o	o	sm'h	s.	clear.
Bg. L. & W. Armstrong, N. 30° 18′, W. 61° 06′*†	30.20	767.1				ne.			3		3		ene.	o	o	mod.	ne.	squally.
S. S. Malabar, N. 42° 33′, E. 5° 55′†	29.24	742.2				w.			10		5		w.			h'vy	w.	raining.
Bk. Matilda C. Smith, N. 27° 28′ W. 60° 00′*†	30.25	768.3				se.			2		0			o	o	mod.	"	fine.
Schr. Minnie A. Bonsall, St. Johns, Fla †	30.22	768 1	73	22.8		sw.			1		2		sw.			light	se.	clear.
S. Minnie N. Gerow, N. 31° 52′, W. 30° 06′ *†	30.28	769.1				e.			6		2		ne.			long	e.	fine.
S. M. P. Grace, S. 10° 13′, W. 129° 12′ *†	29.98	761.5	75	23.9		ese.			5		3		ese.	light	light	r'gh	ese.	squally.
Bg. O. C. Clary, Demerara, British Guiana, S. A *†	29.90	759.4	86	30.0	84	calm			0					o	o			clear.
S. Orealia, N. 19° 22′, E. 92° 51′*	29.89	759.2				nw.			2		5		nw.			sm'h		fine.
S. Paramita, San Francisco, Cal†	30.07	763.8	49	9.4		n.			2		fg.			o	o			foggy.
S. S. Peconic, N. 26° 20′, W. 85° 32′ *†	30.12	765.0	74	23.3		n.			2		8		n.			sm'h	ese.	overcast.
Bk. Pilgrim, N. 5° 18′, W. 38° 00′ *†	29.85	758.2				ne to se			4				ne., se.	10 h'r	10 h'r	high	cross	
S. S. Radnorshire, Singapore, India *†	29.80	756.9				nw.			3		8		nw.	2 h'r	2 h'r			
S. S. Raleigh, off Barnegat, N. J*†	29.89	759.2	46	7.8		ssw.			4		9		sw.	o	o	mod.	ssw.	threatening.
Bk. Rebus, N. 39° 38′, W. 59° 00′*	29.88	758.9	61	16.1		ne.			4		6		nne.	8 h'r	8 h'r	r'gh	se.	cloudy.
S. St. Francis, N. 21° 25′, W. 128° 54′†	30.11	764.8	66	18.9		ne.			4		7		ne.	o	o	long	ne.	cloudy.
Bk. Scud, N. 9° 39′, W. 58° 40′*†	29.90	759.4				ene.			5		6		ene.	sq 'lls	sq 'lls	h'vy	nne.	cloudy.
S. S. Sunbeam, N. 17° 26′ W. 58° 02′	30.02	762.5	84.5	29.2	75	ene.			4		3		ene.	o	o	3	e.	d. clouds.
S. S. Strathieven, N. 7° 57′, E. 71° 13′	29.80	756.9	81.2	27.3	96	ne.			3		2		ene.	o	o	3	ene.	d. clouds.
Schr. T. S. McLellan, N. 29° 40′, W. 79° 50′*†	30.25	768.3	69	20.6		ne.							ne.				n.	
U.S.F.C.S.S.Fish Hawk, Washington, D. C†	30.11	764.8	42	5.6	83	sw.			2		8		sw.	o	o			cloudy.
Bk. Usko, N. 55° 01′, W. 10° 11′ *	29.64	752.8	40	4.4		ne.			2–9		5		ne.	snow	snow	cross	ne.	squally.
Bk. Vincenzo Accame, N. 34° 48′, W. 37° 38′ †	30.41	772.3	70.7	21.5		e.			4		10		ne.	5¾h'r	5¾h'r			
Schr. Walter L. Plummer, N. 31° 50′, W. 75° 30′*†	30.20	767.1				sw.			3		1		sw.	o	o	sm'h		fine.
Bk. Wandering Jew, Montevideo, Uruguay †	29.99	761.7	67	19.4		n.			6		8		ne.	o	o			fair.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.06	763.5				n.			1		4		ne.			sm'h	wsw.	fair.
S. Wm. Woodbury, N. 44° 15′, W. 25° 04′ *	30.19	766.8	53	11.7		n.			7		6		n.			high	nnw.	squally.

International Chart I. December 7, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 8, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.82	757.3	55.8	13.2	85	ne.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair..	Malaterre.
Algiers	.....	.....	29.80	757.0	62.6	17.0	56	sw.	.....	.....	4	.....	4	.....	.....	0	0	cloudy	Thève.
La Calle	.....	.....	29.82	757.5	70.5	21.4	50	wnw.	.....	.....	3	.....	2	.....	.....	0	0	fair.....	Fonfréde.
Tunis	.....	.....	29.85	758.2															Jacques.
Saida	.....	.....	29.88	758.9	61.9	16.6	59	sw.	.....	.....	2	.....	0	.....	.....	0	0	clear.....	Pérès.
Tebessa	.....	.....	29.92	760.0	63.0	17.2	55	sw.	.....	.....	3	.....	1	.....	.....	0	0	very fair....	Dognon.
Geriville	.....	.....	.....	.....	55.0	12.8	28	sw.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair..	Lonchamp.
Laghouat	.....	.....	29.98	761.4	58.3	14.6	39	sse.	.....	.....	1	.....	4	.....	.....	0	0	cloudy.....	Abraham.
Biskra	.....	.....	29.98	761.4	63.7	17.6	35	nw.	.....	.....	1	.....	6	.....	.....	0	0	cloudy.....	Malau.
Australian.																			
Melbourne, Victoria	29.68	753.9	29.77	756.1	73.5	23.1	64	se.	4	1.8	.....	.....	1	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.17	741.0	29.73	755.1	46.4	8.0	94	e.	.....	.....	2	.....	5	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28 95	735.4	29.74	755.3	39.2	4.0	80	ese.	0.7	0.3	.....	.....	6	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.89	733.8	29.79	756.7	38.5	3.6	95	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.46	722.9	29.74	755.5	37.0	2.8	86	e.	.....	.....	1	.....	10	.....	.....	0.087	2.2	.....	Andreas Rospini.
Hermannstadt	28.39	721.2	29.85	758.2	41.4	5.2	80	se.	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.38	720.8	29.77	756.1	32.9	0.5	93	calm	.....	.....	0	.....	10	.....	.....	0	0	gloomy.....	The Staff.
Lemberg	28.79	731.2	29.80	757.0	35.8	2.1	84	s.	.....	.....	1	.....	1	.....	.....	0.146	3.7	.....	Dr. T. Stanecki.
Pola	29.64	752.9	29.76	755.8	48.6	9.2	87	wnw.	.....	.....	1	.....	7	.....	.....	0	0	.....	I. R Hydrographic Office.
Szathmar	29.30	744.3	29.77	756.1	48.2	9.0	76	se.	.....	.....	2	.....	7	.....	.....	0.146	3.7	.....	Joseph Midlinszay, S. J.
Szegedin	29.46	748.2	29.74	755.4	45.3	7.4	94	calm	.....	.....	0	.....	10	.....	.....	0.283	7.2	.....	Karl Stancel.
Trieste	29.68	753.8	29.78	756.4	48.6	9.2	89	w.	.....	.....	1	.....	10	.....	.....	0	0	foggy.....	Royal Academy.
Vienna	29.05	737.7	29.78	756.5	36.9	2.7	77	nw.	.....	.....	1	.....	4	.....	.....	0.020	0.5	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.68	753.9	29.78	756.4	28.1	— 2.2	88	wnw.	10	4.5	.....	.....	7	.....	.....	0.575	14.6	gloomy.....	W. Boswell
Armagh, Observatory	29.52	749.8	29.77	756 1	30.7	— 0.7	81	s.	3	1.3	.....	.....	0	.....	.....	.....	.....	blue sky	S. Oall.
Bidston, Liverpool Obs'y	.....	.....	29.56	750.8	36.1	2.3	83	n.	24	10.7	.....	.....	10	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	28.96	735.6	29.50	749.3	34.8	1.6	84	nne.	24	10.7	.....	.....	10	.....	.....	.....	.....	squally.....	Thomas Mackereth.
Bradford, Yorkshire	29.10	739.1	29.50	749.3	34.9	1.6	91	ne.	.....	.....	4	.....	10	.....	.....	0.11	2.8	overcast.....	McLandsborough&Preston.
Bridgetown, Barbadoes	.....	.....	.....	.....															
Cardington	.....	.....	.....	.....	35.0	1.7	90	n.	.....	.....	1.0	.....	8	.....	.....	.....	.....	.....	Corpl. J. Surgenor, A. H. C.
Chatham, School M. E	29.15	740.4	29.28	743.7	35.0	1.7	92	n.	.....	.....	1	.....	7	.....	.....	.....	.....	overcast.....	John McLaren.
Falmouth, Observatory	29.36	745.7	29.59	751.6	42.3	5.7	62	nnw.	.....	.....	5	.....	7	.....	.....	.....	.....	d. clouds.....	Corpl. G. A. Pickles.
Fort Napier, Natal	27.60	701.0	29.80	756.9	79.0	26.1	51	se.	.....	.....	1	.....	0	.....	.....	.....	.....	d. clouds.....	The Staff.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	87.0	30.6	92	n.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky.....	Corpl. F. Milner, A. H. C.
Gibraltar, Mediterranean	29.72	754.9	29.77	756.1	57.0	13.9	94	w.	.....	.....	3	.....	10	.....	.....	.....	.....	raining.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.53	750.0	29.74	755.4	34.2	1.2	74	ne.	.....	.....	3	.....	10?	.....	.....	.....	.....	blue sky?....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.15	740.4	29.33	745.0	35.3	1.8	90	n.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Guernsey	29.17	740.9	29.47	748.5	38	3.3	90	nnw.	.....	.....	3	.....	8	.....	.....	.....	.....	hailing.....	A. Collenette, F. M. S
Kew, Observatory	29.31	744.5	29.35	745 5	35.4	1.9	89	n.	11	4.9	.....	.....	9	.....	.....	.....	.....	threateping.	The Staff.
Leicester, Museum	29.15	740.4	29.41	747.0	33.5	0 8	99	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	.....	.....	.....	.....	69.0	20.6	96	sw.	.....	.....	2	.....	2	.....	.....	.....	.....	blue sky.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.15	765.8	30.20	767.1	68.2	20.1	98	ne.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast.....	C. S. Duncombe.
Oscott, St. Mary's College	28.86	733.0	29.40	746.7	33.0	0.6	100	nne.	.....	.....	4	.....	10	.....	.....	.....	.....	snowing.....	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.16	740.7	29.39	740.5	34.7	1.5	93	n.	.....	.....	3	.....	10	.....	.....	.....	.....	gloomy.....	The Staff.
Plymouth	29.43	747.5	29.51	749.5	39.0	3.9	88	nw.	.....	.....	4	.....	10	.....	.....	.....	.....	gloomy.....	John Merrifield.
Sandwick Manse, Orkneys	29.09	754.1	29.80	756 9	32.8	0.4	100	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	d. clouds	Rev. C. Clouston, L L D.
Scutari Cemetery, Turkey	29.89	759.2	29.95	760.7	59.6	15.3	79	sw.	.....	.....	1	.....	2	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.17	740.9	29.40	748.3	35.4	1.9	95	n.	.....	.....	2	.....	10	.....	.....	0.33	8.4	rain & snow	W. F. Cooper.
Silloth Rectory	29.64	752.8	29.67	753.6	35.2	1.8	72	nne.	.....	.....	2	.....	4	.....	.....	0.010	0.3	d. clouds.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.56	750.8	35.1	1.7	82	n.	15	6.7	.....	.....	10	.....	.....	.....	.....	gloomy.....	I. New.
Stratfield Turgiss	29.15	740 4	29.37	746.0	35.0	1.7	95	n.	.....	.....	2	.....	10	.....	.....	.....	.....	gloomy.....	Rev. O. H. Griffiths, F. M. S.
Truro, Royal Institution	29.56	750.8	29.58	751.3	45	7.2	68	ne.	.....	.....	7	.....	8	.....	.....	.....	.....	gloomy.....	W. Newcombe.
Valencia, Observatory	29.82	757 4	29.84	757.9	41.6	5.3	74	n.	13	5.8	.....	.....	6	.....	.....	blank	blank	d. clouds.....	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....															Hon. J. Ferguson.
Charlottetown, P. E. Island	29.50	749.3	29.54	750.3	16	— 8.9	99	sw.	15	6.7	.....	0	2 s	.....	sw.	0.370	9.4	fair.....	H. J. Cundall, C. E
Chatham, N. B*	29.45	748.0	29.51	749.5	7	—13.9	87	sw.	14	6.3	.....	0	0	.....	.....	0.24	6.1	clear.....	G. A. Blair.
Father Point, Quebec*	29.28	743.7	29.31	744.5	7	—13.9	91	w.	60	26.8	.....	.....	10 n	.....	.....	0.30	7.6	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.27	743.4	30.23	767.8	—16	—26.7	40	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	James Stewart.
Halifax, N. S*	29.54	750.3	29.67	753.6	21	— 6.1	87	sw.	12	5.4	.....	0	0	.....	.....	0.420	10.7	fair	A. Allison.
Kingston, Ontario*	29.86	758.4	30.24	768.1	4	—15.6	63	w.	14	6.3	.....	.....	10 s	.....	w.	0.02	0.5	cloudy	A. P. Knight, M. A
Montreal, Quebec*	29.81	757.2	30.05	763.3	—2	—18.9	79	w.	24	10.7	.....	.....	10 n	.....	.....	0.02	0.5	hazy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.42	747.3	30.20	767.1	—2	—18.9	71	w.	6	2.7	.....	.....	10 n	.....	w.	0.05	1.3	cloudy.....	Rev. R. Mosley.
Port Dover, Ontario	29.66	753.4	30.44	773.2	1	—17.2	100	w.	16	7.2	.....	0	0	.....	.....	0	0	clear.....	H. Morgan.
Port Stanley, Ontario	29.75	755.6	30.48	774.2	3	—16.1	79	w.	20	8.9	.....	0	2 k	.....	w.	0	0	clear.....	M. Payne.
Quebec, Quebec*	29.38	746.2	29.73	755.1	3	—16.1	100	w.	.....	.....	8	5 k	5 k	w.	w.	1.00	25.4	cloudy.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.62	752.3	30.14	765.5	—7	—21.7	86	nw.	10	4.5	.....	0	0	.....	.....	0.08	2.0	clear.....	W. H. McIntyre.
Saugeen, Ontario*	29.47	748.5	30.25	768.3	15	— 9.4	87	w.	33	14.8	.....	.....	10 s	.....	.....	0.30	7.6	light snow...	
St. Andrews, N. B	29.64	752.8	29.70	754.4	13	—10.6	81	nw.	16	7.2	.....	0	0	.....	.....	0.09	2.3	clear.....	
Sydney, C. B*	29.43	747.5	29.49	749.0	29	— 1.7	77	sw.	34	15.2	.....	.....	10 s	.....	sw.	0.23	5.8	cloudy.....	T. C. Hill, C. E
Toronto, Ontario*	29.89	759.2	30.32	770.1	8	—13.3	80	w.	15	6.7	.....	0	2 ks	.....	w.	0.05	1.3	clear.....	Magnetic Observatory.
Yarmouth, N. S*	29.68	753.9	29.75	755.6	22	— 5.6	73	w.	43	19.2	.....	.....	10 n	.....	.....	0.26	6.6	light snow..	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.76	730.5	30.28	769.1	9.0	—12.8	100	nw.	.....	.....	7	.....	10 s	.....	nw.	0.409	10.4	stormy	Wm. Wylie.
St. Johns, Newfoundland	28.51	724.1	29.77	756.1	38	3.3	100	se.	4	1.8	.....	5 k	5 s	.....	.....	0.03	0.8	raining.....	John Delany
Cape Colony.																			
Cape St. Francis Lt. House	30.00	762.0	30.03	762.7	69.0	20.6	88	e.	5.7	2.5	.....	0	2 s	.....	.....	0	0	light haze...	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....														.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.58	624.2	.....	.....	23.9	— 4.5	.....	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.43	772.8	30.54	775.6	19.8	— 6.8	91	calm	4.0	1.8	.....	.....	10	.....	.....	0	0	covered	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.28	769.1	30.30	769.7	46.4	8.0	97	ene.	14.1	6.3	.....	.....	10 n	.....	.....	0.004	0.1	raining	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.74	755.5	29.79	756.7	25.3	— 3.7	80	e.	31	14	.....	.....	10	... .	.....	.....	.....	.....	Oversergent Fischer.
Fanoe	29.68	753.8	29.70	754.3	28.8	— 1.8	98	ene.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.81	757.1	29.85	758.2	3.9	—15.6	90	se.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.81	757.1	29.83	757.6	25.7	— 3.5	.....	calm	.....	.....	0	.....	6	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.85	758.3	29.90	759.5	11.5	—11.4	.....	n.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.90	759 5	29.95	760.6	31.5	— 0.3	87	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.72	755.0	29.70	755.9	35.2	1.8	80	se.	16	7	.....	.....	5	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.72	754.8	29.81	757.2	24.3	— 4.3	93	ene.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Loearer Oesterboi.
Upernavik, Greenland	30.09	764.3	30.14	765.5	— 1.1	—18.4	.. ..	e.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.16	740.7	29.83	757.6	41.7	5.4	84	ssw.	.....	.....	1	.....	kn	.....	w.	0.094	2.4	.....	M. Labroue, Director.
Alençon, Normal School	28.93	734.8	29.48	748.8	37.4	3	93	s.	.....	.....	1	.....	kn	.....	.....	0.12	3.	.....	M. Nicot, Director.
Arras, Engineer School	29.00	736.6	29.26	743.3	32.7	0.4	93	se.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	M. Fénéon, Commandt.
Avignon, Normal School	29.73	755.1	29.77	756.1	44.6	7	69	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.05	737.9	29.62	752.4	39.2	4.0	82	s.	.....	.....	2	0	8 kn	.....	wsw.	0.157	4.0	very cloudy.	M. Saillard, Director.
Beauvais, Normal School	29.14	740.2	29.41	747.1	37.9	3.3	83	s.	.....	.....	2	.....	10	.....	wsw.	0.213	5.4	raining.	M. Frère Eugène Marie.
Besançon, Normal School	28.78	731.0	29.07	753.6	44.2	6.8	62	se.	.....	.....	1	.....	1	.....	sw.	0.181	4.6	clear	M. Gobin, Director.
Bordeaux, Observatory	29.43	747.4	29.69	754.1	42.8	6.0	81	sse.	.....	.....	1	.....	5	.....	s.	0.516	13.1	cloudy	M. Rayet, Director.
Bourges, Normal School	29.08	738.0	29.64	752.9	41.0	5	67	sw.	.....	.....	2	.....	kn	.....	sw.	0.094	2.4	.....	M. Malet, Director.
Brest, Naval Observatory	29.39	746.6	29.64	752 8	42.1	5.6	84	n.	.....	.....	2	.....	6	.....	n.	0.197	5.0	hailing	M. de Kermaïdé, Dir.
Caen, Normal School	29.30	744.3	29.38	746.2	38.5	3.6	77	sw.	.....	.....	1	.....	10	.....	.....	0.335	8.5	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.19	741.3	29.51	749.5	40.3	4.6	77	sw.	.....	.....	4	.....	8	ssw.	sw.	0.055	1.4	very cloudy	M. Jadot, Director.
Charleville, Normal School	28.97	735.8	29.48	748.9	39.2	4	78	sse.	.....	.....	1	.....	10	.....	.....	0.20	5.	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.30	718.8	29.67	753.6	44.6	7.0	55	s.	.....	.....	1	.....	5	.....	.....	0.012	0.3	½ covered ..	M. Allnard, Director.
Cluny, Normal School	28.83	732.3	29.70	754.3	40.1	4.5	77	s.	.....	.....	1	.....	3	s.	s.	0.126	3.2	....	M. de Villeneuvée, Dir.
Commercy, Normal School	28.75	730.2	29.03	752.6	36.7	2.6	80	s.	.....	.....	4	.....	n	s.	s.	0.071	1.8	.....	Dr. Coulet, Director.
Gap, Normal School	27.26	692.3	29.85	758.3	33.8	1	100	.....	.....	.....	.....	.....	2	.....	.....	0.35	9.	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.67	728.2	29.82	757.5	41.7	5.4	73	n.	.....	.....	1	.....	5	.....	sw.	0	0	....	M. Klun, Director.
Grenoble, Normal School	28.99	736.3	29.78	756.4	38.1	3.4	63	ese.	.....	.....	1	0	2 k	.....	.....	0.161	4.1	slightly cl'dy	M. Ablard, Director.
Guéret	28.05	712.5	29.05	753.0	37.0	2.7	90	sw.	.....	.....	3	.....	10 n	.....	sw.	0.031	0.8	snowing	M. Delorme, Dir.
Lamballe, Normal School	29.24	742.0	29.50	749.4	45.5	7.5	77	w.	.....	.....	2	.....	5	.....	w.	0.24	6.	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.18	741.2	29.75	755.7	46.4	8.0	59	w.	.....	.....	3	2 ck	0	.....	.....	0.24	6.	slightly cl'dy	M. Chanvin, Director.
Lorient, Naval Observatory	29.51	749.5	29.01	752 1	47.8	8.8	58	nw.	.....	.....	1	.....	5	nw.	w.	0	0	½ covered ...	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.65	727.0	29.72	755.0	40.1	4.5	64	se.	.....	.....	2	.....	0	.. ..	.....	0	0	clear	M. André, Director.
Mans, Normal School	29.30	744.2	29.62	752.3	39.7	4.3	81	w.	.....	.....	4	.....	8	.....	w.	0	0	very cloudy	M. Pibeu, Director.
Marseille, Observatory	29.50	749.4	29.78	756.3	46.0	7.8	58	ne.	.....	.....	1	.....	7	.....	w.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.49	622.1	29.34	745.1	29.3	— 1.5	71	sw.	11.2	5.0	.....	.....	0	.....	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.64	752.9	29.81	757.2	47.1	8.4	76	w.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Gaizin, Director.
Nancy, Normal School	28.75	730.3	29.54	750.4	38.8	3.8	54	s.	.....	.....	1	.....	kn	.....	.....	0.051	1.3	.....	M. Hasse, Director.
Nantes, Observatory	29.44	747.7	29.60	751.8	44.1	6.7	78	ssw.	.....	.....	0.2	0	2 k; kn	.....	sw.	0.102	2.6	.....	M. Lareeque, Director.
Perpignan, Observatory	29.71	754.5	29.82	757.4	48.0	8.9	57	sw.	3.8	1.7	.....	.....	3	.....	sw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.75	527.2	.....	.....	8.6	—13.0	.....	nw.	.....	.....	1	.....	1	.....	nw.	0	0	clear	M. Vaussenat.
Privas, Normal School	28.64	727.4	29.73	755.2	37.8	3.2	86	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.65	626.1	.....	.....	24.8	— 4.0	100	sw	.....	.....	6	.....	10	.....	.....	0.299	7.6	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.70	756.0	29.80	756.8	45.3	7.4	75	se.	.....	.....	2	.....	5	.....	w.	0.79	20.	½ covered ...	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.31	744.4	29.52	749.9	37.0	2.8	86	s.	.....	.....	1	.....	0	.....	.....	0.098	2.5	clear	M. Brotier, Director.
Rodez, Normal School	27 00	701.0	29.82	757.4	34.3	1.3	89	sw.	.....	.....	1	.....	8	.....	.....	0	0	very cloudy	M. Seger, Director.
Rouen, Normal School	29.32	744.8	29.37	746.0	37.8	3.2	89	sw.	.....	.....	2	.....	8	sw.	.....	0.425	10.8	very cloudy	M. Moullot.
Saint Lô	.....	.....	.....	.....	37.4	3	95	w.	.....	.....	1	.....	10	nw.	nw.	0.398	10.1	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.32	744.6	29.48	748.8	38.7	3.7	82	ssw.	.....	.....	3	.....	9	.....	.....	0.008	0.2	.....	M. Renou, Director.
Toulouse, Observatory	29.10	739 1	29.82	757.4	44.2	6.8	60	w.	.....	.....	2	.....	2	w.	.....	0	0	slightly cl'dy	M. Baillaud, Director.
Tours	29.40	746.7	29.58	751.2	41.7	5.4	75	ssw.	.....	.....	3	.....	10	.....	sw.	0.024	0.6	raining	M. de Tastes.
Versailles, Observatory	28.98	736.0	29.47	748.5	36.7	2.6	86	sw.	.....	.....	3	.....	.....	.....	.....	0.055	1.4	....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.65	753.0	29.80	756.8	43.3	6.3	85	w.	17.7	7.9	.. ..	0	3 k	.....	w.	1.441	36.6	.....	M. Cartier, Director.
GERMAN.																			
Ansbach	28.24	717 4	29.73	755.1	34.2	1.2	74	sw.	.....	.....	2	.....	2	sw.	.....	0.020	0.5	.....	Prof. Jnedt.
Bamberg	28.85	732.8	29.69	754.0	36.0	2.2	80	se.	.....	.....	1	.....	3	.....	.....	0.039	1.0	.....	Prof. Dr. Hoh.
Berlin	29.49	749.1	29.68	753.8	33.4	0.8	90	e.	.....	.....	2	.....	10	.....	.....	0	0	....	Prof. Dr. Arndt.
Breslau	29.22	742.3	29.75	755.6	34.2	1.2	94	calm	.....	.....	0	.....	10	.....	.....	0.087	2.2	foggy	Royal University Obs'y.
Carlsruhe	29.25	742.9	29.69	754.2	40.6	4.8	59	s.	.....	.....	1	.....	10	sw.	.....	0	0	.....	Albert Senz.
Cassel	28.88	733.5	29.59	751.6	34.9	1.6	88	s.	.....	.....	2	.....	5	s.	.....	0	0	....	Dr. H. Möhl.
Frankfort-on-the-Main	29.29	744.0	29.66	753.4	37.9	3.3	55	s.	.....	.....	1	.....	1	.....	.....	0.059	1.5	.....	Physical Society.
Friedrichshafen	28.28	718.3	29.74	755.5	37.9	3.3	62	ssw.	.....	.....	1	.....	3	sw.	... .	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.58	751.4	29.67	753.7	31.3	— 0.4	92	ese.	.....	.....	3	.....	10	.....	.....	0.028	0.7	snowing	E. Preller.
Kiel	29.66	753.4	29.68	753.8	33.6	0.9	83	e.	.....	.....	3	.....	10	.....	.....	0.008	0.2	snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.29	744.0	29.72	754.9	36.3	2.4	75	s.	.....	.....	2	.....	8	ssw.	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.50	749.2	29.69	754.2	33.1	0.6	78	calm	.....	.....	0	2 c	0	ssw.	.....	0.031	0.8	Weather Observatory.	
Memel	29.82	757.2	29.86	758.4	29.3	— 1.5	92	ene.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	Isserumann.
Munich	27.89	708.3	29.73	755.1	36.1	2.3	76	calm	.....	.....	0	.....	10	.....	.....	0.020	0.5	.....	Central Station.
Neufahrwasser	29.76	755.8	29.77	756.2	33.8	1.0	85	e.	.....	.....	3	.....	10	.....	.....	0.008	0.2	.....	A. Lothes.
Neustadt, Palatinate	29.15	740.3	29.66	753.3	34.9	1.6	82	calm	.....	.....	0	.....	1	.....	.....	0	0	.....	Dicknether.
Stuttgart	28.74	729.9	29.65	753.1	39.2	4.0	63	s.	.....	.....	1	.....	5	w.	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	29.73	755.2	29.76	755.9	32.0	0.0	94	se.	.....	.....	3	.....	10	.....	.....	0.012	0.3	....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.61	752.2	30.00	762.0	62.8	17.1	.....	sw.	.....	.....	1.0	3 c	0	.....	.....	0	0	misty	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	29.97	761.2	30.02	762.5	78.9	26.1	66	wsw.	9.0	4.0	.....	.....	3	.....	s.	0	0	d. clouds	
Deesa	29.47	748.6	29.95	760.7	82.4	28.0	39	sse.	2.0	0.9	.....	.....	0	.....	.....	0	0	hazy	
Bombay	29.87	758.6	29.90	759.6	81.8	27.7	65	wnw.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.05	712.5	29.89	759.3	84.3	29.1	33	ese.	5.0	2.2	.....	.....	1	.....	.....	0	0	d. clouds	
Trichinopoly	29.66	753.4	29.94	760 5	80.2	26.8	78	ne.	1.0	0.4	.....	.....	10	.....	.....	0.52	13.2	overcast	
Belgaum	27.36	694.9	29.89	759.1	78.8	26.0	49	e.	4.0	1.8	.....	.....	5	.....	se.	0	0	d. clouds	
Lahore	29.21	742.0	30.00	761.9	58.6	14.8	65	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.05	737.9	29.98	761.6	63.8	17.7	58	w.	.....	.....	.....	.....	0	.....	.....	0	0	.....	
Agra	29.43	747.5	30.01	762.3	70.9	21.6	38	nw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.92	734.5	29.98	761.4	74.7	23.7	38	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.64	727.4	30.03	762.7	69.7	20.9	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.56	750.7	29.94	760 5	71.2	21.8	52	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.65	753.2	29.98	761.5	61.0	16.1	73	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.79	756.6	29.98	761.5	67.6	19.8	53	w.	2.5	1.1	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.90	708.8	29.98	761.5	62.5	16.9	54	nw.	7.0	3.1	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.87	758.7	29.95	760.8	70.8	21.6	65	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.91	759.7	29.93	760.2	66.6	19.2	76	wnw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.79	756.7	29.91	759.8	70.9	21.6	73	calm	0.1	0.04	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.82	757.5	29.92	759.9	70.8	21.6	70	calm	1.9	0.8	.....	.....	2	.....	.....	0	0	d. clouds. ...	
Sibsagar	29.61	752.0	29.96	760.8	65.9	18.8	81	ne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Jeypore	28.53	724.7	30.00	762.1	72.2	22.3	53	n.	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
ITALIAN.																			
Udine	29.35	745.6	29.77	756.2	42.6	5.9	94	.....	.....	.....	.....	.....	10	.....	.....	0.260	6.6	.....	Prof. Giovanni Clodig.
Milan	29.25	743.0	29.79	756.7	36.3	2.4	86	wsw.	2.5	1.1	.....	.....	7	.....	.....	0.291	7.4	....	Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature	Barometer. Reduced to sea-level.	Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Padua	29.64	752.9	29.75	755.7	40.3	4.6	97	s.	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.86	733.0	29.80	757.0	30.0	— 1.1	84	ene.	0	0	.....	.....	7	.....	.....	0	0	.....	Prof. F. F. Denza.
Genoa	29.53	750.0	29.72	754.9	53.6	12.0	37	se.	3.1	1.4	.....	.....	2	W.	.....	0.035	0.9	.....	Prof. G. M. Garibaldi
Mondovi	27.80	706.1	29.78	756.5	32.9	0.5	66	nw.	..	.....	2	.....	0	.....	.....	0.268	6.8	.....	Prof. D. C. Bruno.
Pesaro	29.71	754.5	29.76	755.8	41.7	5.4	97	n.	4.3	1.9	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.52	749.8	29.78	756.4	50.0	10.0	71	wsw.	.....	.....	2	.....	10	.....	.....	0.236	6.0	.....	Prof. Costantino Pittei.
Leghorn	29.58	751.4	29.67	753.6	53.2	11.8	56	wsw.	19.2	8.6	.....	.....	9	wsw.	.....	0.007	1.7	.....	Prof. P. Monte.
Rome	29.63	752.5	29.80	757.0	54.3	12.4	86	sse.	0.7	0.3	.....	.....	10	.....	.....	0.417	10.6	.....	Prof. P. Tachini.
Lecce	29.69	754.0	29.94	760.5	61.2	16.2	77	ssw.	13.7	6.1	.....	.....	4	.....	.....	0	0	.....	Prof. C. de Giorgi.
Oosenzo	29.58	751.2	29.77	756.1	61.3	16.3	67	sw.	2.5	1.1	.....	.....	4	W.	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.63	752.7	29.89	759.1	66.6	19.2	40	wsw.	13.7	6.1	.....	.....	9	W.	.....	0.236	6.0	.....	Prof. A. Pacinotti.
Palermo	29.63	752.7	29.89	759.1	66.6	19.2	40	wsw.	13.7	6.1	.....	.....	0	.....	.....	0	0	.....	Prof. G. Cacciatore.
Syracuse	29.85	758.3	29.90	759.4	63.5	17.5	59	sw.	18.1	8.1	.....	.....	5	wsw.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. B	29.32	745.0	29.85	758.2	58.8	14.9	74	ssw.	4.9	2.2	.....	.....	5	sw.	.....	0.575	14.6	.....	Prof. F. Brioschi.
Stelvio	21.72	551.8	.....	.....	16.8	— 8.4	94	sw.	.....	.....	2	.....	10	.....	.....	0.272	6.9	misty	Prof. P. F. Denza.
Valdobbia	21.73	552.0	.....	.....	13.8	—10.1	71	e.	.....	.....	2	.....	4	.....	.....	0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.96	760.9	29.99	761.7	39.0	3.9	79	nw.	.....	.....	4	.....	10 n	.....	w.	0.134	3.4	rainy	Hattori.
Awomori	29.92	759.9	29.95	760.7	31.0	— 0.6	85	w.	24.6	11.0	.....	.....	10 n	.....	.....	0.107	4.2	snowing	K. Ogawa.
Hakodate	29.92	759.8	29.93	760.1	26.5	— 3.0	89	wnw.	7.2	3.2	.....	.....	10	.....	.....	0.205	5.2	.....	
Hamamatsu	30.05	763.3	30.08	764.0	46.9	8.3	85	calm	.....	.....	0	0	0	.....	.....	0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y	.....	.....	.....	.....	54.7	12.7	45	nne.	5.6	2.5	.....	0	0	.....	.....	0	0	clear	
Kanazawa	30.06	763.5	30.16	766.1	43.8	6.6	87	calm	0	0	.....	.....	10	.....	.....	0.567	14.4	raining	S. Endo.
Kioto	29.94	760.5	30.12	765.0	43.8	6.6	85	nnw.	1.0	0.4	.....	0	1 s;ck	.....	.....	0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.96	761.0	30.17	766.3	52.7	11.5	71	nne.	6.9	3.1	.....	0	1 s	.....	.....	0	0	clear	S. Takehayashi.
Niigata	30.01	762.2	30.05	763.3	46.5	8.1	75	w.	22.8	10.2	.....	.....	10 n	.....	w.	0.145	3 7	light rain	M. Morita.
Nohiru	29.92	760.0	29.94	760.4	38.3	3.5	90	nnw.	3.2	1.4	.....	0	0	.....	.....	0	0	clear	H. Midzushima.
Numazu	29.97	761.2	30.00	762.1	58.0	14.4	59	wnw.	.....	.....	4	0	0	.....	.....	0	0	clear	R. Kaneda.
Osaka	30.10	764.6	30.12	765.0	46.8	8.2	82	n.	3.7	1.6	.....	3ck;cs	4 cks	w.	w.	0	0	fair	H. Omnra.
Sapporo	.....	.....	.....	.....	22.0	— 5.6	56	nw.	8.0	3.6	.....	.....	10	.....	.....	0.230	5.8	covered	
Tokei Obs'y, Yeddo	29.91	759.6	29.98	761.6	47.0	8.3	74	wnw.	10.2	4.6	.....	0	0	.....	.....	0	0	clear	The Staff.
Wakayama	30.05	763.2	30.11	764.7	50.9	10.5	83	ne.	2.3	1.0	.....	.....	10 n	.....	.....	0.013	0.3	raining	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.79	756.7	29.98	761.5	79.5	26.4	64	ese.	20.0	8.9	.....	0	4 ks;k	.....	.....	0.59	15.0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.77	603.7	29.99	761.7	48.0	8.9	69	ne.	15.6	7.0	.....	.....	10 k;hn	.....	ne.	0.028	0.7	covered	Prof. Vicente Fernandez.
Leon	24.43	620.5	30.27	768.8	47.5	8.6	91	ne.	.....	.....	1	6 c	2 k	sw.	e.	0.024	0.6	cloudy	Prof. M. Leal.
Mazatlan	29.75	755.7	30.02	762.4	68.5	20.3	77	e.	0.9	0.4	.....	5 cs	0	sw.	.....	0	0	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23.20	589.4	30.37	771.5	47.7	8.7	85	nw.	1.3	0.6	.....	.....	10 k	.....	.....	0	0	covered	The Staff.
Morelia	24.23	615.3	30.02	762.6	40.1	4.5	73	s.	.....	.....	1	0	0	.....	.....	0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	24.08	611.0	30.21	767.3	50.7	10.4	93	calm	0	0	.....	.....	10 n	.....	e.	0.080	2.0	covered	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.48	596.4	30.27	768.9	52.7	11.5	25	nw.	0.2	0.1	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.55	572.7	30.33	770.3	42.3	6.0	66	nne.	7.2	3.2	.....	0	0	.....	.....	0.230	5.7	foggy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.31	744.4	29.31	744.4	35.2	1.8	.....	sse.	.....	.....	4	.....	.....	.....	.....	0.315	8.0	.....	
Groningen	29.48	748.7	29.53	750.1	33.4	0.8	.....	s.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	29.44	747.7	29.44	747.7	35.2	1.8	.....	ese.	.....	.....	3	.....	.....	.....	.....	0.213	5.4	.....	
Hellevoetsluis	29.35	745.4	29.35	745.4	33.8	1.0	96	se.	.....	.....	3	.....	.....	.....	.....	0.173	4.4	.....	
Utrecht	29.39	746.4	29.43	747.6	35.4	1.9	82	se.	.....	.....	3	.....	8	.....	.....	0.189	4.8	very cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.85	758.3	29.92	759.9	21.6	— 5.8	64	s.	2	1	.....	.....	1	.....	.....	0	0	.....	
Brono	30.00	762.0	30.04	763.0	22.3	— 5.4	73	se.	5	2	.....	.....	8	.....	.....	0	0	.....	
Christiania	29.85	758.2	30.01	762.2	17.4	— 8.1	68	n.	9	4	.....	.....	0	.....	.....	0	0	.....	
Gjesver	30.15	765.8	30.17	766.4	30.4	— 0.9	.....	ese.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	
Lodingen	30.07	763.7	30.11	764.9	18.9	— 7.3	67	nne.	.....	.....	4	.....	0	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.26	768.7	30.42	772.7	56.5	13.6	69	n.	5.6	2.5	.....	.....	5	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	28.80	731.5	29.83	757.6	43.2	6.2	73	ne.	15.0	6.7	.....	.....	5	.....	.....	0.157	4.0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.90	759.4	29.98	761.6	58.8	14.9	61	ene.	3.8	1.7	.....	.....	10	.....	.....	0.110	2.8	thund'r st'm	Capt. D. A. de Cunha.
Lisbon, Observatory	29.53	750.1	29.90	759.5	46.2	7.9	40	ne.	19.9	8.9	.....	.....	1	.....	.....	0.039	1.0	.....	The Staff.
Ponta Delgada, Azores	30.32	770.0	30.39	771.8	57.2	14.0	60	nne.	14.3	6.4	.....	.....	3	wsw.	.....	0	0	.....	
Saint Paul de Loando	29.61	752.0	29.81	757.1	80.4	26.9	78	w.	1.8	0.8	.....	.....	2	sse.	.....	0	0	.....	
Serra da Estrella	24.99	634.8	29.93	760.1	25.7	— 3.5	100	ene.	.....	.....	1	.....	3	.....	.....	0.276*	7.0*	.....	
RUSSIAN.																			
Akmolinski	29.28	743.7	30.50	774.8	— 1.7	—18.7	83	nnw.	7	3	.....	0	8 n	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	30.13	765.2	30.15	765.7	7.5	—13.6	88	ene.	4	2	.....	.....	10	.....	.....	0	0	.....	Capt. Sseliwerstow.
Astrakhan	30.24	768.1	30.17	766.2	42.1	5.6	79	ese.	11	5	.....	.....	10 k;s	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	29.77	756.1	30.34	770.5	— 3.8	—19.9	72	ne.	4	2	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Bielosersk	29.61	752.0	30.10	764.6	25.9	— 3.4	99	sse.	9	4	.....	.....	10 n	.....	.....	0.079	2.0	snowing	
Dorpat	29.73	755.2	29.99	761.7	29.5	— 1.4	100	ese.	4	2	.....	.....	10 n	.....	.....	0.079	2.0	.....	Observatory.
Ekaterinburg	29.71	754.6	30.83	783.0	—10.8	—23.8	83	calm	0	0	.....	.....	10	.....	.....	0	0	foggy	Meteorological Obs'y.
Elissawetgrad	29.55	750.6	30.02	762.5	34.2	1.2	90	calm	0	0	.....	.....	10	.....	.....	0	0	.....	
Kasan	30.18	766.5	30.47	773.9	22.1	— 5.5	94	ese.	4	2	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kem	30.04	762.9	.....	.....	12.6	—10.8	93	n.	9	4	.....	.....	10	.....	.....	0.118	3.0	heavy cl'ds.	
Kertch	29.91	759.7	29.93	760.2	47.1	8.4	89	calm	0	0	.....	5 cs	0	.....	.....	0	0	.....	Lagorio & Sastyrea.
Kieff	29.26	743.1	29.92	759.9	34.0	1.1	100	se.	7	3	.....	.....	10 n	.....	.....	.....	.....	foggy	Observatory.
Libau	29.84	758.0	29.67	758.6	29.1	— 1.6	87	ene.	.....	.....	1	.....	10	.....	.....	0	0	.....	E. Quaas.
Lugan	29.81	757.1	30.02	762.5	34.0	1.1	92	ene.	18	8	.....	.....	10	.....	.....	blank	blank	.....	Meteorological Obs'y.
Nikolaiev	29.93	760.2	30.00	762.1	35.6	2.0	100	calm	0	0	.....	.....	10 n	.....	.....	0.012	0.3	.....	Capt. Kurdakow.
Pekin, China	30.40	772.2	30.54	775.8	19.9	— 6.7	31	calm	0	0	.....	0	0	.....	.....	.....	.....	.....	Physical Observatory.
Petrozavodsk	29.76	755.9	29.97	761.3	21.9	— 5.6	93	nw.	7	3	.....	.....	10	.....	.....	0.118	3.0	.....	Dr. Bergmann.
Pinsk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
St. Petersburg	29.98	761.6	30.00	762.0	25.2	— 3.8	95	w.	7	3	.....	.....	10 n	.....	.....	0.075	1.9	.....	Central Physical Obs'y.
Sevastopol	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Semipalatinsk	29.61	752.2	30.34	770.7	6.8	—14.0	88	e.	20	9	.....	.....	10	.....	.....	0.039	1.0	.....	Major Lasarew.
Staroi Bykhov	29.53	750.0	30.01	762 2	33.3	0.7	98	ese.	7	3	.....	.....	10	.....	.....	0.150	3.8	.....	
Tashkend, Laboratory	28.47	723.1	30.06	763.5	59.7	10.4	45	calm	0	0	.....	.....	9	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.60	720.5	30.04	763.0	48.9	9.4	67	nnw.	9	4	.....	0	9	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.26	768.6	30.59	777.0	—21.6	—29.8	80	calm	0	0	.....	0	5	.....	.....	.....	.....	.....	
Vladivostock	30.13	765.4	30.20	767.1	8.2	—13.2	76	nw.	7	3	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.30	744 2	29.73	755.2	35.1	1.7	91	s.	4	2	.....	.....	10	.....	.....	.....	.....	heavy cl'ds.	Astronomical Obs'y.
Wilna	29.45	747.9	29.88	758.9	35.2	1.8	95	se.	2	1	.....	.....	10	.....	.....	.....	.....	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.50	774.6	30.85	783.6	—50.3	—45.7	78	calm	0	0	.....	.....	0	.....	.....	.....	.....	dense fog	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.76	755.9	37	2.8	90	sw.	.....	.....	3	0	0	.....	.....	0.1	3.	clear	J. Youngclause.
North Unst	.....	.....	29.88	758.9	.....	.....	.....	s.	.....	.....	0	3	4	sse.	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.67	753 6	29.78	756.3	51.1	10.6	57	w.	4.3	1.9	.....	0	1	.....	.....	0	0	almost clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.77	756.2	29.83	757.7	48.2	9.0	76	nw.	2.5	1.1	.....	3	6	w.	.....	0.177	4.5	almost cov.	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.85	682.0	29.93	760.3	33.8	1.0	70	w.	3.8	1.7	.....	0	1	.....	.....	0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	27.59	700.9	29.69	759.1	40.6	4.8	56	e.	4.7	2.1	.....	0	6	.....	.....	0	0	cloudy	The Staff.
Murcia, Met. Obs'y	29.67	753.6	29.80	756.8	53.2	11.8	79	nw.	1.8	0.8	.....	5	5	se.	.....	0.815	20.7	raining	Olayo Diaz, Director.
Oviedo	28.97	735.8	29.85	758.1	43.2	6.2	66	e.	13.4	6.0	.....	2 s	4 k	w.	w.	0.228	5.8	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.95	735.3	29.85	758.3	41.4	5.2	86	nw.	3.8	1.7	.....	.....	9	.....	.....	0.059	1.5	raining	R. Gil Villanueva, Dir.

* Total for 2 days.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	Upper.	Lower.	Inch.	Mill		
Spanish.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.81	757.1	29.86	758.5	78.6	25.9	88	n.	2.2	1.0	.....	1 c	5 ks	.....	ne.	0	0	cloudy.....	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.60	751.9	29.71	754.5	53.8	12.1	83	ne.	8.6	3.9	.....	.....	10	.....	ne.	0.462	11.7	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.95	760.0	30.04	762.9	77.0	25.0	92	calm	0	0	.....	4 k	4 kn	se.	se.	0.020	0.5	cloudy.....	Manuel Maese.
Tuguegarao, Philippine Id's	29.80	756.9	29.93	760.2	75.1	23.9	93	nw.	0.5	0.2	.....	0	8 ks	.....	ene.	0.41	10.4	rainy.....	José L. Yrastorza.
Swedish.																			
Haparanda	30.14	765.6	30.18	766.6	10.4	—12.0	100	ne.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.04	762.9	30.09	764.2	12.2	—11.0	93	ne.	.....	.....	4	.....	10	.....	.....	0.024	0.6	.....	
Hernosand	29.98	761 5	30.03	762.8	15.4	— 9.2	94	e.	.....	.....	6	.....	10	.....	.....	0.067	1.7	.....	
Stockholm	29.75	755.6	29.93	760.1	18.0	— 7.8	94	wnw.	.....	.....	2	.....	10	.....	.....	0.083	2.1	.....	
Wisby	29.78	756.4	29.84	757.9	.....	.....	.....	sse.	.....	.....	2	.....	3	.....	.....	0.004	0.1	.....	
Sub-series.																			
Upsala	29.82	757.5	29.91	759.7	14.2	— 9.9	97	nw.	4.0	1.8	.....	.....	3	.....	n.	0	0	.....	S. G. Fineman.
Swiss.																			
Geneva	28.30	718.8	29.76	756.0	41.7	5.4	47	sw.	.....	.....	1	.....	0	.....	.....	0.110	2.8	clear.....	The Observatory.
Turkish.																			
Constantinople	.....	.....	30.02	762.4	57.9	14.4	78	sw.	8	3.5	.....	.....	1	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	29.93	760.3	64.0	17.8	.....	s.	.....	.....	2	.....	2	.....	.....	0	0	slightly cld'y	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.96	761.0	64.9	18.3	67	n.	.....	.....	1	.....	5 ks	.....	sw.	1.79	45.5	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.15	765.8	30.24	768.1	19	— 7.2	76	nw.	4	1.8	.....	.....	10 s	.....	nw.	0.14	3.6	cloudy	J. O. Barnes.
Alpena, Michigan	29.57	751.1	30.28	769.1	5.3	—14.8	76	w.	18	8.0	.....	0	5 s	.....	w.	0.02	0.5	fair	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.20	640.1	30.28	769.1	26	— 3.3	59	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	W. C. Barnes.
Assiniaboine, Ft., Montana	26.90	683.2	29.93	760.2	8	—13.3	80	ne.	6	2.7	.....	.....	10 s	.....	n.	0	0	cloudy.....	B. O. Lenoir.
Atlanta, Georgia	29.34	745.2	30.57	776.5	13.5	—10.3	80	nw.	6	2.7	.....	0	0	.....	.....	0.02	0.5	clear.....	H. C. Smith.
Atlantic City, New Jersey	30.46	773.7	30.47	773.9	12	—11.1	42	w.	10	4.5	.....	0	0	.....	.....	0	0	clear.....	Jas. M. Watson.
Augusta, Georgia	30.45	773.4	30.65	778.5	23	— 5.0	61	ne.	7	3.1	.....	0	0	.....	.....	inap.	inap.	clear.....	John Healy.
Baltimore, Maryland	30.52	775.2	30.58	776.7	12	—11.1	61	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	Geo W Felger.
Barnegat, New Jersey	30.42	772.7	30.44	773.2	15.0	— 9.4	67	w.	27	12.1	.....	0	0	.....	.....	0	0	clear.....	G. A. Hill.
Bennett, Fort, Dakota	28 43	722.1	30.19	766.8	5	—15.0	76	nw.	2	0.9	.....	0	1 s	.....	.....	0	0	clear.....	A. Pritchard.
Benton, Fort, Montana	26.90	683.2	29.90	759.4	24	— 4.4	76	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	S. Wheaton.
Bismarck, Dakota	28.14	714.7	30.15	765.8	8	—13.3	80	s.	6	2.7	.....	0	hz.	.....	.....	inap.	inap.	clear.....	Cyrus Cramer.
Block Island, Rhode Island	30.19	766.8	30.22	767 6	18	— 7.8	84	nw.	33	14.8	.....	0	1 ks	.....	nw.	0.32	8.1	clear.....	J. T. Elker.
Boise City, Idaho	27.17	690.1	30.15	765.8	35	1.7	96	n.	4	1.8	.....	.....	10 n	.....	.....	0.07	1.8	light rain....	B. E. Light.
Boston, Massachusetts	29.97	761.2	30.13	765.3	17.0	— 8.3	67	w.	13	5.8	.....	0	0	.....	.....	0.22	5.6	clear.....	O. B. Cole.
Brownsville, Texas	30.43	772.9	30.48	774.2	35.8	2.1	61	n.	24	10.7	.....	.....	10 s	.....	n.	0.20	5.1	cloudy	M. McCarty.
Buffalo, New York	29.55	750.6	30.35	770.9	8.3	—13.2	78	w.	28	12.5	.....	0	2 ks	.....	w.	0	0	clear.....	W. Finn.
Buford, Fort, Dakota	27.88	708.1	30.12	765.0	8	—13.3	80	s.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy.....	F. A. Mellen.
Burlington, Vermont	29.81	757.2	30.12	765.0	8.0	—13.3	76	nw.	13	5.8	.....	5 cs	1 s	w	w.	inap.	inap.	fair.....	G. C. Schaeffer.
Cairo, Illinois	30.31	769.9	30.73	780.5	9.0	—12.8	87	se.	7	3.1	.....	.....	10 s	.....	se.	0	0	cloudy.....	W. H. Ray.
Cape Henry, Virginia	30.57	776.5	30.59	777.0	18	— 7.8	53	nw.	32	14.3	.....	0	3 s	.....	.....	0	0	clear.....	A. K. Alderson.
Cape May, New Jersey	30.45	773 4	30.48	774.2	16.0	— 8.9	67	nw.	40	17.9	.....	0	0	.....	.....	0	0	clear.....	W. E. Smith.
Cape Mendocino, California	29.49	749.0	30.17	766.3	52	11.1	100	nw.	10	4.5	.....	.....	fg.	.....	nw.	0	0	dense fog....	J. J. McLean.
Cedar Keys, Florida	30.39	771.9	30.41	772.4	37	2.8	51	n.	16	7.2	.....	4 cs	0	.....	.....	inap.	inap.	fair.....	F. W. Mixer.
Champaign, Illinois	29.80	756.9	30.07	779.0	—13.0	—25.0	70	sw.	4	1.8	.....	.....	10 s	.....	w.	0	0	cloudy.....	L. A. Welsh.
Charleston, S. Carolina	30.52	775.2	30.58	776.7	25.3	— 3.7	64	n.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	J. H. Smith.
Charlotte, N. Carolina	29.70	754.4	30.58	776.7	13.0	—10.6	61	ne.	4	1.8	.....	0	sk.	.....	.....	0	0	clear.....	D. O'Donoghue.
Chattanooga, Tennessee	29.78	756.4	30.64	778.2	12.0	—11.1	61	ne.	8	3.6	.....	1 cs	0	n.	.....	0	0	clear.....	B. L. Goulding.
Cheyenne, Wyoming	23.96	608.6	30.24	768.1	45.8	7.7	31	sw.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	E. McGovern.
Chicago, Illinois	29.85	758.2	30.61	777.5	— 7.1	—21.7	67	sw.	9	4.0	.....	0	0	.....	.....	0	0	clear.....	J. Mitchell.
Chincoteague, Virginia	30.52	775.2	30.54	775.7	14	—10.0	64	nw.	15	6.7	.....	0	0	.....	.....	0	0	clear.....	C. F. Dickens.
Cincinnati, Ohio	30.02	762.5	30.72	780.3	1	—18.3	42	sw.	8	1.3	.....	1 k	1 s	sw.	sw.	inap.	inap.	clear.....	R. B. Watkins.
Cleveland, Ohio	29.79	756.7	30.58	776.7	— 6.7	—21.5	100	sw.	12	5.4	.....	.....	10 s	.....	w.	0.05	1.3	cloudy.....	J. B. Newlin.
Coleman City, Texas	28.60	726.4	30.50	774.7	25	— 3.9	64	se.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy.....	L. Dorman.
Columbus, Ohio	29.75	755.6	30.06	778.7	— 3	—19.4	62	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	D. Cuthbertson.
Concho, Fort, Texas	28.44	722.4	30.46	773.7	26.6	— 3.0	67	se.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	J. McGlone.
Custer, Fort, Montana	26.66	677.2	30.06	763.5	27	— 2.8	77	e.	6	2.7	.....	0	6 k	.....	.....	0	0	fair	W. B. Lamar.
Davenport, Iowa	29.90	759.4	30.61	777.5	4	—15.6	80	s.	6	2.7	.....	.....	10 s	.....	s.	0	0	cloudy.....	R. R. Martin.
Davis, Fort, Texas	25.40	645.1	30.34	770.6	31	— 0.6	65	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	J. Williams.
Dayton, Washington T'y	28.19	716.0	30.02	762.5	45	7.2	93	sw.	12	5.4	.....	.....	10 s	.....	sw.	0.64	16.3	threatening..	D. Moore.
Deadwood, Dakota	25.22	640.6	30.21	767.3	33	0.6	81	w.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	F. Willson.
Delaware Breakwater, Del.	30.52	775 2	30.54	775.7	15	— 9.4	83	nw.	27	12.1	.....	0	4 s	.....	nw.	0	0	fair.....	T. S. Townsend.
Denison, Texas	29.74	755.4	30.59	777.0	20.7	— 6.3	70	ne.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. W. Byram.
Denver, Colorado	24.67	626.6	30.19	766.8	35.5	1.9	57	se.	4	1.8	.....	0	2 s	.....	.....	0	0	clear.	F. M. Neal.
Des Moines, Iowa	29.55	750.6	30.53	775.4	6	—14.4	76	sw.	8	3.6	.....	.....	10 s	.....	sw.	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.76	755.9	30.52	775.2	3.0	—16.1	83	sw.	14	6.3	.....	.....	10 k	.....	w.	0	0	cloudy.....	C. F. R. Wappenhans.
Dodge City, Kansas	27.52	699.0	30.32	770.1	2	—15.6	76	s.	14	6.3	.....	0	0	.....	.....	0	0	clear.....	V. P. Temple.
Dubuque, Iowa	29.82	757.4	30.59	777.0	— 2	—18.9	48	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. Harvey Smith.
Duluth, Minnesota	29.60	751.8	30.41	772.4	—15.5	—26.4	64	sw.	6	2.7	.....	0	9 s	.....	sw.	0	0	cloudy.....	N. B. Conger.
Eagle Pass, Texas	29.74	755.4	30.58	776.7	36.0	2.2	53	ne.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy.....	F. Belford.
Eagle Rock, Idaho	25.19	639.8	30.11	764.8	34	1.1	82	n.	8	3.6	.....	.....	10 s	.....	sw.	0	0	cloudy.....	J. M. Clifford.
Eastport, Maine	29.66	753.4	29.73	755.1	10.0	—12.2	80	w.	22	9.8	.....	0	1 s	.....	w.	0.22	5.6	clear.....	D. C. Murphy.
Elliott, Fort, Texas	27.38	695.4	30.34	770.6	13	—10.6	64	se.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	W. J. Cundall.
El Paso, Texas	26.52	673.6	30.38	771.6	27.2	— 2.7	88	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	J. O'Dowd.
Erie, Pennsylvania	29.68	753 9	30.44	773.2	4	—15.6	100	sw.	12	5.4	.....	.....	10 s	.....	.....	0.39	9.9	cloudy.....	Peter Wood.
Escanaba, Michigan	29.67	753.6	30.35	771.9	—10.0	—23.3	74	w.	10	4.5	.....	0	0	.....	.....	0.01	0.3	clear.....	George Heathcote.
Fredericksburg, Texas	28.65	727.7	30.47	773.9	28	— 2.2	77	se.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy.....	Frank Halwegler.
Galveston, Texas	30.49	774.4	30.54	775.7	35	1.7	53	ne.	16	7.2	.....	0	2 ks	.....	.....	0.04	1.0	clear.....	E. O'C. Machnerney.
Grand Haven, Michigan	29.78	756.4	30.49	774.4	13.0	—10.6	80	w.	13	5.8	.....	.....	10 s	.....	.....	0.06	1.5	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.37	644.4	30.25	768.3	34	1.1	66	n.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	Robert C. Lord.
Hatteras, North Carolina	30.54	775.7	30.56	776.2	21	— 6.1	58	nw.	25	11.2	.....	hz.	3 k	.....	.....	0.24	6.1	clear.....	R. M. Crawford.
Helena, Montana	25.58	649.7	29.96	761.0	22	— 5.6	88	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy..	N. O. Smith.
Henrietta, Texas	29.47	748.5	30.55	776.0	24	— 4.4	88	se.	10	4.5	.....	.....	10 ks	.....	.....	0	0	cloudy.....	J. P. Sherry.
Huron, Dakota	28.66	728.0	30.20	767.1	11	—11.7	61	se.	15	6.7	.....	0	5 s	.....	se.	0	0	fair.....	S. W. Glenn.
Indianapolis, Indiana	29.82	757.4	30.67	779.0	— 7	—21.7	74	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	O. Schutze.
Indianola, Texas	30.51	774.9	30.54	775.7	35.0	1.7	47	n.	26	11.6	.....	0	8 k	.....	n.	0.03	0.8	cloudy.....	I. A. Reed.
Jacksboro, Texas	29.25	742.9	30.49	774.4	21	— 6.1	70	n.	10	4.5	.....	.....	10 s	.....	nw.	0	0	cloudy.....	D. J. Carr.
Jacksonville, Florida	30.41	772.4	30.46	773.7	42	5.6	57	n.	10	4.5	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.29	693.2	29.99	761.7	15	— 9.4	83	calm	0	0	.....	0	5 s	.....	.....	inap.	inap.	fair.....	A. Schneider.
Keokuk, Iowa	29.92	760.0	30.63	778.0	1.0	—17.2	72	se.	1	0.4	.....	.....	10 s	.....	se.	0	0	cloudy.....	F. Z. Gosewisch.
Key West, Florida	30.15	765.8	30.17	766.3	68.0	20.0	90	ne.	20	8.9	.....	2 c	0	w.	.....	0	0	clear.....	R. H. Paxton.
Kittyhawk, North Carolina	30.56	776.2	30.58	776.7	16	— 8.9	67	nw.	17	7.6	.....	hz.	1 k	.....	n.	0	0	clear.....	H. Mc P. Baldwin.
Knoxville, Tennessee	29.55	750 6	30.63	778.0	7	—13.9	63	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	J. A. Cody.
La Crosse, Wisconsin	29.66	753.4	30.51	774.9	— 4	—20.0	65	s.	9	4.0	.....	.....	10 s	.....	.....	0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.59	751.6	30.55	776.0	12	—11.1	80	s.	8	3.6	.....	3 cs	0	.....	.....	0	0	clear.....	A. W. Browne.
Lewiston, Idaho	29.04	737.6	29.92	760.0	43.5	6.4	92	e.	1	0.4	.....	.....	10 n	.....	.....	0.21	5.3	light rain.....	W. Bell.
Little Rock, Arkansas	30.38	771.6	30.71	780.0	18	— 7.8	46	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	W. U. Simons.
Los Angeles, California	29.71	754.6	30.11	764.8	40	4.4	96	w.	4	1.8	.....	.....	fg.	.....	.....	0	0	dense fog....	T. S. Collins.
Louisville, Kentucky	30.08	764.0	30.68	779.3	6	—14.4	76	n.	3	1.3	.....	0	3 s	.....	.....	0	0	clear.....	L. M. Dey.
Lynchburg, Virginia	29.85	758 2	30.58	776.7	9.8	—12.3	58	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	Lewis Duane.
Mackinaw City, Michigan	29.57	751.1	30.47	768.8	12.0	—11.1	80	nw.	26	11.6	.....	10 k	0	nw.	.....	inap.	inap.	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.55	776.0	30.56	776.2	20	— 6.7	70	nw.	16	7.2	.....	0	0	.....	.....	0	0	clear.....	C. A. Shaw.
Madison, Wisconsin	29.45	748.0	30.55	776.0	— 6	—21.1	62	sw.	3	1.3	.....	9 cs	0	w.	.....	0	0	cloudy.....	F. P. Chaffee.
Maginnis, Fort, Montana	25.29	642.4	29.83	757.7	41	5.0	52	nw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy.....	F. Burke.

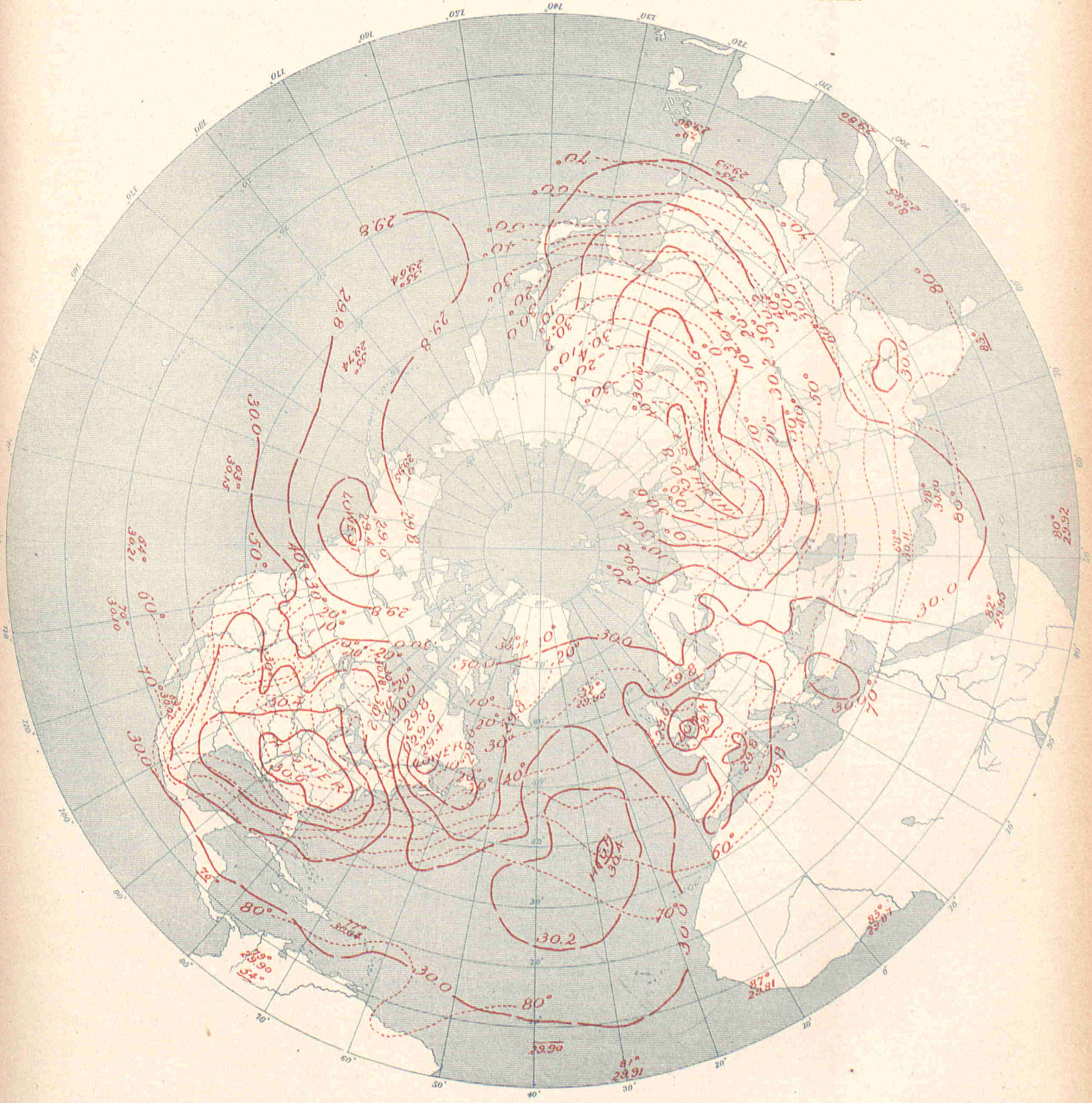
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
McKavett, Fort, Texas	28.03	711.9	30.41	772.4	22	— 5.6	88	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.50	749.3	30.28	769.1	0	—17.8	39	nw.	20	8.9	.....	0	0	.....	.....	inap.	inap.	clear	J. Gilligan.
Memphis, Tennessee	30.34	770.6	30.70	779.8	11.5	—11.4	73	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	D. T. Flannery
Milwaukee, Wisconsin	29.76	755.9	30.57	776.5	— 7	—21.7	100	sw.	12	5.4	.....	0	fg.	.....	.....	0	0	clear	W. Line
Missoula, Fort, Montana	26.54	674.1	30.00	762.0	29	— 1.7	88	nw.	4	1.8	.....	.....	10 n	.....	.....	0.10	2.5	light hail	J. H. Young.
Mobile, Alabama	30.51	774.9	30.55	776.0	25	— 3.9	73	ne.	12	5.4	.....	0	0	.....	.....	0.04	1.0	clear	C. A. Read.
Montgomery, Alabama	30.35	770.9	30.59	777.0	19.2	— 7.1	75	ne.	5	2.2	.....	0	0	.....	.....	0.02	0.5	clear	J. B. McLaughlin.
Moorhead, Minnesota	29.21	741.9	30.32	770.1	—17	—27.2	100	se.	16	7.2	.....	0	0	.....	.....	c	0	clear	H. Bessant.
Morgantown, W. Virginia	29.57	751.1	30.64	778.2	3.5	—15.8	71	sw.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. C. Sprigg, jr.
Mt. Washington, N. H	22.90	581.6	29.52	749.8	—23.0	—30.6	100	nw.	98	43.8	.....	.....	fg.	.....	nw.	0	0	dense fog	B. S. Pague.
Nashville, Tennessee	30.05	763.3	30.66	778.7	6.0	—14.4	87	ne.	8	3.6	.....	4 cs	0	w.	.....	0	0	fair	L. N. Jesunofsky.
New Haven, Connecticut	30.16	766.1	30.28	769.1	12	—11.1	80	w.	10	4.5	.....	0	0	.....	.....	0.09	2.3	clear	J. H. Sherman.
New London, Connecticut	30.22	767.6	30.27	768.8	15	— 9.4	67	nw.	9	4.0	.....	0	0	.....	.....	0.29	7.4	clear	J. G. Lynch.
New Orleans, Louisiana	30.48	774.2	30.54	775.7	32.0	0.0	41	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	L. Dunne.
Newport, Rhode Island	30.14	765.5	30.19	766.8	18.3	— 7.6	63	w.	17	7.6	.....	0	0	.....	.....	0.27	6.9	clear	W. McGillivray.
New York, New York	30.19	766.8	30.38	771.6	12	—11.1	61	w.	18	8.0	.....	0	0	.....	.....	0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.56	776.2	30.59	777.0	17	— 8.3	53	nw.	16	7.2	.....	0	0	.....	.....	0	0	clear	Wm. Davis.
North Platte, Nebraska	27.10	688.3	30.26	768.6	11.6	—11.3	65	calm	0	0	.....	0	2 s	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.07	763.8	30.11	764.8	38.0	3.3	89	calm	0	0	.....	0	0	.....	.....	0.34	8.6	clear	J. Dascomb.
Omaha, Nebraska	29.18	741.2	30.46	773.7	7.6	—13.6	71	s.	12	5.4	.....	0	0	.....	.....	0	0	clear	A. Pollak.
Oswego, New York	29.86	758.4	30.21	767.3	16.8	— 8.4	86	nw.	16	7.2	.....	.....	10 n	.....	.....	0.26	6.6	light snow	J. G. Linsley.
Palestine, Texas	30.02	762.5	30.60	777.2	29.0	— 1.7	77	n.	6	2.7	.....	.....	10 ks	.....	nw.	0	0	cloudy	L. M. Pindell.
Pensacola, Florida	30.50	774.7	30.53	775.4	26.1	— 3.3	28	ne.	10	4.5	.....	1 cs	0	.....	.....	inap.	inap.	clear	M. McGauran.
Philadelphia, Pa	30.37	771.4	30.48	774.2	14.5	— 9.7	66	w.	15	6.7	.....	0	0	.....	.....	0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.74	450 6	30.40	772.1	16	— 8.9	56	nw.	20	8.9	.....	0	2 s	.....	.....	0	0	clear	H. Hall.
Pioche, Nevada	24.13	612.9	30.30	769.6	35.3	1.8	58	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.74	755.4	30.60	777.2	1.0	—17.2	72	sw.	8	3.6	.....	0	0	.....	.....	0.03	0.8	clear	W. A. Reid.
Poplar River, Montana	27.61	701.3	29.97	761.2	.....	.....		nw.	.....	.....	1	0	0	.....	.....	0.05	1.3	clear	W. D. Maxwell.
Port Eads, Louisiana	30.47	773.9	30.48	774.2	43.5	6.4	70	ne.	23	10.3	.....	0	3 k	.....	ne.	0.07	1.8	clear	H. B. Boyer.
Port Huron, Michigan	29.72	754 9	30.44	773.2	4.3	—15.4	85	w.	9	4.0	.....	0	2 s	.....	w.	0	0	clear	W. O. Bailey.
Portland, Maine	29.92	760.0	29.96	761.0	14.0	—10.0	64	w.	19	8.5	.....	0	0	.....	.....	0.14	3.6	clear	W. W. Eichelberger.
Portland, Oregon	30.02	762.5	30.08	764.0	47.0	8.3	89	sw.	1	0.4	.....	0	1 s	.....	.....	1.00	25.4	clear	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	20	— 6.7	70	nw.	.....	.....	4	0	hz.	.....	.....	0	0	clear	F. S. Coburn.
Prescott, Arizona	24.89	632.2	30.26	768.6	29.4	— 1.4	80	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.07	763.8	30.10	764 5	17	— 8.3	51	nw.	28	12.5	.....	2 k	0	nw.	.....	0.22	5.6	clear	P. T. Jenkins.
Punta Rassa, Florida	30.23	767.8	30.24	768.1	57	13.9	69	ne.	17	7.6	.....	6 c	1 s	w.	.....	0	0	fair	W. J. Evans.
Red Bluff, California	29.76	755.9	30.14	765.5	48	8.9	86	nw.	4	1.8	.....	0	8 ks	.....	w.	0	0	cloudy	J. R. Williams.
Rochester, New York	29.57	751.1	30.28	769.1	7	—13.9	87	w.	27	12.1	.....	5 k	hz.	w.	.....	0.24	6.1	fair	E. W. McGann
Roseburg, Oregon	29.62	752.3	30.19	766.8	46	7.8	93	ne.	1	0.4	.....	0	9 s	.....	s.	0.23	5.8	cloudy	J. J. Nanry.
Sacramento, California	30.07	763.8	30.15	765.8	45.5	7.5	93	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. A. Barwick.
St. Louis, Missouri	30.06	763 5	30.71	780.0	3.0	—16.1	72	nw.	6	2.7	.....	.....	10s;sk	.....	.....	0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.43	747.5	30.39	771.9	— 3.0	—19.4	83	se.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	A. P. Leavitt.
St. Paul, Minnesota	29.91	759.7	29.95	760.7	0	—17.8	100	calm	0	0	.....	0	3 s	.....	.....	0	0	clear	F. F. Lyons.
St. Vincent, Minnesota	29.24	742.7	30.23	767.8	— 10	—23.3	88	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.67	652.0	30.21	767.3	37	2.8	56	se.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. Craig.
San Antonio, Texas	29.80	756.9	30.52	775.2	30.5	— 0.8	78	n.	6	2.7	.....	0	9 s	.....	.....	0.02	0.5	cloudy	T. J. Kenan.
San Diego, California	30.00	762.0	30.07	763.8	46.4	8.0	95	n.	3	1.3	.....	.....	fg.	.....	.....	0	0	dense fog	A. C. Dobbins.
Sandusky, Ohio	29.84	757.9	30.57	776.5	— 5	—20.6	62	w.	14	6.3	.....	0	0	.....	.....	0	0	clear	M. H. Perry
Sandy Hook, New Jersey	30.35	770.9	30.38	771.6	4.0	—15.6	69	w.	22	9.8	.....	0	0	.....	.....	0	0	clear	B. A. Blundon.
San Francisco, California	30.09	764.3	30.16	766.1	48	8.9	96	ne.	2	0.9	.....	.....	fg.	.....	.....	0	0	dense fog	N. Gorom.
Santa Fé, New Mexico	23.35	593.1	30.34	770.6	32	0.0	68	calm	0	0	.....	0	0	.....	.....	0	0	clear	H. U. Jones.
Savannah, Georgia	30.48	774.2	30.58	776.7	28.5	— 1.9	63	ne.	10	4.5	.....	0	0	.....	.....	0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.08	662.4	29.91	759.7	41	5.0	59	sw.	16	7.2	.....	0	8 s	.....	.....	0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	30.35	770.9	30.60	777.2	22	— 5.6	73	e.	5	2.2	.....	0	6 s	.....	e.	0	0	fair	E. N. Meekins.
Sill, Fort, Indian Territory	29.19	741.4	30.52	775.2	22	— 5.6	58	se.	16	7.2	.....	.....	10 s	.....	.....	0	0	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.42	620.3	30.26	768.6	26.5	— 3.1	86	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	29.23	742.4	29.30	744.2	40.2	4.6	76	e.	10	4.5	.....	.....	10 n	.....	e.	0 11	2.8	light rain	F. W. Fickett.
Smith, Fort, Arkansas	30.12	765.0	30.62	777.7	16.0	— 8.9	67	e	8	3.6	.....	0	0	.....	.....	0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.55	776.0	30.59	777.0	17	— 8.3	83	n.	8	3.6	.....	0	1 s	.....	.....	0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	27.84	707.1	29.97	761.2	35	1.7	89	nw.	1	0.4	.....	.....	10 s	.....	.....	0.98	24.9	cloudy	H. Clifford.
Springfield, Illinois	29.95	760.7	30.68	779.3	0	—17.8	74	calm	0	0	.....	.....	10 s	.....	w.	0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.18	766.6	30.32	770.1	17	— 8.3	67	w.	.....	.....	6	0	0	.....	.....	0.08	2.0	clear	Charles Mayr.
Springfield, Mo	29.04	737.6	30.57	776.5	12	—11.1	61	se.	9	4.0	.....	0	2 s	.....	se.	0	0	clear	J. B. Marbury.
Starkville, Miss	30.16	766.1	30.66	778.7	13	—10.6	87	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	C. Dill.
Stevenson, Fort, Dakota	28.05	712.5	30.11	764.8	0	—14.4	73	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. Burrows.
Stockton, Fort, Texas	27.33	691.6	30.37	771.4	23	— 5.0	88	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	30.00	763.5	30.12	765.0	10.0	— 8.9	74	nw.	32	14.3	.....	2 k	0	w.	.....	0.20	5.1	clear	G. Liebmann.
Thomas, Camp, Arizona	27.45	697.2	30.27	768.8	32.5	0.3	83	calm	.....	.....	0	0	0	.....	.....	0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.81	757.2	30.55	776.0	— 2	—18.9	95	sw.	14	6.3	.....	0	0	.....	.....	0	0	clear	A. Buell.
Tucson, Arizona	27 67	702.8	30.17	766.3	47	8.3	66	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.65	753.1	30.04	763.0	44	6.7	93	nw.	4	1.8	.....	0	0	.....	.....	0.32	8.1	clear	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	35.6	2.0	82	n	.....	.....	1	0	0	.....	.....	0	0	clear	D. Brooks.
Vicksburg, Mississippi	30.38	771.6	30.65	778.5	19.5	— 6.9	70	ne.	6	2.7	.....	0	0	.....	.....	0.02	0.5	clear	James Kenealy.
Visalia, California	29.76	755.9	30.14	765.5	42.0	5.6	89	e.	2	0.9	.....	0	0	.....	.....	0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.36	618.7	30.13	765.3	26.1	— 3.3	67	ne.	4	1.8	.....	0	1 ks	.....	.....	0	0	clear	T. M. Ambler.
Washington, D. C	30.48	774.2	30.60	777.2	9.2	—12.7	67	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	B. M. Pursell.
West Las Animas, Colorado	26.01	660.6	30.17	766.3	13	—10.6	74	n.	2	0.9	.....	0	4 s	.....	.....	0	0	fair	F. H. Brandenburg
Williamsport, Pa	29.83	757.7	30.46	773.7	7	—13.9	72	w.	16	7.2	.....	0	hz.	.....	.....	inap.	inap.	clear	B. F. Hough.
Wilmington, N. Carolina	30.55	776.0	30.61	777.5	20	— 6.7	70	ne.	11	4.9	.....	0	0	.....	.....	0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.64	651.2	30.17	766.3	41	5.0	44	sw.	9	4.0	.....	0	8 s	.....	w.	0	0	cloudy	J. Grover.
Yankton, Dakota	28.85	732.8	30.28	769.1	9	—12.8	76	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. H. Atfield.
Yuma, Arizona	29.87	758.7	30.02	762.5	54.3	12.4	40	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8	.....	.....	53.5	11.9	91	calm	0	0	.....	0	1 s	.....	w.	0.05	1.3	clear	Joaquin Gomez.
Havana, Cuba, W. I	30.04	763.0	30.10	764.5	74.1	23.4	71	ne.	12	5.4	.....	3c;ck	4 ks	w.	ne.	0	0	fair	Benito Vines, S. J.
Kingston, Jamaica, W. I	30.00	762.0	30.01	762.2	70	21.1	86	calm	0	0	.....	6 c	0	.....	.....	0	0	fine	Robert Johnston.
Paramaribo, S. A	30.01	762.2	30.01	762.2	80	26.7	82	e.	.....	.....	2	5 ck	4 s	e.	.....	0.320	8.1	.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.90	759.4	79	26.1	85	calm	.....	.....	0	5 c	2 k	n.	calm	0	0	fair	Francisco J. Cisneros.
Rivas, Nicaragua, C. A	.....	.....	.....	.....	76	24.4	95	ne.	.....	.....	3	0	0	.....	.....	0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.55	750.6	29.61	752.1	33	0.6	88	nw.	.....	.....	3	.....	6 ks	.....	.....	0.02	0.5	fair	W. J. Fisher.
St. Thomas, W. I	29.94	760.5	30.06	763.5	79	26.1	74	e.	.....	.....	.....	0	2 k	.....	.....	0.06	1.5	fine	Aug. Walloe.
York Factory, B. A	30.11	764.8	30.18	766.6	—30.0	—34.4	.....	w.	13	5.8	.....	0	0	.....	.....	0	0	clear	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
BRITISH NAVAL.																		
H. M. S. Amethyst, Montevideo, Uruguay †	30.09	764.3	66.5	19.2	84	ese.			2		3							d. clouds.
H. M. S. Audacious, N. 6° 01′, E. 94° 37′	29.85	758.2	81	27.2	91	w.			2		10	w.						raining.
H. M. S. Beacon, Lake Timsah, Egypt			69	20.6	65	wsw.			2		0					1	w.	raining.
H. M. S. Boadecia, Saldanha Bay, Cape Colony	29.93	760.2				s.			2-3		2					1	wsw.	blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.08	764.0	70	21.1	79	wnw.			3		4	wnw.						d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.30	769.6	48	8.9	62	ene.			3-5		10							d. clouds.
H. M. S. Comus, N. 47° 04′ W. 125° 04′	30.10	764.5	44	6.7	92	sw.			3		7							drizzling.
H. M. S. Curacoa, Yokohama, Japan	29.95	760.7	53.5	11.9		calm			0		0					4	wnw.	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.72	754.9	68	20.0	64	ne.			1-4		3	ne.						blue sky.
H. M. Dock-Yard, Bermuda, W. I.	30.03	762.7	68.5	20.3	84	wsw.			1-2		7	wsw.						squally.
H. M. S. Fawn, S. 23° 38′, E. 43° 38′	29.89	759.2	80.5	26.9	82	w.			2		8							d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.96	761.0	60	15.6	94	calm			0		10							d. clouds.
H. M. S. Iron Duke, N. 18° 55′, E. 114° 00′	29.83	757.7	75	23.9	90	ene.			4-5		7	ne.						drizzling.
H. M. S. Kingfisher, S. 2° 30′ W. 82° 50′	29.94	760.5	69	20.6		s.			2		4	s.				3	ne.	d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	30.02	762.5	64.3	17.9	92	nne.			4		3					4	s.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.93	760.2	61	16.1		calm			0							2	n.	squally.
H. M. S. Magpie, N. 34° 18′ E. 128° 50′	30.23	767.8	47.5	8.6	56	nne.			3		3							d. clouds.
H. M. S. Northampton, St. John's Antigua, W. I.	29.96	761.0	81	27.2	78	ne.			3		4	ene.				4	ne.	d. clouds.
H. M. S. Rocket, S. 13° 30′, W. 76° 33′	29.96	761.0	65	18.3	?	s.			2		3							d. clouds.
H. M. S. Startling, N. 5° 29′, E. 2° 22′	29.87	758.7	83.3	28.5	91	s.			1		3	ssw.				2-3	sw.	d. clouds.
H. M. S. Swiftsure, S. 12° 04′ W. 77° 10′	29.99	761.7	65	18.3	100	se.			1		10							d. clouds.
H. M. S. Sylvia, Peckett Harbor, Patagonia	29.30	744.2	50	10.0	82	ne.			2		10					3		overcast.
H. M. S. Tourmaline, N. 14° 00′, E. 49° 35′	29.97	761.2				e.			3		1	e.						misty.
H. M. S. Woodlark, Bushire, Persia	30.01	762.2	67.5	19.7	79	n.			1-2		2	nw.				2	e.	blue sky.
H. M. S. Zephyr, Chee-foo, China	30.28	769.1	28.5	— 1.9	87	nw.			2-4		2	nw.						d. clouds.
PORTUGUESE NAVAL.																2	e	d. clouds.
Tamega, Macao, China	30.05	763.2	70.7	21.5	78	n.			1		5							d. clouds.
UNITED STATES NAVAL.																		
Navy Yard, Pensacola, Fla	30.38	771.6	26	— 3.3	76	n.	8	3.6			2		nw.	o	o			fair.
Navy Yard, Portsmouth, N. H.	30.04	763.0	15	— 9.4	?	wnw.	25	11.2			0			o	o			clear.
Naval Hospital, Yokohama, Japan*	29.83	757.7	48.5	9.2	81	calm			0		2			o	o			clear.
Adams, Sitka, Alaska*†	29.35	745.5	41	5.0	65	e.			1		10	e.						light rain.
Alaska, N. 36° 37′, W. 145° 05′	30.15	765.8	63	17.2	83	ene.			6		8	ne.		o	o	long	nw.	cloudy
Alliance, Hampton Roads, Va	30.58	776.7	21	— 6.1	85	nw.			3-4		0			o	o			clear.
Ashuelot, Nagasaki, Japan	30.17	766.3	55	12.8	87	nne.			1		1							clear.
Brooklyn, Keel Point, Patagonia	29.24	742.7	56	13.3	87	ese.	8	3.6			10	ese.		o	o	sm'h		cloudy.
Colorado, New York, N. Y.	30.46	773.7	13	—10.6	100	wsw.	25	11.2			0			o	o			clear.
Enterprise, Norfolk, Va	30.60	777.2	17	— 8.3	?	nnw.			3		2	calm						clear.
Essex, Callao, Peru	29.91	759.7	65	18.3	89	s			1		8	s.				sm'h	s.	cloudy.
Franklin, Norfolk, Va	30.60	777.2	16	— 8.9	?	nnw.	5	2.2			0			o	o			clear.
Galena, Montevideo, Uruguay	29.94	760.5	67	19.4	90	ene.			2		5	e.				sm'h		hazy.
Hartford, Sandy Point, Patagonia*	29.24	742.7	49	9.4	100	nne.			3		10	n;e	.4 h'r	4 h'r	mod.	ne.		cloudy.
Independence, Mare Island, Cal.	30.16	766.1	47	8.3	100	calm			0		0			o	o			foggy.
Iroquois, Callao, Peru	29.93	760.2	65	18.3	89	se.			1		10							overcast.
Jamestown, Boston, Mass.	30.09	764.3	16	— 8.9	66	nw.			5		0							clear.
Juniata, N. 35° 06′, W. 52° 31′*	30.07	763.8	75	23.9	95	wsw.			2		5	calm				sm'h		fair.
Kearsarge, Norfolk, Va	30.57	776.5	18	— 7.8	84	nnw.			4		0							clear.
Lackawanna, Callao, Peru*	29.88	758.9	64	17.8	94	sse			1		10	sse.				sm'h		cloudy.
Lancaster, Naples, Italy*	29.76	755.9	63	17.2	94	wsw.			4		8	ssw.				sm'h		fair.
Michigan, Erie, Pa.	30.37	771.4	11	—11.7	100	sw.			4		10	sw.						cloudy.
Minnesota, New York, N. Y.	30.42	772.7	37	2.8	100	nw.	15	6.7			0							clear.
Monocacy, Kobe, Japan	30.05	763.3	57	13.9	93	calm			0		0							clear.
New Hampshire, Newport, R. I.	30.25	768.3	19	— 7.2	69	w.			5		2					mod.	w.	fair.
Nipsic, Lisbon, Portugal*	29.83	757.7	49	9.4	50	nne.			3		0					sm'h		clear.
Onward, Callao, Peru	30.06	763.5	63	17.2	100	sse.			2		10	n.				long	w.	cloudy.
Palos, Tien-Tsin, China*	30.45	773.4	21	— 6.1	100	calm			0		0							clear.
Pensacola, Callao, Peru*	29.86	758.4	64	17.8	94	sse.	1	0.4			10			o	o	sm'h		cloudy.
Powhatan, Boston, Mass.	30.12	765.0	15	— 9.4	64	w.			1		2							clear.
Quinnebaug, Villefranche, France*	29.71	754.6	58	14.4	41	nnw.			1		5	calm				sm'h		fair.
Ranger, N. 16° 09′, W. 94° 22′	29.98	761.5	74	23.3	72	nw.			4		2	calm				mod.	nw.	clear.
Richmond, Yokohama, Japan*	30.04	763.0	55	12.8	68	e.			1		2	w.		o	o			fair.
Saratoga, Newport, R. I.	30.31	769.9	17	— 8.3	34	w.			3		2	w.		o	o	sm'h		clear.
St. Louis, League Island, Pa.	30.72	780.3	12	—11.1	80	wnw.			2		0			o	o			clear.
Swatara, Hampton Roads, Va*.	30.39	771.9	17	— 8.3	67	nw.			5		5	calm				sm'h		hazy.
Tennessee, Fort Monroe, Va.	30.57	776.5	23	— 5.0	46	nw.	20	8.9			0			o	o			squally.
Vandalia, Hampton Roads, Va*	30.52	775.2	20	— 6.7	84	nw.			4		1	calm						clear.
Wabash, Boston, Mass.	30.10	764.5	14	—10.0	64	nw.	6	2.7			2	e.	0.16	4.1				clear.
Wachusetts, Mare Island, Cal*	30.07	763.8	44	6.7	100	var.			1		0			o	o	sm'h		clear.
Wyandotte, Washington, D. C	30.74	780.8	26	— 3.3	76	nw.			2		5	nw.		o	o			fair.
Yantic, Hampton Roads, Va.	30.64	778.2	19	— 7.2	?	nw.			3		2							fair.
MERCHANT MARINE.																		
S. S. Grecian, N. 0° 08′, W. 31° 06′*	29.91	759.7	81	27.2	78	ese.			5		4	ese.	½ h'r	½ h'r	mod.	ne.		clear.
S. S. Nova Scotian, N. 43° 38′ W. 69° 14′	29.85	758.2	15	— 9.4		w.			5		5	w.			sli't	w.		fair.
S. S. Scandinavian, N. 43° 03′ W. 59° 51′	29.73	755.1	39	3.9		wsw.			7		10	wnw.	8 h'r	8 h'r	high	wnw.		showery.
S. S. British Crown, N. 47° 17′, W. 51° 54′†	29.07	753.6	40	4.4		sse.			6		10	sse.	8 h'r	8 h'r	h'vy	ssw.		raining.
S. S. British Prince, N. 50° 18′, W. 19° 32′†	30.10	764.5	44	6.7		n.			2-4		6	nnw.	o	o	mod.	nnw.		fair.
S. S. Indiana, N. 51° 40′, W. 160° 00′†	29.76	755.9	47	8.3	85	ne.			5		2	ne.			cross	ne.		fine.
S. S. Lord Clive, Philadelphia, Pa						nw.			3		0			o	o			clear.
S. S. Ohio, Philadelphia, Pa			11	—11.7	80	wsw.			5		7	nw.						cloudy.
S. S. Pennsylvania, Philadelphia, Pa†	30.33	770.4	19	— 7.2		nw.			3		1	nw.						clear.
S. S. Stella, N. 47° 40′ W. 23° 08′	30.13	765.4	48.2	9		nnw.			2		6	n.				3	nw.	drizzling.
S. S. Bolivia, Glasgow, Scotland*†	29.82	757.4	36	2.2	90	calm			0		10		light	light				
S. S. Dorian, N. 53° 35′, W. 5° 40′ *	29.57	751.1	43	6.1	57	n.			5		6	n.	o	o	sm'h			cloudy.
S. S. Elysia, N. 37° 07′, W. 72° 25′ †	30.50	774.7	33	0.6		nnw.			6		10	nnw.	snow	snow	r'gh	nnw.		cloudy.
S. S. Ethiopia, N. 41° 35′ W. 63° 14′	29.83	757.7	33	0.6		w.			6		8	w.	7 h'r	7 h'r	hv'y	wnw.		cloudy.
S. S. Galatia, N. 13° 22′, E. 42° 41′†	30.05	763 3	82.3	27.9	91	sse.			4		0		o	o	mod.	sse.		clear.
S. S. Ailsa, N. 17° 58′, W. 76° 46′†	30.12	765.0	79	26.1	?	ne.			2		2	ne.	o	o	sm'h			fair.
S. S. Alvo, N. 12° 00′, W. 81° 00′	29.94	760.5	78	25.6		ne.			5-6		6 ks;n	ene.	3 h'r	3 h'r	long	ne.		showery
S. S. Antillas, Kingston, Jamacia, W. I.			78	25.6		calm			0									
S. S. Gordon Castle, N. 8° 42′, E. 108° 10′	29.90	759.4	76.5	24.7	91	nne.			3-4		8							d. clouds.
S. S. Inchkeith, S. 40° 32′, E. 61° 16′	29.64	752.8	61	16.1	88	nw.			6		6							rain & fog.
Mertola, N. 43° 20′, W. 11° 48′	29.97	761.2	50.2	10.1	86	n.			6		4							squally.
S. S. Mexico, N. 32° 43′, W. 117° 52′ †	30.14	765.5	57	13.9	87	nw.			2		10	nw.			sm'h	nw.		cloudy.
S. S. Gallia, N. 41° 05′, W. 61° 12′	29.86	758.4	48	8.9	92	wnw.			7		10	nw.	o	o	mod.	w.		
S. S. Marathon, Smyrna, Turkey	30.02	762.5	59	15.0		sse.			2		2	sse.	2 h'r	2 h'r				fine.
S. S. Scytha, N. 47° 37′, W. 37° 38′	30.19	766.8	57	13.9		calm			0		7?	calm	4 h'r	4 h'r	mod.	wsw.		clear ?
S. S. Colina, N. 54° 12′, W. 19° 20′†	29.90	759.4				wnw.			1		6	nw.	o	o	sm'h	nw.		cloudy.
S. S. France, N. 47° 45′, W. 38° 10′†	30.11	764.8	55.4	13		se.			3	ck	0	ese.			h'vy	e.		covered.
S. S. Arizona N. 45° 19′, W. 52° 42′	29.72	754.9	44	6.7		sse.			5	fg			o	o	mod.	se.		foggy.
S. S. Wisconsin, N. 49° 15′, W 37° 30′	30.04	763.0	48	8.9		nw.			4		0		2 h'r	2 h'r	mod.	w.		clear.
S. S. Wyoming, Liverpool, Eng	29.63	752.6	35	1.7		n.			6		5	n.	o	o				threatening
S. S. Bohemia, N. 43° 23′, W. 57° 34′†	29.71	754.6				wnw.			7		10	nw.	10 h'r	10 h'r	h'vy	wnw.		heavy rain.
S. S. Frisia, N. 48° 00′, W. 36° 30′	30.20	767.1	55	12.8		w.			3		9	w.	rain	rain	mod.	sw.		rainy.
S. S. Gellert N. 47° 50′, W. 40° 12′	30.15	765.8	56	13.3		ese.			4		5	ese.			long	s.		fair.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																	
S. S. Silesia, Hamburg, Germany†	29.78	756.4	34.8	1.6	?	e.			2			e.	o	o			overcast.?
S. S. Vandalia, N. 49° 53′, W. 19° 25′	30.17	766.3	47.8	8.8	94	nw.			5		5?	nw.	o	o	mod.	nw.	cloudy.
S. S. Wieland, N. 40° 35′, W. 69° 30′	30.20	767.1				nw.			6		8	hw.	3 h'r	3 h'r	h'vy	nw.	stormy.
S. S. Mentmore, N. 43° 34′, W. 47° 00′*	29.86	758.4				e.			3		8	e.	4 h'r	4 h'r	cross	e.;sw.	fine.
S. S. Archimedes, Lisbon, Portugal	29.90	759.4				nne.			4		2	n.	o	o			fine.
S. S. Hevelius, N. 38° 40′ W. 9° 30′ *†	29.95	760.7	58	14.4		n.			6		6?	nne.	o	o	long	nnw.	clear.?
S. S. Sirius, N. 9° 30′, W. 25° 40′*	29.88	758.9				nne.			1		5	nne.	o	o	mod.	nne.	clear.
S. S. Bulgarian, N. 43° 15′, W. 58° 47′ *	29.79	756.7				w.			8		10	wnw.	6 h'r	6 h'r	light	w.	
S. S. Colorado, N. 26° 28′, W. 86° 55′†	30.30	769.6	63	17.2		n.			5		10	nne.	o	o	high	nne.	cloudy.
S. S. Rio Grande, Galveston, Texas†	30.51	774.9	40	4.4		nne.			3		9	ne	o	o			overcast.
S. S. San Marcos, Galveston, Texas			52	11.1		n.			5								
S. S. Archimede, New York, N. Y			36	2.2	f	w.			3		1	wsw.	o	o			clear.
S. S. Hermod, N. 48° 01′, W. 24° 19′†	30.22	767.6	50.0	10.0		nw.			1		10	wnw.	o	o	long	n.	cloudy.
S. S. John Hopkins, Norfolk, Va			14	—10.0		nw.			5		0		o	o			clear.
S. S. Glenapp, S. 3° 15′, W. 32° 10′†	29.81	757.2				ese.			3		5?	e.	o	o	long	ese.	cloudy.?
S. S. Glenfyne, S. 3° 31′, W. 36° 44′ *†	29.58	751.3				ese.			5		1	ese	o	o	r'gh	ese.	fair.
S. S. Toronto, N. 49° 31′, W. 41° 20′			40.0	4.4		e.			2		0		2 h'r	2 h'r	sm'h		clear.
S. S. Chalmette, New York, N. Y†	30.23	767.8	15	— 9.4		w.			5		1	w.	o	o			clear.
S. S. New York, N. 34° 25′ W. 76° 20′†	30.53	775.4	32	0.0		n.			6		8	n.			r'gh		
S. S Denmark, London, Eng †	29.25	742.9	39	3.9		wsw.			2		8	wsw.	snow	snow			cloudy.
S. S. Egypt, N. 47° 29′, W. 36° 11′ *†	30.28	769.1				ssw.			4		10	sw.	3 h'r	3 h'r	mod.	sw.	showery.
S. S. Erin, N. 44° 37′, W. 53° 06′	29.65	753.1	45	7.2		sse.			6		10	sw.	4 h'r	4 h'r	r'gh	ssw.	misty.
S. S. Greece, N. 48° 49′, W. 22° 21′ *†	30.19	766.8	49	9.4		nnw.			4		10	n.	4 h'r	4 h'r	mod.	n.	cloudy.
S. S. Helvetia, Liverpool, Eng	29.52	749.8	40	4.4		nne.			5		10	ne.	o	o			overcast.
S. S. City of Alexandria, Havana, Cuba, W. I†	30.22	767.6	77	25.0		ese.			4		7	e.	2 h'r	2 h'r	small	e.	rainy.
S. S. City of Merida, N. 21° 20′, W. 89° 40′*†	30.20	767.1	75.2	24.0		ene.			3		5	ene.	1 h'r	1 h'r	light	ene.	cloudy.
S. S. Amsterdam, N. 49° 08′, W. 26° 28′ *	30.19	766.8	46	7.8		sw.			6						5	wnw.	heavy rain.
S. S. Knickerbocker, N. 24° 18′, W. 81° 30′	30.13	765.3	71	21.7		ne.			7							wsw.	
S. S. Olbers, N. 10° 30′ W. 50° 00′ *†	29.80	756.9	80	26.7		e.			4–5							e.	clear.
S. S. State of Nebraska, N. 51° 15′ W 37° 10′†	30.10	764.5	43	6.1		wnw.			4						mod.	w.	hazy.
S. S. Western Texas, N. 30° 58′ W. 81° 10*†	30.40	772.1	50	10.0		nnw.			5							ese.	cloudy.
S. S. Donau, N. 47° 04′, W. 34° 09′	30.33	770.4				sw.			3–4		10	sw.	1 h'r	1 h'r	mod.	sw.	light rain.
S. S. Gen. Werder, N. 49° 23′, W. 24° 40′	30.16	766.1	48.2	9.0		wsw.			4		8	wnw.	rain	rain	cross	wnw.	cloudy.
S. S. Ohio, N. 37° 32′, W. 71° 44′	30.36	771.1				nw.			8–9		9	nw.	snow	snow	cross	nw.	misty.
S. S. Rhein, N 49° 40′ W. 7° 30′	29.81	757.2				n.			6		6	n.	rain	rain	long	n.	fair.
S. S. Salier, N. 42° 58′, W. 60° 26′	29.75	755.6	41.0	5.0		w.			7		10	w.	3 h'r	3 h'r	cross	w.	cloudy.
S. S. Strassburg, S. 11° 55′ W. 35° 28′	29.92	760 0	82.5	28.1	93	ene.			3–4		5	ene.	o	o	mod.	ene.	fair.
S. S. Belgic, N. 44° 54′, W. 176° 32′†	29.84	757.9	55	12.8	68	ese.			5		2		o	o	r'gh	se.	clear.
S. S. Coptic, N. 37° 59′, W. 165° 20′	29.64	752.8	54.5	12.6	87	nw.			7		0		o	o	high	nw.	squally.
S. S. Oceanic, N. 23° 02′ E. 117° 04′*	30.06	763.5	70	21.1	75	ene.			3		2				slt	ne.	clear.
S. S. Mississippi, N. 43° 35′, W. 124° 43′*†	30.25	768.3	50	10.0	93	nw.			2		0				mod.	wnw.	clear.
S. S. Willamette, N. 41° 00′, W. 124° 43′†	30.30	769.6	51	10.6	86	n.			3		3	nnw.	o	o	long	wnw.	foggy.
S. S. Columbia, N. 45° 45′, W. 124° 10′†	30.13	765 3	50	10.0	79	n.			2		7	nnw.			mod.	nw.	hazy.
S. S. Oregon, San Francisco, Cal†	30.13	765.3	46	7.8	92	calm			0								foggy.
S. S. Ancon, N. 32° 43′, W. 117° 20′ †	30.03	762.7	55	12.8	93	se.			1		10	se.			sm'h		dense fog.
S. S. City of Chester, Hookton, Cal *†	30.19	766.8	49	9.4	71	nw.			2		fg.						foggy.
S. S. Dakota. Seattle, Wash. Ter†	29.83	757.7	40	4.4	82	sw.			4		10	sw.	3 h'r	3 h'r	sm'h		cloudy.
S. S. State of California, Portland, Oregon *†	30.08	764.0	45	7.2		calm			0		4		o	o			fair.
S. S. Australia, S. 23° 02′, W. 175° 06′	29.90	759.4	75	23.9	95	e.			3		10	e.	1 h'r	1 h'r	sm'h		cloudy.
S. S. City of New York, Sydney, N. S. W †	29.98	761.4	73	22.8	81	n.			3		5	n.	1 h'r	1 h'r			fair.
S. S. City of Pekin, N. 34° 37′, E. 138° 00′†	30.07	763.8	62	16.7	72	wnw.			5		0		o	o	sm'h		clear.
S. S. City of Rio de Janeiro, Panama, Panama†	29.90	759.4	78	25.6	78	calm			0		0		o	o	sm'h		fine.
S. S. City of Tokei, N. 30° 13′, W. 137° 11′ †	30.36	771.1	65	18.3		n.			4		10	n.	o	o	small	se.	overcast.
S. S. Colima, N. 21° 17′ W. 106° 07′†	30.02	762.5	74	23.3	100	se.			3		4	se.	o	o	sm'h	n.	clear.
S. S. Grenada, N. 15° 42′, W. 95° 51′†	29.92	760.0	82	27.8	58	nnw.			6		0		o	o	mod.	n	clear.
S. S. Zealandia, S. 23° 52′, W. 175° 33′	29.92	760.0	74	23.3	90	sse.			3		3	sse.					fine.
S. S. Muriel, N. 12° 15′ W. 60° 25′	29.92	760.0	80	20.7		ne.			4		0		o	o	mod.	ene.	fair.
S. S. Caracas, Puerto Cabello, Venezuela †	29.93	760.2	79	26.1	89	w.			1		2	e.	¼ h'r	¼ h'r	sm'h		fine.
S. S. Claudius, Greytown, Nicaragua†	29.99	761.7				calm			0		5	se.	10 h'r	10 h'r	long	e.	rainy.
S. S. Valencia, N. 39° 30′, W. 73° 30′ †	30.45	773.4			77	nw.			9		5	nw.	o	o	high	nnw.	fine.
S. S. Belgenland, N. 47° 29′, W. 30° 45′			49	9.4	85	sw.			7		10	wsw.	2 h'r	2 h'r	h'vy	w.	hail squalls.
S. S. Nederland, N. 47° 50′, W. 41° 00′ †	30.32	770.1	54	12.2		e.			4		2	ssw.	3 h'r	3 h'r	mod.	s.	fair.
S. S. Pennland, N. 42° 10′, W. 62° 10′	29.87	758.7	32	0.0	90	wsw.			7		10	wsw.			long	wsw.	snowy.
S. S. Rhynland, Antwerp, Belgium	29.36	745.7	37	2.8	90	s.			5		10	ssw.	24 h'r	24 h'r			sleeting.
S. S. Waesland, Antwerp, Belgium	29.41	747.0	37	2.8	90	se.			6		10	e.	0.45	11.4			sleeting.
S. S. Leerdam, N. 40° 25′, W. 68° 24′†	30.30	769.6	49	9.4	78	nw.			6		4	nw.	2½ h'r	2½ h'r	long	w.	sleeting.
S. S. P. Caland, N. 43° 04′, W. 56° 37′	29.67	753.6	54.9	12.7	98	sse.			5		10	s.			3	s.	cloudy.
S. S. Schiedam, N. 45° 01′, W. 48° 22′	29.88	758.9	48.6	9.2	81	ese.			4		10		4 h'r	4 h'r	mod.	se.	foggy.
S. S. W. A. Scholten, Rotterdam, Holland			37.9	3.3	95	sw.			6		10	wsw.	rain	rain			
S. S. State of Florida, New York, N. Y	30.29	769.4	20	— 6.7		wsw.			3		0		o	o			clear.
S. S. Iowa, N. 48° 37′, W. 35° 19′ *†	30.34	770.6	56	13.3		nw.			1		1	nw.	10 h'r	10 h'r	mod.	con.	clear.*
S. S. Britannic, N. 49° 10′, W. 29° 19′†	30.17	766 3	49	9.4	93	wsw.			2		8	wnw.	2 h'r	2 h'r	mod.	nw.	overcast.
S. S. Celtic, N. 50° 45′, W. 23° 46′†	30.12	765.0	48	8.9		wsw.			4		10	wsw.	o	o	mod.	nw.	overcast.
S. S. Germanic, N. 43° 27′, W. 57° 41′†	29.81	757.2	46	7.8		wsw.			6		9	w.	sh'rs	sh'rs	r'gh	w.	squally.
S. S. Salerno, N. 49° 15′, W. 5° 34′						nne.			7		8	n.	4 h'r	4 h'r	h'vy	n.	
S. S. Catherine Whiting, Providence, R. I †	30.26	768.6	74	23.3		nw.			5		0		o	o			
S. S. Saxon, N. 39° 06′, W. 74° 34′ †	30.33	770.4	18	— 7.8		w.			0		0				sm'h		fair.
MISCELLANEOUS.																	
Bg. Alcira, N. 13° 45′, W. 71° 13′	29.99	761.7	84	28.9		ene.			6		2		ne.	o	o	mod.	ne.	clear.
Schr. Annie Lewis, Tampico, Mexico †	30.49	774.4	52	11.1		w.			4		10	nw.	16 h'r	16 h'r	h'vy	ne.	raining.
S. Annie M. Law, N. 23° 08′ E. 129° 50′*†	30.08	764.0	71	21.7		ene.			3		5?	ne.	o	o	sm'h		clear?
Bk Anna Thormann, S. 26° 09′, E. 59° 02′*	30.08	764.0	72.7	22.6	74	s.			2		1 k	s.	o	o	mod.	ssw.	clear.
S. S. Antonio Lopez, N. 19° 57′, W. 70° 44′ *	30.07	763.8	78	25.6	95	e.			1		8		1 h'r	1 h'r	sm'h		squally.
Bgt. Arthur, N. 36° 50′, W. 45° 49′*†	30.20	767.1				wsw.			6			wsw.	rain	rain		var.	squally.
Bk. Champion, N. 21° 28′, W. 46° 05′			76.0	24.4		e.			4		5	e.	1 h'r	1 h'r	mod.	e.	fair.
Schr. Chas. F. Heyer, N. 31° 05′, W. 78° 55′	30.42	772.7	54	12.2	74	ne.			4		10 8	ne.	o	o	r'gh	ne.	cloudy.
Bg. Clara M. Goodrich, N. 23° 20′, W. 79° 00′ *†	30.01	762.2				ne.			0		10	ne.	o	o	mod.	ene.	cloudy.
S. Cornelius, N. 50° 48′, E. 0° 36′*†	29.41	747.0	41.0	5.0		nw.			4		8	n.	rain	rain	sm'h		cloudy.
S. S. D. J. Foley, N. 24° 06′, W. 74° 15′ *†	30.12	765.0	77	25.0		ene.			3		5	e.	o	o	mod	ene.	fine.
Bkt. David Preston, Pensacola, Fla			56.0	13.3		e.					2	e.	o	o			
Bk. E. L. Pettingill, N. 18° 49′, W. 121° 25′ *†	30.20	767.1	70	21.1		ne.			3		2	ene.	o	o	sm'h	e.	
Schr. Edith R. Seward, Baltimore, Md *†	30.50	774.7	12	—11.1		nw.			3		3		o	o			hazy.
S. E. J. Spicer, N. 42° 25′, W. 42° 00′ *†	30.00	762.0	67	19.4		sw.			7		10	sw.	10 h'r	10 h'r	light	ssw.	heavy rain.
Bk. Eliza Barss, N. 33° 55′, W. 68° 30′†	30.19	766.8				nnw.			7		10	nnw.			r'gh	nw.	raining.
S. Enoch Train, N. 29° 10′, W. 76° 10′						nne.			4		10	ne.	sh'rs	sh'rs	sharp	nnw.	showery.
Bk. Essex, Muscat, Arabia*†	30.00	762.0	78	25.6		ne.			3				o	o			fine.
Schr. F. E McDonald, Camden, N. J†	29.79	756.7	5	—15.0		wnw.			5		0		snow	snow			fine.
S. S. Foscolin, N. 38° 24′, W. 74° 49′						nnw.			8		10	nnw.	o	o	h'vy	nnw.	
Bk Freya, N. 19° 46′, W. 63° 53′			84	28.9		e.			3		1	ene.	o	o	mod.	ene.	clear.
S. J. W. Gildemeister, N. 44° 48′, W. 47° 40′ *†	29.91	759.7	46.4	8	46	e.			3-4		10		3½ h'r	3½ h'r	2	sw.	foggy.
Bg. George. N. 41° 45′, W. 62° 30′						wnw.			7		10	nw.	snow	snow	h'vy	nnw.	cloudy.
Bk. Gronsvaer, Wellington, New Zealand†	30.19	766.8	71.2	21.8	95	sso.			4		3	s.	o	o			fine.
Bk. Godelfroy, S. 48° 48′, W. 63° 03′ †	29.21	741.9	51.0	10.9	99	nne.			5		10	w.	8 h'r	8 h'r	sm'h	n.	misty.
Bk. Great Surgeon, S. 17° 08′, E. 91° 12′*†	30.07	763.8	79	26.1		ese.			4		2	se.	o	o	long	ssw.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Grey Eagle, N. 11° 26′, W. 31° 18′.						ene.			6		5		e.	5 h'r	5 h'r	long	ne.	fair.
Bk. Hattie G. McFarland, New York, N. Y†	30.42	772.7	17	— 8.3		nw.			5		3		nnw.	o	o			
Schr. Hattie Weston, N. 28° 20′, W. 72° 45′*†	30.21	767.3	77	25.0		nnw.			3		8		nnw	o	o	mod	nne.	threatening.
Bk. Heinrich & Tonio, N. 54° 23′, W. 3° 30′*†	29.52	749.8	38	3.3	95	ese.			7		10		ese.	rain	rain	mod.	e.	rain & snow
Schr. Isabel Alberto, N. 24° 22′, W. 79° 40′†	30.11	764.8				ne.			5		4		ne.	hv'y	hv'y	mod.	ne.	fair.
Schr. James Slater, N. 36° 52′, W. 73° 05′†	30.35	770.9	40	4.4		nw.			9		10		nnw.	snow	snow	hv'y	nnw.	snowy.
Schr. Jennie N. Huddell, Savannah, Ga†	30.51	774.9	28	— 2.2		ne.			5		2			o	o			clear.
Bg. John Wesley, N. 37° 15′, W. 73° 39′†	30.52	775.2				nw.			1		1			snow	snow	mod	nw.	clear.
Bk. Joseph A. Ropes, N. 3° 06′ E. 52° 32′*†	29.92	760.0	80	26.7	91	nne.			4		8		ne.	4 h'r	4 h'r	mod.	ne.	cloudy.
Bkt. Josephine, N. 33° 56′, W. 50° 19′†	30.14	765 5	74	23.3	81	s.			4		3		ssw.	2 h'r	2 h'r	sm'h		light rain
Bk. Julia H, N. 41° 26′, W. 50° 05′	29.92	760.0	65.8	18.8	89	ssw.			3		8					4.	s.	d. clouds.
Light House Tender Laurel, Key West, Fla†	30.17	766.3	70	21.1		ne.			2–3		8		ene.	1 h'r	1 h'r	sm'h		cloudy.
Bg. Lilian, N. 37° 46′, W. 74° 50′†	30.46	773.7	18	— 7.8		nw.			6		2		nnw.	o	o	mod.	n.	clear.
Bg. L. & W. Armstrong, N. 29° 10′, W. 60° 45′*†	30.18	766.6				ssw.			1		1		e.	o	o	mod.	ese.	squally.
S. S. Malabar, Marseilles, France						nw.			7		5?		nw.	o	o			cloudy.?
Bk. Matilda C. Smith, N. 27° 32′, W. 61° 07′*†	30.30	769 6				se.			2		1		se.	shr's	shr's	mod	e.	fine.
Schr. Minnie A. Bonsall, St. John's, Fla†	30.48	774.2	60	15.6		nne.							nne.			h'vy	nne.	cloudy.
S. Minnie N. Gerow, N. 32° 08′, W. 33° 40′ *†	30.36	771.1				e.			5		2		e.			long	e.	fine.
S. M. P. Grace, S. 13° 12′, W. 129° 15′*†	30.00	762.0	77	25.0		e.			4		3		e.	light	light	sm'h	ese.	fine.
Bg. O. C. Clary, Demerara, British Guiana, S. A *†	29.90	759.4	78	25.6	91	e.			4		10		ne.	hv'y	hv'y			
S. Orealia, N. 19° 56′, E. 92° 46′ *	29.94	760.5				nw.			2		6		var.			sm'h		fine.
Bk. Ottawa, N. 39° 29′, W. 71° 20′*	30.21	767.3	30	— 1.1		wnw.			7		10					mod.	w.	heavy snow
S. Paramita, San Francisco, Cal†	30.10	764.5	48	8.9		ne.			2		fg.			o	o			
S. S. Peconic, N. 28° 39′, W. 88° 40′*†.	30.44	773.2	52	11.1		nne.			6		8		n.			mod.	nne.	overcast.
Bk. Pilgrim, N. 7° 20′, W. 39° 30′ *†	29.90	759.4				e.			4				ne.; se.	12 h'r	12 h'r	high	cross	
S. S. Radnorshire, N. 1° 19′, E. 104° 05′*†	29.80	756.9				w.			3		0			o	o	long	ene.	clear.
Bk. Rebus, N. 39° 36′, W. 55° 28′ *	29.65	753.1	67	19.4		sw.			6		7		sw.	1 h'r	1 h'r	mod.	se.	cloudy.
S. St. Francis, N. 22° 27′ W. 130° 50′†	30.21	767.3	64	17.8		nne.			5		8		ne.	o	o	long	nne.	cloudy.
Bk. Scud, N. 12° 22′, W. 59° 34′*†	29.92	760.0				ene.			5		1		ene.	o	o	long	e.	fine.
S. S. Sunbeam, N. 16° 46′, W. 62° 08′	29.99	761.7	82	27.8	83	n.			4		3		ne.	¼ h'r	¼ h'r	3	ene.	d. clouds.
S. S. Strathleven, N. 7° 29′ E. 75° 00′			82.5	28.1	89	calm			0		2		e.	o	o	2	s.	d. clouds.
Schr. T. S. McLellan, N. 29° 30′, W. 77° 00′*†	30.20	767.1	70	21.1		ene.							ene.				n.	
U.S. F. C. S. S. Fish Hawk, Washington, D. C†	30.22	767.6	10	—12.2		w.			4		0			o	o			clear.
Bk. Usko, N. 54° 47′, W. 9° 56′*	29.80	756.9	45	7.2		nne.			3		7		nne.	rain	rain	long	wnw.	drizzling.
Bk. Vincenzo Accame, N. 35° 15′, W. 40° 34′†	30.43	772.9	71.6	22.0		s.			4		7		s.	1 h'r	1 h'r			
Schr. Walter L. Plummer, N. 32° 50′, W. 74° 20′*†	30.40	772.1				nw.			5		10		n.	o	o	cross		threatening.
Bk. Wandering Jew, Montevideo, Uruguay †	29.79	756.7	67	19.4		n.			6		5		n.	o	o			fair.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.05	763.3				ne.			2		6		ne.			sm'h	sw.	fair.
S. Wm. Woodbury, N. 44° 10′, W. 23° 21′*	30.31	769.9	53	11.7		n.			4		2		ne.			high	nw.	squally.

International Chart I. December 8, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 9, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer, corrected for instrumental error and for temperature.		Barometer, reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.80	757.0	56.1	13.4	80	e.	.....	.....	5	.....	2	.....	.....	0	0	fair	Malaterre.
Algiers	.....	.....	29.70	754.3	59.7	15.4	75	w.	.....	.....	5	.....	0	.....	.....	0	0	cloudy	Thève.
La Calle	.....	.....	29.81	757.1	67.6	19.8	20	sse.	.....	.....	4	.....	4	.....	.....	0	0	cloudy	Fonfréde.
Tunis	.....	.....	29.87	758.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.77	756.1	52.5	11.4	52	nw.	.....	.....	1	.....	0	.....	.....	0.177	4.5	clear	Pérès.
Tebessa	.....	.....	29.93	760.2	59.4	15.2	51	se.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	50.0	10.0	43	ssw.	.....	.....	4	.....	4	.....	.....	0.276	7.0	cloudy	Loncheinp.
Laghouat	.....	.....	29.90	759.4	52.5	11.4	31	s.	.....	.....	0	.....	3	.....	.....	0.118	3.0	pretty fair	Abraham.
Biskra	.....	.....	29.90	759.4	62.2	16.8	30	se.	.....	.....	6	.....	0	.....	.....	inap.	inap.	cloudy	Malau.
Australian.																			
Melbourne, Victoria	29.65	753.1	29.74	755.4	58.1	14.5	86	sse.	2	0.9	.....	.....	10	.....	.....	0.15	3.8	showery	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.53	750.0	30.10	764.5	39.2	4.0	97	e.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.28	743.6	30.07	763.8	37.8	3.2	80	nne.	4.9	2.2	.....	.....	0	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.15	740.4	30.06	763.5	39.2	4.0	93	s.	.....	.....	1	.....	fg.	.....	n.	0.299	7.6	foggy	Julius Mikolik.
Gratz	28.78	731.1	30.09	764.2	34.3	1.3	87	s.	.....	.....	1	.....	10	.....	.....	0.012	0.3	.....	Andreas Rospini.
Hermannstadt	28.65	727.8	30.12	765.0	45.7	7.6	86	nw.	.....	.....	1	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.65	727.8	30.21	767.3	21.9	— 5.6	97	calm	.....	.....	0	.....	10	.....	.....	0	0	gloomy	The Staff.
Lemberg	29.04	737.5	30.06	763.5	38.1	3.4	88	s.	.....	.....	1	.....	9	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.89	759.2	30.00	762.1	51.8	11.0	80	e.	.....	.....	1	.....	8	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.63	752.5	30.10	764.4	46.4	8.0	90	s.	.....	.....	2	.....	10	.....	.....	0.004	0.1	light fog	Joseph Midlinszky, S. J.
Szegedin	29.80	756.9	30.09	764.3	40.6	4.8	100	calm	.....	.....	0	.....	10	.....	.....	0.039	1.0	dense fog	Karl Stancel.
Trieste	29.96	760 9	30.06	763.5	49.6	9.8	84	se.	.....	.....	1	.....	10	.....	.....	0	0	.....	Royal Academy.
Vienna	29.36	745.8	30.11	764.9	32.2	0.1	90	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.66	753.4	29.76	755.9	36.0	2.2	85	ene.	19	8.5	.....	.....	9	.....	.....	0.330	8.4	rain & snow	W. Boswell
Armagh, Observatory	29.55	750.6	29.80	756.9	23.9	— 4.5	93	ssw.	3	1.3	.....	.....	.....	.....	.....	.....	.....	foggy	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.68	753.9	37.6	3.1	75	nw.	13	5.8	.....	.....	6	.....	.....	.....	.....	d. clouds	John Hartnup.
Bolton, Sharples	29.11	739.4	29.65	753.1	33.5	0.8	84	nnw.	12	5.4	.....	.....	2	.....	.....	.....	.....	blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.29	744.0	29.62	752.3	35.6	2.0	83	ne.	.....	.....	3	.....	10	.....	.....	0.06	1.5	overcast	McLandsborough & Preston.
Bridgetown, Barbadoes	29.90	759.4	29.93	760.2	80.0	26.7	82	ne.	.....	.....	1	.....	5	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H.C.
Cardington	.....	.....	.....	.....	33.0	0.6	89	w.	.....	.....	0.6	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E.	29.57	751.1	29.70	754.4	38.1	3.4	82	sw.	.....	.....	1	.....	6	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.54	750.3	29.78	756.4	39.9	4.4	74	w.	.....	.....	1	.....	2	.....	.....	.....	.....	blue sky	The Staff.
Fort Napier, Natal	27.72	704.1	29.93	760.2	74.0	23.3	52	s.	.....	.....	4	.....	9	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	86.0	30.0	84	ne.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson
Gibraltar, Mediterranean	29.73	755.1	29.78	756.4	53.5	11.9	94	nw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.53	750.0	29.74	755 4	35.8	2.1	67	nnw.	.....	.....	2	.....	10	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.52	749.8	29.70	754.4	37.4	3.0	81	wsw.	.....	.....	1	.....	9	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.46	748.3	29.77	756.1	36	2.2	90	s.	.....	.....	1	.....	6	.....	.....	.....	.....	snowing	A. Collenette, F. M. S
Kew, Observatory	29.68	753.9	29.71	754.6	37.6	3.1	80	w.	12	5.4	.....	.....	4	.....	.....	.....	.....	misty	The Staff.
Leicester, Museum	29.39	746.5	29.66	753.4	35.2	1.8	82	nw.	.....	.....	1	.....	3	.....	.....	blank	blank	d. clouds	J. C. Smith.
Malta, Mediterranean	.....	.....	.....	.....	67.0	19.4	98	se.	.....	.....	2	.....	1	.....	.....	.....	.....	blue sky	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.16	766.1	30.20	767.1	74.0	23.3	76	ne.	.....	.....	4	.....	7	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	29.13	739 9	29.67	753.6	33.9	1.1	75	wnw.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.47	748 5	29.70	754 4	36.1	2.3	85	w.	.....	.....	1	.....	9	.....	.....	.....	.....	overcast	The Staff.
Plymouth	29.68	753.9	29.76	755.9	36.8	2.7	59	nw.	.....	.....	1	.....	0	.....	.....	blank	blank	blue sky	John Merrifield.
Sandwick Manse, Orkneys	29.75	755.6	29.86	758.4	32.6	0.3	100	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty	Rev. C. Clouston, L L D.
Scutari Cemetery, Turkey	30.05	763.3	30.11	764.8	60.0	15.6	69	ssw.	.....	.....	2	.....	1	.....	.....	.....	.....	blue sky	W. H. Lyne.
Sheffield	29.36	745.7	29.65	753.1	36.8	2.7	83	wsw.	.....	.....	1	.....	9	.....	.....	0.01	0.3	overcast	W. F. Cooper.
Silloth Rectory	29.66	753.4	29.70	754.4	33.9	1.1	84	nne.	.....	.....	1	.....	8	.....	.....	0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.70	754.4	35.0	1.7	77	w.	2	0.9	.....	.....	5	.....	.....	.....	.....	d. clouds	I. New.
Strathfield Turgiss	29.29	744.0	29.71	754.6	38.2	3.4	81	nw.	.....	.....	2	.....	8	.....	.....	.....	.....	d. clouds	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.72	754.9	29.76	755.9	46	7.8	62	nw.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	29.77	756.1	29.80	756.9	36.8	2.7	90	calm	0	0	.....	.....	1	.....	.....	.....	.....	misty	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.83	757.7	29.87	758.7	10	—12.2	75	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	H. J. Cundall, C. E
Chatham, N. B*	29.80	756.9	29.87	758.7	0	—17.8	87	sw.	10	4.5	.....	0	0	.....	.....	0	0	clear	G. A. Blair.
Father Point, Quebec*	29.73	755.1	29.75	755.6	6	—14.4	87	w.	66	29.6	.....	.....	10 s	.....	w.	.....	.....	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.01	736.8	29.92	760.0	5	—15.0	75	e.	14	6.3	.....	.....	10 n	.....	e.	0.10	2.5	light snow	James Stewart.
Halifax, N. S*	29.88	758.9	30.02	762.5	16	— 8.9	80	w.	13	5.8	.....	.....	0	.....	.....	0	0	clear	A. Allison.
Kingston, Ontario*	29.88	758.9	30.25	768.3	11	—11.7	80	w.	6	2.7	.....	2 ck	2 s	w.	.....	0	0	fair	A. P. Knight, M. A
Montreal, Quebec*	29.99	761.7	30.23	767.8	— 5	—20.6	87	w.	18	8.0	.....	0	2 s	.....	.....	0.01	0.3	clear	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.41	747.0	30.17	766.3	9	—12.8	70	e	6	2.7	.....	.....	10 n	.....	e.	0.20	5.1	light snow	Rev. R. Mosley.
Port Dover, Ontario	29.54	750.3	30.31	769.9	9	—12.8	100	calm	0	0	.....	.....	10 n	.....	.....	inap.	inap.	threatening	H. Morgan.
Port Stanley, Ontario	29.59	751.6	30.30	769.6	11	—11.7	87	w.	7	3.1	.....	.....	10 k	.....	w.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.73	755.1	30.10	764.5	— 5	—20.6	87	nw.	.....	.....	6	.....	2	.....	nw.	0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.69	754.1	30.21	767.3	— 4	—20.0	91	calm	0	0	.....	.....	10 ks	.....	w.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.42	747.3	30.19	766.8	20	— 6.7	91	sw.	16	7.2	.....	.....	10 ks	.....	.....	0.02	0.5	cloudy	
St. Andrews, N. B	30.01	762.2	30.06	763.5	12	—11.1	61	wnw.	10	4.5	.....	0	0	.....	.....	0	0	clear	
Sydney, C. B*	29.81	757.2	29.88	758.9	17	— 8.3	73	sw.	26	11.6	.....	0	2 ks	.....	.....	0	0	clear	T. C. Hill, C. E
Toronto, Ontario*	29.88	758.9	30.31	769.9	0	—14.4	83	w.	6	2.7	.....	5 cs	5 s	w.	w.	0	0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	30.00	762.0	30.07	763.8	23	— 5.0	80	nw.	22	9.8	.....	.....	10 k	.....	nw.	0	0	cloudy	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.74	730.0	30.29	769.4	5.0	—15.0	75	wsw.	.....	.....	3	.....	.....	.....	.....	0	0	overcast	Wm. Wylie.
St. Johns, Newfoundland	29.08	753.9	29.95	760.7	25	— 3.9	100	sw.	2	0.9	.....	.....	10 n	.....	.....	0.20	5.1	snowing	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.12	765 0	30.15	765.8	71.0	21.7	78	e.	6.5	2.9	.....	0	8 k	.....	.....	0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction Upper.	Clouds. Direction Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Sung-shu-chwang	24.48	621.8	.....	.....	26.2	— 3.2	.....	W.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.21	767.3	30.32	770.1	29.3	— 1.5	88	calm	3.1	1.4	.....	0	0	.....	.....	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.27	768.8	30.29	769.4	46.6	8.1	76	e.	11.2	5.0	.....	0	8 k	.....	e.	0.268	6.8	covered	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.89	759.2	29.94	760.4	33.8	1.0	89	sse.	11	5	.....	.....	10	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanoe	29.77	756.1	29.79	756.6	32.0	0.0	90	se.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.41	747.1	29.46	748.2	38.3	3.5	57	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.37	745.9	29.39	746.4	45.3	7.4	.....	se.	.....	.....	8	.....	10	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.75	755.6	29.80	756.8	22.3	— 5.4	.....	n.	.....	.....	4	.....	5	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	30.18	766.6	30.22	767.7	24.1	— 4.4	84	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.95	760.8	29.99	761.7	29.1	— 1.6	86	calm	0	0	.....	.....	1	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.76	756.0	29.86	758.4	31.5	— 0.3	98	ene.	.....	.....	6	.....	10	.....	.....	.....	.....	snowing	Loearer Oesterboi.
Upernavik, Greenland	30.18	766.6	30.23	767.8	— 8.9	—22.7	.....	e.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.23	742.5	29.90	759.4	42.4	5.8	94	calm	.....	.....	0	c;ck	0	.....	.....	0	0	.....	M. Labroue, Director.
Alençon, Normal School	29.28	743.9	29.84	757.9	33.4	0.8	96	s.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Nicot, Director.
Arras, Engineer School	29.42	747.2	29.68	753.9	36.7	2.6	59	sw.	.....	.....	1	.....	kn	.....	sw.	0	0	.....	M. Fénéon, Command't.
Avignon, Normal School	29.76	755.8	29.84	757.8	37.0	2.8	86	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	M. Giraud, Director.
Bar-sur-Seine	29.29	744.0	29.87	758.6	39.2	4.0	80	ssw.	.....	.....	1	0	5 kn	.....	.....	0.020	0.5	cloudy	M. Saillard, Director.
Beauvais, Normal School	29.52	749.8	29.80	756.8	37.6	3.1	89	sw.	.....	.....	1	.....	5	.....	wsw.	0.252	6.4	cloudy	M. Frère Eugène Marie.
Besançon, Normal School	28.98	736.0	29.89	759.1	42.4	5.8	66	ssw.	.....	.....	1	.....	n	.....	sw.	0	0	.....	M. Goblin, Director.
Bordeaux, Observatory	29.52	749.8	29.79	756.6	45.0	7.2	63	s.	.....	.....	1	.....	5	.....	.....	0.217	5.5	cloudy	M. Rayet, Director.
Bourges, Normal School	29.25	742.9	29.85	758.2	47.3	8.5	72	s.	.....	.....	2	.....	k	.....	s.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.59	751.5	29.83	757.7	46.0	7.8	83	ne.	.....	.....	1	.....	4	.....	ne.	0.071	1.8	.....	M. de Kermaïde, Dir.
Caen, Normal School	29.66	753.2	29.73	755.1	39.0	3.9	74	sw.	.....	.....	1	.....	0	.....	.....	0.20	5.	clear	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.50	749.2	29.82	757.5	40.5	4.7	87	sw.	.....	.....	2	.....	2	sw.	sw.	0.003	0.2	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.34	745.2	29.87	758.6	37.2	2.9	89	ssw.	.....	.....	1	.....	8	.....	.....	0.35	9.	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.45	722.7	29.85	758.1	40.1	4.5	72	ene.	.....	.....	1	.....	10	.....	.....	0	0	hazy	M. Allnard, Director.
Cluny, Normal School	29.01	736.8	29.87	758.8	39.2	4	72	w.	.....	.....	1	.....	10	w.	sw.	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.00	736.7	29.89	759.2	38.1	3.4	91	w.	.....	.....	1	ck	.....	w.	w.	0	0	.....	Dr. Coulet, Director.
Gap, Normal School	27.28	692.8	29.87	758.8	34.5	1.4	74	e.	.....	.....	1	.....	10	.....	.....	1.02	26.	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.60	726.4	29.77	756.1	36.0	2.2	96	s.	.....	.....	1	.....	10	.....	s.	0.04	1.	snowing	M. Kina, Director.
Grenoble, Normal School	29.10	739.2	29.91	759.6	32.0	0	100	se.	.....	.....	1	.....	n	.....	.....	0	0	.....	M. Ablard, Director.
Guéret	28.22	716.8	29.91	759.6	37.4	3	83	sw.	.....	.....	1	cs	kn	.....	sw.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.53	750.0	29.80	757.0	41.0	5	93	nw.	.....	.....	2	.....	5	.....	nw.	0.039	1.0	cloudy	M. Olliffrault, Director.
Lescar, Normal School	29.24	742.6	29.81	757.2	44.2	6.8	79	n.	.....	.....	1	ck	0	.....	.....	0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.71	754.5	29.81	757.1	48.2	9.0	58	calm	.....	.....	0	.....	0	.....	.....	0	0	clear	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.80	731.0	29.90	759.4	34.7	1.5	77	ne.	.....	.....	1	.....	8	.....	.....	0	0	dense haze	M. André, Director.
Mans, Normal School	29.57	751.0	29.89	759.2	33.4	0.8	94	s.	.....	.....	4	.....	10	.....	.....	0	0	hazy	M. Pibeau, Director.
Marseille, Observatory	29.37	746.0	29.04	752.9	41.4	5.2	84	ene.	.....	.....	2.3	.....	10	.....	se.	2.232	56.7	raining	M. Stephan, Director.
Mt. Louis	24.48	621.8	29.32	744.8	23.9	— 4.5	100	se.	9.4	4.2	.....	.....	10	.....	.....	0.665	16.9	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.68	753.9	29.84	757.9	39.2	4	87	nnw.	.....	.....	2	.....	10	.....	.....	0	0	covered	M. Galzin, Director.
Nancy, Normal School	29.04	737.6	29.84	758.0	40.3	4.6	69	sse.	.....	.....	1	.....	k	.....	.....	0.102	2.6	.....	M. Husse, Director.
Nantes, Observatory	29.67	753.7	29.85	758.2	39	4	75	n.	.....	.....	0–1	3 c; ck	0	.....	.....	0	0	.....	M. Larocque, Director.
Perpignan, Observatory	29.74	755.4	29.85	758.3	38.8	3.8	95	n.	7.4	3.3	.....	.....	10	.....	nw.	0.197	5.0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.78	527.7	.....	.....	13.5	—10.3	.....	w.	.....	.....	1	.....	5	.....	w.	0	0	cloudy	M. Vaussenat.
Privas, Normal School	28.78	731.1	29.91	759.8	33.8	1	85	n.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Tathen.
Puy de Dôme Obs'y, Summit	24.85	631.3	.....	.....	25.9	— 3.4	100	sse.	.....	.....	1	.....	8	.....	.....	0.051	1.3	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.74	755.4	29.77	756.2	38.1	3.4	87	se.	.....	.....	1	.....	5	.....	.....	0.24	6.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.51	749.6	29.74	755.3	37.4	3	74	wsw.	.....	.....	1	.....	10	.....	.....	0.012	0.3	covered	M. Brotier, Director.
Rodez, Normal School	27.65	702.3	29.85	758.2	34.7	1.5	85	sw.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Seger, Director.
Rouen, Normal School	29.76	755.9	29.81	757.1	39.2	4	83	w.	.....	.....	1	.....	2	w.	.....	0.244	6.2	slightly cl'dy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	39.6	4.2	89	wsw.	.....	.....	1	.....	5	w.	w.	0.031	0.8	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.67	753.7	29.84	757.9	34.3	1.3	93	ssw.	.....	.....	1	.....	10	.....	.....	0.047	1.2	.....	M. Renou, Director.
Toulouse, Observatory	29.16	740.6	29.88	758.9	39.7	4.3	82	se.	.....	.....	1	.....	10	sw.	.....	0	0	covered	M. Baillaud, Director.
Tours	29.64	752.9	29.82	757.4	40.6	4.8	80	s.	.....	.....	1	.....	1	.....	sw.	0.004	0.1	covered	M. de Tastes.
Versailles, Observatory	29.34	745.1	29.83	757.6	33.4	0.8	92	sw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.69	754.0	29.84	757.8	45.9	7.7	71	w.	9.8	4.4	.....	.....	7 kn; k	w.	wsw.	0.094	2.4	.....	M. Cartier, Director.
German.																			
Ansbach	28.50	723.8	30.01	762.3	31.1	— 0.5	78	se.	.....	.....	2	.....	1	se.	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.03	737.3	29.87	758.6	32.9	0.5	73	se.	.....	.....	1	.....	1	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.73	755.1	29.91	759.8	32.5	0.3	92	se.	.....	.....	2	.....	1	.....	.....	0.008	0.2	.....	Prof. Dr. Arndt.
Breslau	29.51	749.6	30.04	763.1	32.9	0.5	89	ssw.	.....	.....	1	.....	0	.....	.....	0.118	3.0	foggy	Royal University Obs'y.
Carlsruhe	29.47	748.5	29.92	759.9	41.9	5.5	62	sse.	.....	.....	1	.....	1	sw.	.....	0.031	0.8	.....	Albert Senz.
Cassel	29.10	739.2	29.82	757.3	36.5	2.5	77	s.	.....	.....	3	.....	8	s.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.52	749.8	29.89	759.3	41.5	5.3	69	ssw.	.....	.....	1	.....	4	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.49	723.6	29.97	761.3	36.0	2.2	69	s.	.....	.....	1	.....	10	sw.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.76	755.8	29.85	758.1	28.4	— 2.0	92	se.	.....	.....	2	.....	10	.....	.....	.....	.....	snow & fog	E. Preller.
Kiel	29.82	757.4	29.84	757.8	32.0	0.0	81	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.53	750.0	29.97	761.1	35.6	2.0	64	s.	.....	.....	2	.....	1	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.72	755.0	29.92	760.0	34.0	1.1	81	se.	.....	.....	2	0	7 k	.....	sw.	0	0	.....	Weather Observatory.
Memel	29.95	760.8	30.00	762.0	33.4	0.8	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	dense fog	Issermann.
Munich	28.11	714.0	29.97	761.2	31.1	— 0.5	64	s.	.....	.....	1	.....	3	.....	.....	0	0	.....	Central Station.
Neufahrwasser	29.97	761.1	29.98	761.5	34.2	1.2	96	s.	.....	.....	1	.....	10	.....	.....	0.256	6.5	snowing	A. Lothes.
Neustadt, Palatinate	29.35	745.4	29.85	758.3	39.6	4.2	80	calm	.....	.....	0	.....	3	.....	.....	0	0	.....	Dicknether.
Stuttgart	28.94	735.1	29.86	758.4	38.7	3.7	64	sw.	.....	.....	1	.....	5	w.	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	29.93	760.2	29.96	760.9	26.6	— 3.0	96	se.	.....	.....	3	.....	10	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.79	756.7	30.17	766.4	64.2	17.9	.....	sw.	.....	.....	1.0	.....	5	.....	.....	0.004	0.1	misty	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.99	761.8	30.04	763.1	79.9	26.6	58	wsw.	8.0	3.6	.....	.....	7	s.	.....	0	0	hazy	
Deesa	29.49	749.0	29.96	761.0	82.5	28.1	39	nnw.	3.0	1.3	.....	.....	0	.....	.....	0	0	hazy	
Bombay	29.88	759.0	29.92	759.9	81.3	27.4	75	wnw.	10.0	4.5	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.07	712.9	29.91	759.7	83.2	28.4	34	e.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.67	753.6	29.95	760.8	79.6	26.4	70	ne.	1.0	0.4	.....	.....	10	.....	.....	0.21	5.3	overcast	
Belgaum	27.38	695.4	29.90	759.5	79.6	26.4	45	ene.	2.0	0.9	.....	.....	3	.....	ne.	0	0	d. clouds	
Lahore	29.25	742.9	30.02	762.4	66.6	19.2	40	calm	0	0	.....	.....	5	.....	.....	0	0	d. clouds	
Roorkee	29.03	737.3	29.96	761.0	63.8	17.7	62	calm	0	0	.....	.....	4	w.	.....	0	0	.....	
Agra	29.43	747.4	30.01	762.2	71.2	21.8	40	nw.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.91	734.3	29.97	761.2	75.5	24.2	39	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.63	727.1	30.01	762.2	71.6	22.0	52	ne.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.60	751.7	29.98	761.6	69.3	20.7	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.63	752.7	29.96	761.0	60.8	16.0	67	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.78	756.5	29.98	761.4	66.4	19.1	68	w.	2.2	1.0	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.88	708.3	29.96	761.1	61.7	16.5	57	nw.	5.8	2.6	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.87	758.7	29.95	760.8	70.1	21.2	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.89	759.1	29.91	759.7	69.2	20.7	77	nw.	2.0	0.9	.....	.....	5	.....	.....	0	0	d. clouds	
Dhubri	29.77	756.2	29.90	759.3	71.5	21.9	71	calm	0.5	0.2	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.82	757.4	29.91	759.7	69.6	20.9	76	calm	1.2	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.58	751.2	29.92	760.1	64.5	18.1	86	ne.	2.0	0.9	.....	.....	4	.....	.....	0	0	blue sky	
Jeypore	28.55	725.1	30.01	762.2	75.7	24.3	46	nw.	3.2	1.4	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.64	752.9	30.06	763.5	44.6	7.0	70	nw.	1.3	0.6	.....	.....	10	.....	.....	0.394	10.0	.....	Prof. Giovanni Giodig.
Milan	29.52	749.7	30.06	763.4	33.4	0.8	85	ne.	4.3	1.9	.....	.....	10	.....	.....	0.126	3.2	.....	Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Padua	29.92	759.9	30.03	762.7	41.7	— 5.4	91	n.	9.4	4.2			10			0.039	1.0		Prof. Dott. Lorenzoni.
Moncalieri	29.11	739.5	30.06	763.5	31.6	— 0.2	89	e.	3.1	1.4			10			0.022	15.8		Prof. F. F. Denza.
Genoa	29.74	755.3	29 93	760.2	39.6	4.2	80	n.	12.5	5.6			10		se.	0.433	11.0		Prof. G. M. Garibaldi
Mondovi	28.06	712.8	30.05	763.2	32.9	0.5	81	w.			2		10			0	0		Prof. D. C. Bruno.
Pesaro	29.95	760.7	30.00	762.0	41.7	5.4	97	n.	5.6	2.5			10			0	0		Prof. Luigi Guidi.
Florence	29.70	754.3	29.96	760.9	48.2	9.0	80	se.			2		10			0.197	5.0		Prof. Costantino Pittei.
Leghorn	29.74	755.3	29.82	757.5	47.5	8.6	93	ene.	3.8	1.7			10			0.295	7.5		Prof. P. Monte.
Rome	29.74	755.5	29.92	760.0	55.8	13.2	70	e.	0.3	2.8			10			0.083	2.1		Prof. P. Tachini.
Lecce	29.85	758.1	30.10	764.6	63.0	17.2	70	sse.	20.0	9.2			3			0	0		Prof. C. de Giorgi.
Cosenza	29.17	740.8	30.06	763.6	57.6	14.2	78	wsw.	3.1	1.4			3	sw.		0	0		Prof. D. Conti.
Cagliari	29.52	749 7	29.71	754.6	61.3	16.3	77	se.			4		9	s.		0	0		Prof. A. Pacinotti.
Palermo	29.65	753.2	29.91	759.6	68.7	20.4	32	ne.	4.3	1.9			3			0	0		Prof. G. Cacciatore.
Syracuse	29.97	701.3	30.02	762.4	61.9	16.6	78	se.	4.3	1.9			8	sse.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.47	748.4	29.99	761.7	60.8	16.0	72	ne.	0	0			4	sw.		0	0		Prof. F. Brioschi.
Stelvio	21.94	557.3			15.3	— 9.3	94	sw.			6		10			0.386	9.8	misty	Prof. P. F. Denza.
Valdobbia	21.95	557.5			13.3	—10.4	71	e.			2		10			0.394	10.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.98	761.6	30.01	762.4	25.5	— 3.6	71	nw.			4		10 n		nw.	0.228	5.8	snowing	Hattori.
Awomori	29.94	760.5	29.98	761.5	20.5	— 6.4	79	nw.	25.9	11.6			10 n			0.369	9.4	light snow	K. Ogawa.
Hakodate	29.95	760.8	29.97	761.1	16.5	— 8.6	86	nw.	15.6	6.7			10			0.000	1.5		
Hamamatsu	30.04	763.0	30.07	763.7	39.9	4.4	64	nw.			6	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					38.9	3.8	64	nne.	1.9	0.8			10 ck;s			0	0	cloudy	
Kanazawa	30.06	763.5	30.17	766.2	36.7	2.6	64	wnw.	10.5	7.3			10			0.110	2.9	overcast	S. Endo.
Kioto	30.00	762.0	30.18	766.6	36.5	2.5	70	wnw.	2.3	1.0		0	1 s;ck			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.12	765 1	30.34	770.6	34.4	1.3	65	calm.	0	0		0	0			0	0	clear	S. Takehayashi.
Niigata	29.99	761.7	30.03	762.7	37.2	2.9	70	w.	22.6	10.1		0	9 ck		w.	0.365	9.3	overcast	M. Morita.
Nobiru	29.92	760.0	29.94	760.4	28.6	— 1.9	82	n.	14.0	6.3		2 ck	6 n			0.020	0.5	snowing	H. Midzushina.
Numazu	29.86	758.4	29.89	759.3	48.5	9.2	51	ssw.			7	0	0			0	0	clear	R. Kaneda.
Osaka	30.18	766 6	30.20	767.0	36.6	2.6	86	n.	5.9	2.6		2 ck	4ks;ck	w.	w.	0	0	fair	H. Omura.
Sapporo					13.0	—10.6	66	w.	21.0	9.4		0	2		w.	0.040	1.0	clear	
Tokei Obs'y, Yeddo	29.87	758.5	29.90	759.4	42.3	5.7	82	nnw.	12.6	5.6		0	0			0	0	clear	The Staff.
Wakayama	30.14	765.5	30.20	767.0	41.1	5.1	56	nw.	1.7	0.8		0	5ck;ks		nw.	0	0	fair	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.82	757.4	30.00	762.0	79.9	26.6	63	ese.	19.0	8.5		7 cs;c	2 k;ks		se.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.73	602.8	29.96	760.8	44.8	7.1	96	calm	0	0		2 ck	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.41	620.0	30.32	770.1	42.8	6.0	91	nw.			1	1 c	1 s			0	0	clear	Prof. M. Leal.
Muzatlan	29.73	755.0	29.99	761.7	71.5	21.9	51	ne.	1.6	0.8		2 cs	0	sw.		0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.15	588 1	30.32	770 1	46.2	7.9	93	calm	0	0			10 k			0	0	foggy	The Staff.
Morelia	24.32	617.6	30.19	766.7	41.5	5.3	69	e.			2	0	0			0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.01	609.9	30.13	765.2	48.6	9.2	77	calm	0	0		1 c	2 s	sw.	sw.	0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.44	595.4	30.22	767.2	51.8	11.0	49	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.56	573.1	30.29	769.4	44.0	6.5	94	ne.	9.2	4.1		0	1 s		ne.	0.028	0.7	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.71	754.6	29.71	754.6	36.9	2.7		ssw.			4					0.169	4.3		
Groningen	29.05	753.1	29.71	754.5	36.1	2.3		s.			2					0	0		
Helder	29.00	751.8	29.00	751.8	38.3	3.5		ssw.			4					0.157	4.0		
Hellevoetsluis	29.69	754.1	29.69	754.1	36.7	2.6	87	ssw.			4					0.181	4.6		
Utrecht	29.68	753.8	29.72	755.0	36.9	2.7	86	ssw.			4		2			0	0	lightly cld'y	H. van der Brink.
NORWEGIAN.																			
Bergen	29.89	759.1	29.95	760.7	24.1	— 4.4	77	sse.	2	1			1			0	0		
Brono	30.06	763.5	30.10	764.5	25.2	— 3.8	64	se.	9	4			2			0	0		
Christiania	29.99	761.7	30.15	765.7	19.4	— 7.0	83	ne.	2	1			10					snowing	
Gjæsvær	30.35	770.9	30.37	771.5	22.3	— 5.4		e.			2		0						
Lodingen	30.19	766.8	30.24	768.0	25.3	— 3.7	64	e.			4		7			0	0		
PORTUGUESE.																			
Angra, Azores	30.11	764.9	30.27	768.9	57.9	14.4	76	wnw.	8.7	3.9			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.10	739 1	30.13	765.3	40.0	7.8	40	nne.	5.6	2.5			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.15	765.9	30.24	768.2	62.6	17.0	50	nw.	3.8	1.7			4	n.		0.295	7.5		Capt. D. A. de Cunha.
Lisbon, Observatory	29.65	753.1	30.02	762.4	48.6	8.9	62	sw.	3.1	1.4			2			0	0		The Staff.
Ponta Delgada, Azores	30.26	768.7	30.34	770.5	61.5	16.4	56	wnw.	5.6	2.5			3			0	0		
Saint Paul de Loando	29.00	751.7	29.80	756.8	76.6	24.8	84	nw.	1.8	0.8			8			0	0		
Serra da Estrella	25 02	635.4	29.96	760.9	25.3	— 3.7	87	wnw.	21.7	9 7			3			0	0		
RUSSIAN.																			
Akmolinski	29.63	752 6	30.91	785.1	—15.7	—26.5	82	ene.	7	3		0	0						Major K. Lasarew.
Archangel	30.32	770.2	30.34	770.7	9.7	—12.4	92	ne.	4	2			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.43	772.9	30.35	770 9	40.5	4.7	73	ese.	7	3			10 s			0	0		Capt. Wisganow.
Barnaul	30.20	768.7	30.87	784.0	—22.0	—30.0	76	nw.	2	1			0			0	0		Meteorological Obs'y.
Bielosersk	29.79	756.6	30.28	769.1	31.3	— 0.4	100	ene.	2	1			10 n			0.087	2.2	snow & fog	
Dorpat	29.84	758 0	30.10	764.5	31.3	— 0.4	100	e.	7	3			10 n			0.134	3.4		Observatory.
Ekaterinburg	29.55	750.5	30.01	777.4	11.3	—11.5	91	se.	7	3			10			0.138	3.5	snowing	Meteorological Obs'y.
Elissawetgrad	29.09	754.0	30.15	765.9	34.9	1.6	98	sse.	2	1			10			0.150	3.8		
Kasan	30.21	767.4	30.50	774.8	22.5	— 5.3	79	sse.	18	8			10						Observatory.
Kem	30.28	769.1			21.9	— 5.6	96	ne.	4	2			10			0	0	heavy cld's	
Kertch	30.12	765.0	30.14	765 5	45 3	7.4	91	calm	0	0		0	7 n			0	0		Lagorio & Sastyrez.
Kieff	29.39	746.6	30.06	763.4	35 1	1.7	100	se.	4	2			10 n					foggy	Observatory.
Liban	29.95	760.7	29.97	761.3	35.1	1.7	91	e.			1		10			0.020	0.5		E. Quaas.
Lugan	29.95	760.7	30.16	766.1	35.8	2.1	94	ese.	9	4			10			0	0		Meteorological Obs'y.
Nikolaiev	30.05	763 2	30.12	765.1	41.7	5.4	99	s.	13	6			10 n			0.031	0.8	raining	Capt. Kurdakow.
Pekin, China	30.24	768.1	30.38	771.7	18.7	— 7.4	86	se.	4	2			10 n					snowing	Physical Observatory.
Petrozavodsk	30.00	763.5	30.27	768.9	19.8	— 6.8	89	nw.	7	3			10			0.091	2.3		Dr. Bergmann.
Pinsk																			
St. Petersburg	30.15	765.8	30.17	766.2	30.4	— 0.9	94	ne.	7	3			10 n			0.031	0.8		Central Physical Obs'y.
Sevastopol																			
Semipalatinsk	30.19	766.7	30.98	780 8	—22.4	—30.2	82	w.	9	4			0			map.	map.		Major Lasarew.
Starol Bykhov	29.69	754.0	30.17	766.2	33.4	0.8	100	ese.	9	4			10			0.102	2.6	foggy	
Tashkend, Laboratory	28.56	725.5	30.16	766.0	49.3	9.6	67	calm	0	0			10			0	0		Teich, A. M.
Tiflis	28.76	730.6	30.19	766.7	55.8	13.2	58	calm	0	0		2 ck	0			0	0		Physical Observatory.
Tomsk	30.06	778.8	31.01	787.6	—30.9	—38.3	79	calm	0	0		0	3						
Vladivostock	30.32	770.2	30.39	771.9	0.7	—17.4	45	n.	4	2		0	0			0	0		
Warsaw	29.59	751.5	30.03	762.7	34.2	1.2	94	sw.	4	2			10					heavy cl'ds	Astronomical Obs'y.
Wilna	29.66	751.8	30.04	762.9	35.8	2.1	96	sse.	2	1			10					heavy cl'ds	Berg, Assistant.
Yeniseisk	30.60	777.2	30.95	786.2	—40.2	—40.1	80	calm	0	0			10						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.80	756.9	37	2.8	80	e.			4	0	0			0	0	clear	J. Youngclause
North Unst			29.86	758.4				se.			3	3	6	e.		blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.58	751.3	29.69	754.0	46.0	7.8	74	ne.	2.7	1.2			10			0.272	6.9		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.80	757.0	29.86	758.5	48.6	9.2	59	sw.	1.3	0.6		3	0	w.		0	0	almost cov	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.81	681.0	29.91	759.8	32.0	0.0	93	w.	2.9	1.3			0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	27.58	700.6	29.89	759.1	38.5	3.6	62	sw.	1.6	0.7			0			0	0	clear	The Staff.
Murcia, Met. Obs'y	29.58	751.4	29.69	754.2	46.2	7.9	84	nw.	6.3	2.8		0	0						
Oviedo	28.99	730.4	29.87	758.8	37.4	3.0	87	se.	4.0	1.8		5	5	se.		0.177	4.5	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.91	734.3	29.83	757.7	43.2	6.2	86	calm	0	0		2 k	4 k	calm	calm	0	0	cloudy	Prof. L. G. Frades.
													1			0.209	5.3	almost clear	R. Gil Villanueva, Dir.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From	Lower. From.	Inch.	Mill		
Spanish.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.73	755.2	29.79	756.7	79.4	26.3	90	nne.	2.2	1.0	.....	.....	10 kn	.....	.....	0.256	6.5	threatening.	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.87	758.6	29.97	761.2	49.5	9.7	55	nw.	11.9	5.3	.....	0	0	.....	.....	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.95	760.6	30.04	762.9	77.7	25.4	89	ne.	17.0	7.6	.....	.....	10 n	.....	e.	0.138	3.5	raining.....	Manuel Maese.
Tuguegarao, Philippine Id's	29.75	755.7	29.89	759.1	71.5	21.9	92	nnw.	14.3	6.4	.....	0	7 ks	.....	ne.	0.27	6.9	covered.....	José L. Yrastorza.
Swedish.																			
Haparanda	30.37	771.3	30.41	772.3	10.8	—11.8	100	ne	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.27	768.8	30.32	770.1	14.4	— 9.8	94	ne.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Hernosand	30.20	767.1	30.25	768.4	28.4	— 2.0	96	ne.	.....	.....	2	.....	10	.....	.....	0.028	0.7	.....	
Stockholm	29.85	758.3	30.03	762.8	31.3	— 0.4	96	ne.	.....	.....	6	.....	10	.....	.....	0.008	0.2	snowing.....	
Wisby	29.84	757.9	29.90	759.4	34.9	1.6	96	e.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Sub-series.																			
Upsala	29.97	761.3	30.06	763.5	29.7	— 1.3	95	ne.	9.4	4.2	.....	.....	10	.....	.....	0.126	3.2	snowing.....	S. G. Fineman.
Swiss.																			
Geneva	28.48	723.3	29.98	761.4	30.9	— 0.6	78	sw.	.....	.....	1	.....	10	.....	.....	0	0	covered.....	The Observatory.
Turkish.																			
Constantinople	.....	.....	30.17	766.3	58.6	14.8	69	sw.	8	3.5	.....	.....	2	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	30.14	765.6	64.8	18.2	.....	s.	.....	.....	1	.....	5	.....	.....	0	0	slightly cl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.13	765.4	63.5	17.5	59	n.	.....	.....	2	.....	4 ks	.....	nw.	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.25	768.3	30.34	770.6	22	— 5.6	73	sw.	3	1.3	.....	.....	10 s	.....	w	0.08	2.0	cloudy	J. O. Barnes.
Alpena, Michigan	29.46	748.3	30.17	766.3	11	—11.7	80	w.	5	2.2	.....	.....	10 n	.....	.....	inap.	inap.	light snow...	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.09	637.3	30.17	766.3	27	— 2.8	61	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	W. C. Barnes.
Assinnaboine, Ft., Montana	27.04	686.8	30.07	763.8	27	— 2.8	77	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	B. O. Lenoir.
Atlanta, Georgia	29.17	740.9	30.41	772.4	23.0	— 5.0	73	ne.	8	3.6	.....	0	3 s	.....	.....	0	0	clear.....	H. C. Smith.
Atlantic City, New Jersey	30.47	773.9	30.48	774.2	12	—11.1	61	w.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	Jas. M. Watson.
Augusta, Georgia	30.29	769.4	30.49	774.4	28	— 2.2	64	ne.	2	0.9	.....	0	9 s	.....	sw.	0	0	cloudy.....	John Healy.
Baltimore, Maryland	30.45	773.4	30.50	774.7	20	— 6.7	56	nw.	1	0.4	.....	.....	hz.	.....	.....	0	0	dense haze..	Geo W Felger.
Barnegat, New Jersey	30.44	773.2	30.46	773.7	15.0	— 9.4	70	w.	17	7.6	.....	1 k	0	.....	.....	0	0	clear	G. A. Hill.
Bennett, Fort, Dakota	28.09	713.5	29.86	758.4	32	0.0	88	nw.	13	5.8	.....	.....	10 s	.....	nw.	0	0	cloudy.....	A. Pritchard.
Benton, Fort, Montana	27.11	688.6	30.11	764.8	25	— 3.9	64	calm	0	0	.....	.....	10 s	.....	sw.	0.01	0.3	cloudy.....	S. Wheaton.
Bismarck, Dakota	27.84	707.1	29.85	758.2	21	— 6.1	87	nw.	28	12.5	.....	.....	10 s	.....	.....	0.01	0.3	cloudy.....	Cyrus Cramer.
Block Island, Rhode Island	30.34	770.6	30.37	771.4	25	— 3.9	73	nw.	10	4.5	.....	0	5 ks	.....	nw.	0	0	fair.....	J. T. Elker.
Boise City, Idaho	27.35	694.7	30.33	770.4	30.5	— 0.8	94	w.	1	0.4	.....	.....	10 s	.....	.....	0.08	2.0	cloudy.....	B. E. Light.
Boston, Massachusetts	30.13	765.3	30.29	769.4	18.6	— 7.8	67	w.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	O. B. Cole.
Brownsville, Texas	30.00	763.5	30.10	764.5	44.2	6.8	97	n.	2	0.9	.....	.....	fg.	.....	.....	0.11	2.8	dense fog.....	M. McCarty.
Buffalo, New York	29.51	749.5	30.31	769.9	13.2	—10.4	100	s.	12	5.4	.....	.....	10 n	.....	w.	0.35	8.9	heavy snow	W. Finn.
Buford, Fort, Dakota	27.97	710.4	30.21	767.3	24	— 4.4	92	sw.	12	5.4	.....	.....	10 s	.....	w.	0.02	0.5	cloudy.....	F. A. Mellen.
Burlington, Vermont	29.95	760.7	30.26	768.6	15.0	— 9.4	67	w.	15	6.7	.....	.....	10 s	.....	w.	0	0	cloudy.....	G. O. Shaeffer.
Cairo, Illinois	29.77	756.1	30.19	766.8	30.0	— 1.1	88	s.	12	5.4	.....	.....	10 s	.....	s.	0	0	threatening.	W. H. Ray.
Cape Henry, Virginia	30.50	774.7	30.52	775.2	21	— 6.1	58	s.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	A. K. Alderson.
Cape May, New Jersey	30.46	773.7	30.50	774.7	20.0	— 6.7	76	nw.	11	4.9	.....	0	0	.....	.....	0	0	clear.....	W. E. Smith.
Cape Mendocino, California	29.59	751.6	30.27	768.8	46	7.8	83	nw.	18	8.0	.....	0	0	.....	.....	0	0	clear.....	J. J. McLean.
Cedar Keys, Florida	30.30	769.6	30.32	770.1	47	8.3	86	ne.	8	3.6	.....	.....	10 ks	.....	e.	0	0	cloudy.....	F. W. Mixer.
Champaign, Illinois	29.23	742.4	30.10	764.5	17.5	— 8.1	58	se.	12	5.4	.....	.....	10 s	.....	se.	0	0	cloudy.....	L. A. Welsh.
Charleston, S. Carolina	30.37	771.4	30.43	772.9	36	2.2	61	ne.	8	3.6	.....	.....	10 s	.....	ne.	0	0	threatening.	J. H. Smith.
Charlotte, N. Carolina	29.55	750.6	30.44	773.2	20.0	— 6.7	70	s.	1	0.4	.....	0	fg.	.....	.....	0	0	clear.....	D. O'Donoghue.
Chattanooga, Tennessee	29.55	750.6	30.41	772.4	23.0	— 5.0	61	se.	3	1.3	.....	1 cs	0	.....	.....	0	0	clear.....	B. L. Goulding.
Cheyenne, Wyoming	23.79	604.3	30.07	763.8	26.2	— 3.2	80	ne.	20	8.9	.....	0	5 s	.....	.....	0	0	fair.....	E. McGovern.
Chicago, Illinois	29.38	746.2	30.14	765.5	20.1	— 6.6	67	s	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	J. Mitchell.
Chincoteague, Virginia	30.46	773.7	30.48	774.2	23	— 5.0	61	n.	7	3.1	.....	hz.	0	.....	.....	0	0	clear.....	C. F. Dickens.
Cincinnati, Ohio	29.61	752.1	30.31	769.9	19	— 7.2	70	e.	6	2.7	.....	2 c	3 s	sw.	s.	0	0	fair.....	R. B. Watkins.
Cleveland, Ohio	29.53	750.0	30.32	770.1	11.8	—11.2	74	s.	8	3.6	.....	.....	10 s	.....	sw.	0	0	cloudy	J. B. Newlin.
Coleman City, Texas	28.13	714.5	30.03	762.7	51	10.6	86	sw.	21	9.4	.....	.....	10 s	.....	sw.	0	0	cloudy.....	L. Dorman.
Columbus, Ohio	29.40	746.7	30.31	769.9	14	—10.0	80	se.	7	3.1	.....	.....	10 s	.....	w	0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.00	711.2	30.02	762.5	43.6	6.4	86	sw.	26	11.6	.....	0	5 s	.....	.....	0	0	fair.....	J. McGlone.
Custer, Fort, Montana	26.71	678.4	30.11	764.8	32	0.0	100	w.	12	5.4	.....	.....	10 n	.....	.....	0.04	1.0	light snow..	W. B. Lamar.
Davenport, Iowa	29.31	744.5	30.02	762.5	23	— 5.0	73	se.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.15	638.8	30.09	764.3	44	6.7	71	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	J. Williams.
Dayton, Washington T'y	28.38	720.8	30.21	767.3	40.7	4.8	77	sw.	16	7.2	.....	0	0	.....	.....	0	0	clear.....	D. Moore.
Deadwood, Dakota	25.09	637.3	30.08	764 0	30	— 1.1	100	ne.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy.....	F. Willson.
Delaware Breakwater, Del.	30.48	774.2	30.50	774 7	22	— 5.6	44	nw.	13	5.8	.....	0	0	.....	.....	0	0	clear.....	T. S. Townsend.
Denison, Texas	29.14	740.1	29.99	761.7	43.0	6.1	83	s.	19	8.5	.....	.....	10 s	.....	.....	0	0	cloudy	J. W. Byram.
Denver, Colorado	24.50	622.3	30.02	762.5	39.5	4.2	43	w.	25	11.2	.....	0	1 s	.....	w.	0	0	clear.....	F. M. Neal.
Des Moines, Iowa	28.92	734.6	29.90	759.4	23	— 5.0	73	s.	5	2.2	.....	10 cs	0	.....	.....	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.51	749.5	30.27	768.8	20.4	— 6.4	84	s.	9	4.0	.....	.....	10 k	.....	sw.	0	0	cloudy.....	C. F. R. Wappenhans.
Dodge City, Kansas	27.04	686.8	29.84	757.9	20	— 6.7	73	n.	11	4.9	.....	0	0	.....	.....	0	0	clear.....	V. P. Temple.
Dubuque, Iowa	29.26	743.2	30.03	762.7	19.2	— 7.1	70	se.	3	1.3	.....	.....	10 s	.....	.....	inap.	inap.	cloudy.....	J. Harvey Smith.
Duluth, Minnesota	29.18	741.2	29.99	761.7	13	—10.6	80	se.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy.....	N. B. Conger.
Eagle Pass, Texas	29.32	744.7	30.16	765.1	45.1	7.3	68	se.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25.29	642.4	30.21	767.3	24	— 4.4	76	sw.	14	6.3	.....	0	0	.....	.....	0.04	1.0	clear.....	J. M. Clifford.
Eastport, Maine	30.02	762.5	30.09	764 3	11.0	—11.7	70	w.	10	4.5	.....	0	0	.....	.....	0	0	clear.....	D. C. Murphy.
Elliott, Fort, Texas	26.94	684.3	29.90	759.4	44	6.7	63	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	W. J. Gundall.
El Paso, Texas	26.24	666.5	30.10	764.5	44.0	6.7	68	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	J. O'Dowd.
Erie, Pennsylvania	29.55	750.6	30.32	770.1	12	—11.1	80	s.	12	5.4	.....	.....	10 s	.....	s.	0.06	1.5	cloudy.....	Peter Wood.
Escanaba, Michigan	29.40	746.7	30.12	765.0	4.5	—15.3	85	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy.....	George Heathcote.
Fredericksburg, Texas	28.29	718.6	30.11	764.8	48	8.9	100	sw.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy.....	Frank Halwegler.
Galveston, Texas	30.10	764.5	30.15	765.8	59	15.0	81	se.	12	5.4	.....	.....	fg.	.....	.....	0	0	dense fog....	E. O'C. Machierney.
Grand Haven, Michigan	29.44	747.8	30.15	765.8	15.0	— 9.4	83	se.	11	4.9	.....	.....	10 s	.....	se.	0.08	2.0	cloudy.....	J. E. Mueller.
Grant, Fort, Arizona	25.25	641.3	30.13	765 3	35.5	1.9	72	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	Robert C. Lord.
Hatteras, North Carolina	30.48	774.2	30.50	774.7	29	— 1.7	77	ne.	8	3.6	.....	hz.	0	.....	.....	0	0	clear.....	R. M. Crawford.
Helena, Montana	25.72	653.3	30.10	764.5	32	0.0	86	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	N. C. Smith.
Henrietta, Texas	28.87	733.3	29.95	760.7	48	8.9	71	sw.	20	8.9	.....	0	2 ks	.....	w.	0	0	clear.....	J. P. Sherry.
Huron, Dakota	28.24	717.3	29.78	756.4	27.3	— 2.6	67	se.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.37	746.0	30.22	767.6	17	— 8.3	73	se.	6	2.7	.....	.....	10 s	.....	se.	0	0	cloudy	O. Schutze.
Indianola, Texas	30.08	764.0	30.11	764.8	55.5	13.1	100	calm	0	0	.....	.....	10 n	.....	e.	0.05	1.3	light rain....	I. A. Reed.
Jacksboro, Texas	28.71	729.2	29.95	760.7	52	11.1	69	s.	22	9.8	.....	0	3 s	.....	.....	0	0	clear.....	D. J. Carr.
Jacksonville, Florida	30.31	769.9	30.39	771.1	45	7.2	83	n.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. W. Smith.
Keogh, Fort, Montana	27.36	694.9	30.06	763.5	31	— 0.6	81	nw.	13	5.8	.....	5 ck	0	nw.	.....	0.03	0.8	fair.....	A. Schneider.
Keokuk, Iowa	29.39	746.5	30.10	764 5	20.0	— 6.7	70	se.	8	3.6	.....	1 k	0	w.	.....	0	0	clear.....	F. Z. Gosewisch.
Key West, Florida	30.12	765.0	30.14	765.5	69.0	20.6	92	ne.	16	7.2	.....	4 ck	5 ks	w.	ne.	0	0	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	30.51	774.9	30.53	775.4	21.5	— 5.8	65	nw.	6	2.7	.....	hz.	0	.....	.....	0	0	dense haze..	H. Mc P. Baldwin.
Knoxville, Tennessee	29.32	744.7	30.40	772.1	17.8	— 7.9	86	ne.	1	0.4	.....	0	sk.	.....	.....	0	0	clear.....	J. A. Cody.
La Crosse, Wisconsin	29.11	739.4	29.96	761.0	16	— 8.9	83	se.	8	3.6	.....	.....	10 n	.....	.....	inap.	inap.	light snow..	S. C. Emery.
Leavenworth, Kansas	28.97	735.8	29.93	760.2	27	— 2.8	77	e.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy	A. W. Browne.
Lewiston, Idaho	29.29	744.0	30.17	766.3	38.0	3.3	82	e.	4	1.8	.....	0	0	.....	.....	0.02	0.5	clear.....	W. Bell.
Little Rock, Arkansas	29.77	756.1	30.10	764.5	37	2.8	82	s.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	W. U. Simons.
Los Angeles, California	29.67	753.6	30.07	763.8	43	6.1	96	n.	4	1.8	.....	.....	fg.	.....	.....	0	0	dense fog....	T. S. Collins.
Louisville, Kentucky	29.64	752.8	30.24	768.1	26	— 3.3	70	se.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy.....	L. M. Dey.
Lynchburg, Virginia	29.71	754.6	30.44	773.2	18.5	— 7.5	69	calm	0	0	.....	0	2 s	.....	.....	0	0	clear.....	Lewis Dunne.
Mackinaw City, Michigan	29.44	747.8	30.14	765.5	19.0	— 7.2	84	s.	3	1.3	.....	.....	10 n	.....	.....	0.45	11.4	light snow..	F. R. Day.
Macon, Fort, North Carolina	30.48	774.2	30.49	774.4	26	— 3.3	76	ne.	10	4.5	.....	0	0	.....	.....	0	0	clear.....	U. A. Shaw.
Madison, Wisconsin	28.96	735.6	30.06	763.5	15	— 9.4	83	se.	8	3.6	.....	.....	10 s	.....	se.	0	0	cloudy.....	F. P. Chaffee.
Maginnis, Fort, Montana	25 42	645.7	29.96	761.0	28	— 2.2	47	w.	12	5.4	.....	0	0	.....	.....	0.03	0.8	clear.....	F. Burke.

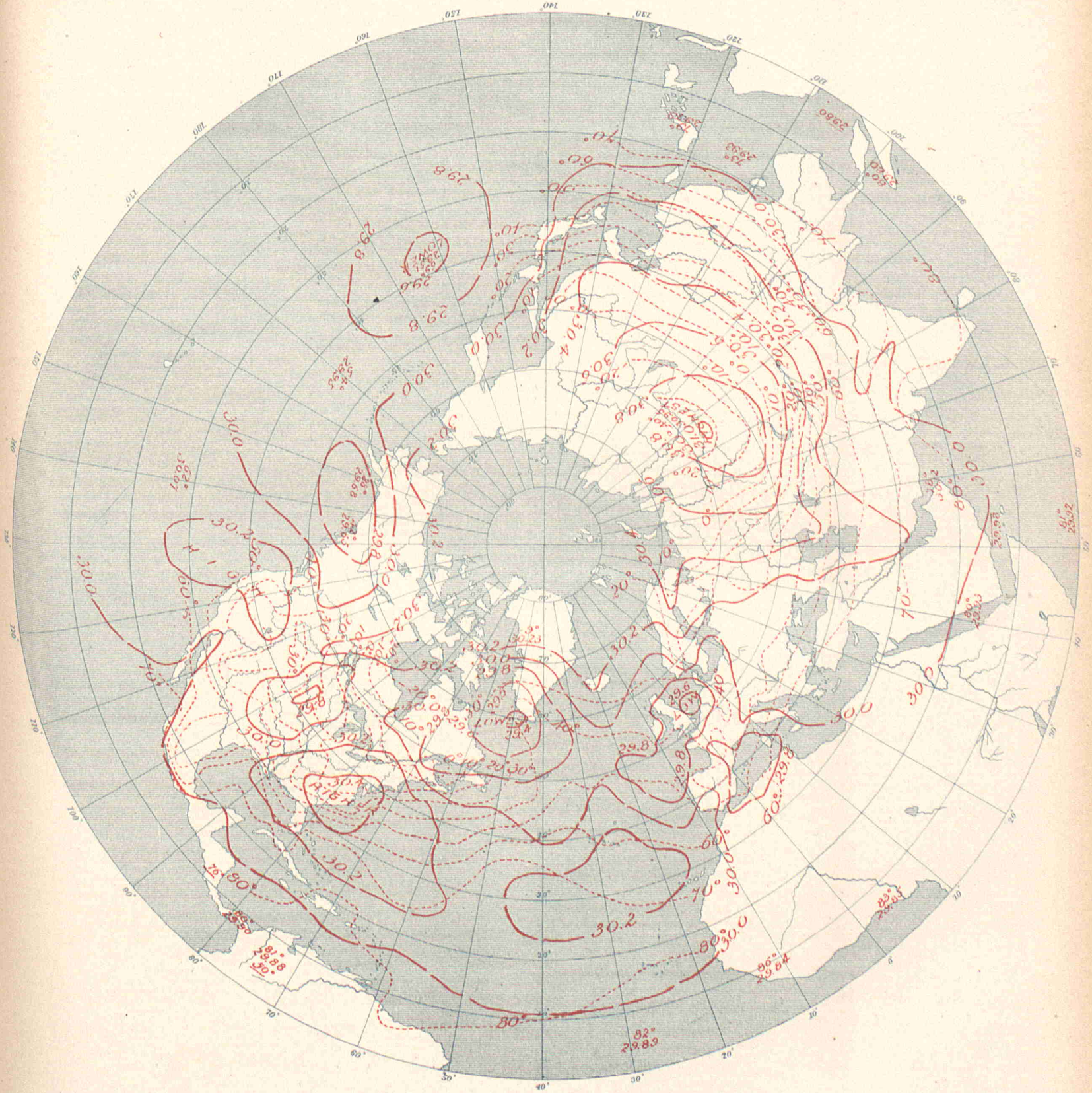
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	WEATHER.	OBSERVERS.
UNITED STATES.—Cont'd.																			
McKavett, Fort, Texas	27.76	705.1	30.14	765.5	47	8.3	93	s.	16	7.2			10 s			0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.29	744.0	30.07	763.8	7	—13.9	52	w.	2	0.9			10 s			0	0	cloudy	J. Gilligan.
Memphis, Tennessee	29.85	758.2	30.21	767.3	34	1.1	78	se.	3	1.3			10 s			0	0	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.31	744.5	30.12	765.0	17	— 8.3	83	s.	4	1.8			10s;fg			0	0	cloudy	W. Line
Missoula, Fort, Montana	26.71	678.4	30.17	766.3	29	— 1.7	67	w.	2	0.9			8 s			0.01	0.3	cloudy	I. H. Young.
Mobile, Alabama	30.26	768.6	30.30	769.6	34	1.1	65	ne.	5	2.2		2 ck	0	sw.		0	0	clear	C. A. Read.
Montgomery, Alabama	30.12	765.0	30.36	771.1	27.4	— 2.6	58	e.	3	1.3		0	0			0	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	28.72	729.5	29.83	757.7	17	— 8.3	83	se.	14	6.3			10 s			0.05	1.3	cloudy	H. Bessant.
Morgantown, W. Virginia	29.34	745.2	30.41	772.4	8.0	—13.3	76	sw.	1	0.4		2 k	4 s	w.	sw.	0	0	fair	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.12	587.2	29.75	755.6	—16.0	—26.7	100	nw.	104	46.5			fg.		nw.	0.10	2.5	dense fog	B. S. Pague.
Nashville, Tennessee	29.67	753.6	30.28	769.1	23.0	— 5.0	88	e.	4	1.8		10 cs	0	sw.		0	0	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.26	768.6	30.38	771.6	12	—11.1	80	w.	5	2.2		0	0			0	0	clear	J. H. Sherman.
New London, Connecticut	30.36	771.1	30.41	772.4	15	— 9.4	67	w.	8	3.6		0	0			0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.19	766.8	30.25	768.3	42.2	5.7	73	e.	9	4.0		8 c	sk.	w.		0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.32	770.1	30.37	771.4	19.0	— 7.2	70	w.	19	8.5		0	0			0	0	clear	W. McGillivray.
New York, New York	30.26	768.6	30.45	773.4	13	—10.6	61	w.	8	3.6		3 cs	0			0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.48	774.2	30.51	774.9	23	— 5.0	34	calm	0	0		0	0			0	0	clear	Wm. Davis.
North Platte, Nebraska	29.74	679.2	29.90	759.4	35.6	2.0	75	n.	11	4.9		0	2 s			0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.16	766.1	30.20	767.1	43.0	6.1	93	s.	5	2.2		0	4 s			0.57	14.5	fair	J. Dascomb.
Omaha, Nebraska	28.56	725.4	29.85	758.2	22.1	— 5.5	76	s.	16	7.2		0	0 s			0	0	fair	A. Pollak.
Oswego, New York	29.93	760.2	30.28	769.1	20.5	— 6.4	63	sw.	12	5.4			10 s		w.	0.68	17.3	cloudy	J. G. Linsley.
Palestine, Texas	29.56	750.8	30.14	765.5	42.5	5.8	82	s.	12	5.4			10 n			inap.	inap.	light rain	L. M. Pindell.
Pensacola, Florida	30.29	769.4	30.32	770.1	36.8	2.7	72	ne.	7	3.1		4 cs	0	w.		0	0	fair	M. McGauran.
Philadelphia, Pa.	30.38	771.6	30.49	774.4	16.5	— 8.6	67	w.	7	3.1		2 cs	0	w.		0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.46	443.5	30.12	765.0	5	—15.0	83	nw.	24	10.7			10 n		nw.	0.05	1.3	light snow	H. Hall.
Ploche, Nevada	24.01	609.8	30.18	766.6	36.5	2.5	52	nw.	8	3.6		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.51	749.5	30.37	771.4	12.0	—11.1	70	se.	2	0.9			10 s		se.	0	0	cloudy	W. A. Reid.
Poplar River, Montana	27.75	704.8	30.11	764.8				ne.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.23	767.8	30.24	768.1	55.0	12.8	86	ne.	10	4.5		3 c	5 s	sw.	se.	0	0	cloudy	H. B. Boyer.
Port Huron, Michigan	29.56	750.8	30.29	769.4	11.2	—11.6	80	sw.	8	3.6			10 s			0	0	cloudy	W. O. Bailey.
Portland, Maine	30.15	765.8	30.20	767.1	17	— 8.3	67	sw.	14	6.3		0	0			0	0	clear	W. W. Elchelberger.
Portland, Oregon	30.18	766.6	30.25	768.3	44.8	7.1	83	s.	6	2.7		0	4 s		s.	0.19	4.8	fair	M. L. Hearne.
Portsmouth, N. C.					31	— 0.6	78	sw.			2	hz.	hz.			0	0	light haze	F. S. Coburn.
Prescott, Arizona	24.75	628.6	30.12	765.0	45.5	7.5	51	s.	8	3.6		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	30.27	768.8	30.30	769.6	19	— 7.2	70	w.	13	5.8		1 k	0	w.		0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	30.20	767.1	30.21	767.3	57.5	14.2	90	ne.	13	5.8		7 c	0	w.		0	0	fair	W. J. Evans.
Red Bluff, California	29.85	758.2	30.22	767.6	42	5.6	73	n.	6	2.7		0	0			0	0	clear	J. R. Williams.
Rochester, New York	29.60	751.8	30.31	769 9	12.5	—10.8	87	sw.	8	3.6			10 s			0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.77	756.1	30.34	770.6	38	3.3	89	e.	1	0.4		0	2 s		w.	inap.	inap.	clear	J. J. Nanry.
Sacramento, California	30.11	764.8	30.19	766.8	43.3	6.3	74	n.	7	3.1		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.44	747.8	30.09	764.3	25.9	— 3.4	97	s.	10	4.5			10 s		s.	0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	30.21	767.3	30.24	768.1	—12	—24.4	100	calm	0	0		0	0			0.04	1.0	clear	A. P. Leavitt.
St. Paul, Minnesota	28.95	735.3	29.91	759.7	15.0	— 9.4	83	se.	12	5.4			10 s		se.	inap	inap.	cloudy	P. F. Lyons.
St. Vincent, Minnesota	28.91	734.3	29.90	759.4	9	—12.8	87	se.	9	4.0			10 n			0.04	1.0	heavy snow	C. B. Dilley.
Salt Lake City, Utah	25.66	651.8	30.20	767.1	36	2.2	72	calm	0	0			10 s			0.03	0.8	threatening	J. Craig.
San Antonio, Texas	29.40	746.7	30.12	765.0	43.0	6.1	100	calm	0	0			10 n			0.03	0.8	light rain	T. J. Kenan.
San Diego, California	29.98	761.5	30.05	763.3	50.2	10.1	96	e.	5	2.2			fg.			0	0	dense fog	A. C. Dobbins.
Sandusky, Ohio	29.57	751.1	30.30	769.6	16	— 8.9	67	sw.	8	3.6			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.41	772.4	30.44	773.2	14.0	—10.0	80	w.	13	5.8		1 k	0			0	0	clear	B. A. Blundon.
San Francisco, California	30.13	765.3	30.20	767.1	47.5	8.6	96	sw.	1	0.4		0	fg.			0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.09	586.5	30.08	764.0	32	0.0	65	e.	6	2.7		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.34	770.6	30.44	773.2	38	3.3	44	n.	6	2.7		10 ck	0			0	0	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.26	667.0	30.08	764.0	30	— 1.1	70	w.	5	2.2		0	4 s			0	0	fair	A. L. Mathews.
Shreveport, Louisiana	29.92	760.0	30.17	766.3	39	3.9	46	s.	9	4.0			10 s		s.	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.58	725.9	29.91	759.7	38.5	3.6	81	s.	17	7.6		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.29	617.0	30.13	765 3	33.5	0.8	80	calm	0	0		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.58	751.3	29.65	753.1	41.7	5.4	65	se.	9	4.0			10 s		se.	0.29	7.4	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.49	749.0	29.99	761.7	36.0	2.2	61	e.	7	3.1			10 s			0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.45	773.4	30.49	774.4	24	— 4.4	73	n.	7	3.1		0	0			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.00	711.2	30.13	765.3	37	2.8	89	sw.	4	1.8			10 s			0	0	cloudy	H. Clifford.
Springfield, Illinois	29.35	745.5	30.08	764.0	23	— 5.0	72	s.	11	4.9			10 s			inap.	inap.	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.22	767.6	30.36	771.1	15.0	— 9.4	91	sw.			2	0	0			0	0	clear	Charles Mayr.
Springfield, Mo.	28.39	721.1	29.92	760.0	34	1.1	78	s.	24	10.7			10 s			0	0	cloudy	J. B. Marbury.
Starkville, Miss.	29.80	756.9	30.30	769.6	33	0.6	81	s.	13	5.8			9 s		s.	0	0	cloudy	C. Dill.
Stevenson, Fort, Dakota	27.84	707.1	29.90	759.4	15	— 9.4	83	n.	25	11.2			10 s			0.06	1.5	cloudy	W. Burrows.
Stockton, Fort, Texas	26.92	683.8	30.06	763.5	53	11.7	61	sw.	10	4.5		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	30.23	767.8	30.29	769.4	22.5	— 5.3	73	w.	27	12.1		0	0			0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.28	692 9	30.10	764.5	30	— 1.1	88	sw.			1	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.52	749.8	30.26	768.6	16	— 8.9	48	s.	5	2.2			10 s		sw.	0	0	cloudy	A. Buell.
Tucson, Arizona	27.58	700.5	30.08	764.0	42	5.6	67	se	2	0.9		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.84	757.9	30.23	767.8	40	4.4	82	sw.	10	4.5		0	1 s			0	0	clear	J. Daly.
Verde, Fort, Arizona					31.9	— 0.1	62	nw.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.98	761.5	30.26	768.6	39.8	4.3	56	se.	7	3.1			10 s			0	0	cloudy	James Kenealy.
Visalia, California	29.78	756.4	30.16	766.1	41.0	5.0	86	s.	3	1.3		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.32	617.7	30.09	764.3	21.9	— 5.6	70	nw.	7	3.1		0	4 s		nw.	0	0	fair	T. M. Ambler.
Washington, D. C.	30.38	771.6	30.50	774.7	14.0	—10.0	66	calm	0	0		1 k	sk.			0	0	clear	B. M. Purssell.
West Las Animas, Colorado	25.75	654.0	29.91	759.7	27.5	— 2.5	46	w.	3	1.3		0	4 s		nw.	0	0	fair	F. H. Brandenburg.
Williamsport, Pa.	29.79	756.7	30.42	772.7	13	—10.6	80	w.	6	2.7			10 ks			0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.44	773.2	30.50	774.7	24	— 4.4	73	ne.	6	2.7		2 c	hz.			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.68	652.3	30.22	767.6	23	— 5.0	73	sw.	10	4.5		0	0			inap.	inap.	clear	J. Grover.
Yankton, Dakota	28.33	719.6	29.76	755 9	22	— 5.6	73	n.	3	1.3			10 ks			0	0	cloudy	J. H. Attfield.
Yuma, Arizona	29.78	756.4	29.93	760.2	45.6	7.6	68	e.	1	0.4		1 cs	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.99	558.5			50.0	10.0	70	se.	1	0.4		0	1 s		w.	0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I.	30.03	762.7	30.10	764.5	68.7	20.4	88	e.	6	2.7		ck	ks;s	w.		0.06	1.5	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	29.99	761.7	30.00	762.0	75	23.9	94	n.	1	0.4		1 cs	5 s		e.	0.03	0.8	cloudy	Robert Johnston.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	80	26.7	82	se.			1	5 ck	5 k	e.	e.	0.400	10.2		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.32	744.7	29.88	758.9	81	27.2	90	calm			0	9 c	1 s	w.	calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					76	24.4	93	ne.			3		10 ks		ne.	0.25	6.3	cloudy	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.62	752.3	29.68	753.9	28	— 2.2	77	nw.			5		5 k			0	0	fair	W. J. Fisher.
St. Thomas, W. I.	29.94	760.5	30.06	763.5	77	25.0	76	e.				2 k	4 k	e.	e.	0.42	10.7	cloudy	Aug. Walloe.
York Factory, B. A.	30.16	766.1	30.22	767.6	—22.0	—30 0		w.	7	3.1		2 c	2 s	sw.	w.	0	0	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	29.92	760.0	67.5	19.7	81	n.			4		4	n.						d. clouds.
H. M. S. Audacious, N. 5° 38′, E. 97° 29′	29.80	756.9	80	26.7		nne.			2		4							d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			71	21.7	62	n.			1–2		4	nnw.				1	nnw	d. clouds.
H. M. S. Boadicea, Saldanha, Bay, Cape Colony	29.92	760 0				sse.			2–3		1							blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.16	766.1	67	19.4	84	nnw.			3		8	nnw.						d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.28	769.1	47	8.3	69	ene.			1		7							d. clouds.
H. M. S. Comus, N. 42° 34′, W. 124° 50′	30.34	770.6	46	7.8	85	sw.			1–2		5	nnw.				5	nnw.	d. clouds.
H. M. S. Curacoa, Yokohama, Japan	29.79	756.7	50.5	10 3	64	ne.			2–3		0							squally.
H. M. S. Diamond, Sydney, N. S. W*†	29.63	752.6	70	21.1	52	ne.			1		2							d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	30.29	769.4	58.5	14.7	66	nw.			2–3		3	nw.						d. clouds.
H. M. S. Fawn, S. 23° 52′ E. 42° 58′	29.91	759.7	80.5	26.9	82	ssw.			1		6	nne.				2	ssw.	d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.94	760.5	61	16.1	77	calm			0		0							misty.
H. M. S. Iron Duke, N. 16° 09′ E. 113° 28′	29.83	757.7	73	22.8	85	ne.			4–5		5	ne.				6	ne.	d. clouds.
H. M. S. Kingfisher, S. 4° 56′ W. 82° 01′	29.93	760.2	66	18.9		se.			1		5	se.				4	se.	d. clouds.
H. M. S. Lark, S 33° 52′, E. 151° 14′	29.91	759.7	70.3	21.3	88	n.			3		8					1	n	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.92	760.0	65	18.3		calm			0									d. clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.32	770.1	40.1	4.5	69	ne.			1		0							blue sky.
H. M. S. Northampton, St. John's Antigua, W. I.	29.97	761.2	80	26.7		ene.			2		3	ene.						showery.
H. M. S. Rocket, S. 15° 00′, W. 75° 40′	29.96	761 0	68	20.0	90	se.			1		3					2–3	sw.	foggy.
H. M. S. Starling, N. 5° 25′, E. 3° 21′	29.85	758.2	82.7	28.2	91	ssw.			1		2	sse.						d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.96	761.0	64	17.8	100	calm			0		10					3		misty.
H. M. S. Sylvia, Elizabeth Island' Patagonia	29.08	738.6	48.2	9.0	73	wnw.			4		5	ene.						d. clouds.
H. M. S. Tourmaline, N. 14° 40′ E. 51° 50′	29.98	761.5				e.			2		0					1	e.	blue sky
H. M. S. Woodlark, Bushire. Persia	30.11	764.8	71.5	21.9	67	ne.			5–6		6	s.				4	ne.	squally.
H. M. S. Zephyr, Chee-foo, China	30.37	771.4	27.5	— 2.5	100	se.			1		10					2	e.	overcast.
Portuguese Naval.																		
Tamega, Macao, China	30.04	763 0	70.7	21.5	78	se.			6		0							blue sky*
Swedish Naval.																		
Vanadis, N. 36° 00′, E. 14° 45′	30.01	762.1	67.6	19.8	90	ese.			4		4							d clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla.	30.22	767.6	42	5.6	75	ne.	8	3.6			5		ne.	0	0			fair.
Navy Yard, Portsmouth, N. H.	30.24	768.1	15	— 9.4	?	sw.	14	6.3			0			0	0			clear
Naval Hospital, Yokohama, Japan*	29.75	755.6	44.5	6.9	49	nw.			2		0			0	0			clear.
Adams, Sitka, Alaska *†	29.70	754.4	39	3.9	91	sw.			3		10							cloudy.
Alaska, N 37° 35′, W 41° 56′	30.07	763.8	62	16.7	94	ese.			4		5		ne.	0.15	3.8	long	ne.	fair.
Alliance, Hampton Roads, Va.	30.47	773.9	29	— 1.7	89	wnw.			1–2		0			0	0			clear.
Ashuelot, Nagasaki, Japan	30.32	770.1	41	5.0	73	n.			1		2							clear.
Brooklyn, Keel Point, Patagonia	29.13	739 9	54	12 2	87	wsw.	15	6.7			10		sw.	0	0	sm'h		cloudy.
Colorado, New York, N. Y.	30.49	774 4	14	—10.0	100	sw.	4	1.8			0			0	0			clear.
Enterprise, Norfolk, Va	30.54	775.7	25	— 3.9	?	sw.			1		0							clear.
Essex, Callao, Peru	29.91	759.7	66	18.9	90	calm			0		10					sm'h		misty.
Franklin, Norfolk, Va.	30.49	774 4	16	— 8.9	?	s.	2	0.9			0			0	0			clear.
Galena, Montevideo, Uruguay	29.75	755.6	65	18.3	94	nne.			4		8		n.			sm'h		fair.
Hartford, Sandy Point, Patagonia*	29.01	736.8	50	10.0	71	wnw.			2		5		w.	light	light	sm'h		fair.
Independence, Mare Island, Cal.	30.23	767.8	44	6.7	100	calm			0		10			0	0			foggy.
Iroquois, Callao, Peru	29.95	760.7	67	19.4	90	calm			0		10							overcast.
Jamestown, Boston, Mass	30.27	768 8	17	— 8.3	100	wsw.			3		0							clear.
Juniata, N. 35° 36′, W. 50° 12′*	30.08	764.0	69	20.6	95	wsw.			2		10		calm	sli't	sli't	sm'h		threatening.
Kearsarge, Norfolk, Va.	30.47	773.9	28	— 2.2	88	ssw.			2		0							clear.
Lackawanna, Callao, Peru*	29.92	760.0	67	19.4	90	se.			1		10							cloudy.
Lancaster, Naples, Italy*	29.91	759.7	63	17.2	85	calm			0		10		calm			sm'h		cloudy.
Michigan, Erie, Pa.	30.13	765.3	26	— 3.3	100	s			4		10		sw.					cloudy.
Minnesota, New York, N. Y	30.49	774.4	14	—10.0	100	wnw.	1	0.4										overcast.
Monocacy, Kobe, Japan	30.14	765.5	43	6.1	75	wnw.			2		5		calm					fair.
New Hampshire, Newport, R. I.	30.38	771.6	19	— 7.2	100	w.			4		2		calm			sm'h	w.	fair.
Nipsic, Lisbon, Portugal*	29.95	760 7	55	12.8	62	wsw.			1		2		w.			sm'h		clear.
Onward, Callao, Peru	30.07	763.8	65	18.3	94	sse.			1		10		n.			long	w.	cloudy.
Palos, Tientsin, China*	30.26	768.6	24	— 4.4	87	ene.			3		10		calm					light snow.
Pensacola, Callao, Peru*	29.87	758.7	65	18.3	94	se.	2	0.9			10		se.	0	0	sm'h		cloudy.
Powhatan, Boston, Mass	30.27	768.8	14	—10.0	81	w.			1		0							clear.
Quinnebaug, Villafranche, France*	29.79	756.7	53	11.7	66	n.			1		10		n.			sm'h	sw.	raining.
Ranger, N 16° 09′, W. 94° 22′	29.94	760.5	72	22.2	71	nnw.			3		2		calm			gr'd	nw.	fair.
Richmond, Kobe, Japan*	30.11	764.8	43	6.1	67	nnw.			3		0			0	0			clear.
Saratoga, Newport, R. I.	30.30	769.6	15	— 9.4	64	w.			3		1		w.	0	0	sm'h		clear.
St. Louis, League Island, Pa.	30.71	780.0	14	—10.0	100	wsw.			2		2			0	0			clear.
Swatara, Hampton Roads, Va*	30.38	771.6	28	— 2.2	67	calm			0		0					sm'h		clear.
Tennessee, Fort Monroe, Va.	30.54	775.7	29	— 1.7	59	wsw.	9	4.0			0			0	0			clear.
Vandalia, Hampton Roads, Va*	30.48	774 2	28	— 2.2	100	wsw.			2		0							clear.
Wabash, Boston, Mass.	30.28	769.1	15	— 9.4	64	w.	10	4.5			0			0	0			clear.
Wachusetts, Mare Island, Cal*	30.10	764.5	45	7.2	100	var.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C.	30.56	776.2	40	4.4	48	se.			3		5		s.	0	0			fair.
Yantic, Hampton Roads, Va.	30.55	776.0	31	— 0.6	89	w.			1		2							clear.
Merchant Marine.																		
S. S. Grecian, N. 4° 30′, W. 29° 36′*	29.89	759.2	82	27.8	83	e.			3		3		e.	0	0	mod.	ne.	clear.
S. S. Nova Scotian, Off Sambro, N. S.	29.96	761.0	21	— 6.1		wnw.			4		2		w.			sli't	wsw.	fair.
S. S. Scandinavian, N. 42° 41′, W. 61° 40′	30.10	764.5	31	— 0.6		w.			7		4		w.	snow	snow	high	w.	snow & hail
S. S. British Crown, N. 45° 41′, W. 54° 42′†	29.87	758.7	26	— 3.3		w.			7		8		wnw.	sleet	sleet	h'vy	ssw.	sleeting.
S. S. British Prince, N. 50° 20′, W. 11° 56′†	29.81	757.2	44	6.7		e.			2–4		2		e.	2 h'r	2 h'r	mod.	nw.	fair.
S. S. Indiana, N. 51° 49′, W. 23° 09′			48	8.9	85	se.			5		10		se.	hv'y	hv'y	r'gh	se.	rainy.
S. S. Lord Clive, Philadelphia, Pa.						w.			2		0			0	0			clear.
S. S. Ohio, Philadelphia, Pa.			12	—11.1	80	wsw.			4		7?		wnw.					clear. ?
S. S. Pennsylvania Philadelphia, Pa†	30.37	771.4	12	—11.1		w.			2		8?		sw.					cloudy.?
S. S. Stella, N. 48° 23′, W. 18° 10′	29.61	752.0	48.2	9		n.			4		8		ne.	2 h'r	2 h'r	4	nnw.	squally.
S. S. Bolivia, Glasgow, Scotland *†	29.82	757.4	36	2.2	90	calm			0		5			0	0			
S. S. Elysia, N. 37° 20′, W. 63° 33′†	30.41	772 4	48	8.9		nw.			5		10		nnw.			mod.	nnw.	light rain.
S. S. Ethiopia, N. 43° 26′ W. 57° 00′	30.04	763.0	32	0.0		wnw			5		6		wnw.	snow	snow	h'vy	wnw.	cloudy.
S. S. Galatia, N. 16° 44′, E. 40° 50′ †	30.03	762.7	80	26.7	91	ne.			2		0			0	0	mod.	cross	clear.
S. S. Ailsa, N. 17° 58′, W. 76° 46′†	30.10	764.5	79	26.1	?	ne.			2		2		ne.	0	0	sm'h		fair.
S. S. Alvo, N. 14° 20′, W. 78° 40′	29.91	759.7	80	26.7		ene.			6	6 ck	0		e.	4 h'r	4 h'r	long	ne.	heavy rain.
S. S. Antillas, N. 19° 00′, W. 75° 20′			77	25.0		ne.			5		6		ne.	0	0	h'vy	ne.	cloudy.
S. S. Gordon Castle, N. 5° 44′, E. 105° 58′.	29.84	757.9	78.5	25.8	86	nne.			3–4		6							d. clouds.
Inchkeith, S. 39° 39′, E. 66° 46′	30.02	762.5	55.8	13.2	73	sw.			6		4							d. clouds.
Mertola, N. 43° 43′, W. 11° 38′	29.64	752.8	50.2	10.1	100	sw.			6		10							squally.
Ptolmey, N. 40° 30′, W. 69° 20′	30.36	771.1	31	— 0.6	48	wnw.			5		8							snowing.
S. S. Mexico, N. 29° 12, W. 115° 38′†	30.08	764.0	62	16.7	77	nw.			2		5		nw.			mod.	wnw	fair.
S. S. Gallia. N. 41° 53′, W. 53° 20′	30.07	763.8	45	7.2	56	nw.			5		10		n.	sh'rs	sh'rs	high	wnw.	squally.
S. S. Marathon, N. 37° 04′ E. 23° 50′	30.19	766.8	74	23.3		sw.			1		2		sw.	0	c		sw.	fine.
S. S. Pavonia, Boston, Mass†	30.29	769.4	28	— 2.2	88	w.			4		1		w	0	0			clear.
S. S. Scythia, N. 45° 42′, W. 43° 51′	29.91	759.7	44	6.7		nw.			5		10		nnw.	5 h'r	5 h'r	mod	nw.	overcast
S. S. Colina, N. 53° 57′, W. 25° 31′†	29.94	760.5				ene.			1		2		ne.	0	0	mod.	nw.	clear.
S. S. France, N. 47° 09′, W. 45° 16′ †	29.91	759.7	39.2	4		ne.			4	ck	0	ne.				h'vy	ne.	covered
S. S. Arizona, N. 48° 08′, W 44° 19′	29.89	759 2	35	1.7		wnw.			6		10			4 h'r	4 h'r	mod	nw.	overcast.
S. S. Wisconsin, N. 48° 00′ W. 44° 30′			30	2.2		w.			5		8		wnw.	6 h'r	6 h'r	r'gh	wnw.	cloudy.
S. S. Bohemia, N. 42° 27′, W. 59° 33′†	30.04	763.0				wnw.			7		7		wnw.	0	0	long	wnw.	squally.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
									Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE—Continued.																		
S. S. Frisia, N. 46° 52′, W. 42° 55′	29.87	758.7	40	4.4		wnw.			6–7		10		wnw.	rain	rain	mod.	ssw.	raining.
S. S. Gellert, N. 49° 36′, W. 33° 15′	29.92	760.0	52	11.1		ese.			6		10			4 h'r	4 h'r	rg'h	ese.	covered.
S. S. Silesia, Hamburg, Germany†	29.71	754.6	29.3	— 1.5	89	e.			1		4?		e.	o	o			overcast?
S. S. Vandalia, N. 49° 27′, W. 24° 36′	29.97	761.2	50.9	10.5	94	nnw.			5		8		ne'w.	o	o	mod.	nnw.	cloudy.
S. S. Wieland, N. 41° 40′, W. 63° 10′	30.21	767.3				nw.			6		8		nw.	snow	snow	h'vy	ew.	snowy.
S. S. Mentmore, N. 45° 30′, W. 41° 36′*	29.98	761.5				nnw.			7		8		nw.	o	o	cross	var.	threatening
S. S. Archimedes, Lisbon, Portugal						ne.			3		2		n.	o	o			fine.
S. S. Hevelius, N. 43° —′, W. 9° 30′*†	29.85	758.2	55	12.8		sw.			5		2		wsw.	o	o	long	nnw.	clear.
S. S. Sirius, N. 6° 00′, W. 26° 50′*	29.85	758.2				ne.			3		3		ene.	3 h'r	3 h'r	mod.	ese.	clear.
S. S. Bulgarian, N. 44° 21′ W. 52° 37′ *	30.11	764.8				w.			4		10		w.	snow	snow	mod.	w.	overcast.
S. S. Colorado, N. 24° 26′, W. 83° 26′†	30.18	766.6	70	21.1		ene.			5		8		ene.	o	o	high	ene.	cloudy.
S. S. Rio Grande, N. 28° 33′, W. 92° 24′ †	30.22	767.6	68	20.0		ese.			2		4?		ese.	o	o	mod.	ese.	overcast.?
S. S. San Marcos, N. 29° 14′, W. 92° 40′*	30.28	769.1	67	19.4		ese.			4				se.			sm'h		d.izzling.
S. S. Archimede, New York, N. Y†	30.26	768.6	32	0.0	79	wnw.			4		1		wnw.	o	o			clear.
S. S. Hermod, N. 48° 48′, W. 19° 39′†	29.72	754.9	46.4	8.0		ne.			3		7		ene.	4 h'r	4 h'r	long	nne.	threatening
S. S. John Hopkins, N. 38° 46′, W. 74° 30′*†	30.64	778.2	20	—6.7		w.			4		0			o	o			clear.
S. S. Glenapp, S. 0° 23′, W. 31° 00′ †	29.83	757.7				ese.			3		8		e.	o	o	sm'h		cloudy.
S. S. Glenfyne, S. 5° 30′ W. 34° 36′ *†	29.57	751.1				se.			3		1		se.	o	o	sm'h	ese.	clear.
S. S. Toronto, N. 5° 34′, W. 34° 48′				48.0	8.9	sse.			5		8			1 h'r	1 h'r	mod.	sse.	hazy
S. S. Chalmette, New York, N. Y†	30.30	769.6	16	—8.9		wsw.			5		2		w.	o	o			clear.
S. S. New York, N. 31° 35′, W. 80° 10′†	30.35	770.9				e.			3		8		se.			sm'h		cloudy.
S. S. Denmark, London, Eng†	29.58	751.3	44	6.7		wnw.			1		8		wnw.	o	o			cloudy.
S. S. Egypt, N. 49° 18′, W. 29° 11′*†	30.05	763.3				ene.			3		5		e.	8 h'r	8 h'r	long	nw.	fair.
S. S. Erin, N. 43° 23′, W. 57° 42′	29.98	761.5	29	—1.7		w.			9		5		w.	o	o	h'v'y	w.	
S. S. Greece, N. 49° 26′, W. 15° 29′*†	29.59	751.6	49	9.4		e.			6		4		e.	15 h'r	15 h'r	sm'h	e.	fair.
S. S. Helvetia, Liverpool, Eng	29.62	752.3	42	5.6		nnw.			1		5		n.	o	o			fine.
S. S. City of Alexandria, Havana, Cuba, W. I. †...	30.19	766.8	76	24.4		e.			2		5		e.	o	o	small	e.	clearing.
S. S. City of Merida, N. 19° 50′, W. 90° 40′*†	29.96	761.0	73.4	23.0		ene.			3		0			o	o	cross	nne.	fine.
S. S. Amsterdam, N. 48° 58′, W. 31° 57′*	29.97	761.2	51	10.6		se.			3							chop		raining.
S. S. Alene, N. 17° 50′ W. 75° 22′†	29.99	761.7	80	26.7		ne.			3								sw.	
S. S. Knickerbocker, N. 27° 31′, W. 79° 50′	30.28	769.1	70	21.1		ne.			9								ne.	showery.
S. S. Olbers, N. 14° 02′, W. 53° 00′*†	29.85	758.2	78	25.6		ene.			5–6							mod.		cloudy.
S. S. State of Nebraska, N. 48° 58′, W. 44° 00′†	29.85	758.2	38	3.3		wnw.			6									
S. S. Western Texas, N. 31° 10′ W. 81° 24′ *†	30.50	774.7	55	12.8		nnw.			5					o	o	sm'h		fair.
S. S. America, N. 36° 57′ W. 74° 55′ *	30.56	776.2	28.0	— 2.2	59	e.			2		0		nw.	6 h'r	6 h'r	light	nw.	cloudy.
S. S. Braunschweig, N. 50° 24′ W. 1° —′	29.71	754.6	43.5	6.4	72	nw.			4		6		nne.	10 h'r	10 h'r	high	nw.	fair.
S. S. Donau, N. 48° 33′. W. 26° 30′	30.10	764.5				n.			4		8		wsw.	5 h'r	5 h'r	mod.	sw.	cloudy.
S. S. Gen. Werder, N. 48° 34′ W. 31° 11′	29.99	761.7	50.0	10.0		se.			3–4		10		ene.	o	o	mod.	ene.	covered.
S. S. Hohenstaufen, N. 13° 42′, W. 26° 22′	29.93	760.2	84.2	29.0		ene.			5		8		wnw.	snow	snow	mod.	wnw.	cloudy.
S. S. Ohio, N. 38° 35′, W. 66° 25′	30.29	769.4				w.			6		9		ese.	1 h'r	1 h'r	mod.	ese.	fair.
S. S. Rhein, N. 49° 30′, W. 15° 10′	29.71	754.6				ene.			4		9		w.	snow	snow	h'vy	w.	squally.
S. S. Sailer, N. 41° 42′, W. 63° 48′	30.13	765.3	35.6	2.0		w.			6		8		ne.	o	o	mod.	ne.	fair.
S. S. Strassburg, S. 15° 46′, W. 37° 00′	29.90	759.4	81.0	27.2	90	nne.			4–5		5		sse.	2 h'r	2 h'r	h'v'y	se.	fair.
S. S. Belgic, N. 44° 54′, W. 171° 25′†	29.95	760.7	54	12.2	67	se.			5		3		w.	3 h'r	3 h'r	mod.	w.	squally.
S. S. Coptic, N. 37° 26′ E. 161° 34′	29.51	749.5	68.5	20.3	70	wnw.			6		10							squally.
S. S. Oceanic, Hong Kong, China*	30.05	763.3	65	18.3	68	ne.			3		3							clear.
S. S. Mississippi, N. 39° 48′, W. 124° 15′ †*	30.35	770.9	52	11.1	80	nnw.			3		3		nnw.			high	nw.	fair.
S. S. Willamette, N. 45° 33′, W. 124° 32′†	30.33	770.4	48	8.9	85	wnw.			4		4		nw.	0.04	1.0	long	wnw	squally.
S. S. Oregon, San Francisco, Cal†	30.15	765.8	50	10.0	79	calm			0									foggy.
S. S. Ancon, San Pedro Bay, Cal†	30.01	762.2	53	11.7	86	nne.			1		10		e.			sm'h		cloudy.
S. S. City of Chester, Eureka, Cal. *†	30.30	769.6	50	10.0	86	calm			0		0							clear.
S. S. Dakota, Seattle, Wash. Ter†	29.76	755.9	40	4.4	82	s.			2		10		sw.	4 h'r	4 h'r	sm'h		cloudy.
S. S. State of California, Portland, Oregon *†	30.24	768.1	45	7.2		calm			0		5?		s.	o	o			cloudy?
S. S. Australia, S. 18° 40′, W. 172° 00′	29.89	759.2	81	27.2	83	nne.			3		1		ene.	1 h'r	1 h'r	mod.	ne.	clear.
S. S. City of New York, Sydney, N. S. W †	29.83	757.7	74	23.3	70	nw.			1		5		n.	3 h'r	3 h'r			fair.
S. S. City of Pekin, Yokohama, Japan†	30.07	763.8	44	6.7	60	nne.			3		0			o	o	sm'h		clear.
S. S. City of Rio de Janeiro Panama, Panama†	29.90	759.4	80	26.7	78	w.			1		0			o	o	sm'h		fine.
S. S. City of Tokei, N. 29° 52′, W. 144° 34′†	30.24	768.1	69	20.0		sse.			4		10		sse.	light	light	r'gh	sse.	overcast.
S. S. Colima, N. 18° 02′, W. 103° 43′ †	29.92	760.0	73	22.8	81	calm			0		1		calm	o	o	sm'h	n.	clear.
S. S. Grenada, N. 16° 18′, W. 99° 00′†	29.91	759.7	77	25.0	86	n.			1		0			o	o	sm'h	e.	clear.
S. S. Zealandia, S. 26° 20′, W. 177° 20′	30.02	762.5	72	22.2	90	se.			4		3		se.					fine.
S. S. Muriel, St. Lucia, W. I..	29.95	760.7	80	26.7		ne.			4		0			o	o	sm'h		clear.
S. S. Carnea, Puerto Cabello, Venezuela†	29.93	760.2	78	25.6	86	se.			1		2			¼h'r	¾h'r	sm'h		fine.
S. S. Claudius, Greytown, Nicaragua†	29.99	761.7				calm			0		8		n.	h'vy	h'vy	long	ne.	rainy.
S. S. Belgenland, N. 46° 38′, W. 36° 38′..	29.97	761.2	58	14.4	82	sw.			3		8		sw.	1 h'r	1 h'r	mod	var.	squally.
S. S. Nederland, N. 49° 06′, W. 34° 45′ †	29.92	760.0	53	11.7		se.			0		mist					mod.	se.	misty.
S. S. Pennland, N. 41° 22′, W. 64° 35′	30.21	767.3	34	1.1	90	w.			7		10		w.	snow	snow	long	w.	squally.
S. S. Rhynland, Antwerp, Belgium			37	2.8	100	se.			0		10		sse.	o h'r	o h'r			sleeting.
S. S. Waesland, Antwerp, Belgium	29.77	756.1	39	3.9	91	ssw.			4		10		ssw.	0.15	3.8			cloudy.
S. S. Leerdam, N. 41° 05′ W. 62° 38′†	30.38	769.1	47	8.3	55	wnw.			0		6		nw.	o	o	long	w.	fair.
S. S. P. Oaland, N. 42° 17′, W. 58° 43′	30.08	764.0	40.5	4.7	83	w.			6		6		w.			7	w.	fair.
S. S. Schiedam, N. 46° 11′ W. 42° 55′	29.92	760.0	48.7	9.3	86	nw.			6		9		nw.	3 h'r	3 h'r	cross	var.	cloudy.
S. S. W. A. Scholten, Rotterdam, Holland			37.0	2.8	90	w.			4		3		nw.	o	o			
S. S. State of Florida, New York, N. Y			45	7.2		calm			0		10			snow	snow			
S. S. Iowa, N. 49° 52′, W. 28° 19′			52	11.1		ene.			1		1		ene.	o	o	sl't	con.	clear.
S. S. Britanic, N. 50° 06′, W. 19° 37′†	29.72	754.9	49	9.4	93	ene.			3		1		e.	2 h'r	2 h'r	mod.	nw.	fair.
S. S. Celtic, N. 49° 59′, W. 31° 22′†	30.00	762.0	47	8.3		se.			4		3		se.	o	o	mod	wnw.	fair.
S. S. Germanic, N. 42° 01′, W. 61° 48′†	30.12	765.0	38	3.3		n.			7		7		w.	sh'rs	sh'rs	r'gh	w.	squally.
S. S. Salerno, N. 50° 32′ W. 1° 30′						nnw.			2		3		calm	o	o	sm'h		fine.
S. S. Aries, N. 40° 05′, W. 73° 45′*†	30.32	770.1				wnw.			5		2		nw.	h'vy	h'vy	mod	wnw.	
S. S. Catherine Whiting, Providence, R. I†	30.26	768.6	42	5.6		nw.			1		0			o	o			
S. S. Saxon, Philadelphia, Pa†	30.44	773.2	28	—2.2		wsw.			4		0							
MISCELLANEOUS.																		
Bg. Alcira, N. 16° 58′, W. 73° 35′	29.99	761.7	84	28.9		ne.			6		4		ne.	o	o	mod.	ne.	clear.
Schr. Annie Lewis, Tampico, Mexico †	30.21	767.3	56	13.3		wsw.			2		8		wsw.	o	o	long	ne.	cloudy.
S. Annie M. Law, N. 22° 45′, E. 126° 43′ *†	30.04	763.0	70	21.1		ne.			3		10		ene.	1 h'r	1 h'r	light	e.	threatening.
Bk. Anna Thormann, S. 26° 33′, E. 56° 46′*	30.17	766.4	72.5	22.5	66	ese.			5		5 k		se.	o	o	mod.	ssw.	fair.
S. S. Antonio Lopez, San Juan, Porto Rico, W. I*	30.04	763.0	76	24.4	95	ene.			5		4			2 h'r	2 h'r	mod.	ene.	squally.
Bgt. Arthur, N. 36° 50′, W. 42° 28′ *†	30.18	766.0				wsw.							wnw.	o	o		var.	
Schr. Anna Holton, N. 38° 23′, W. 74° 29′†	30.33	770.4	50	10.0		nw.			6		0			o	o	mod.	w.	clear.
Bk. Champion, N. 21° 24′, W. 49° 03′			76.0	24.4		e.			4		2		e.	¼h'r	¼h'r	mod.	e.	fair.
Schr. Chas. F. Heyer, N. 31° 55′, W. 79° 13′	30.41	772.4	57	13.9	63	ne.			2	0	4 k		ne.	o	o	mod.	ne.	fair.
Br. Clara M. Goodrich, Key Francis, W. I*†	30.01	762.2				ne.			6		10?		ne.	o	o			clear.?
S. S. Cornelius, N. 52° 49′, E. 3° 06′ *†	29.73	755.1	41.0	5.0		wsw.			5		9		w.	o	o	long	w.	cloudy.
S. S. D. J. Foley, N. 20° 19′, W. 74° 05′*†	30.05	763.3	80	26.7		ne.			6		8		ne.	o	o	long	ene.	cloudy.
Bkt. David Preston, Pensacola, Fla			62.0	16.7		nne.					10		sw.	10 h'r	10 h'r			
Bk. E. L. Pettingill, N. 15° 50′, W. 120° 36′*†	30.10	764.5	76	24.4		ene.			5		8		e.	o	o	mod.	e.	d. clouds.
Schr. Edith R. Seward, Baltimore, Md			20	—6.7		nw.			1		hz.							
S. E. J. Spicer, N. 43° 26′, W. 39° 00′*	29.80	756.9	68	20.0		w.			6		10		wnw.	18 h'r	18 h'r	mod.	wsw.	raining.
Bk. Eliza Burns, N. 33° 20′, W. 70° 00′ †	30.39	771.9				n.			4		8		n.	o	o	mod.	nnw.	cloudy.
S. Enoch Train, N. 39° 25′, W. 76° 25′ *†	30.52	775.2				ene.			1		5		ene.	o	o	light	nw.	fine.
Bk. Essex, Muscat, Arabia*†	30.02	762.5	78	25.6		n.			2					o	o			fine.
Schr. F. E. McDonald, Camden, Maine†	30.23	767.8	10	—12.2		wnw.			1		0			o	o			
S. S. Foscolia, New York, N. Y						w.			3		2		w.	o	o			

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—(Continued.																		
Bk. Freya, N. 20° 01′, W. 66° 13′..	.....	.....	80	26.7	.....	ne.	.....	.....	4	.....	1	....	ne.	0	0	mod.	ene.	clear.
S. J. W. Glidemeister. N 45° 12′. W. 44° 05′*.....	29.94	760.5	45.5	7.5	46	nnw.	.....	.....	6	.....	10 ks	.....	nnw.	2 h'r	2 h'r	5-6	s;nw.	gloomy.
Bg. George, N. 39° 25′, W. 61° 20′ *†.....	30.22	767.6	... .	.....	.....	nw.	.....	.....	7	.....	8	.....	nw.	sq'll	sq'll	h'vy	nw.	clearing.
Bk. Gronsvaer, Wellington, New Zealand†.....	30.21	767.2	72.4	22.4	90	s.	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	fine.
Bk. Godeffroy, S. 50° 03′, W. 63° 28′†.....	28.85	732.8	48.7	9.3	96	wsw.	.....	.....	5	.....	10	.....	.....	3 h'r	3 h'r	mod.	n.	misty.
Bk. Great Surgeon, S. 18° 09′, E. 88° 12′ *†.....	30.06	763.5	79	26.1	.....	se.	.....	.....	4	.....	2	.....	sse.	0	0	long	sw.	clear.
Bk. Grey Eagle, N. 8° 48′ W. 29° 22′...*†	29.85	758.2	.....	.....	.....	e.	.....	.....	6	.....	9	.....	e.	0	0	light	ne.	fair.
Bk Hattie G. McFarland, New York, N. Y †	30.46	773.7	18	— 7.8	.....	wnw.	.....	.....	1	.....	2	.....	nw.	0	0	.....	.....	
Schr Hattie Weston, N. 29° 08′. W. 73° 40′ *†	30.41	772 4	70	21.1	.....	nne.	.....	.....	5	.....	8	....	ne.	3 h'r	3 h'r	h'vy	n.	clearing.
Bk. Heinrich & Tonio, N. 55° 05′, E. 3° 04′ *†.....	29.57	751.1	41	5.0	95	ese.	.....	.....	6	.....	10	.....	ese.	rain	rain	mod.	ese.	cloudy.
Schr. Isabel Alberto, N. 25° 06′, W. 79° 55†.....	30.16	766.1	.....	.....	.....	ne.	.....	.....	6	.....	3	.....	ne.	sli't	sli't	high	nne.	squally.
Schr. James Slater, N. 36° 47′, W. 72° 33′†.....	30.35	770.9	46	7.8	.....	nnw.	.....	.....	2	.....	2	.....	nw.	snow	snow	r'gh	n.	
Schr. Jennie N. Huddell, Savannah, Ga †.....	30.36	771.1	39	3.9	.....	ne.	.....	.....	1	.....	5	.....	ne.	o	o	.....	.....	threatening.
Bg. John Wesley, N. 38° 57′, W. 74° 22′.....	.....	.....	.....	.....	.....	sw.	.....	.....	4	.....	10	.....	sw.	8 h'r	8 h'r	mod.	sw.	drizzling.
Bk. Joseph A. Ropes, N. 1° 38′. E. 51° 55′*†..	29.92	760.0	81	27.2	91	ne.	.....	.....	2	.....	5	.....	ne.	o	o	mod.	ne.	fair.
Bkt. Josephine, N. 33° 14′, W. 47° 28′†.....	30.17	766.3	75	23.9	77	s.	.....	.....	5	.....	10	.....	.....	2 h'r	2 h'r	mod.	s.	cloudy.
Bk. Julia H, N. 41° 52′, W. 47° 05′	30.06	763.5	51.5	10.8	72	nnw.	.....	.....	7	.....	10	.....	.....	7 h'r	7 h'r	6	n.	overcast.
S. S. J. W. Wilson, Key West, Fla †.....	30.16	766.1	.....	.....	.....	ne.	.....	.....	6	.....	8	.....	e.	light	light	.....	.....	cloudy.
Light House Tender, Laurel, Key West, Fla †.....	30.13	765.3	70	21.1	.....	ene.	.....	.....	2–3	.....	8	.....	e.	4 h'r	4 h'r	sm'h	.....	cloudy.
Bg. Lilian, N. 39° 36′, W. 74° 07′†	30.48	774.2	18	— 7.8	.....	wnw.	.....	.....	5	.....	0	.....	.....	o	o	.....	.....	clear.
Bg. L. & W. Armstrong, N. 28° 21′. W. 60° 10′ *†.....	30.24	768.1	.....	.....	.....	ne.	.....	.....	3	.....	3	....	ese.	o	o	long	se.	clearing.
S. S. Madrid, N. 37° 00′, W. 74° 16′*†.....	30.56	776.2	21	— 6.1	.....	w.	.....	.....	1–2	.....	0	.....	.....	o	o	sm'h	.....	fair.
S. S. Malabar, Marseilles, France.....	.....	.....	.....	.....	.....	nw.	.....	.....	7	.....	10	.....	nw.	16 h'r	16 h'r	.....	.....	raining.
Bk. Matilda C. Smith, N. 27° 40′. W. 63° 30′ *†.....	30.30	769.6	.....	.....	.....	n.	.....	.....	6	.....	4	.....	nne.	sh'rs	sh'rs	r'gh	nw.	fine.
Schr. Minnie A. Bonsall, May Port, Fla †.....	30.34	770.6	68	20.0	.....	n.	.....	.....	.....	.....	.....	.....	n.	.....	.....	.....	.....	cloudy.
S. Minnie N. Gerow, N. 31° 59′, W. 36° 01′*†.....	30.32	770.1	.....	.....	.....	sw.	.....	.....	4	.....	4	.....	s.	.....	.....	sm'h	se.	fine.
S. M. P. Grace. S. 16° 34′, W. 129° 35′ *†	30.01	762.2	78	25.6	.....	e.	.....	.....	5	.....	3	.....	e.	o	o	sm'h	ese.	fair
Bg. O. C. Clary, Demerara, British Guiana, S. A*†.....	29.90	759.4	78	25.6	91	e.	.....	.....	3	.....	10	.....	ne.	h'vy	h'vy	.....	.....	
S. Orealla, N. 19° 48′, E. 91° 14′*.....	29.86	758.4	.....	.....	.....	wnw.	.....	.....	2	.....	6	.....	wnw.	.....	.....	sm'h	.....	fine.
Bk. Ottawa, N. 37° 40′, W. 68° 10′ *.....	30.31	769.9	42	5.6	.....	w.	.....	.....	4	.....	6	.....	w.	o	o	sm'h	w.	cloudy.
S Paramita, San Francisco, Cal †.....	30.10	764.5	49	9.4	.....	n.	.....	.....	1	.....	hz.	.....	.....	o	o	.....	.....	hazy.
Bk. Pilgrim, N. 9° 30′, W. 41° 30′*†.....	29.87	758.7	.....	.....	.....	ne.	.....	.....	5	....	.....	.....	ne;e.	10 h'r	10 h'r	long	ne.	cloudy.
S. S. Radnorshire, N. 4° 00′, E. 106° 09′ *†	29.80	756.9	.....	.....	.....	n.	.....	.....	6	.....	5	.....	nne.	o	o	long	nne.	cloudy.
S. S. Raleigh, off Sing Sing, N. Y *†.....	30.15	765.8	12	—11.1	.....	ne.	.....	.....	1	.....	1	.....	.....	o	o	.....	.....	
Bk. Rebus, N. 39° 44′, W. 51° 59′ *.....	29.91	759.7	55	12.8	.....	nne.	.....	.....	4	.....	8	.....	n.	7 h'r	7 h'r	mod.	var.	light rain
S. St. Francis, N. 25° 55′, W. 132° 00′†.....	30.20	767.1	66	18.9	.....	ne.	.....	.....	4	.....	6	....	ne.	o	o	h'vy	nnw.	cloudy.
Bk. Scud, N. 15° 22′, W. 60° 00′*†.....	29.96	761.0	.....	.....	.....	ene.	.....	.....	6	.....	2	.....	ene.	o	o	short	ene.	
S. S. Sunbeam, N. 16° 52′, W. 66° 40′	30.01	762.2	82	27.8	83	ne.	.....	.....	4	.....	4	.....	ne.	o	o	2	ene.	d. clouds.
S. S. Strathleven, N. 6° 32′, E. 78° 36′.....	29.84	757.9	80.8	27.1	97	ne.	.....	.....	3	.....	3	.....	ene.	o	o	2	s.	d. clouds.
Schr. T. S. McLellan, N. 28° 40′, W. 75° 10′ *†.....	30.25	768.3	70	21.1	.....	ne.	.....	.....	.....	.....	.....	.....	se;ne.	.....	.....	.....	.....	nne.
U. S. F. C. S. S. FishHawk, Washington, D. C†..	30.26	768.6	24	— 4.4	.....	n.	.....	.....	1	.....	3	....	.....	o	o	.....	.....	clear.
Bk. Usko, N. 54° 52′. W. 9° 11′*.....	29.71	754.6	48	8.9	.....	var.	.....	.....	0–1	.....	2	.....	ne.	4 h'r	4 h'r	mod.	nnw.	clear.
Bk. Vincenzo Accame, N. 36° 15′, W. 44° 29′†.....	30.21	767.3	73.4	23.0	.....	sw.	.....	.....	5	.....	10	.....	sw.	4¾h'r	4¾h'r	.....	ssw.	
Schr. Walter L. Plummer, N. 32° 40′, W. 73° —′*†.....	30.40	772.1	.....	.....	.....	ne.	.....	.....	2	.....	8	.....	e.	o	o	cross	.....	clearing.
Bk. Wandering Jew, Montevideo, Uruguay †.....	29.79	756.7	.....	.....	.....	ne.	.....	.....	4	.....	4	.....	ne.	o	o	.....	.....	fair.
Bk. Warden Law, Tocapilla, Peru, S. A*.....	30.07	763.8	.....	.....	.....	calm	.....	.....	0	.....	2	.....	s.	.....	.....	sm'h	wsw.	fair.
S. Wm. Woodbury, N. 45° 25′, W. 20° 40′*.....	29.87	758.7	57	13.9	.....	n.	.....	.....	6	.....	6	... .	nnw.	.....	.....	long	nnw.	squally.

International Chart I. December 9, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 10, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.87	758.6	57.2	14.0	91	ne.	.....	.....	6	.....	3	.....	.....	0	0	pretty fair...	Malaterre.
Algiers	.....	.....	29.80	756.9	53.6	12.0	52	ssw.	.....	.....	6	.....	0	.....	.....	2.543	64.6	clear.....	Thève.
La Calle	.....	.....	29.67	753.5	60.1	15.6	66	w.	.....	.....	3	.....	2	.....	.....	0	0	fair.....	Fonfrède.
Tunis	.....	.....	29.68	753 9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.93	760.1	45.7	7.6	91	w.	.....	.....	2	.....	0	.....	.....	0	0	clear.....	Pérès.
Tebessa	.....	.....	29.81	757.2	52.5	11.4	76	sw.	.....	.....	6	.....	0	.....	.....	0	0	clear.....	Dognon.
Geriville	.....	.....	.....	.....	36.1	2.3	14	wsw.	.....	.....	5	.....	6	.....	.....	0	0	cloudy.....	Lonchamp.
Laghouat	.....	.....	30.00	761.9	46.8	8.2	83	nw.•	.....	.....	4	.....	2	.....	.....	0	0	fair.....	Abraham.
Biskra	.....	.....	29.89	759.1	56.5	13.6	36	nw.	.....	.....	2	.....	6	.....	.....	0.024	0.6	cloudy.....	Malau.
Australian.																			
Melbourne, Victoria	29.81	757.2	29.90	759.4	58.2	14.6	71	s.	5	2.2	.....	4	.....	.....	.....	0.11	2.8	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.25	743.0	29.81	757.2	42.8	6.0	97	ne.	.....	.....	2	.....	10	.....	.....	0.630	16.0	raining.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.17	741.0	29.96	761.0	39.6	3.9	78	ssw.	7.4	3.3	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.15	740.3	30.06	763.4	38.5	3.6	90	calm	.....	.....	0	.....	10 8	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.59	726.2	29.87	758.7	38.5	3.6	90	e.	.....	.....	1	.....	10	.....	.....	0.035	0.9	.....	Andreas Rospini.
Hermannstadt	28.60	726.4	30.04	763.0	51.6	10.9	37	sse.	.....	.....	4	.....	1	.....	.....	0	0	... .	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.63	727.1	29.60	751.8	37.9	3.3	88	ene.	.....	.....	3	7 c	.....	.....	.....	0	0	.....	The Staff.
Lemberg	29.11	739 5	30.14	765.6	38.3	3.5	77	se.	.....	.....	2	.....	2	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.42	747.2	29.53	750.0	58.6	14.8	93	se.	.....	.....	7	.....	10	.....	.....	0.142	3.6	thund'r st'm	I. R.Hydrographic Office.
Szathmar	29.56	750 9	30.03	762.8	48.2	9.0	60	e.	.....	.....	4	.....	10	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.66	753 3	29.94	760.4	53.2	11.8	72	s.	.....	.....	3	.....	3	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.55	750.6	29.65	753.2	57.0	13.9	86	se.	.....	.....	1	.....	10	.....	.....	1.638	41.6	raining.....	Royal Academy.
Vienna	29.15	740.3	29.89	759.2	36.3	2.4	98	e.	.....	.....	2	.....	10	.....	.....	0.007	1.7	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.53	750.0	29.63	752.6	35.5	1.9	93	nw.	17	7.6	.....	.....	9	.....	.....	0.050	1.3	overcast.....	W. Boswell
Armagh, Observatory	29.52	749.8	29.78	756.4	25.4	— 3.7	94	ssw.	2	0.9	.....	.....	.....	.....	.....	.....	.....	.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.72	754.9	33.4	0.8	86	nnw.	7	3.1	.....	.....	7	.....	.....	.....	.....	d. clouds....	John Hartnup.
Bolton, Sharples	29.17	740 9	29.72	754.9	30.6	— 0.8	95	nnw.	.....	.....	.....	.....	10	.....	.....	.....	.....	foggy.....	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.93	760.2	29.96	761.0	82.0	27.8	77	ne.	.....	.....	3	.....	2	.....	.....	.....	.....	d. clouds....	Corpl.J.Surgenor, A. H.C.
Cardington	.....	.....	.....	.....	33.0	0.6	96	w.	.....	.....	0.4	.....	9	.....	.....	.....	.....	overcast.....	John McLaren.
Chatham, School M. E.	29.62	752.3	29.76	755.9	26.8	— 2.9	99	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.52	749.8	29.76	755.9	39.1	3.9	81	nne.	.....	.....	1	.....	1	.....	.....	.....	.....	blue sky.....	The Staff.
Fort Napier, Natal	27.66	702.6	29.87	758.7	86.0	30.0	36	n.	.....	.....	2	.....	3	.....	.....	.....	.....	blue sky.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.60	751.8	29.83	757.7	88.0	31.1	92	n.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	29.72	754.9	29.77	756.1	54.0	12.2	91	w.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.50	749.3	29.70	754.4	33.4	0.8	?	n.	.....	.....	1	.....	8	.....	.....	.....	.....	foggy.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.57	751.1	29.75	755.6	26.9	— 2.8	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy.....	The Staff.
Guernsey	29.44	747.8	29.74	755.4	39	3.9	73	calm	.....	.....	0	.....	6	.....	.....	.....	.....	d. clouds.....	A. Collenette, F. M. S.
Kew, Observatory	29 73	755 1	29.77	756.1	25.1	— 3.8	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	foggy.....	The Staff.
Leicester, Museum	29.49	749.0	29.76	755.9	31.8	— 0.1	92	w.	.....	.....	1	.....	9	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	29.64	752.8	29.72	754.9	65.2	18.4	100	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.10	764 5	30.15	765.8	73.5	23.1	88	e.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.19	741.4	29.74	755.4	30.3	— 0.9	95	wnw.	.....	.....	2	.....	10	.....	.....	.....	.....	threatening.	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.53	750.0	29.75	755.6	29.8	— 1.2	90	calm	.....	.....	0	.....	0	.....	.....	.....	.....	foggy.....	The Staff.
Plymouth	29.66	753.4	29.73	755.1	34.8	1.6	68	n.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky.....	John Merrifield.
Sandwick Manse, Orkneys	29.71	754.6	29.82	757.4	34.5	1.4	96	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty.....	Rev. C. Clouston, L.L.D.
Scutari Cemetery, Turkey	30.13	765.3	30.19	766.8	58.2	14.6	71	ne.	.....	.....	1	.....	6	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	29.44	747.8	29.73	755.1	33.4	0.8	89	calm	.....	.....	0	.....	5	.....	.....	0	0	misty.....	W. F. Cooper.
Silloth Rectory	29.68	753.9	29.71	754.6	35.5	1.9	74	nnw.	.....	.....	1	.....	4	.....	.....	0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.74	755.4	31.2	— 0.4	91	ne.	.....	.....	.....	.....	10	.....	.....	.....	.....	misty.....	I. New.
Stratfield Turgiss	29.54	750.3	29.77	756.1	25.0	— 3.9	95	calm	.....	.....	0	.....	fg	.....	.....	.....	.....	foggy.....	Rev.C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.70	754.4	29.74	755.4	42	5.6	66	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	29.68	753.9	29.70	754.4	37.7	3.2	92	ese.	3	1.3	.....	.....	10	.....	.....	.....	.....	drizzling...	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.08	764 0	30.12	765.0	14	—10.0	80	w.	6	2.7	.....	.....	10 8	....	calm	0	0	cloudy.....	H. J. Cundall, C. E
Chatham, N. B*	30.05	763 3	30.12	765.0	6	—14.4	91	sw.	4	1.8	.....	5 c	2 ks	sw.	sw.	0	0	fair	G. A. Blair.
Father Point, Quebec*	30.01	762.2	30.04	763 0	11	—11.7	66	w.	30	13.4	.....	0	8 s	.....	w.	0	0	clearing.....	J. McWilliams.
Fort Garry, Manitoba*	29.13	739.9	30.02	762.5	12	—11.1	73	ne.	.....	.....	.....	.....	10 n	.....	ne.	0.45	11.4	light snow..	James Stewart.
Halifax, N. S*	30.09	764.3	30.23	767.8	22	— 5.6	76	w.	2	0.9	.....	.....	10 8	....	.....	0	0	cloudy	A. Allison.
Kingston, Ontario*	29.56	750.8	29.92	760.0	21	— 6.1	91	e.	5	2.2	.....	.....	10n	....	.....	0.25	6.3	heavy snow	A. P. Knight, M. A
Montreal, Quebec*	29.81	757.2	30.04	763.0	9	—12.8	96	n.	4	1.8	.....	.....	10 n	....	.....	0.14	3.6	heavy snow	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.13	739.9	29.87	758.7	17	— 8.3	83	e.	11	4.9	.....	.....	10 n	.....	e.	1.00	25.4	light snow..	Rev. R. Mosley.
Port Dover, Ontario	29.05	737.9	29.76	755.9	33	0.6	100	s.	9	4.0	.....	.....	10n	....	.....	0.17	4.3	threatening.	H. Morgan.
Port Stanley, Ontario	29.10	739.1	29.77	756.1	34	1.1	92	sw.	11	4.9	.....	.....	10 n	.....	sw.	0.17	4.3	light rain....	M. Payne.
Quebec, Quebec*	29.78	756.4	30.14	765.5	0	—17.8	68	w.	.....	.....	1	.....	10 ks	.....	w.	0	0	cloudy.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.48	748 8	29.97	761.2	13	—10.6	80	ne.	6	2.7	.....	.....	10 n	....	.....	0.05	1.3	light snow..	W. H. McIntyre.
Saugeen, Ontario*	29.03	737 3	29.80	756.9	20	— 6.7	96	w.	12	5.4	.....	.....	10ks	....	.....	0.35	8.9	light snow..	
St. Andrews, N. B	29.13	739.9	30.18	766.6	19	— 7.2	84	ne.	1	0.4	.....	.....	10 n	....	.....	0	0	cloudy.....	
Sydney, C. B*	30.04	763.0	30.10	764.5	21	— 6.1	84	sw.	18	8.0	.....	2 c	8 ks	.....	w.	0	0	fair.....	T. C. Hill, C. E
Toronto, Ontario*	29.43	747.5	29.83	757.7	26	— 3.3	96	e.	12	5.4	...	...	10 8	....	.....	0.13	3.3	threatening.	Magnetic Observatory.
Yarmouth, N. S*	30.13	765 3	30.20	767.1	28	— 2.2	84	calm	0	0	.....	.....	10 n	....	.....	0.04	1.0	light snow..	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.30	718.8	29.80	756.9	21.0	— 6.1	100	sse.	.....	.....	3	.....	10 8	.....	sse.	0.205	5.2	overcast.....	Wm. Wylie
St. Johns, Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.69	754.1	29.72	754 9	74.5	23.6	87	ne.	20.4	9.1	.....	7 cs	0	.....	.....	0	0	hazy.....	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
												Upper	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.65	626.2	.....	.....	22.3	— 5.4	.....	nnw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.43	772.8	30.54	775.6	19.9	— 6.7	95	ne.	1.8	0.8	.....	0	0	.....	.....	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.08	763.9	30.10	764.6	53.1	11.7	92	nnw.	7.4	3.3	.....	.....	10	.....	.....	0	0	.....	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.81	757.1	29.85	758.3	36.1	2.3	84	ese.	27	12	.....	.....	10	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanoe	29.78	756.4	29.80	756.9	31.8	— 0.1	90	ne.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.53	750.0	29.57	751.1	25.9	— 3.4	87	s.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.55	750.5	29.57	751.0	27.3	— 2.6	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	snowing	
Jacobshavn, Greenland	29.70	754.4	29.75	755.6	36.9	2.7	.....	se.	.....	.....	7	.....	7	.....	.....	.....	.....	snowing	
Stykkisholm, Iceland	30.19	766.8	30.23	767.9	25.9	— 3.4	93	calm	.....	.....	0	.....	0	.....	.....	.....	...	.....	A. O. Thorlacius.
Thorshavn	29.97	761.3	30.01	762.2	36.3	2.4	85	ene.	11	5	.....	.....	5	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.80	756.8	29.89	759.2	31.3	— 0.4	96	ene.	.....	.....	4	.....	10	.....	.....	.....	.....	hazy	Loerarer Oesterboi.
Upernavik, Greenland	29.73	755.1	29.78	756.3	9.0	—12 8	.....	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.04	737.5	29.70	754.4	37.8	3.2	90	calm	.....	.....	0	.....	fg	.....	.....	0	0	dense fog	M. Labroue, Director.
Alençon, Normal School	29.22	742.3	29.78	756 3	29.5	— 1.4	96	s.	.....	.....	1	.....	fg	.....	.....	0	0	dense fog	M. Nicot, Director.
Arras, Engineer School	29.49	749.0	29.76	755.8	29.8	— 1.2	86	sse.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Fénéon, Command't.
Avignon, Normal School	29.49	749.0	29.57	751.0	39.9	4.4	77	n.	.....	.....	2	.....	5	.....	.....	1.06	27.	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.15	740.3	29.72	755.0	34.7	1.5	93	ne.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.50	749.4	29.78	756.4	31.3	— 0.4	92	sse.	.....	.....	1	.....	10	.....	.....	0	c	covered	M. Frère Eugène Marie.
Besançon, Normal School	28.78	731.0	29.68	753.9	37.0	2.8	79	ene.	.....	.....	1	.....	n	.....	se.	0.181	4.6	.....	M. Gobin, Director.
Bordeaux, Observatory	29.39	746.5	29.66	753.3	41.2	5.1	79	ene.	.....	.....	1	.....	5	.....	se.	0.031	0.8	cloudy	M. Rayet, Director.
Bourges, Normal School	29.10	739.0	29.71	754.6	38.3	3.5	91	w.	.....	.....	1	.....	k	.....	w.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.55	750.6	29.80	756.8	42.8	6.0	75	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. de Kermaidé, Dir.
Caen, Normal School	29.64	752.8	29.72	754.8	30.0	— 1.1	72	sw.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.39	746.6	29.72	754.9	33.4	0.8	92	nw.	.....	.....	2	.....	10	.....	.....	0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.17	740.8	29.69	754.2	36.3	2.4	80	nnw.	.....	.....	1	.....	2	.....	.....	0	0	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.32	719.4	29.71	754.5	37.9	3.3	73	ne.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Allnard, Director.
Cluny, Normal School	28.84	732.4	29.71	754.5	36.3	2.4	89	ne.	.....	.....	1	.....	10	ne.	ne.	0	0	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.82	732.0	29.70	754.4	35.6	2	83	nw.	.....	.....	1	.....	ksc	nw.	nw.	0	0	.....	Dr. Coulet, Director.
Gap, Normal School	27.02	686.3	29.60	751.8	35.2	1.8	96	e.	.....	.....	1	.....	10	.....	.....	0.08	2.	.....	M. Jeanginard, Director.
Gréasque, du Rhone	28.40	721.4	29.54	750.4	40.6	4.8	97	n.	.....	.....	1	.....	10	.....	sw.	2.80	71.	raining	M. Kina, Director.
Grenoble, Normal School	28.93	734.8	29.69	754.2	33.4	0.8	100	sw.	.....	.....	1	.....	10 n	.....	.....	.....	.....	snowing	M. Ablard, Director.
Guéret	28.11	714.0	29.72	754.8	41.0	5	69	n.	.....	.....	1	.....	ku	.....	n.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.40	746.7	29.68	753.9	34.7	1.5	89	w.	.....	.....	2	.....	10	.....	w.	0	0	covered	M. Ollitrault, Director.
Lescar, Normal School	29.03	737.4	29.61	752.0	46.0	7.8	67	e.	.....	.....	3	2 cs	0	.....	.....	0	0	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.67	753.6	29.77	756.2	29.1	— 1.6	96	calm	.....	.....	0	.....	fg	.....	.....	0	0	foggy	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.61	726.8	29 71	754.5	34.0	1.1	98	nnw.	.....	.....	1	.....	hz	.....	.....	0.228	5.8	dense haze	M. André, Director.
Mans, Normal School	29.46	748.2	29.78	756.4	28.4	— 2	92	s.	.....	.....	1	.....	10	.....	.....	0	0	hazy	M. Pibeën, Director.
Marseille, Observatory	29.24	742.7	29.51	749.6	42.8	6.0	88	wnw.	.....	.....	1	.....	10	.....	sw.	0.024	0.6	.....	M. Stephan, Director.
Mt. Louis	24.35	618.5	29.19	741.5	27.5	— 2.5	57	ne.	5.6	2.5	.....	.....	0	.....	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.43	747.5	29.60	751.7	42.4	5.8	88	nnw.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Gulzin, Director.
Nancy, Normal School	28.80	731.4	29.60	751.9	35.6	2.0	79	wnw.	.....	.....	1	.....	n	.....	.....	0	0	.....	M. Hasse, Director.
Nantes, Observatory	29.61	752.1	29.73	755.2	35.1	1.7	93	ese.	.....	.....	0–1	.....	10 n	.....	.....	0	0	.....	M. Larocque, Director.
Perpignan, Observatory	29.51	749.6	29.63	752.5	46.4	8.0	53	nw.	5.6	2.5	.....	.....	1	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.68	525.2	.....	.....	15.4	— 9.2	.....	sw.	.....	.....	1	.....	5	.....	sw.	0	0	cloudy	M. Vaussenat.
Privas, Normal School	28.66	727.9	29.76	755.8	37.4	3	86	s.	.....	.....	1	.....	0	.....	.....	0.906	23.0	clear	M. Taillen.
Puy de Dôme Obs'y, Summit	24.71	627.6	.....	.....	24.4	— 4.2	100	ne.	.....	.....	2	.....	10	.....	.....	0.004	0.1	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.70	754.3	29.73	755.1	40.3	4.6	90	ene.	.....	.....	1	.....	10	.....	ese.	0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.47	748.5	29.69	754.2	33.4	0.8	96	ese.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Brotier, Director.
Rodez, Normal School	27.49	698.2	29.70	754.4	33.8	1	78	sw.	.....	.....	2	.....	1	.....	nw.	0.102	2.6	clear	M. Seger, Director.
Rouen, Normal School	29.79	756.7	29.84	757.9	30.9	— 0.6	96	sse.	.....	.....	1	.....	10	sse.	.....	0	0	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	27.5	— 2.5	68	s.	.....	.....	1	.....	5	.....	.....	0.024	0.6	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.58	751.3	29.74	755.5	34.5	1.4	82	n.	.....	.....	1	.....	10	.....	n.	0	0	.....	M. Renou, Director.
Toulouse, Observatory	28.99	736.4	29.71	754.5	39.6	4.2	73	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Baillaud, Director.
Tours	29.57	751.0	29.74	755.5	38.1	3.4	76	nne.	.....	.....	1	.....	10	.....	ne.	0	0	hazy	M. de Tastes.
Versailles, Observatory	29.24	742.8	29.74	755 3	30.9	— 0.6	96	sw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.49	749.0	29.64	752.8	42.8	6.0	66	ne.	4.0	1.8	.....	c	7 k	s.	sw.	0	0	.....	M. Cartier, Director.
GERMAN.																			
Ansbach	28.17	715.5	29.67	753.5	32.7	0.4	80	calm	.....	.....	0	.....	8	.....	.....	0	0	.....	Prof. Jnedt.
Bamberg	28.81	731.8	29.65	753.0	36.5	2.5	78	nw.	.....	.....	1	.....	6	w.	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.49	749.0	29.67	753.6	34.7	1.5	71	e.	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.26	743.3	29.79	756.7	39.9	4.4	70	se.	.....	.....	4	.....	10	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.21	742.0	29.66	753.4	34.5	1.4	81	sw.	.....	.....	1	.....	10	.....	.....	0.185	4.7	.....	Albert Senz.
Cassel	28.88	733.6	29.60	751.7	31.6	— 0.2	83	n.	.....	.....	2	.....	8	w.	.....	0.161	4.1	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.29	744.0	29.67	753.6	35.4	1.9	69	nne.	.....	.....	1	.....	10	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.19	716.0	29.67	753.6	32.0	0.0	92	e.	.....	.....	2	.....	10	ese.	.....	0.110	2.8	.....	Wilhelm, Chief Tel.
Hamburg	29.64	752.8	29.65	753.1	28.4	— 2.0	92	e.	.....	.....	3	.....	10	.....	.....	0	0	foggy	E. Prelier.
Kiel	29.74	755.4	29.76	755.8	32.5	0.3	88	e.	.....	.....	2	.....	10	.....	.....	0.012	0.3	snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.25	743.0	29.69	754.0	31.8	— 0.1	90	nne.	.....	.....	1	.....	9	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.49	749.1	29.69	754.1	30.4	— 0.9	84	ne	.....	.....	1	.....	10 ks	.....	ne.	0	0	foggy	Weather Observatory.
Memel	30.17	766.4	30.22	767.6	29.3	— 1.5	100	ese.	.....	.....	3	.....	10	.....	.....	.....	.....	foggy	Issermann.
Munich	27.76	705.2	29.60	751.8	31.1	— 0.5	74	nw.	.....	.....	2	.....	3	se.	.....	0	0	.....	Central Station.
Neufahrwasser	30.06	763.5	30.08	763.9	29.1	— 1.6	94	e.	.....	.....	1	.....	10	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.12	739.6	29.64	752.8	35.2	1.8	85	calm	.....	.....	0	.....	10	.....	.....	0.197	5.0	.....	Dicknether.
Stuttgart	28.69	728.8	29.61	752.2	32.9	0.5	83	n.	.....	.....	1	.....	10	.....	.....	0.236	6.0	.....	Prof. Dr. Schoder.
Wustrow	29.81	757.1	29.83	757.7	32.9	0.5	92	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.80	756.9	30.19	766.7	62.8	17.1	.....	sw.	.....	.....	1.0	.....	8	.....	.....	0.004	0.1	misty	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	29.94	760.3	29.99	761.6	79.9	26.6	62	w.	9.0	4.0	.....	.....	8	sse.	.....	0	0	gloomy	
Deesa	29.43	747.5	29.90	759.6	83.5	28.6	32	wnw.	3.0	1.3	.....	.....	3	nnw.	.....	0	0	d. clouds	
Bombay	29.87	758.6	29.90	759.6	79.9	26.6	80	wnw.	11.0	4.9	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.04	712.2	29.88	759.0	83.4	28.6	19	sse.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.67	753.6	29.95	760.6	82.1	27.8	52	ene.	1.0	0.4	.....	.....	6	.....	.....	0	0	d. clouds	
Belgaum	27.36	694.9	29.89	759.1	78.5	25.8	26	ene.	6.0	2.7	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.16	740.6	29 93	760.2	62.6	17.0	52	calm	0	0	.....	.....	4	.....	.....	0	0	d. clouds	
Roorkee	28.96	735.4	29.88	759.0	64.0	17.8	63	s.	.....	.....	.....	.....	2	w.	.....	0	0	.....	
Agra	29.34	745.2	29.91	759.8	75.2	24.0	48	nw.	6.0	2.7	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.86	733.0	29.91	759.7	75.9	24.4	37	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.55	725.2	29.93	760.2	73.0	22.8	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.61	752.0	30.00	761.9	65.3	18.5	47	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.56	750.7	29.88	759.0	62.0	16.7	71	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.71	754.7	29.91	759.8	68.5	20.3	56	w.	2.9	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.83	707.0	29.91	759.7	61.7	16.5	58	nw.	5.8	2.6	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.80	757.0	29.89	759.2	68.9	20.5	67	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.84	757.8	29.86	758.4	69.0	20.6	77	w.	0.5	0.2	.....	.....	1	.....	.....	0	0	d. clouds	
Dhubri	29.72	754.9	29.84	757.9	72.3	22.4	76	calm	0.3	0.1	.....	.....	6	.....	wsw.	0	0	d. clouds	
Chittagong	29.76	756.0	29.86	758.3	70.9	21.6	76	nne.	1.8	0.8	.....	.....	4	.....	.....	0	0	d. clouds	
Sibsagar	29.54	750.2	29.88	759.0	64.9	18.3	84	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jeypore	28.47	723.2	29.93	760.3	75.7	24.3	43	nnw.	3.0	1.3	.....	.....	4	n.	.....	0	0	blue sky	
ITALIAN.																			
Udine	29.24	742.7	29.66	753.3	53.2	11.8	74	ne.	9.4	4.2	.....	.....	10	.....	.....	0.236	6.0	.....	Prof. Giovanni Clodig.
Milan	29.08	738.7	29.62	752.4	35.1	1.7	96	w.	3.8	1.7	.....	.....	10	.....	.....	1.894	48.1	.....	Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Padua	29.47	748.5	29.58	751.3	55.4	13.0	91	ese.	16.8	7.5			10	se.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.71	729.1	29.65	753.1	35.6	2.0	93	nw.	0.7	0.3			10			0.063	1.6		Prof. F. F. Denza.
Genoa	29.35	745.4	29.54	750.3	44.2	6.8	71	ne.	9.8	4.4			10	ne.		1.063	27.0		Prof. G. M. Garibaldi
Mondovi	27.69	703.2	29.67	753.6	37.2	2.9	84	w.			2		10			0	0		Prof. D. C. Bruno.
Pesaro	29.50	749.3	29.55	750.6	55.8	13.2	75	sse.	3.1	1.4			7			0	0		Prof. Luigi Guidi.
Florence	29.29	743.9	29.55	750.5	56.8	13.8	79	ese.			2		9	s.		0.142	3.6		Prof. Costantino Pittei.
Leghorn	29.34	745.2	29.43	747.4	59.4	15.2	87	s.	1.3	0.6			10			0.720	18.3		Prof. P. Monte.
Rome	29.42	747.3	29.60	751.8	64.0	17.8	64	s.	24.2	10.8			7			0	0		Prof. P. Tachini.
Lecce	29.60	751.8	29.85	758.3	61.0	16.1	89	se.	38.5	17.2			10	se.		0	0		Prof. C. de Giorgi.
Cosenza	28.95	735.4	29.85	758.2	61.0	16.6	79	wsw.	6.9	3.1			9	sw.		0.071	1.8		Prof. D. Conti.
Cagliari	29.33	744.9	29.52	749.8	56.8	13.8	72	s.			6		8	s.		0.008	0.2		Prof. A. Pacinotti.
Palermo	29.41	747.0	29.66	753.4	66.4	19.1	38	sw.	37.4	16.7			9	wsw.		0	0		Prof. G. Cacciatore.
Syracuse	29.77	756.2	29.82	757.3	64.0	17.8	81	sw.	9.8	4.4			10	ssw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.19	741.3	29.70	754.3	63.0	17.2	80	sse.	5.6	2.5			7	se.		0	0		Prof. F. Brioschi.
Stelvio	21.74	552.1			25.3	— 3.7	98	ese.			2		10			1.776	45.1	covered	Prof. P. F. Denza.
Valdobbia	21.72	551.8			20.8	— 6.2	71	e.			2		10			1.181	30.0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.05	763.4	30.08	764.2	26.0	— 3.3	92	nw.			4		10 n		w.	0.071	1.8	snowing	Hattori.
Awomori	29.94	760.5	29.97	761.2	22.0	— 5.6	94	w.	28.4	12.7			10 n		w.	0.020	0.7	heavy snow	K. Ogawa.
Hakodate	29.93	760.3	29.94	760.6	19.0	— 7.2	83	nw.	15.0	6.7			9			0.025	0.6		
Hamamatsu	30.18	766.6	30.21	767.3	37.5	3.1	75	calm			0	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					37.7	3.2	60	n.	8.2	3.7		0	4 ck		sw.	0	0	clear	
Kanazawa	30.14	765.6	30.25	768.4	33.0	0.6	83	se.	4.5	2.0		0	1			0.110	2.8	fair	S. Endo.
Kioto	30.09	764.3	30.28	769.1	29.6	— 1.3	100	wnw.	1.5	0.6		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.05	763.2	30.26	768.5	42.3	5.7	62	e.	4.2	1.9		0	0			0.440	11.2	clear	S. Takehayashi.
Niigata	30.12	765.0	30.16	766.0	35.6	2.0	70	w.	17.1	7.6		0	8 ck		w.	0.040	1.0	cloudy	M. Morita.
Nobiru	30.06	763.6	30.08	764.0	27.0	— 2.8	89	nw.	4.6	2.1			10 n					snowing	H. Midzushima.
Numazu	30.08	763.9	30.11	764.8	40.0	4.4	70	ene.			4	0	1 s		w.	0	0	clear	R. Kaneda.
Osaka	30.26	768.6	30.28	769.0	35.8	2.1	87	n.	3.7	1.6		0	0			0	0	clear	H. Omura.
Sapporo					15.0	— 9.4	62	w.	20.0	8.9		1	0			0	0	clear	
Tokei Obs'y, Yeddo	30.04	763.1	30.13	765.2	35.6	2.0	61	nnw.	6.3	2.8		0	0			0	0	clear	The Staff.
Wakayama	30.21	767.4	30.27	768.9	42.8	6.0	63	n.	8.4	3.8			10 ck			0	0	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.83	757.7	30.02	762.5	76.9	24.9	79	ene.	9.0	4.0		2 c;cs	9 n;ks		ne.	0.01	0.3	overcast	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.72	602.4	29.94	760.4	49.3	9.6	79	calm	0	0		2 c	0	sw.		0	0	clear	Prof. Vicente Fernandez.
Leon	24.39	619.5	30.28	769.1	43.2	6.2	89	wnw.			1	1 c	1 k			0	0	clear	Prof. M. Leal.
Mazatlan	29.70	754.3	29.96	761.0	72.0	22.2	54	ne.	1.6	0.8		6 cs	0	sw.		0	0	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23.14	587.8	30.33	770.4	43.3	6.3	68	nw.	0.9	0.4		0	0			0	0	fine	The Staff.
Morelia	24.33	618.0	30.24	768.0	42.1	5.6	74	s.			2	1 c	2 k	s.	se.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.99	609.4	30.10	764.5	43.9	5.5	81	wnw.			1	1 cs	0			0.004	0.1	clear	M. V. de Leon, M. E
Puebla, Catholic Institute	23.44	595.3	30.24	768.2	50.9	10.5	34	calm	0	0		0	4			0	0	⅛ cloudy	Prof. P. Spina.
Zacatecas	22.55	572.9	30.27	768.9	44.5	7.3	68	nw.	4.1	1.8		0	1 s		sw.	0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.77	756.2	29.77	756.2	31.6	— 0.2		s.			1					0	0		
Groningen	29.72	754.8	29.77	756.2	32.9	0.5		ne.			1					0	0		
Helder	29.77	756.1	29.77	756.1	30.9	— 0.6		se.			1					0	0		
Hellevoetsluis	29.78	756.3	29.78	756.3	31.8	— 0.1	96	calm			0					0	0		
Utrecht	29.72	755.0	29.77	756.2	32.4	0.2	96	s.			2		hz.			0	0	hazy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.90	759.5	29 97	761.1	27.0	— 2.8	70	e.	2	1			2			0	0		
Brono	30.13	765.2	30.17	766.2	27.7	— 2.4	69	e.	9	4			9			c	0		
Christiania	29.94	760.4	30.09	764.3	28.0	— 2.2	92	ne.	5	2			10			0.004	0.1		
Gjesvær	30.24	768.2	30.27	768.8	21.9	— 5.6		se.			4		2						
Lodingen	30.21	767.4	30.26	768.6	21.0	— 6.1	69	n.			1		0			0	0		
PORTUGUESE.																			
Angra, Azores	29.84	757.9	29.99	761.8	64.0	17.8	94	wnw.	13.0	5.8			8			0.512	13.0		Dr. J. A. Sampaio.
Campo Major	28.58	725.9	29.59	751.6	40.2	7.9	83	wnw.	6.3	2.8			9			0.236	6.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.02	762.4	30.11	764.7	66.4	19.1	58	wsw.	16.1	7.2			1			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.28	743.7	29.64	752.8	53.1	11.7	76	w.	11.2	5.0			9			0.445	11.3		The Staff.
Ponta Delgada, Azores	29.97	761.2	30.04	763.0	66.2	19.0	87	w.	18.1	8.1			3			0.122	3.1		
Saint Paul de Loando	29.01	752.0	29.81	757.1	83.1	28.4	70	wsw.	1.8	0.8			10			0	0		
Serra da Estrella	24.71	627.7	29.56	750.9	28.0	— 2.2	100	wnw.	13.6	6.1			10					foggy	
RUSSIAN.																			
Akmolinski	29.43	747.5	30.65	778.5	1.9	—16.7	70	s.	4	2		5 ck	0						Major K. Lasarew.
Archangel	30.49	774 4	30.51	774.9	7.5	—13.6	92	ene.	4	2			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.48	774.2	30.40	772.2	33.6	0.9	84	e.	7	3			10			0	0	heavy cl'ds.	Capt. Wisganow.
Barnaul	30.36	771.1	30.97	786.6	—28.1	—33.4	78	sw.	4	2			0			0	0		Meteorological Obs'y.
Bielosersk	29.87	758.7	30.30	771.2	30.9	— 0.6	100	se.	4	2			10 n			0.008	0.2	snowing	
Dorpat	29.98	761.4	30.23	767.9	32.7	0.4	100	sw.	2	1			10 n			0.055	1.4	light fog	Observatory.
Ekaterinburg	29.41	747.0	30.45	773.3	21.6	— 5.8	87	w.	9	4			10			0.055	1.4		Meteorological Obs'y.
Elisawetgrad	29.95	760.8	30.43	772.8	35.2	1.8	100	nnw.	0	0			10			0.012	0.3		
Kasan	30.17	766.2	30.46	773.6	22.5	— 5.3	75	sse.	9	4			10						Observatory.
Kem	30.41	772.3			18.7	— 7.4	97	calm	0	0			10 ks			0.047	1.2	heavy clouds	
Kertch	30.22	767.5	30.24	768.0	44.8	7.1	89	calm	0	0			10			0	0		Lagorio & Sastyres.
Kieff	29.65	753 2	30.32	770.2	33.6	0.9	87	nw.	2	1			c;cs	10 ks					Observatory.
Libau	30.19	766.7	30.21	767.3	33.1	0.6	94	sse.			1		10			0.010	0.4		E. Quaas.
Lugan	30.13	765.4	30.35	770.8	35.8	2.1	96	calm	0	0			10			0.004	0.1		Meteorological Obs'y.
Nikolaiev	30.20	768.6	30.34	770.5	39.0	4.2	100	calm	0	0			10 n			0.012	0.3		Capt. Kurdakow.
Pekin, China	30.42	772.7	30.56	776.3	19.4	— 7.0	35	nw.	22	10		0	0						Physical Observatory.
Petrozavodsk	30.09	764.3	30.30	769.6	29.1	— 1.6	100	e.	7	3			10			0.224	5.7		Dr. Bergmann.
Pinsk																			
St. Petersburg	30.14	765.5	30.15	765.9	33.4	0.8	96	se.	7	3			10 n			0.071	1.8		Central Physical Obs'y.
Sevastopol																			
Semipalatinsk	30.23	767.9	31.04	788.3	—26.7	—32.6	83	e.	13	6			0			0	0		Major Lasarew.
Staroi Bykhov	29.85	758.3	30.34	770.0	33.3	0.7	96	w.	9	4			10			0.043	1.1		
Tashkend, Laboratory	28.60	726.3	30.18	766.5	54.5	12.5	54	calm	0	0			10					hv'y clouds	Teich, A. M.
Tiflis	28.79	731.3	30.24	768.0	51.6	10.5	64	n.	2	1			9 ks			0	0		Physical Observatory.
Tomsk	30.44	773 2	30.77	781.6	—16.4	—26.9	81	s.	7	3			10						
Vladivostock	30.32	770.0	30.38	771.7	— 3.8	—19.9	70	n.	11	5		0	0			0	0		
Warsaw	29.65	753.0	30.09	764.2	34.2	1.2	85	se.	16	7			6					light clouds	Astronomical Obs'y.
Wilna	29.86	758.4	30.30	769.6	33.6	0.9	87	s.	2	1			10					hv'y clouds	Berg, Assistant.
Yeniseisk	30.61	777.4	30.95	786.2	—23.8	—31.0	85	ese.	4	2			2						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.79	756.7	49	9.4	91	ne.			4	0	0			0	0	clear	J. Youngclause.
North Unst			29.95	760.7				sse.			4		7			blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.57	751.0	29.68	753.8	45.7	7.6	54	nw.	3.4	1.5		0	0			0.043	1.1	clear	Antonio Rzve, Director.
Bilbao, Met. Obs'y	29.58	751.3	29.64	752.8	44.1	6.7	78	se.	2.5	1.1			10			0	0	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.59	675.4	29.72	754.9	28.8	— 1.8	96	n.	6.3	2.8			10			0.118	3.0	foggy	Domingo Martin.
Madrid, Royal Obs'y	27.31	693.6	29.61	752.1	32.4	0.2	100	ne.	12.5	5.6			10					snowing	The Staff.
Murcia, Met. Obs'y	29.51	749.5	29.63	752.7	39.2	4.0	88	ne.	2.2	1.0		5	5	nw.		0.010	0.4	misty	Olayo Diaz, Director.
Oviedo	28.73	729.8	29.60	751.8	37.4	3.0	79	se.	7.8	3.5		4 n	4 n	nw.	w.	0	0	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.64	727.4	29.54	750.3	44.1	6.7	76	e.	4.9	2.2			3			0.508	12.9	cloudy	R. Gil Villanueva, Dir.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.72	754.8	29.77	756.2	78.0	25.6	78	nne.	2.2	1.0	.....	3 c	4 ks	.....	ne.	0.709	18.0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.62	752.3	29.72	754.9	54.1	12.3	70	nw.	22.3	9.9	.....	0	5	.....	w.	0.740	18.8	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.98	761.6	30.08	763.9	79.9	26.6	89	calm	0	0	.....	2 k	3 k;n	e.	e.	0.236	6.0	raining	Manuel Muese.
Tuguegarao, Philippine Id's	29.73	755.2	29.87	758.6	73.8	23.2	93	wnw.	2.9	1.3	.....	.....	10 n	.....	.....	0.20	5.1	rainy	José L. Yrastorza.
SWEDISH.																			
Haparanda	30.39	771.9	30.43	772.9	20.1	— 6.6	95	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	
Umea	30.29	769.3	30.34	770.6	16.9	— 8.4	100	ne.	.....	.....	4	.....	10.	.....	.....	0.079	2.0	.....	
Hernosand	30.26	768.6	30.31	769.9	22.6	— 5.2	96	ne.	.....	.....	2	.....	10	.....	.....	0.315	8.0	.....	
Stockholm	29.94	760.5	30.12	765.0	33.8	1.0	98	w.	.....	.....	2	.....	10	.....	.....	0.161	4.1	.....	
Wisby	30.05	763.2	30.11	764.7	33.4	0.8	96	s.	.....	.....	2	.....	7	.....	.....	0.079	2.0	.....	
Sub-series.																			
Upsala	30.02	762.4	30.10	764.6	33.8	1.0	95	e.	5.4	2.4	.....	.....	10	.....	.....	0.071	1.8	foggy	S. G. Fineman.
SWISS.																			
Geneva	28.21	716.6	29.70	754.4	34.3	1.3	82	sw.	.....	.....	1	.....	10	.....	.....	0.409	10.4	covered	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.26	768.7	55.9	13.3	78	n.	15	6.5	.....	.....	4	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	30.00	762.1	65.5	18.6	.....	se.	.....	.....	2	.....	10	.....	.....	0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.17	766.3	64.0	17.8	52	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.94	760.5	30.03	762.7	29	— 1.7	77	s.	8	3.6	.....	.....	10 n	.....	.....	0.21	5.3	light snow	J. O. Barnes.
Alpena, Michigan	29.08	738.6	29.79	756.7	15	— 9.4	100	e.	13	5.8	.....	.....	10 n	.....	.....	0.83	21.1	light snow	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.11	637.8	30.19	766.8	26	— 3.3	59	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.16	689.9	30.19	766.8	25	— 3.9	64	sw.	18	8.0	.....	0	0	.....	.....	0	0	clear	R. O. Lenoir.
Atlanta, Georgia	28.89	733.8	30.12	765.0	36.0	2.2	94	e.	5	2.2	.....	.....	10 n	.....	.....	0.09	2.3	light rain	H. C. Smith.
Atlantic City, New Jersey	30.02	762.5	30.02	762.5	36	2.2	94	sw.	5	2.2	.....	.....	10 n	.....	.....	0.57	14.5	light rain	Jas. M. Watson.
Augusta, Georgia	29.98	761.5	30.18	766.6	39	3.9	89	nw.	2	0.9	.....	.....	10 s	.....	sw.	0.01	0.3	cloudy	John Healy.
Baltimore, Maryland	29.98	761.5	30.04	763.0	36	2.2	79	s.	1	0.4	.....	.....	10 n	.....	sw.	0.18	4.6	light rain	Geo W Felger.
Barnegat, New Jersey	30.02	762.5	30.04	763.0	35.0	1.7	96	sw.	6	2.7	.....	.....	10 n	.....	.....	0.31	7.9	light rain	G. A. Hill.
Bennett, Fort, Dakota	28.36	720.3	30.12	765.0	8	—13.3	87	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.22	691.4	30.22	767.6	30	— 1.1	71	sw.	10	4.5	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.08	713.2	30.09	764.3	14	—10.0	83	nw.	6	2.7	.....	0	0	.....	.....	inap.	inap.	clear	Cyrus Cramer.
Block Island, Rhode Island	30.06	763.5	30.09	764.3	38	3.3	100	calm	0	0	.....	.....	10 n	.....	w.	0.07	1.8	light rain	J. T. Elker.
Boise City, Idaho	27.22	691.4	30.20	767.1	24	— 4.4	88	ne.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	B. E. Light.
Boston, Massachusetts	29.94	760.5	30.10	764.5	24.0	— 4.4	88	se.	5	2.2	.....	.....	10 n	.....	.....	0.06	1.5	light snow	O. B. Cole.
Brownsville, Texas	29.92	760.0	29.98	761.5	59.7	15.4	99	calm	0	0	.....	.....	fg.	.....	.....	0.01	0.3	dense fog	M. McCarty.
Buffalo, New York	29.04	737.6	29.84	757.9	30.8	— 0.7	90	s.	8	3.6	.....	.....	10 s	.....	s.	0.13	3.3	cloudy	W. Finn.
Buford, Fort, Dakota	27.97	710.4	30.21	767.3	15	— 9.4	83	calm	0	0	.....	0	2 s	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.71	754.6	30.02	762.5	20.3	— 6.5	89	s.	3	1.3	.....	.....	10 n	.....	w.	0.04	1.0	light snow	G. C. Schaeffer.
Cairo, Illinois	29.61	752.1	30.03	762.7	37.8	3.2	84	n.	7	3.1	.....	.....	10 s	.....	.....	0.14	3.6	cloudy	W. H. Ray.
Cape Henry, Virginia	30.07	763.8	30.09	764.3	50	10.0	77	sw.	12	5.4	.....	.....	10 s	.....	.....	0	0	threatening	A. K. Alderson.
Cape May, New Jersey	30.01	762.2	30.04	763.0	42.0	5.6	74	s.	18	8.0	.....	.....	10 n	.....	.....	0.35	8.9	light rain	W. E. Smith.
Cape Mendocino, California	29.48	748.8	30.16	766.1	46	7.8	76	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	J. J. McLean.
Cedar Keys, Florida	30.10	764.5	30.12	765.0	60	15.6	87	se.	10	4.5	.....	.....	10 n	.....	se.	inap.	inap.	light rain	F. W. Mixer.
Champaign, Illinois	29.00	736.6	29.87	758.7	28.0	— 2.2	64	w.	15	6.7	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.03	762 7	30.09	764.3	49	9.4	86	n.	5	2.2	.....	.....	10 s	.....	.....	0	0	threatening	J. H. Smith.
Charlotte, N. Carolina	29.20	741 7	30.09	764.3	33.0	0.6	88	s.	4	1.8	.....	.....	10 s	.....	s.	3.06	1.5	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.21	741.9	30.07	763.8	37.5	3.1	84	se.	5	2.2	.....	.....	10 n	.....	se.	0.22	5.6	light rain	B. L. Goulding.
Cheyenne, Wyoming	24.02	610.1	30.30	769.6	20.1	— 6.6	64	nw.	14	6.3	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.03	737.3	29.79	756.7	26.0	— 3.3	77	w.	8	3.6	.....	.....	10 s	.....	.....	0.07	1.8	cloudy	J. Mitchell.
Chincoteague, Virginia	30.06	763.5	30.08	764.0	37	2.8	89	w.	5	2.2	.....	.....	10 n	.....	sw.	0.02	0.5	light rain	C. F. Dickens.
Cincinnati, Ohio	29.18	741.2	29.88	758.9	42	5.6	92	s.	8	3.6	.....	.....	10 n	.....	se.	0.13	3.3	light rain	R. B. Watkins.
Cleveland, Ohio	29.05	737.9	29.84	757.9	35	1.7	91	s.	9	4.0	.....	.....	10 n	.....	sw.	0.11	2.8	light rain	J. B. Newlin.
Coleman City, Texas	28.35	720.1	30.25	768.3	37	2.8	82	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	28.93	734.8	29.84	757.9	38	3.3	82	s.	5	2.2	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.18	715.8	30.20	767.1	39.3	4.1	73	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.84	681.7	30.24	768.1	30	— 1.1	71	sw.	18	8.0	.....	0	2 s	.....	.....	inap.	inap.	clear	W. B. Lamar.
Davenport, Iowa	29.20	741.7	29.90	759.4	24	— 4.4	73	nw.	7	3.1	.....	8 k	1 s	nw.	nw.	0.03	0.8	cloudy	R. R. Martin.
Davis, Fort, Texas	25.29	642.4	30.23	767.8	35	1.7	82	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.30	718.8	30.14	765.5	35.2	1.8	81	sw.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	D. Moore.
Deadwood, Dakota	25.28	642.1	30.27	768.8	30	— 1.1	92	e.	4	1.8	.....	.....	10 n	.....	.....	0.22	5.6	light snow	F. Willson.
Delaware Breakwater, Del.	29.96	761.0	29.98	761.5	35	1.7	100	sw.	8	3.6	.....	.....	10 n	.....	sw.	0.20	5.1	light rain	T. S. Townsend.
Denison, Texas	29.29	744.0	30.14	765.5	38.0	3.3	72	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24.80	629.9	30.32	770.1	31.0	— 0.6	54	w.	10	4.5	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.03	737.3	30.01	762.2	22	— 5.6	73	n.	12	5.4	.....	.....	10 s	.....	n.	0.02	0.5	cloudy	F. W. Conrad.
Detroit, Michigan	28.99	736.3	29.75	755.6	36.0	2.2	89	s.	9	4.0	.....	.....	10 s	.....	.....	0.19	4.8	cloudy	O. F. R. Wappenhans.
Dodge City, Kansas	27.52	699.0	30.32	770.1	20	— 6.7	58	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.12	739.6	29.89	759.2	16.5	— 8.6	73	calm	0	0	.....	0	0	.....	.....	0.05	1.3	clear	J. Harvey Smith.
Duluth, Minnesota	29.12	739.6	29.93	760.2	18.8	— 7.3	87	nw.	15	6.7	.....	.....	10 s	.....	nw.	0.20	5.1	cloudy	N. B. Conger.
Eagle Pass, Texas	29.23	742.4	30.07	763.8	55.3	12.9	93	nw.	6	2.7	.....	.....	10 n	.....	.....	inap.	inap.	light rain	F. Belford.
Eagle Rock, Idaho	25.43	645.9	30.35	770.9	24	— 4.4	76	sw.	9	4.0	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	30.10	764.5	30.17	766.3	23.0	— 5.0	80	sw.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.36	694.9	30.32	770.1	30	— 1.1	71	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26 34	669.0	30.20	767.1	38.0	3.3	46	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.06	738.1	29.83	757.7	35	1.7	79	s.	10	4.5	.....	.....	10 s	.....	.....	0.12	3.0	cloudy	Peter Wood.
Escanaba, Michigan	29.11	739.4	29.83	757.7	20.0	— 6.7	96	n.	13	5.8	.....	.....	10 n	.....	n.	0.12	3.0	light snow	George Heathcote.
Fredericksburg, Texas	28.28	718.3	30.10	764.5	45	7.2	86	n.	9	4.0	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	29.91	759.7	29.96	761.0	63	17.2	93	sw.	8	3.6	.....	.....	fg.	.....	.....	0.04	1.0	dense fog	E. O'C. Machaerney.
Grand Haven, Michigan	29.02	737.1	29.73	755.1	22.0	— 5.6	80	ne.	6	2.7	.....	.....	10 n	.....	.....	0.13	3.3	light snow	J. E. Mueller.
Grant, Fort, Arizona	25.34	643.6	30.22	767.6	36	2.2	66	e.	2	0.9	.....	0	0	.....	.....	0	0	clear	Robert O. Lord.
Hatteras, North Carolina	30.14	765 5	30.16	766.1	60	15.6	81	s.	23	10.3	.....	6 k	3 s	sw.	w.	0	0	threatening	R. M. Crawford.
Helena, Montana	25 83	656.1	30.21	767.3	33	0.6	88	nw.	18	8.0	.....	3 cs	0	.....	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	29.15	740.4	30.23	767.8	32	0.0	88	n.	8	3.6	.....	c	0	.....	.....	0	0	clear	J. P. Sherry.
Huron, Dakota	28.56	725.4	30.10	764.5	7.5	—13.6	52	nw.	1	0.4	.....	0	0	.....	.....	0.01	0.3	clear	S. W. Glenn.
Indianapolis, Indiana	28.97	735.8	29.82	757.4	35	1.7	79	w.	10	4.5	.....	.....	10 s	.....	w.	0.02	0.5	cloudy	O. Schutze.
Indianola, Texas	29.94	760.5	29.97	761.2	61.2	16.2	96	w.	6	2.7	.....	.....	fg.	.....	.....	inap.	inap.	dense fog	I. A. Reed.
Jacksboro, Texas	28.98	736.1	30.22	767.6	34	1.1	60	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.09	764.3	30.14	765.5	56	13.3	86	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.44	697.0	30.14	765 5	30	— 1.1	80	w.	16	7.2	.....	0	5 s	.....	w.	0	0	fair	A. Schneider.
Keokuk, Iowa	29.21	741 9	29.92	760.0	26.5	— 3.1	88	w.	8	3.6	.....	.....	10 s	.....	w.	0.02	0.5	cloudy	F. Z. Gosewisch.
Key West, Florida	30.05	763.3	30.07	763.8	74.0	23.3	84	e.	11	4.9	.....	4 ck	1 k	s.	e.	0.18	4.6	fair	R. H. Paxton.
Kittyhawk, North Carolina	30.12	765.0	30.14	765.5	56	13.3	80	sw.	15	6.7	.....	0	7 ks	.....	w.	0	0	fair	H. Mc P. Baldwin.
Knoxville, Tennessee	28.99	736.3	30.07	763.8	33.8	1.0	100	n.	3	1.3	.....	.....	10n;fog	.....	.....	0.66	16.8	light rain	J. A. Cody.
La Crosse, Wisconsin	29.04	737.6	29.89	759.2	11	—11.7	61	n.	5	2.2	.....	hz.	4 s	.....	.....	0.07	1.8	fair	S. C. Emery.
Leavenworth, Kansas	29.16	740.7	30.12	765.0	24	— 4.4	73	nw.	16	7.2	.....	0	0	.....	.....	inap.	inap.	clear	A. W. Browne.
Lewiston, Idaho	29.30	744.2	30.18	766.6	34.0	1.1	72	ne.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	W. Bell.
Little Rock, Arkansas	29.72	754.9	30.05	763.3	46	7.8	83	nw.	4	1.8	.....	0	9 ks	.....	w.	0.15	3.8	cloudy	W. U. Simons.
Los Angeles, California	29.68	753.9	30.08	764.0	49	9.4	63	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.29	744.0	29.89	759.2	45.5	7.5	80	sw.	12	5.4	.....	.....	10 s	.....	sw.	0.08	2.0	cloudy	L. M. Dey.
Lynchburg, Virginia	29.34	745.2	30.07	763.8	35	1.7	85	calm	0	0	.....	.....	10 s	.....	.....	0.18	4.6	threatening	Lewis Dunne.
Mackinaw City, Michigan	29.08	738.6	29.78	756.4	25.0	— 3.9	88	ne.	35	15.6	.....	.....	10 n	.....	ne.	0 31	7.9	light snow	F. R. Day.
Macon, Fort, North Carolina	30.15	765.8	30.16	766.1	55	12.8	100	sw.	16	7.2	.....	10 cs	0	.....	.....	0	0	cloudy	C. A. Shaw.
Madison, Wisconsin	28.74	730 0	29.84	757.9	15	— 9.4	67	nw.	12	5.4	.....	0	0	.....	.....	0.11	2.8	clear	F. P. Chaffee.
Maginnis, Fort, Montana	25.53	648.5	30.07	763 8	28	— 2.2	59	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	F. Burke.

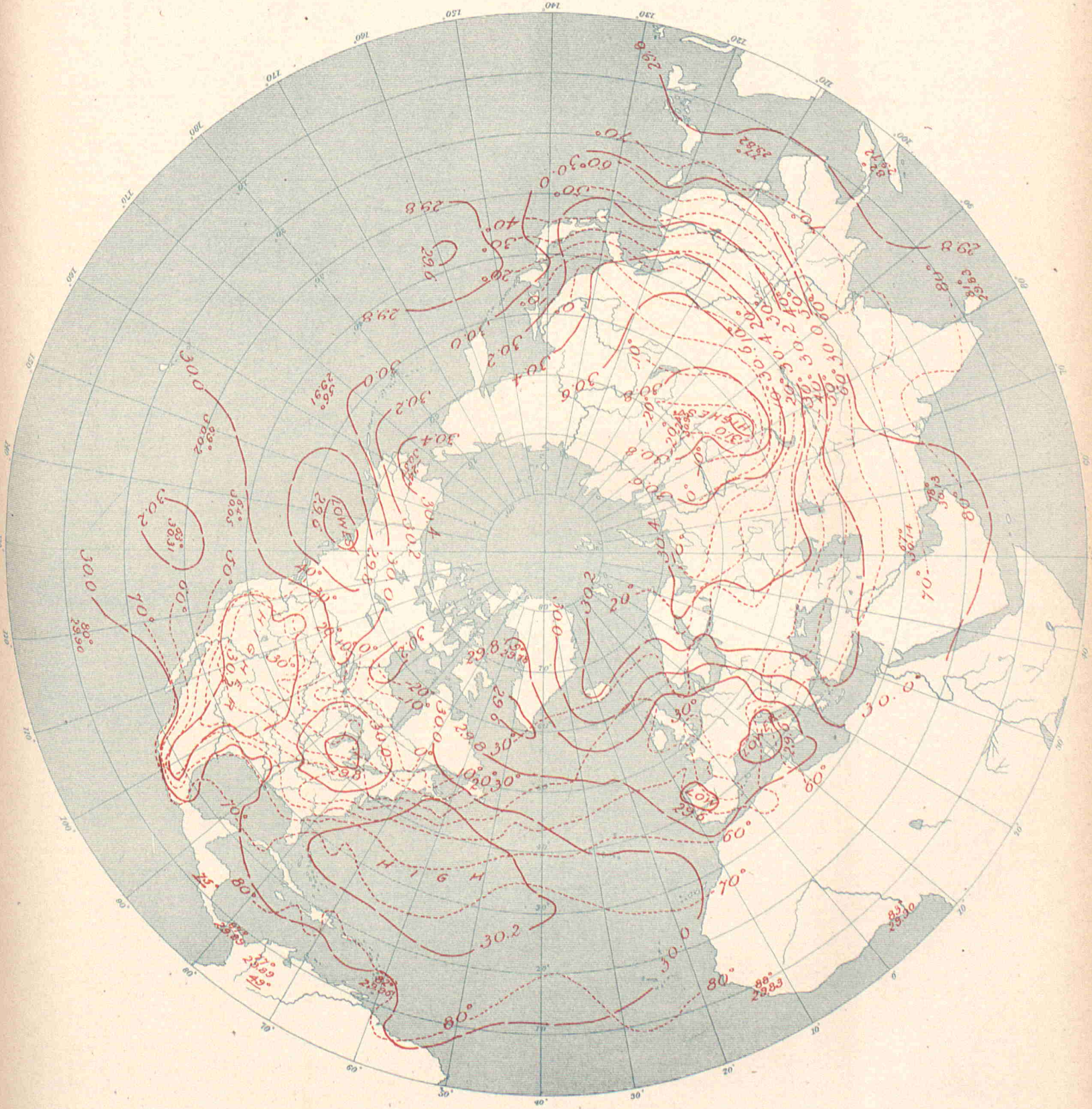
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES,—Cont'd.																			
McKavett, Fort, Texas	27.76	705.1	30.14	765.5	43	6.1	76	sw.	11	4.9		0	0					clear	J. E. Thatcher.
Marquette, Michigan	29.07	738.4	29.85	758.2	24	— 4.4	73	se.	16	7.2			10 n			0.24	6.1	heavy snow	J. Gilligan.
Memphis, Tennessee	29.68	753.9	30.04	763.0	44	6.7	68	nw.	2	0.9			10 s		nw.	0.35	8.9	cloudy	D. T. Flannery
Milwaukee, Wisconsin	28.94	735.1	29.75	755.6	10	— 7.2	84	w.	9	4.0			10 n			0.17	4.3	light snow	W. Line.
Missoula, Fort, Montana	26.79	680.5	30.25	768.3	30	— 1.1	81	nw.	2	0.9			10 s			0.01	0.3	threatening	J. H. Young.
Mobile, Alabama	29.97	761.2	30.01	762.2	57	13.9	100	nw.	3	1.3			10n;fg		nw.	0.15	3.8	light rain	C. A. Read.
Montgomery, Alabama	29.80	756.9	30.04	763.0	45.7	7.6	69	se.	4	1.8			10 s			trap.	trap.	cloudy	J. B. McLaughlin.
Moorhead, Minnesota	28.94	735.1	30.05	763.3	—10	—23.3	100	nw.	8	3.6		0	0			0.05	1.3	clear	H. Bessant.
Morgantown, W. Virginia	28.87	733.3	29.94	760.5	44.0	6.7	83	sw.	8	3.6			10 s			0.62	15.7	light rain	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.46	595.9	30.09	764.3	15.0	— 9.4	87	w.	36	16.1			10n;fg		w.	0	0	light snow	B. S. Pague.
Nashville, Tennessee	29.36	745.7	29.97	761.2	46.0	7.8	93	sw.	5	2.2			10 n		w.	0.22	5.6	light rain	L. N. Jesunofsky.
New Haven, Connecticut	29.94	760.5	30.06	763.5	24	— 4.4	100	n.	4	1.8			10 n			0.03	0.8	light snow	J. H. Sherman.
New London, Connecticut	30.05	763.3	30.10	764.5	28	— 2.2	100	e.	3	1.3			10 n			0.04	1.0	light snow	J. G. Lynch.
New Orleans, Louisiana	29.94	760.5	30.00	762.0	60.0	15.6	93	sw.	5	2.2		0	2s;fg		sw.	0.17	4.3	clear	L. Dunne.
Newport, Rhode Island	29.98	761.5	30.03	762.7	35.3	1.8	84	s.	6	2.7			10 n		e.	0.13	3.3	light rain	W. McGillivray.
New York, New York	29.87	758.7	30.06	763.5	29	— 1.7	100	sw.	2	0.9			10 s			0.13	3.3	cloudy	J. B. Merrill.
Norfolk, Virginia	30.07	763.8	30.10	764.5	43	6.1	74	sw.	4	1.8		a	10s;fg		sw.	0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.08	687.8	30.24	768.1	23.6	— 4.7	84	w.	10	4.5		0	0			trap.	trap.	clear	E. F. Brady.
Olympia, Washington T'y.	30.00	762.0	30.04	763.0	43.0	6.1	93	s.	3	1.3			10 n			0.18	4.6	light rain	J. Dascomb.
Omaha, Nebraska	28.84	732.5	30.14	765.5	13.2	—10.4	70	nw.	11	4.9		0	0			0.02	0.5	clear	A. Pollak.
Oswego, New York	29.54	750.3	29.89	759.2	28.0	— 2.2	64	se.	9	4.0			10 n			0.04	1.0	light snow	J. G. Linsley.
Palestine, Texas	29.48	748.8	30.06	763.5	57.5	14.2	93	w.	5	2.2			10 n		nw.	0.16	4.1	light rain	L. M. Pindell.
Pensacola, Florida	29.98	761.5	30.01	762.2	57.2	14.0	96	ne.	7	3.1			10 n		ne.	0.63	16.0	light rain	M. McGauran.
Philadelphia, Pa	29.94	760.5	30.05	763.3	36	2.2	100	se.	2	0.9			10n;fg		se.	0.22	5.6	light rain	T. T. Townsend.
Pike's Peak, Colorado	17.44	443.0	30.10	764.5	—11	—23.9	100	nw.	40	17.9		0	0			0.02	0.5	clear	H. Hall.
Ploche, Nevada	24.17	613.9	30.34	770.6	25.4	— 3.7	78	nw.	5	2.2		0	0					clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.03	737.3	29.89	759.2	36.0	2.2	85	se.	2	0.9			10 n		se.	0.08	2.0	light rain	W. A. Reid.
Poplar River, Montana	27.68	703.1	30.04	763.0				w.			4	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.00	762.0	30.01	762.2	64.2	17.9	93	sw.	6	2.7		0	0			0.08	2.0	clear	H. B. Boyer.
Port Huron, Michigan	29.02	737.1	29.75	755.6	29.0	— 1.7	100	se.	2	0.9			10 n			0.46	11.7	light snow	W. O. Bailey.
Portland, Maine	30.06	763.5	30.11	764 8	27.0	— 2.8	84	w.	1	0.4			10 n			0.22	5.6	heavy snow	W. W. Eichelberger.
Portland, Oregon	29.94	760.5	30.01	762.2	43.2	6.2	93	s.	3	1.3			10 s		s.	0.06	1.5	cloudy	M. L. Hearne.
Portsmouth, N. C.					60	15.6	93	s.			8		10 s		sw.	0	0	cloudy	F. S. Coburn.
Prescott, Arizona	24.85	631.2	30.22	767.6	25.6	— 3.6	80	w.	3	1.3		0	0					clear	W. H. Clendenon.
Provincetown, Mass	30.04	763.0	30.07	763.8	33	0.6	88	se.	12	5.4			10 n			0.20	5.1	light snow	P. T. Jenkins.
Punta Rassa, Florida	30.09	764 3	30.10	764.5	67.5	19.7	90	e.	10	4.5		6 c	3 s	w.	s.	0	0	cloudy	W. J. Evans.
Red Bluff, California	29.82	757.4	30.19	766.8	41	5.0	65	nw.	4	1.8		0	2 ks		nw.	0	0	clear	J. R. Williams.
Rochester, New York	29.16	740 7	29.87	758.7	25	— 3.9	88	se.	8	3.6			10 s			0.04	1.0	threatening	E. W. McGann
Roseburg, Oregon	29.56	750.8	30.13	765.3	41.7	5.4	79	ne.	4	1.8			10 s		sw.	0	0	cloudy	J. J. Naury.
Sacramento, California	30.12	765.0	30.20	767.1	41.2	5.1	82	se	4	1.8		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.32	744 7	29.97	761.2	31.9	— 0.1	95	w.	7	3.1			10 s		w.	0.01	0.3	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	30.53	775.4	30.57	776.5	—24.0	—31.1	100	calm	0	0		0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.00	736.6	29.96	761.0	14.0	—10.0	80	w.	4	1.8			10 s			0.24	6.1	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.08	738.6	30.08	764.0	2	—16.7	85	nw.	2	0.9		5 cs	0			0.07	1.8	fair	C. B Dilley.
Salt Lake City, Utah	25.86	656.8	30.40	772.1	28	— 2.2	67	ne.	2	0.9		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.28	743.7	30.00	762.0	53.0	11.7	86	ne.	2	0.9		0	0			0.06	1.5	clear	T. J. Kenan.
San Diego, California	29.98	761.5	30.05	763.3	43.6	6.4	94	ne.	3	1.3		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.06	738.1	29.79	756.7	35	1.7	79	sw.	13	5.8			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.02	762.5	30.05	763.3	34.0	1.1	89	sw.	4	1.8			10 s			0.19	4.8	cloudy	B. A. Blundon.
San Francisco, California	30.12	765.0	30.19	766.8	49	9.4	81	nw.	6	2.7		0	2 s		nw.	0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.24	590.3	30.23	767.8	27	— 2.8	51	n.	12	5.4		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.06	763.5	30.16	766.1	51	10.6	59	e.	1	0.4		8 cs	2 ks	w.		0	0	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.37	669.8	30.20	767.1	29	— 1.7	67	w.	8	3.6		3 cs	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.72	754.9	29.97	761.2	54	12.2	100	w.	1	0.4			10 s			0.03	0.8	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.90	734.0	30.23	767.8	34.5	1.4	81	n.	5	2.2		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.35	618.5	30.19	766.8	32.0	0.0	78	nw.	8	3.6		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.34	745.2	29.41	747.0	36.1	2.3	89	e.	4	1.8			10 n		e.	0.26	6.6	light rain	F. W. Fickett.
Smith, Fort, Arkansas	29.61	752.1	30.11	764.8	33.8	1.0	88	sw.	2	0.9		0	6 s			0	0	fair	J. B. Campbell.
Smithville, North Carolina	30.09	764.3	30.13	765.3	56	13.3	93	s.	19	8.5			10 s		sw.	0.03	0.8	threatening	O. Parker.
Spokane Falls, Wash. Ter.	28.06	712.7	30.19	766.8	31	— 0.6	88	calm	0	0		0	0			0	0	clear	H. Clifford.
Springfield, Illinois	29.18	741.2	29.91	759.7	28	— 2.2	82	nw.	10	4.5			10 s			0.06	1.5	cloudy	T. B. Jennings.
Springfield, Massachusetts	29.90	759.4	30.04	763.0	22.5	— 5.3	68	calm			0		10 n			0.06	1.5	snowing	Charles Mayr.
Springfield, Mo	28.58	725.9	30.11	764.8	30	— 1.1	77	nw.	8	3.6		0	0			0.07	1.8	clear	J. B. Marbury.
Starkville, Miss	29.51	749.5	30.01	762.2	49	9.4	96	n.	10	4.5			10 n		n.	0.19	4.8	light rain	O. Dill.
Stevenson, Fort, Dakota	28.07	713.0	30.13	765.3	8	—13.3	80	nw.	4	1.8		0	0			0	0	clear	W. Burrows.
Stockton, Fort, Texas	27 19	690.6	30.33	770.4	33	0.6	81	sw.	2	0.9		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.92	760.2	29.99	761.7	37.0	2.8	89	ne.	7	3.1			10 n		ne.	0.10	2.5	light snow	G. Liebmann.
Thomas, Camp, Arizona	27.32	693.9	30.14	765.5	30.5	— 0.8	90	calm			0	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.02	737.1	29.76	755.9	37	2.8	82	s.	4	1.8			10 n		sw.	0.06	1.5	light rain	A. Buell.
Tucson, Arizona	27.63	701.8	30.13	765.3	40	4.4	67	s.	4	1.8		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.74	755.4	30.13	765.3	38	3.3	89	se.	3	1.3			10 s			0	0	cloudy	J. Daly.
Verde, Fort, Arizona					32.4	0.2	81	n.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.73	755.1	30.00	762.0	58.2	14.6	97	s.	5	2.2			fg.			0.02	0.5	dense fog	James Kenealy.
Visalia, California	29.82	757.4	30.20	767.1	41.0	5.0	92	se.	1	0.4		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.49	622.0	30.26	768.6	22.1	— 5.5	76	w.	8	3.6		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	29.91	759.7	30.03	762.7	36.5	2.5	93	s.	3	1.3			10 n		s.	0.26	6.6	light rain	B. M. Purssell.
West Las Animas, Colorado	26.16	664.5	30.32	770.1	9.5	—12.5	49	w.	8	3.6		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.33	745.0	29.96	761.0	30	— 1.1	88	e.	1	0.4			10 s			trap.	trap.	threatening	B. F. Hough.
Wilmington, N. Carolina	30.10	764.5	30.16	766.1	58	14.4	100	sw.	8	3.6			10 n			0.03	0.8	light rain	Samuel A. Haney.
Winnemucca, Nevada	25.80	655.3	30.33	770.4	18	— 7.8	70	ne.	6	2.7		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.72	729.5	30.15	765.8	8	—13.3	76	calm	0	0		0	0			0.08	2.0	clear	J. H. Atfield.
Yuma, Arizona	29.90	759.4	30.04	763.0	55.6	13.1	34	n.	4	1.8		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8			49.0	9.4	67	calm	0	0		1 c	0	nw.		0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I.	29.98	761.5	30.05	763.3	67.7	19.8	94	e.	2	0.9		1 cs	0	w.		0	0	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762.2	71	21.7	94	calm	0	0		0	0			0	0	fine	Robert Johnston.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	80	26.7	87	e.			1	4 c	4 k	e.		0.330	8.4	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.33	745.0	29.89	759.2	77	25.0	94	n.			1	7 c	2 ks	nw.	calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75	23.9	95	ne.			3	0	0			0.12	3.0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.74	755.4	29.80	756.9	18	— 7.8	53	nw.			0		4 k			0	0	fair	W. J. Fisher.
St. Thomas, W. I.	29.98	761.5	30.10	764.5	80	26.7	74	e.				1 c	4 k	e.	e.	0.15	3.8	fair	Aug. Walloe.
York Factory, B. A	30.19	766.8	30.26	768.6	—23.0	—30.6		sw.	8	3.6		4 k	4 s	sw.	sw.	0.20	5.1	cloudy	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay	30.00	762.0	68	20.0	74	sw.			2		0							blue sky.
H. M. S. Audacious, N. 4° 30′, E. 99° 17′	29.72	754.9	82	27.8	74	n.			1-2		4	nw.						d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			68	20.0	69	ne.			1		1	ene.				1	ne.	blue sky.
H. M. S. Boadeica, Saldanha Bay, Cape Colony	29.90	759.4				var.			1		4							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.18	766 6	63	17.2	83	nnw.			3		4	nnw.						d. clouds.
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.10	764.5	54	12.2	86	n.			1		10							overcast
H. M. S. Comus, N. 38° 25′, W. 123° 35	30.19	766.8	46	7.8	92	calm			0		4					5	nw.	d. clouds.
H. M. S. Curacoa, Yokohama, Japan	29.98	761.5	44.5	6.9	76	n.			1-2		6	e.						d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.63	752.6	65	18.3	52	s.			2-5		9							raining.
H. M. Dock Yard, Bermuda, W. I	30.37	771.4	61	16.1	66	nne.			1-2		4	ene.						d. clouds.
H. M. S. Fawn, S. 24° 40′, E. 39° 36′	29.98	761.5	76.5	24.7	86	sse.			4		3	nnw.				2	sse.	d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.86	758.4	60	15.6	82	n.			1		0							misty.
H. M. S. Heroine, N. 49° 58′, W. 4° 57′	29.71	754.6	43	6.1	83	wsw.			1-2		1					sm'h		blue sky.
H. M. S. Iron Duke, N. 13° 57′, E. 112° 14′	29.82	757.4	77	25.0	86	n.			4		8	n.				5	ne.	d. clouds.
H. M. S. Kingfisher, S. 6° 50′, W. 81° 00′	29.89	759.2	67	19.4		se.			1		10					3	se.	misty.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	29.87	758.7	64.3	17.9	87	s.			6		10					2	s.	raining.
H. M. S. Liffey, S. 29° 56′, W. 71° 20.′	29.86	758.4	65	18.3		calm			0									d. clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.26	768.6	44.8	7.1	60	nne.			1		0							blue sky.
H. M. S. Northampton, St. John's, Antigua, W. I	30.01	762.2	81.5	27.5	78	ne.			3		3	ne.						d. clouds.
H. M. S. Rocket, S. 16° 10′, W. 74° 46′	29.93	760.2	72	22.2	85	se.			1		3							misty.
H. M. S. Startling, N. 5° 03′, E. 4° 21′	29.90	759.4	82.5	28.1	91	w.			2		4	ssw.				2-3	sw.	d. clouds.
H. M. S. Superb N. 35° 49′, E. 10° 02 *	29.95	760.7	65	18.3	89	sse.			3-4		6	s.				4	se.	d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.91	759.7	65	18.3	100	s.			1		10					3		overcast.
H. M. S. Sylvia, Sandy Point, Patagonia	28.92	734.6	44	6.7	75	w.			3-6		6	wsw.						squally.
H. M. S. Tourmaline, N. 15° 25′ E. 54° 20′	30.00	762.0				ene.			2		2	n.						d clouds.
H. M. S. Woodlark, Bushire, Persia	30.04	763.0	66.5	19.2	79	wnw.			4-6		4	w.				3	wnw.	squally.
H. M. S. Zephyr, Chee-foo, China	30.37	771.4	28.5	— 1.9	?	n.			4-5		6	n.				4	ne.	squally.
Portuguese Naval.																		
Tamega, Macao, China	29.99	761.8	69.8	21.0	82	calm			0		0							blue sky.
Swedish Naval.																		
Vanadis, N. 35° 44′, E. 15° 45′	29.89	759.1	66.2	19.0	91	sse.			3		9							overcast.
United States Naval.																		
Navy Yard, Pensacola, Fla	29.97	761.2	58	14.4	93	ne.	10	4.5			10		ne.	0.84	21.3			cloudy.
Navy Yard, Portsmouth, N. H	30.10	764 5	25	— 3.9	?	ne.	6	2.7			10		ne.					snowing.
Naval Hospital, Yokohama, Japan*	29.91	759.7	39	3.9	52	n.			2		0			0	0			clear.
Adams, Sitka, Alaska *†	29.50	749.3	35	1.7	90	calm			0		10							cloudy.
Alaska, N. 37° 48′, W. 139° 19′	30.05	763.3	64	17.8	89	s.			5		5		ne.	0	0	long	se.	fair.
Alliance, Hampton Roads, Va	30.08	764.0	44	6.7	92	wsw.			1-2		10			0	0			cloudy.
Ashuelot, Nagasaki, Japan	30.25	768.3	46	7.8	76	nne.			1		2		wnw.					clear.
Brooklyn, Keel Point, Patagonia	29.13	739.9	54	12.2	86	wnw.	45	20.1			2		ssw.	0.01	0.3	chop	e.	fair.
Colorado, New York, N. Y	30.24	768.1	32	0.0	100	s.	1	0.4			10							rain & snow
Enterprise, Norfolk, Va	30.14	765.5	46	7.8	76	w.			1		10		sw.					cloudy.
Essex, Callao, Peru	29.88	758.9	64	17.8	89	sse.			1		10					sm'h		overcast
Franklin, Norfolk, Va	30.09	764.3	44	6.7	67	wsw.	8	3.6			8		sw.	0	0			fair.
Galena, Montevideo, Uruguay	29.85	758.2	67	19.4	90	w			2		2		w.			sm'h		clear.
Hartford, Sandy Point, Patagonia*	28.93	734.8	49	9.4	77	wnw.			2		8		s;w	light	light	sm'h		fair.
Independence, Mare Island, Cal	30.21	767.3	42	5.6	91	calm			0		2			0	0			fair.
Iroquois, Callao, Peru	29.90	759.4	64	17.8	94	se.			2		10							overcast.
Jamestown, Boston, Mass	30.21	767.3	34	1.1	100	sse.			1		10							snowing.
Juniata, N. 35° 49′, W. 47° 17′*	30.39	771.9	66	18.9	68	nnw.			4		5		n.	0	0	mod	nw.	fair.
Kearsarge, Norfolk, Va	30.10	764.5	45	7.2	84	ssw.			2		8		ssw.					fair.
Lackawanna, Callao, Peru*	29.96	761.0	64	17.8	89	se.			1		10							cloudy.
Lancaster, Naples, Italy*	29.61	752.1	66	18.9	94	se.			6		8		se			mod	se.	fair.
Michigan, Erie, Pennsylvania	29.68	753.9	41	5.0	100	ssw.			2		10							drizzling.
Minnesota, New York, N. Y	30.10	764.5	32	0.0	100	ssw.	4	1.8			10							drizzling.
Monocacy, Kobe, Japan	30.27	768.8	44	6.7	92	calm			0		0							clear.
New Hampshire, Newport, R. I	30.10	764.5	33	0.6	100	e.			3		10		calm			sm'h		rainy.
Nipsic, Lisbon, Portugal*	29.59	751.6	57	13.9	75	w.			3		8		w.			sm'h		cloudy.
Onward, Callao, Peru†	30.03	762.7	64	17.8	89	sse.			2		10					long	w.	cloudy.
Palos, Tientsin, China*	30.44	773.2	18	— 7.8	100	ne.			1		0							clear.
Pensacola, Callao, Peru*	29.85	758.2	64	17.8	89	s.	3	1.3			10			0	0	sm'h		cloudy.
Powhatan, Boston, Mass	30.12	765.0	26	— 3.3	88	ssw.			1		10							snowing.
Quinnebaug, Villafranche, France*	29.49	749.0	57	13.9	69	nw.			3		10		calm			sm'h		cloudy.
Ranger, N. 16° 09′, W. 94° 22′	29.92	760.0	73	22.8	85	n.			2		0					sm'h		clear.
Richmond, Kobe, Japan	30.21	767.3	44	6.7	67	calm			0		5		wnw.	0	0			fair.
Saratoga, Newport, R. I	30.02	762.5	33	0.6	79	ese.			4		10		se.					snowy.
St. Louis, League Island, Pa	30.29	769.4	33	0.6	100	sse.			1		10							raining.
Swatara, Hampton Roads, Va*	29.98	761.5	44	6.7	75	sw.			2		10		sw.	0.26	6.6			hazy.
Tennessee, Fort Monroe, Va	30.10	764.5	43	6.1	83	sw.	9	4.0			10					sm'h		cloudy.
Vandalia, Hampton Roads, Va*	30.10	764.5	43	6.1	83	sw.			1		10			0	0			cloudy
Wabash, Boston, Mass	30.02	762.5	25	— 3.9	100	calm	0	0			2?		sw.					snowing
Wachusetts, Mare Island, Cal*	30.10	764.5	43	6.1	91	calm			0		2		calm	0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.07	763 8	47	8.3	85	sw.			1		10		calm	2.30	58.4			cloudy.
Yantic, Hampton Roads, Va	30.17	766.3	43	6.1	83	sw.			3		8							cloudy.
Merchant Marine.																		
S. S. Grecian, S. 8° 20′ W. 28° 00′*	29.94	760.5	80	26.7	78	nne.			6		5		nne.	4 h'r	4 h'r	mod.	ne.	cloudy.
S. S. Nova Scotian, N. 44° 49′ W. 61° 25′	30.14	765.5	25	— 3.9		wsw.			3		8		w.			sli't	wsw.	cloudy
S. S. Scandinavian, N. 42° 37′, W. 64° 36′	30.25	768.3	35	1.7		wsw.			4		10		w.	snow	snow	mod.	wsw.	overcast.
S. S. British Crown, N. 43° 42′ W. 58° 24′†	30.15	765.8	34	1.1		w.			6		7		w.	sleet	sleet	h'vy	w.	cloudy.
S. S. Indiana, N. 50° 54′, W. 31° 21′†	29.86	758.4	40	4.4	82	nw.			3		5		w.			mod	nw.	fine.
S. S. Lord Clive, Reedy Island, Delaware*†	29.99	761.7				sw.			2		10			4 h'r	4 h'r			raining.
S. S. Ohio, N. 40° 02′, W. 71° 20′†	29.94	760.5	46	7.8	92	ssw.			4		10		sw.					cloudy
S. S. Pennsylvania, Philadelphia, Pa†	29.95	760.7	33	0.6		ssw.			2		10		sw.					rainy.
S. S. Stella, N. 48° 42′ W. 13° 50′	29.75	755.7	53.6	12		calm			0		3		e.	0	0	2	nw.	d clouds.
S. S. Bolivia, Glasgow, Scotland*†	29.66	753.4	34	1.1	79	se.			2		10			0	0			
S. S. Elysia, N. 38° 33′, W. 62° 51′†	30.40	772.1	55	12.8		nnw.			3		10		nnw.	light	light	light	nw.	rainy.
S. S. Ethiopia, N. 45° 25′ W. 51° 00′	30.05	763.3	31	— 0.6		wnw.			3		8		wnw.	snow	snow	hv'y	wnw.	cloudy.
S. S. Galatia, N. 19° 44′, E. 38° 40′†	30.09	764.3	80.3	26.8	78	nnw.			5		2		nnw.	1 h'r	1 h'r	r'gh	nnw.	fair.
S. S. Ailsa, N. 17° 58′, W. 76° 46′†	30.10	764.5	80	26.7	82	ne.			5		2		ne.	0	0	sm'h		fair.
S. S. Alvo, N. 10° 30′, W. 77° 00′	29.93	760.2	79	26.1		ne.			2		2		ene.	2 h'r	2 h'r	high	ne.	cloudy.
S. S. Antillas, Inagua, W. I			86	26.7		ne.			4-6		8ks		ene.	0	0	h'vy	ne.	cloudy
S. S. Carroll, N. 43° 08′, W. 67° 03′*†	30.24	768.1	37	2.8		wsw.			4		3		ne.	0	0	h'vy	ne.	cloudy
Inchkeith, S. 39° 01′ E. 70° 32′	29.68	753.9	57.6	14.2	96	nnw.			4		10		wsw.	0	0	short	wsw.	cloudy.
Mertola, N. 44° 34′ W. 11° 32′	29.66	753.4	51.2	10.7	86	ene			6		7							raining.
Ptolmey, N. 41° 14′, W. 63° 50′	30.31	769.9	42.2	5.7	66	var.			3		4							d. clouds.
S. S. Mexico, N. 25° 31′, W. 112° 59′†	30.02	762.5	70	21.1	80	nw.			2		8							d. clouds.
S. S. Gallia, N. 43° 54′, W. 45° 31′	30.11	764.8	53	11.7	67	wnw.			1		2					mod.	wnw.	fair.
S. S. Marathon, N. 30° 09′, E. 19° 00′	30.10	764.5	75	23.9		sse.			6		5		w.	rain	rain	mod.	w.	fair.
S. S. Pavonia, N. 42° 22′, W. 64° 53′*	30.25	768.3	42	5.6	74	w.			5		10		sse.	0	0	r'gh	s..	overcast.
S. S. Scythia, N. 44° 07′, W. 49° 39′	30.15	765.8	36	2.2		w.			4		10		w.	0	0	mod.	w.	cloudy.
S. S. Colina, N. 52° 17′, W. 31° 53†	29.68	753.9				se.			4		4		w.	4 h'r	4 h'r	short	w.	clear.
S. S. France, N. 45° 36′, W. 51° 49′†	30.07	763.8	35.6	2		ene.			5		10		se.			mod.	se.	sleeting.
S. S. Arizona, N. 50° 54′ W. 35° 14′	29.83	757.7	41	5.0		var.			5	ck		ene.				h'vy	ene.	snowing.
S. S. Wisconsin, N. 46° 15′, W. 49° 30′	29.88	758.9	39	3.9		wnw.			3		10		nw.	sh'rs	sh'rs	mod.	nw.	showery.
									6		8		wnw.	3 h'r	3 h'r	hv'y	wnw.	cloudy

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Bohemia, N. 41° 50′, W. 62° 50′†	30.10	764.5				wnw.			3-4		8		wnw.	o	o	long	wnw.	squally.
S. S. Cimbria, N. 49° 54′, W. 8° 06′	29.71	754.6	44.8	7.1		n.			1		2		nw.	o	o	sm'h	nw.	clear.
S. S. Frisia, N. 45° 12′, W. 49° 00′	30.11	764.8	33	0.6		wnw.			6		0		wnw.	snow	snow	r'gh	w.	fair.
S. S. Gellert, N. 50° 09′, W. 25° 44′	29.90	759.4	49	9.4		e.			4		7		e.	o	o	mod.	ese.	cloudy.
S. S. Silesia, Hamburg, Germany†	29.52	749.8	28.5	—1.9	95	ese.			3		10			½h'r	½h'r			overcast.
S. S. Vandalia, N. 48° 46′, W. 31° 10′	29.77	756.1	48.7	9.3	89	nw.			6		10		nw.	o	o	r'gh	nw.	squally.
S. S. Wieland, N. 43° 15′, W. 56° 20′	30.34	770.6				wnw.			5		2		wnw.	snow	snow	high	wnw.	fine.
S. S. City of Berlin, N. 40° 30′, W. 70° 15′	30.11	764.8	47	8.3	85	s.			5		10		driz.	driz.				misty.
S. S. Mentmore, N. 46° 43′, W. 35° 50′ *	29.96	761.0			86	n.			6		5		n.	o	o	cross	n.;ne.	clearing.
S. S. Nessmore, Barrow, Eng	29.54	750.3	53	11.7		sw.			5		8		sw.					showery.
S. S. Archimedes, Lisbon, Portugal	29.57	751.1				wnw.			4		8		wnw.	9 h'r	9 h'r			showery.
S. S. Hevelius, N. 47° —′ W. 7° —′ *†	29.75	755.6	50	10.0		ene.			5		7		s.			sm'h		showery.
S. S. Sirius, N. 2° 40′, W. 28° 10′ *	29.88	758.9				ese.			4		10		se.	7 h'r	7 h'r	mod.	se.	gloomy.
S. S. Bulgarian, N. 46° 04′, W. 46° 37′ *	30.11	764.8				wnw.			5		3		wnw.	4 h'r	4 h'r	light	wnw	clear.
S. S. Colorado, Key West, Fla†	30.08	764.0	70	21.1		ese.			5		4		ese	sh'rs	sh'rs			fair.
S. S. Rio Grande, N. 26° 46′, W. 88° 00′†	30.05	763.3	75	23.9		e.			5		2		ese.	5 h'r	5 h'r	mod.	e.	fair.
S. S. San Marcos, N. 27° 15′, W. 88° 50′	30.08	764.0	74	23.3		e.			4		0							clear.
S. S. Archimede, New York, N. Y†	29.91	759.7	42	5.6	74	w.			2		8		w.	snow	snow			covered.
S. S. Hermod, N. 49° 20′, W. 15° 00′†	29.74	755.4	46.4	8.0		ne.			1		7		n.	6 h'r	6 h'r	mod.	nne.	cloudy.
S. S. John Hopkins, N. 41° 20′, W. 71° 20′ *†	30.22	767.6	40	4.4		s.			4		8		s.	8 h'r	8 h'r			stormy.
S. S. Glenapp, N. 2° 30′, W. 30° 00′†	29.83	757.7				ese.			2		8		e.	2 h'r	2 h'r	cross	var.	squally.
S. S. Glenfyne, Pernambuco, Brazil *†	29.62	752.3				e.			3		1		e.	o	o			clear.
S. S. Toronto, N. 50° 57′, W. 27° 54′			48.0	8.9		e.			4		6		e.	o	o	mod.	e.	cloudy.
S. S. Chalmette, N. 38° 00′, W. 74° 30′†	30.07	763.8	52	11.1		ssw.			6		10		sw.	3 h'r	3 h'r	mod.	ssw.	light rain.
S. S. New York, N. 28° 26′ W. 80° 15′†	30.17	766 3	73	22.8		se.			6		10		sse.			r'gh		cloudy.
S. S. Denmark, London, Eng†	29.64	752.8	34	1.1		var.			1		10			o	o			dense fog.
S. S. Egypt, N. 50° 10′, W. 22° 00′ *†	29.90	759.4				ene.			4		2		ene.	o	o	mod.	ene.	clear.
S. S. Erin, N. 42° 20′, W. 61° 00′	30.21	767 3	30	—1.1		w.			6		3		w.	sqll's	sqll's	h'vy	w.	sleeting.
S. S. Greece, N 49° 54′, W. 8° 44′ *†	29.69	754.1	50	10.0		ese.			2		3		ese.	2 h'r	2 h'r	sm'h	w.	clear.
S. S. Helvetia, Liverpool, Eng	29.66	753.4	31	—0.6		n.			1		8		n.	o	o			cloudy.
S. S. Holland, N. 40° 24′, W. 70° 46′			46	7.8		s.			4		10			4 h'r	4 h'r	mod.	s.	light rain.
S. S. City of Alexandria, N. 24° 51′, W. 80° 22′†	30.20	767.1	77	25.0		ese.			2		10		e.	o	o	small	se.	gloomy.
S. S. City of Merida, N. 19° 30′, W. 94° 23′*†	29.90	759.4	77	25.0		ne.			3		5		n.	o	o	light	ne.	fine.
S. S. Amsterdam, N. 48° 58′, W. 36° 40′ *	29.98	761.5	47	8.3		wnw.			4							4	wnw.	clear.
S. S. Alene, N. 13° 50′, W. 76° 58′†	29.85	758.2	81	27.2		ne.			5								ne.	rainy.
S. S. Knickerbocker, N. 31° 42′, W. 77° 46′	30.17	766.3	68	20.0		se.			6								w.	cloudy.
S. S. Olbers, N. 17° 05′ W. 56° 00′ ††	29.95	760.7	78	25.6		ene.			6								ene.	showery.
S. S. State of Nebraska, N. 46° 15′ W. 49° 10′†	29.96	761.0	33	0.6		wnw.			6							high	w.	snowy.
S. S. Western Texas, N. 31° 31′ W. 81° 13*†	30.26	768.6	60	15.6		ene.			7								ene.	heavy rain.
S. S. America, N. 38° 42′, W. 69° 30′*	30.22	767.6	53 0	11.7	80	sse.			4		8		s.	o	o	sm'h		covered.
S. S. Braunschweig, N. 48° 25′, W. 5° 25′	29.75	755.6	48.0	8.9	78	ssw.			2		3		wnw.	snow	snow	light	wnw.	fair.
S. S. Donau, N. 49° 28′, W. 18° 20′	29.84	757.9				nne.			2		5		ne.	o	o	light	nw.	fair.
S. S. Elbe, N 40° 00′, W. 69° 32′	30.18	766.6	47.3	8.5		ssw.			4		10		s.	o	o	sm'h	ssw.	covered.
S. S. Gen. Werder, N. 47° 18′, W. 37° 17′	29.90	759.4	46.4	8.0		wnw.			4		7		wnw.	2 h'r	2 h'r	mod.	w.	fair.
S. S. Hohenstaufen, N. 9° 20′, W. 27° 47′	29.91	759.7	86.0	30.0		ene.			5		10		ene.	1 h'r	1 h'r	mod.	ene.	covered.
S. S. Neckar, N. 40° 11′, W. 67° 36′	30.22	767.6	46.5	8.1	100	sse.			4		8		s.	o	o	sm'h	ssw.	fair.
S. S. Ohio, N. 40° 18′, W. 60° 48′	30.37	771.4				nnw.			5		3		nnw.	2 h'r	2 h'r	mod.	nw.	fair.
S. S. Rhein, N 49° 30′ W. 23° 00′	29.85	758.2				ne.			4		4		nne.	3 h'r	3 h'r	sm'h	ne.	fair.
S. S. Salier, N. 40° 42′, W. 68° 49′	30.18	766.6	41.9	5.5		s.			5		10		s.	snow	snow	mod.	w.	cloudy.
S. S. Strassburg, S. 19° 33′ W. 38° 34′	29.89	759.2	79.0	26.1	95	n to nw			3-5		8		n.	1 h'r	1 h'r	mod.	n.	cloudy.
S. S. Belgic, N. 44° 47′, W. 167° 15′†	30.01	762.2	50	13.3	75	ne.			6		2		n.	o	o	h'vy	ne.	clear.
S. S. Coptic, N. 37° 08′, E. 157° 13′	29.58	751.3	49.0	9.4	64	w.			8–9		10		w.	20 h'r	20 h'r	high	w.	raining.
S. S. Oceanic, Hong Kong, China *	30.04	763.0	65	18.3	68	ne.			3		0							clear.
S. S. Mississippi, San Francisco, Cal *†	30.25	768.3	50	10.0	93	nnw.			1		0							clear.
S. S. Willamette, Fuca Strait, Wash. Ter †	29.65	753.1	44	6.7	84	se.			7		7		se.	0.08	2.0	long	wnw.	rainy.
S. S. Oregon, N. 40° 28′, W. 124° 32′ †	30.23	767.8	51.5	10.8	79	calm			0		0					light	w.	hazy.
S. S. Ancon, N. 34° 35′, W. 20° 40′ †	30.05	763.3	59	15.0	94	nne.			4		0					mod.	wnw.	hazy.
S. S. City of Chester, off Point Ryes, Cal *†	30.29	769.4	52	11.1	73	nw.			1		fg.					h'vy	nw.	clear.
S. S. Dakota, Seattle, Wash. Ter			40	4.4	91	se.			4		10		se.	8 h'r	8 h'r	sm'h		cloudy.
S. S. State of California, Astoria, Oregon			43	6.1		ese.			4		10		se.	8 h'r	8 h'r			raining.
S. S. Australia, S. 14° 00′, W. 170° 11′	29.83	757.7	82	27.8	83	nne.			3		5?		nne.	o	o	mod.	ne.	clear?
S. S. City of New York, Sydney, N. S. W †	29.81	757.2	74	23.3	76	sse.			4		10		se.	3 h'r	3 h'r			cloudy.
S. S. City of Pekin, Yokohama, Japan†	30.07	763.8	40	4.4	82	n.			4		0			o	o	sm'h		clear.
S. S. City of Rio de Janeiro, Panama Panama†	29.89	759.2	87	30.6	74	nnw.			1		0			o	o	sm'h		fine.
S. S. Colima, Acapulco, Mexico †	29.95	760.7	80	26.7	87	e.			2		8		se.	light	light	r'gh	se.	overcast.
S. S. Grenada, N. 17° 02′, W. 100° 34′†	29.87	758.7	78	25.6	86	ne.			2		2		calm	o	o			clear.
S. S. Zealandia, S. 29° 13′, E. 176° 47′	30.07	763.8	71	21.7	75	se.			1		0			o	o	sm'h	s.	clear.
S. S. Muriel, Martinique, W. I	29.98	761.5	80	26.7		ene.			6		9		se.			mod.	se.	squally.
S. S. Caracas, La Guayra, Venezuela †	29.93	760.2	78	25.6	91	ene.			5		5			sh'rs	sh'rs	sm'h		fair.
S. S. Claudius, Greytown, Nicaragua†	29.98	761.5				ene.			1		10		e.	6 h'r	6 h'r	mod.	ne.	rainy.
S. S. Belgenland, N. 45° 19′, W. 42° 17′	30.11	764.8	46	7.8	100	sw.			2		6		se.	hv'y	hv'y	long	ne.	rainy.
S. S. Nederland, N. 49° 45′, W. 28° 32′			48	8.9		se.			5		10		sw.	5 h'r	5 h'r	mod	var.	h'y squalls.
S. S. Rhynland, Antwerp, Belgium	29.77	756.1	40	4.4	91	ssw.			5		10					mod.	se.	misty
S. S. Switzerland, N. 50° 29′ W. 1° 43′ †	29.75	755.6				n.			3		2		s.	o	o			clear.
S. S. Waesland, Antwerp, Belgium	29.79	756.7	35	1.7	90	wnw.			1		2		wsw.	ram	rain	sm'h		fair.
S. S. Leerdam, N. 42° 10′, W. 57° 05′†	30.09	764.3	40.5	8.1	66	nnw.			4		10		w.	o	o			foggy.
S. S. P. Caland, N. 41° 47′, W. 61° 06′	30.24	768.1	40.1	4.5	80	w.			4		5?		ssw.	o	o	mod.	nw.	cloudy.?
S. S. Schiedam, N. 47° 13′, W. 37° 16′	29.93	760.2	58.5	14.7	74	nne.			5		8		wsw.			4	w.	cloudy.
S. S. W. A. Scholten, Rotterdam, Holland	29.86	758.4	35.0	1.7	80	wsw.			4		9		n.	2 h'r	2 h'r	mod.	n.	cloudy.
S. S. State of Georgia, N. 55° 25′, W. 10° 10′†	29.76	755.9	41	5.0		var.			3		4		sw.					
S. S. Iowa, N. 50° 47′, W. 21° 25′			47	8.3		n.			1-2		4		n.	o	o	long	w.	fine.
S. S. Britannic, N. 51° 18′, W. 10° 10′†	29.70	754.4	50	10.0	93	nnw.			2		2		n.	o	o	sm'h		clear.
S. S. Celtic, N. 48° 36′, W. 39° 18′†	29.95	760.7	48	8.9		w.			2		2		s.	o	o			fair.
S. S. Germanic, N. 40° 54′, W. 67° 37′†	30.26	768.6	42	5.6		wsw.			3		3			6 h'r	6 h'r	mod.	w.	fine.
S. S. Catherine Whiting, Fire Island, N. Y†	30.10	764.5	64	17.8		wsw.			1		9		w.	sh'rs	sh'rs	sm'h	wsw.	d. clouds.
S. S. Saxon, Philadelphia, Pa†	30.05	763.3	36	2.2		sse.			5		0?			rain	rain	short	s.	rainy.?
											10							raining.
MISCELLANEOUS.																		
Bg. Alcira, N. 18° 17′, W. 74° 22′	30.02	762.5	82	27.8		n.			1		2		ne.		o	h'vy	se.	clear.
Bk. Alpha, N. 46° 45′, W. 3° 45′†	29.75	755.6	46	7.8		ese.			3		5?		ese.	o	o	sm'h		cloudy?
Schr. Annie Lewis, Tampico, Mexico†	30.11	764.8	66	18.9		ssw.			2		1?		ssw.	o	o	long	ne.	cloudy.?
S. Annie M. Law, N. 21° 40′ E. 122° 40′*†	29.90	759.4	73	22.8		ene.			3		10		ene.	3 h'r	3 h'r	cross	var.	drizzling.
Bk. Anna Thormann, S. 20° 40′, E. 55° 00′*	30.15	765.8	73.2	22.9	74	se.			4		0	4 k	s.	se.		o	mod.	se.	fair.
S. S. Antonio Lopez, San Juan, Porto Rico, W. I*	30.06	763.5	78	25.6	86	e.			4		3			4 h'r	4 h'r	mod.	e.	fair.
Bgt. Arthur, N. 36° 51′, W. 39° 36′*†	30.12	765.0				nw.			6				nw.			high	nw.	
Schr. Anna A. Holton, N. 37° 45′, W. 73° 41′†	30.11	764.8	63?	17.2?		ssw.			4		10		w.			mod.	sw.	drizzling.
Bk. Champion, N. 21° 14′, W. 51° 45′				77.0	25.0	ene.			4		2		ene.	o	o	mod.	e.	fair.
Schr. Chas. F. Heyer, N. 33° 30′, W. 77° 09′	30.18	766.6	67	19.4	74	sse.			4	5 ck	3 k		s.	0.48	12.2	r'gh	sse.	threatening.
Bg. Clara M. Goodrich, Key Francis, W. I *†	30.01	762.3				ne.			4		5?		ne.	o	o			clear.?
S. Cornelius, N. 53° 49′, E. 6° 01′*†	29.95	760.7	38.3	3.5		e.			3		10		ene.	o	o	sm'h		cloudy.
S. S. D. J. Foley, Port Antonio, Jamaica, W. I. *†	29.98	761.5	81	27.2														
Bkt. David Preston, Pensacola, Fla			58.0	14.4		n.			0		0			4 h'r	4 h'r			
Bk. E. L. Pettingill, N. 12° 30′, W. 120° 30′ *†	30.00	762.0	80	26.7		e.			6		8		ese.	8 h'r	8 h'r	r'gh	ese.	rainy.
Schr. Edith R. Seward, Baltimore, Md *†	30.03	762.7	36	2.2		s.			1		10			3 h'r	3 h'r			cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		WEATHER.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
S. E. J. Spicer, N. 44° 40′, W. 34° 40′*.....	29.91	759.7	60	15.6	.....	nne.	.....	.....	7	.....	10	.....	nne.	rain	rain	mod.	n.	raining.
Bk. Eliza Barss, N. 33° 40′, W 70° 15′†.....	30.37	771.4	.....	.....	.....	sse.	.....	.....	4	.....	5?	.....	sse.	0	0	mod.	n.	clear?
S Enoch Train, N. 33° 36′, W. 75° 14′	.....	.....	.....	.....	.....	se.	.....	.....	4	.....	10	.....	s.	0	0	sm'h	.....	overcast.
Bk. Essex, Muscat, Arabia*†.....	30.03	762.7	78	25.6	.....	calm	.....	.....	0	.....	.....	.....	.....	0	0	.....	.....	
Schr. F E. McDonald, Rockland, Maine †.....	30.21	767.3	25	— 3.9	.....	calm	.....	.....	0	.....	.....	.....	.....	½h'r	½h'r	.....	.....	snowing.
S S. Foscolia, New York, N. Y	.....	.....	.....	.....	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
Bk. Freya, N. 20° 00′, W. 69° 40′.....	.....	.....	83	28.3	.....	e.	.....	.....	4	.....	5	.....	ene.	5 h'r	5 h'r	mod.	ne.	fair.
S. J. W. Gildemeister, N. 46° 33′ W. 38° 00′ *.....	29.94	760.5	48.2	9	48	n.	.....	.....	4	.....	1 8	.....	e.	1 h'r	1 h'r	4–5	var.	blue sky
Bg. George, N. 37° 00′, W. 60° 45′ *†.....	30.42	772.7	.....	.....	.....	nw.	.....	.....	5	.....	8	.....	wnw.	sq 'lls	sq 'lls	mod.	nnw.	clearing.
Bk. Gronsvaer, Wellington, New Zealand †.....	30.18	766.6	72.0	22.2	98	nnw.	.....	.....	7	.....	5	.....	nw.	0	0	.....	.....	
Bk. Godeffroy, S. 52° 12′, W. 62° 34′†.....	28.75	730.2	46.0	7.8	74	w.	.....	.....	6	.....	7	.....	w.	rain	rain	r'gh	w.	squally.
Bk. Great Surgeon, S. 19° 01′, E 85° 26′*†.....	30.05	763.3	78	25.6	.....	se.	.....	.....	5	.....	3	.....	sse.	½h'r	½h'r	long	sw.	fair.
Bk. Grey Eagle, N 6° 17′, W. 27° 25′ *†.....	29.80	756.9	.....	.....	.....	e.	.....	.....	5	.....	5	.....	e.	1 h'r	1 h'r	long	ene.	raining.
Bk. Hattie G. McFarland, New York, N. Y†.....	30.06	763.5	33	0.6	.....	calm	.....	.....	0	.....	.....	.....	.....	snow	snow	.....	.....	stormy.
Schr. Hattie Weston, N. 31° 30′ W. 73° 50′*†.....	30.33	770.4	70	21.1	.....	se.	.....	.....	4	.....	8	.....	sse.	0	0	mod.	e.	cloudy.
Bk. Heinrich & Tonio, N. 55° 05′, E. 3° 48′ *†.....	29.77	756.1	41.5	5.3	82	se.	.....	.....	3	.....	10	.....	e.	rain	rain	.....	.....	squally.
Schr. Isabel Alberto, N. 24° 44′, W. 79° 39′ †.....	30.09	764.3	.....	.....	.....	e.	.....	.....	5	.....	10	.....	e.	light	light	sharp	nne.	squally.
Schr. James Slater, N. 38° 30′, W. 74° 10′†.....	30.25	768.3	56	13.3	.....	ssw.	.....	.....	6	.....	10	.....	wnw.	2 h'r	2 h'r	mod.	ssw.	
Schr. Jennie N. Huddell, Savannah, Ga †.....	30.14	765.5	38	3.3	.....	e.	.....	.....	1	.....	10	.....	.....	4 h'r	4 h'r	.....	.....	threatening.
Bg. John Wesley, N. 39° 40′ W. 73° 55′	.....	.....	.....	.....	.....	nw.	.....	.....	4	.....	10	.....	.....	24 h'r	24 h'r	mod.	sse.	light rain.
Bk. Joseph A. Ropes, N. 1° 29′ E. 51° 55′ *†.....	29.93	760.2	84	28.9	83	se.	.....	.....	1	.....	5	.....	ne.	0	0	mod	ne.	fair.
Bkt. Josephine, N. 32° 00′, W. 43° 56′†.....	30.24	768.1	75	23.9	77	n.	.....	.....	2	.....	10	.....	n.	1 h'r	1 h'r	sm'h	.....	light rain.
Bk. Julia H., N. 41° 56′. W 44° 02′	30.14	765.5	54.0	12.2	87	wnw.	.....	.....	6	.....	10	.....	.....	1 h'r	1 h'r	6	nw.	raining.
S. S. J. W. Wilson, Key West, Florida†.....	30.06	763.5	72	22.2	.....	e.	.....	.....	4	.....	2	.....	.....	0	0	.....	.....	fair
Light House Tender, Laurel, Key West, Florida†.....	30.07	763.8	74	23.3	.....	ese.	.....	.....	1–2	.....	6	.....	se.	0	0	sm'h	.....	fair.
Bk. Louise Adelaide, Baltimore, Md.....	.....	.....	40	4.4	.....	s.	.....	.....	2	.....	.....	.....	w.	0.5	13.	.....	.....	light rain.
Bg. L. & W. Armstrong, N. 15° 55′, W. 59° 45′*†.....	30.30	769 6	.....	.....	.....	ene.	.....	.....	5	.....	2	.....	ese.	.....	.....	long	n.	light rain.
S. S. Madrid, N. 37° 37′ W. 69° 47′ *†.....	30.34	770.6	63	17.2	.....	ssw.	.....	.....	6	.....	9	.....	sw.	3 h'r	3 h'r	mod.	wsw.	raining.
S. S. Malabar, Marseilles, France†.....	29.52	749.8	.....	.....	.....	nw.	.....	.....	4	.....	10	.....	nw.	12 h'r	12 h'r	.....	.....	raining.
Bk. Matilda O. Smith, N. 27° 51′ W. 67° 40′*†	30.40	772.1	.....	.....	.....	ne.	.....	.....	6	.....	5	.....	ne.	0	0	con.	nw;e	fine.
Schr. Minnie A. Bonsall, May Port, Fla †	30.22	767.6	68	20.0	.....	se.	.....	.....	1	.....	.....	.....	.....	.....	.....	r'gh	se.	cloudy.
S. Minnie N. Gerow, N. 32° 00′, W. 38° 37′*†.....	30.20	767.1	.....	.....	.....	w.	.....	.....	4	.....	5	.....	w.	.....	.....	long	s.	squally.
S. M. P. Grace, S. 19° 52′, W. 130° 20′ *†.....	30.02	762.5	76	24.4	.....	e.	.....	.....	4	.....	3	.....	e.	shr's	shr's	sm'h	ese.	fair.
Bg. Myrtle, Bear River, Nova Scotia*†.....	30.02	762.5	.....	.....	.....	wsw.	.....	.....	2	.....	10	.....	sw.	0	0	.....	.....	cloudy.
Bg. O. C. Clary, Demerara, British Guiana, S. A *†....	29.90	759.4	78	25.6	91	e.	.....	.....	3	.....	10	.....	.....	0	0	.....	.....	
S. Orealla, N. 20° 16′, E. 91° 27′*.....	29.86	758.4	.....	.....	.....	nw.	.....	.....	2	.....	5	.....	nnw.	.....	.....	sm'h	.....	fine.
Bk. Ottawa, N. 37° 30′, W. 65° 40′*.....	30.32	770.1	54	12.2	.....	wsw.	.....	.....	3	.....	6	.....	wsw.	0	0	sm'h	wnw.	cloudy.
S. Paramita, San Francisco, Cal.....	.....	.....	50	10.0	.....	se.	.....	.....	2	.....	hz.	.....	.....	0	0	.....	.....	
Bk. Pilgrim, N. 11° 02′, W. 44° 30′*†.....	30.00	762 0	.....	.....	.....	ne.	.....	.....	5	.....	.....	.....	ne.	0	0	long	ne,	cloudy.
S. S. Radnorshire, N. 6° 41′, E. 108° 06′*†.....	29.78	756.4	.....	.....	.....	nne.	.....	.....	4	.....	8	.....	nne.	0	0	h'vy	nne.	cloudy.
S. S. Raleigh, off Sing Sing, N. Y*†.....	29.91	759.7	31	— 0.6	.....	calm	.....	.....	0	.....	10	.....	.....	snow	snow	.....	.....	
Bk. Rebus, N. 39° 36′, W. 47° 36′*	30.07	763.8	59	15.0	.....	nw.	.....	.....	6	.....	6	.....	nw.	sq 'lls	sq 'lls	mod.	var.	squally.
S. St. Francis, N. 28° 38′, W. 133° 00′†.....	30.31	769.9	63	17.2	.....	ne.	.....	.....	4	.....	7	.....	nne.	0	0	long	nnw.	cloudy.
Bk. Scud, N. 18° 36′, W. 60° 40′ *†.....	30.05	763.3	.....	.....	.....	ene.	.....	.....	7	.....	2	.....	ene.	0	0	h'vy	ene.	clear.
S. S. Sunbeam, N. 17° 20′, W. 71° 20′.....	29.99	761.7	77	25.0	95	ne.	.....	.....	4	.....	8	.....	ne.	3 h'r	3 h'r	3	ene.	showery.
S. S. Strathleven, N. 6° 17′, E. 81° 28′.....	29.83	757.7	80.8	27.1	97	ene.	.....	.....	2	.....	3	.....	ene.	0	0	2	s.	d clouds.
Schr. T. S. McLellan, N. 29° 10′, W. 74° 40′*†.....	30.40	772.1	68	20.0	.....	ne.	.....	.....	.....	.....	.....	.....	sw.	.....	.....	.....	.....	
U. S. F. C. S. S. Fish Hawk, Washington, D. C†.....	30.17	766.3	37	2.8	100	ssw.	.....	.....	2	.....	10	.....	calm	0.31	7.9	.....	.....	raining.
Bk. Usko, N. 55° 21′, W. 8° 21′*.....	29.71	754.6	50	10.0	.....	s.	.....	.....	1	.....	6?	.....	ne.	2 h'r	2 h'r	mod.	wnw.	clear?
Bk. Vincenzo Accame, N. 36° 31′, W. 46° 25′†.....	30.37	771.3	67.1	19.5	.....	n.	.....	.....	5	.....	2	.....	n.	3½h'r	3½h'r	.....	.....	
Schr. Walter L. Plummer, N. 34° 20′, W. 73° —′*†	30.30	769.6	.....	.....	.....	s.	.....	.....	4	.....	8	.....	ssw.	0	0	r'gh	ssw.	threatening.
Bk. Wandering Jew, Montevideo, Uruguay †.....	29.83	757.7	69	20.6	.....	sw.	.....	.....	3	.....	3	.....	sw.	0	0	.....	.....	clear.
Bk. Warden Law, Tocapilla, Peru, S. A*.....	30.07	763.8	.....	.....	.....	n.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	wsw.	fair.
S. Wm. Woodbury, N. 45° 34′, W. 19° 25′ *.....	29.83	757.7	54	12.2	.....	ne.	.....	.....	2	.....	0	.....	.....	.....	.....	long	nnw.	clear.

International Chart I. December 10, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 11, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.84	758.0	57.6	14.2	80	ne.	.....	.....	4	.....	2	.....	.....	0	0	fair	Malaterre.
Algiers	.....	.....	29.70	754.4	56.1	13.4	56	ssw.	.....	.....	6	.....	0	.....	.....	0.646	16.4	clear	Thève.
La Calle	.....	.....	29.76	755.9	59.0	15.0	64	wnw.	.....	.....	5	.....	4	.....	.....	0.020	0.5	cloudy	Fonfréde.
Tunis	.....	.....	29.76	755.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.89	759.2	55.4	13.0	96	w.	.....	.....	2	.....	3	.....	.....	0.004	0.1	pretty fair	Pérès.
Tebessa	.....	.....	29.91	759.8	48.9	9.4	37	w.	.....	.....	4	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	46.0	7.8	69	w.	.....	.....	5	.....	5	.....	.....	0	0	cloudy	Lonchamp.
Laghouat	.....	.....	29.92	759.9	54.0	12.2	35	ssw.	.....	.....	6	.....	4	.....	.....	0	0	cloudy	Abraham.
Biskra	.....	.....	29.93	760.1	57.9	14.4	42	se.	.....	.....	1	.....	6	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	29.98	761.5	30.07	763.8	56.6	13 7	77	sse.	4	1.8	.....	.....	2	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	28.98	736.1	29.53	750.1	44.2	6.8	98	sw.	.....	.....	2	.....	10	.....	.....	0.264	6.7	raining	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.83	732.2	29.61	752.0	38.5	3.6	80	s.	18.6	8.3	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.82	732.1	29.72	754.8	40.3	4.6	97	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.29	718.6	29.56	750.7	42.4	5.8	91	w.	.....	.....	2	.....	10	.....	.....	1.114	28.3	.....	Andreas Rospini.
Hermannstadt	28.37	720.7	29.81	757.3	47.5	8.6	68	s.	.....	.....	6	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.27	718.1	29.66	753.4	30.9	— 0.6	97	nw.	.....	.....	2	.....	10	.....	.....	0.638	16.2	light snow	The Staff.
Lemberg	28.80	731.4	29.81	757.2	36.1	2.3	87	s.	.....	.....	3	.....	10	.....	.....	0.012	0.3	.....	Dr. T. Stanecki.
Pola	29.46	748.3	29.57	751.1	52.3	11.3	87	ssw.	.....	.....	1	.....	10	.....	.....	0.138	3.5	.....	I. R. Hydrographic Office.
Szathmar	29.26	743.2	29.72	754.9	47.1	8.4	77	se.	.....	.....	4	.....	10	.....	.....	0.193	4.9	.....	Joseph Midlinszky, S. J.
Szegedin	29.33	745.0	29.61	752.2	47.3	8.5	79	s.	.....	.....	5	.....	10	.....	.....	0.035	0.9	.....	Karl Stancel.
Trieste	29.46	748.2	29.56	750.8	50.0	10.0	89	calm	.....	.....	0	.....	10	.....	.....	0.071	1.8	raining	Royal Academy.
Vienna	28.86	733.0	29.60	751.7	35.1	1.7	84	w.	.....	.....	3	.....	10	.....	.....	0.035	0.9	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.62	752.3	29.72	754.9	29.7	— 1.3	91	wnw.	11	4.9	.....	.....	7	.....	.....	0.140	3.6	misty	W. Boswell
Armagh, Observatory	29.46	748.3	29.73	755.1	22.5	— 5.3	90	ssw	1	0.4	.....	.....	0	.....	.....	.....	.....	blue sky	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.71	754.6	28.8	— 1.8	83	ese.	8	3.6	.....	.....	0	.....	.....	.....	.....	blue sky	John Hartnup.
Bolton, Sharples	29.16	740.7	29.71	754.6	26.7	— 2.9	90	nnw.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.28	743.7	29.67	753.6	26.2	— 3.2	82	nw.	.....	.....	1	.....	5	.....	.....	0	0	d. clouds	McLandsborough&Preston
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	82.0	27.8	75	ne.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	32.0	0.0	90	w.	.....	.....	0.2	.....	2	.....	.....	.....	.....	blue sky	John McLaren.
Chatham, School M. E.	29.64	752.8	29.77	756 1	26.6	— 3.0	90	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.45	748.0	29.68	753 9	41.9	5.5	66	ese.	.....	.....	3	.....	8	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.49	698.2	29.70	754.4	93.0	33.9	30	e.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	89.0	31.7	80	n.	.....	.....	3	.....	2	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	29.76	755.9	29.80	756.9	59.8	15.4	94	w.	.....	.....	2	.....	9	.....	.....	.....	.....	gloomy	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.50	749.3	29.71	754 6	29.5	— 1.4	97	e.	.....	.....	1	.....	.....	.....	.....	.....	.....	foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.60	751.8	29.78	756.4	26.7	—2.9	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy	The Staff.
Guernsey	29.41	747.0	29.72	754.9	36.4	2.4	91	s.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	A. Collenette, F. M. S.
Kew, Observatory	29.74	755.4	29.78	756.4	26.8	— 2.9	97	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	foggy	The Staff.
Leicester, Museum	29.47	748.5	29.74	755.4	25.0	— 3.9	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	.....	.....	.....	.....	60.8	16.0	97	sw.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.07	763.8	30.12	765.0	72.5	22.5	100	s	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	29.19	741.4	29.74	755.4	22.7	— 5.2	100	wnw.	.....	.....	3	.....	.....	.....	.....	.....	.....	foggy	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.54	750.3	29.76	755.9	21.6	— 5.8	98	wnw.	.....	.....	1	.....	.....	.....	.....	.....	.....	foggy	The Staff.
Plymouth	29.02	752.3	29.70	754.4	35.6	2.0	68	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	gloomy	John Merrifield.
Sandwick Manse, Orkneys	29.65	753.1	29.76	755.9	33.9	1.1	100	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.99	701.7	30.05	763.3	54.2	12.3	80	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	W. H. Lyne.
Sheffield	29.42	747.3	29.72	754.9	30.6	— 0.8	89	ssw	.....	.....	1	.....	2	.....	.....	0	0	misty	W. F. Cooper.
Silloth Rectory	29.69	754.1	29.72	754.9	24.5	— 4.2	85	calm	.....	.....	0	.....	10	.....	.....	0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.74	755.4	23.8	— 4.6	93	ne.	.....	.....	.....	.....	.....	.....	.....	.....	.....	blue sky	I. New.
Stratfield Turgiss	29.56	750.8	29.79	756.7	22.4	— 5.3	95	calm	.....	.....	0	.....	fg.	.....	.....	.....	.....	foggy	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.00	751.8	29.62	752.3	42	5.6	66	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	29.63	752.6	29.66	753.4	35.5	1.9	85	se.	6	2.7	.....	.....	4	.....	.....	.....	.....	d. clouds	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.90	759.4	29.94	760.5	24	— 4.4	87	n.	3	1.3	.....	.....	10 n	.....	calm	0.075	1.9	threatening	H. J. Cundall, C. E
Chatham, N. B*	29.93	760.2	29.99	761.7	11	—11.7	87	n.	1	0.4	.....	.....	10 s	.....	n.	0.01	0.3	cloudy	G. A. Blair.
Father Point, Quebec*	30.02	762.5	30.04	763.0	6	—14.4	76	w.	5	2.2	.....	5 k	5 s	calm	calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.09	738.9	30.05	763.3	—17	—27.2	65	ne.	.....	.....	.....	0	0	.....	.....	0	0	clear	James Stewart.
Halifax, N. S*	29.77	756.1	29.91	759.7	29	— 1.7	100	ne.	4	1.8	.....	.....	10 n	.....	.....	0.30	7.6	cloudy	A. Allison.
Kingston, Ontario*	29.44	747.8	29.80	756.9	16	— 8.9	96	ne.	8	3.6	.....	.....	10 n	.....	.....	0.28	7.1	light snow	A. P. Knight, M. A
Montreal, Quebec*	29.61	752.1	29.83	757.7	14	—10.0	87	n.	8	3.6	.....	.....	10 s	.....	.....	0.24	6.1	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.12	739.6	29.86	758.4	15	— 9.4	83	n.	6	2.7	.....	.....	1c n	.....	n.	0.15	3.8	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.14	740.1	29.87	758.7	24	— 4.4	100	w.	15	6.7	.....	.....	10 n	.....	.....	0.17	4.3	threatening	H. Morgan.
Port Stanley, Ontario	29.20	741.7	29.88	758 9	24	— 4.4	92	w.	14	6.3	.....	.....	10 n	.....	w.	0.11	2.8	cloudy	M. Payne.
Quebec, Quebec*	29.60	751.8	29.95	760.7	14	—10.0	100	ne.	.....	.....	5	...	10 n	.....	ne.	inap.	inap.	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.38	746.2	29.88	758.9	14	—10.0	83	se.	2	0.9	.....	.....	10 s	.....	se.	0.28	7.1	light snow	W. H. McIntyre.
Saugeen, Ontario*	29.09	738.9	29.84	757.9	24	— 4.4	88	n.	10	4.5	.....	.....	10 s	.....	.....	0.50	12.7	cloudy	.....
St. Andrews, N. B	29.82	757.4	29.87	758.7	23	— 5.0	86	ne.	4	1.8	.....	.....	10 n	.....	.....	0.39	9.9	cloudy	.....
Sydney, C. B*	29.91	759.7	29.97	761.2	27	— 2.8	96	calm	0	0	.....	.....	10 n	.....	.....	0.03	0.8	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.42	747.3	29.82	757 4	23	— 5.0	96	nw.	7	3.1	.....	.....	10 ks	.....	w.	0.12	3.0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.80	756.9	29.87	758.7	34	1.1	92	e.	2	0.9	.....	.....	fg	.....	.....	0.43	10.9	foggy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.38	720.8	29.88	758.9	19.0	— 7.2	100	nw.	.....	.....	2	.....	1c s	.....	nw.	0.212	5.4	overcast	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Denny.
Cape Colony.																			
Cape St. Francis Lt. House	29.72	754.9	29.75	755.6	74.0	23.3	84	w.	8.3	3.7	.....	0	9 k	.....	.....	6	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction Upper	Clouds. Direction Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Chinese (*Sub-series*).																			
Sung-shu-chwang	24.87	631.6	.....	.....	13.3	—10.4	.....	ene.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.62	777.8	30.73	780.6	17.2	— 8.2	46	calm	5.8	2.6	.....	0	0	.....	.....	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.44	773.2	30.47	773.8	40.6	4.8	80	n.	32.9	14.7	.....	.....	10	.....	.....	0.268	6.8	.....	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.48	748.9	29.53	750.1	35.2	1.8	93	s.	11	5	.....	.....	10	.....	.....	.....	.....	foggy	Oversergent Fischer.
Fanoe	29.46	748.3	29.48	748.8	33.3	0.7	100	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.70	754.3	29.74	755.4	27.7	— 2.4	85	nne.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.74	755.5	29.76	756.0	28.9	— 1.7	.....	se.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	
Jacobshavn, Greenland	29.84	757.9	29.89	759.1	32.0	0.0	.....	se.	.....	.....	6	.....	5	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	30.15	765.8	30.19	766.9	25.9	— 3.4	85	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
Thorshavn	29.87	758.7	29.91	759.6	31.3	— 0.4	79	n.	13	6	.....	.....	3	.....	.....	.....	.....	.....	A. O. Thorlacius.
Vestervig	29.35	745.4	29.44	747.8	32.5	0.3	98	e.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	Overloerer Bergh.
Upernavik, Greenland	29.81	757.2	29.86	758.4	26.2	— 3.2	.....	ese.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	Loearer Oesterbol.
French.																			
Agen, Normal School	29.13	739.8	29.79	756.7	36.7	2.6	93	calm	.....	.....	0	0	8 n	.....	.....	0	0	very cloudy	M. Labroue, Director.
Alençon, Normal School	29.30	744.1	29.85	758.1	28.4	— 2	96	s.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Nicot, Director.
Arras, Engineer School	29.47	748.6	29.74	755.3	24.3	— 4.3	92	w.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Fénéon, Command't.
Avignon, Normal School	29.53	750.0	29.61	752.0	41.0	5	74	n.	.....	.....	3	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.22	742.2	29.80	756.8	29.8	— 1.2	92	ne.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.54	750 4	29.83	757.6	30.7	— 0.7	96	s.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Frère Eugène Marié
Besançon, Normal School	28.82	732.1	29.73	755.1	34.9	1.6	81	ene.	.....	.....	1	.....	n	.....	ne.	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.48	748.7	29.75	755.6	33.4	0.8	77	e.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Rayet, Director.
Bourges, Normal School	29.20	741.7	29.77	756.2	36.5	2.5	82	nw.	.....	.....	1	.....	k	.....	nw.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.47	748.6	29.71	754.7	31.6	— 0.2	89	ne.	.....	.....	2	.....	10	.....	ne.	0	0	.....	M. de Kermaïdé, Dir.
Caen, Normal School	29.68	753.9	29.76	755.9	26.4	— 3.1	77	.....	.....	.....	.....	.....	10	.....	.....	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.40	746.7	29.73	755.1	29.8	— 1.2	88	sw.	.....	.....	2	.....	10	.....	.....	0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.26	743.2	29.79	756.7	30.2	— 1	92	nnw.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.36	720.4	29.77	756.2	31.3	— 0.4	85	ne.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Allnard, Director.
Cluny, Normal School	28 90	734.0	29.76	756.0	33.6	0.9	72	.....	.....	.....	.....	.....	10	.....	.....	0.181	4 6	..	M. de Villemontée, Dir.
Commercy, Normal School	28.91	734.3	29.80	757.0	30.7	— 0.7	88	nw.	.....	.....	1	.....	n	nw.	nw.	0	0	.....	Dr. Goulet, Director.
Gap, Normal School	27.05	687.0	29.63	752.7	32.0	0	70	ne.	.....	.....	3	.....	1	.....	n.	0	0	.....	M. Jeangirard, Director.
Grénaque, du Rhone	28.43	722.2	29.58	751.4	38.3	3.5	100	n.	.....	.....	1	.....	8	.....	w.	0.213	5.4	foggy	M. Kina, Director.
Grenoble, Normal School	28.91	734.4	29.71	754.7	35.6	2	100	sw.	.....	.....	1	.....	10 n	.....	.....	0.283	7.2	snowing	M. Ablard, Director.
Guéret	28.13	714.5	29.77	756.1	35.8	2.1	83	nw.	.....	.....	1	.....	n	.....	nw.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.43	747.6	29.72	754.9	31.3	— 0.4	100	se.	.....	.....	2	.....	5	.....	se.	0	0	cloudy	M. Ollivault, Director.
Lescar, Normal School	29.09	738.9	29.67	753.5	41.4	5.2	91	e.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.67	753.5	29.77	756.1	30.2	— 1.0	92	e.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.66	727 9	29.70	755.8	32.4	0.2	89	nnw.	.....	.....	2	.....	10	.....	.....	0	0	covered	M. André, Director.
Mans, Normal School	29.50	749.3	29.83	757.6	27.3	— 2.6	93	s.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Piboën, Director.
Marseille, Observatory	29.30	744 2	29.58	751.2	38.7	3.7	88	e.	.....	.....	1	.....	10	.....	s.	0	0	.....	M. Stephan, Director.
Mt. Louis	24.39	619.6	29.24	742.6	30.2	— 1.0	33	w.	9.4	4.2	.....	.....	6	n.	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.46	748.2	29.62	752.3	43.2	6.2	55	w.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Galzin, Director.
Nancy, Normal School	28.93	734.8	29.74	755.4	32.0	0	81	wnw.	.....	.....	1	.....	n	.....	.....	0	0	foggy	M. Hasse, Director.
Nantes, Observatory	29.66	753.3	29.82	757.4	30.2	— 1	93	se.	.....	.....	0–2	.....	10	.....	.....	0	0	.....	M. Larocque, Director.
Perpignan, Observatory	29.54	750.2	29.65	753.1	45.3	7.4	48	n.	13.0	5.8	.....	.....	9	.....	sse.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.70	525.9	.....	.....	11.5	—11.4	.....	ne.	.....	.....	1	.....	1	.....	ne.	0	0	clear	M. Vaussenat.
Privas, Normal School	28.58	720.0	29.69	754.0	41.4	5.2	87	n.	.....	.....	1	.....	2	n.	n.	0	0	slightly cl'dy	M. Tallien.
Puy de Dôme Obs'y, Summit	24.70	627.3	.....	.....	22.6	— 5.2	100	e.	.....	.....	3	.....	2	.....	.....	0.039	1.0	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.73	755.1	29.76	755.9	34.9	1.6	85	ene.	.....	.....	2	.....	8	.....	ene.	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.50	749.3	29.72	755.6	30.9	— 0.6	94	ese.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Brotier, Director.
Rodez, Normal School	27.52	698 9	29.73	755.1	30.2	— 1	78	sw.	.....	.....	1	.....	1	.....	nw.	0	0	clear	M. Seger, Director.
Rouen, Normal School	29.78	756.4	29.83	757.6	29.1	— 1.6	92	sse.	.....	.....	1	.....	10	sse.	.....	0	0	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	26.6	— 3	100	nw.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.64	752.9	29.81	757.1	28.9	— 1.7	86	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.04	737.5	29.67	753.6	34.9	1.6	89	sw.	.....	.....	1	.....	10	nw.	.....	0	0	covered	M. Baillaud, Director.
Tours	29.61	752.2	29.79	756.7	32.4	0.2	88	e.	.....	.....	1	.....	10	.....	e.	0	0	covered	M. de Tastes.
Versailles, Observatory	29.31	744.4	29.80	756.9	28.0	— 2.2	87	nw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
Sub-sertes.																			
St. Martin du Hinx	29.60	751.9	29.75	755.7	40.6	4.8	74	e.	6.0	2.7	.....	0	1 k	.....	.....	0	0	.....	M. Cartier, Director.
German.																			
Ansbach	28.23	717.0	29.72	755 0	29.5	— 1.4	92	n.	.....	.....	2	.....	10	n.	.....	0	0	.....	Prof. Jaedt.
Bamberg	28.85	732.8	29.69	754.0	32.4	0.2	77	nw.	.....	.....	1	.....	8	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.44	747.8	29.63	752.5	32.4	0.2	89	w.	.....	.....	2	.....	10	.....	.....	0.126	3.2	.....	Prof. Dr. Arndt
Breslau	29.11	739 3	29.63	752.6	38.1	3.4	95	calm	.....	.....	0	.....	10	.....	.....	0 130	3.3	raining	Royal University Obs'y.
Carlsruhe	29.31	744.4	29.76	755.9	33.4	0.8	90	nw.	.....	.....	1	.....	9	sw.	.....	0	0	.....	Albert Senz.
Cassel	28.90	734 1	29.62	752.3	35.2	1.8	71	nw.	.....	.....	2	.....	8	nw.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.36	745.8	29.74	755.5	32.4	0.2	90	n.	.....	.....	1	.....	7	.....	.....	0.291	7.4	.....	Physical Society.
Friedrichshafen	28.25	717.5	29.73	755.1	33.4	0.8	92	nnw.	.....	.....	1	.....	10	w.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.52	749.7	29.61	752.0	32.2	0.1	96	wsw.	.....	.....	3	.....	10	.....	.....	0.102	2.6	foggy	E. Preller.
Kiel	29.53	750.1	29.55	750.5	34.9	1.6	92	sw.	.....	.....	2	.....	10	.....	.....	0.114	2.9	snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.20	743.2	29.70	754 3	31.1	— 0.5	83	wnw.	.....	.....	1	.....	10	.....	.....	0	0	foggy	H. Leppig, Asst.
Magdeburg	29.45	748 0	29.65	753.0	34.2	1.2	78	w.	.....	.....	2	.....	10 ks	.....	sw.	0.020	0.5	foggy	Weather Observatory.
Memel	29.85	758.3	29.90	759.5	32.7	0.4	87	se.	.....	.....	5	.....	10 s	.....	.....	0	0	foggy	Issermann.
Munich	27.82	706.7	29.66	753.4	30.4	— 0.9	90	nw.	.....	.....	1	.....	10	.....	.....	0	0	.....	Central Station.
Neufahrwasser	29.70	754.3	29.71	754.7	35.6	2.0	85	se.	.....	.....	3	.....	10	.....	.....	0.016	0.4	.....	A. Lothes.
Neustadt, Palatinate	29.22	742.1	29.74	755.4	32.0	0	81	w.	.....	.....	1	.....	10	.....	.....	0	0	.....	Dicknether.
Stuttgart	28 77	730.7	29.70	754 3	30.7	— 0.7	86	nw.	.....	.....	1	.....	10	.....	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	29.56	750.8	29.58	751.4	32.7	0.4	92	sw.	.....	.....	3	.....	10	.....	.....	0.189	4.8	rain & fog	Profs. Brandes & Reimar
Greek.																			
Athens	29.60	751.8	29.98	761.5	63.7	17.6	.....	s.	.....	.....	4 0	0	6 k	.....	.....	0.126	3.2	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.93	760.3	29.98	761.6	75.9	24.4	86	wsw.	16.0	7.2	.....	.....	8	sswv.	.....	0	0	gloomy	
Deesa	29.44	747 6	29.91	759.6	84.3	29.1	38	nw.	6.0	2.7	.....	.....	2	nw.	.....	0	0	d. clouds	
Bombay	29.87	758.8	29.91	759.7	78.7	25.9	71	nw.	13.0	5.8	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.05	712.4	29.88	759.0	84.7	29.3	20	w.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.65	753.1	29.93	760.3	78.6	25.9	54	ene.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Belgaum	27.37	695.1	29.88	759.1	81.0	27.2	21	ene.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.16	740.5	29.92	760.0	65.6	18.7	37	calm	0	0	.....	.....	0	.....	.....	0	0	d. clouds	
Roorkee	28.95	735.2	29.87	758.7	67.2	19.6	40	w.	.....	.....	.....	.....	2	w.	.....	0	0	.....	
Agra	29.34	745 2	29.92	759.8	74.2	23.4	37	nw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.86	732.9	29.91	759.6	77.2	25.1	35	e.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.56	725.5	29.91	760.4	74.3	23.5	47	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.50	749.5	29.89	759.2	69.3	20.7	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.57	751.2	29.90	759.4	62.3	16.8	74	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.74	755 3	29.93	760.2	64.6	18.1	68	w.	1.8	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribugh	27 86	707.7	29.94	760.4	61.7	16 8	57	nw.	7.6	3.4	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.81	757 1	29.89	759.2	71.0	21.7	60	w.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Allpore	29.86	758.3	29.88	758.9	70.0	21.1	83	nnw.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.76	755.9	29.88	759 0	72.2	22.3	77	calm	0.4	0.2	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.78	756.5	29.88	758.8	70.6	21.4	77	w.	1.1	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.54	750.3	29.89	759.1	65.6	18.7	81	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jeypore	28.46	722.8	29.92	759.9	75.7	24.3	50	nw.	4.2	1.9	.....	.....	2	nw.	.....	0	0	d. clouds	
Italian.																			
Udine	29.15	740.3	29.56	750.9	46.6	8.1	94	nw.	1.3	0.6	.....	.....	10	.....	.....	0.906	23.0	.....	Prof. Giovanni Clodig.
Milan	29.09	738.0	29.59	751.6	37.0	2.8	97	wsw.	3.8	1.7	.....	.....	10	.....	.....	1.744	44.3	.....	Prof. Schiapparelli.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Padua	29.42	747.3	29.54	750.2	43.9	6.6	94	ssw.	3.8	1.7			10			0.303	7.7		Prof. Dott. Lorenzoni.
Moncalieri	28.64	727.5	29.58	751.4	41.9	5.5	78	ne.	1.3	0.6			9			0.217	5.5		Prof. F. F. Denza.
Genoa	29.37	745.9	29.56	750.9	48.6	9.2	79	calm	0	0			10		se.	1.675	27.3		Prof. G. M. Garibaldi
Mondovi	27.61	701.4	29.60	751.7	38.7	3.7	75	w.			2		1			0.130	3.3		Prof. D. C. Bruno.
Pesaro	29.57	751.0	29.62	752.3	50.7	10.4	72	sw.	9.4	4.2			10			0.201	5.1		Prof. Luigi Guidi.
Florence	29.35	745.5	29.61	752.1	51.3	10.7	71	sw.			2		10			0.142	3.6		Prof. Costantino Pittei.
Leghorn	29.48	748.7	29.56	750.9	50.9	10.5	55	ssw.	11.9	5.3			10			0.339	8.6		Prof. P. Monte.
Rome	29.47	748.6	29.65	753.1	55.2	12.9	59	sse.	3.8	1.7			10			0.302	9.2		Prof. P. Tachini.
Lecce	29.00	751.9	29.86	758.4	57.2	14.0	08	sse.	24.2	10.8			7		se.	1.240	31.5		Prof. C. de Giorgi.
Cosenza	28.91	734.3	29.82	757.3	56.1	13.4	77	ssw.	5.0	2.5			9		sw.	0.866	22.0		Prof. D. Conti.
Cagliari	29.38	746.3	29.58	751.2	51.8	11.0	74	sw.			6		10			0.339	8.6		Prof. A. Pacinotti.
Palermo	29.47	748.6	29.72	755.0	58.6	14.8	43	wsw.	8.1	3.6			10		wsw.	0.051	1.3		Prof. G. Cacciatore.
Syracuse	29.80	756.8	29.84	757.9	57.9	14.4	65	wsw.	12 5	5.6			10		sw.	0.354	9.0		Sig. Vincenzo Giuliano.
Sub-section.																			
Naples, S. R	29.20	741.6	29.72	755.0	52.3	11.3	80	nw.	0.7	0.3			9		sw.	0.228	5.8		Prof. F. Brioschi.
Stelvio	21.07	550.3			23.4	— 4.8	98	ne.			2		10			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.07	550.4			23.0	— 5.0	71	e.			2		10			1.575	40.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.91	759.8	29.94	760.6	29.0	— 1.7	100	nw.			0		10 n		nw.	0.110	2.8	snowing	Hattori.
Awomori	29.80	756.9	29.84	757.9	23.9	— 4.5	94	nw.	43.6	19.5			10 n			0.082	2.1	light snow	K. Ogawa.
Hakodate	29.78	756.4	29.79	756.7	22.0	— 5.6	85	wnw.	17.2	7.7			10			0.010	0.3		
Hamamatsu	30.02	762.5	30.05	763.2	42.6	5.9	81	w.			2	0	5 8		w.	0.020	0.5	cloudy	Y. Miwa.
Hiroshima, I. M. Obs'y					38.7	3.7	92	nne.	3.7	1.6		0	0			0.165	4.2	clear	
Kanazawa	29.98	761.4	30.08	764.1	40.0	4.4	92	sw.	8.4	3.8			10			0.601	15.3	raining	S. Endo.
Kioto	29.94	760.5	30.12	765.0	39.4	4.1	96	calm	0	0			10 n			0.030	0.8	light rain	M. Tojima.
Nagasaki, I. M. Obs'y	30.00	762.1	30.21	767.4	46.7	8.2	67	ne.	9.3	4.2		0	7 8			0.030	0.8	cloudy	S. Takehayashi.
Niigata	29.97	761.2	30.01	762.2	32.9	0.5	98	sw.	4.9	2.1			10 n			0.380	9.6	light snow	M. Morita.
Nohiru	29.90	759.5	29.92	759.9	32.6	0.3	73	nw.	14.0	6.3		0	0			0	0	clear	H. Midzushina.
Numazu	29.91	759.6	29.94	760.5	50.9	10.5	74	sSW.			6	0	2 ks			0	0	clear	R. Kaneda.
Osaka	30.11	764.9	30.13	765.3	41.9	5.5	90	n.	2.3	1.0			10 8			0.040	1.0	cloudy	H. Omura.
Sapporo					15.5	— 9.2	81	s.	0.0	2.7		0	1			0	0	clear	
Tokei Obs'y, Yeddo	29.83	757.8	29.92	759.9	33.2	0.7	87	nnw.	1.8	0.8		0	0			0	0	clear	The Staff.
Wakayama	30.08	764.0	30.14	765.5	44.4	6.9	91	n.	2.6	1.2		0	9 ck		w.	0.087	2.2	cloudy	Y. Kuwamnea.
MAURITIUS.																			
Mauritius Observatory	29.85	758.2	30.04	763.0	79.4	26.3	72	ese.	19.0	8.5		3ck;cs	5 ks;ks	w.	ese.	0.19	4.8	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajunto	23.72	602.4	29.94	760.4	54.9	12.7	75	ese.	inap.	inap.		10 ck	0			0	0	covered	Prof. Vicente Fernandez.
Leon	24.37	619.0	30.15	765.8	50.0	10.0	88	nw.			1	9 c	1 8	sw.		0	0	covered	Prof. M. Leal.
Mazatlan	29.02	752.5	29.88	759.0	73.0	22.8	46	nnw.	0.9	0.4		4 cs	0	w.		0	0	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23.15	588.1	30.31	769.8	47.7	8.7	57	w.	0.7	0.3		4 c	3 ck			0	0	cloudy	The Staff.
Morelia	24.43	620.5	30.32	770.1	41.7	5.4	71	ne.			1	0	0			0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.98	609.2	30.09	764.3	51.3	10.7	78	calm	0	0		0	2 8		ssw.	0	0	clear	M. V. de Leon, M. E
Puebla, Catholic Institute	23.45	595.6	30.167	767.02	54.7	12.6	25	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.54	572.5	30.26	768.9	44.2	7.0	80	ne.	4.6	2.0		0	0			0	0	blue sky	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.76	755.9	29.76	755.9	31.6	— 0.2		sw.			3					0	0		
Groningen	29.59	751.5	29.64	752.9	36.1	2.3		w.			2					0.039	1.0		
Helder	29.07	753.5	29.67	753.5	40.1	4.5		w.			4					0	0		
Hellevoetsluis	29.74	755.5	29.74	755.5	33.8	1.0	96	sw.			3					0.134	3.4		
Utrecht	29.69	754.1	29.74	755.3	34.0	1.1	96	ssw.			2		hz.			0.012	0.3	hazy	H. van der Brink
NORWEGIAN.																			
Bergen	29.00	751.8	29.66	753.4	35.2	1.8	50	e.	11	5			7			0	0		
Brono	29.85	758.3	29.89	759.3	31.5	— 0.3	65	e.	9	4			6			0	0		
Christiania	29.51	749.6	29.67	753.5	29.7	— 1.3	100	nne.	25	11			10			0.012	0.3	snowing	
Gjæsvær	29.97	761 2	29.99	761.8	22.3	— 5.4		s.			2		7						
Lodingen	29.95	760.6	29 99	761 8	22.3	— 5.4	80	ne.			1		1			0	0		
PORTUGUESE.																			
Angra, Azores	29.82	757.4	29.98	761.4	63.5	17.5	94	w.	12.5	5.6			4			0.900	23.0		Dr. J. A. Sampaio.
Campo Major	28.77	730.8	29.80	757.0	41.0	5.0	100	se.	4.3	1.9			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.93	760.1	30.01	762.3	68.0	20.0	61	wsw.	11.9	5.3			2	nw.		0	0		Capt. D. A. de Ounha.
Lisbon, Observatory	29.30	745.7	29.72	755.0	49.0	9.8	100	s.	8.7	3.9			10			0.224	5.7	raining	The Staff.
Ponta Delgada, Azores	29.94	760.4	30.01	762.2	63.0	17.2	53	nnw.	5.6	2.5			4			0.003	1.0		
Saint Paul de Loando	29.61	752.2	29.81	757.2	80.6	27.0	80	w.	1.8	0.8			10			0	0		
Serra da Estrella	24.89	632.1	29.75	755.7	29.7	— 1.3	100	se.			2		10					foggy	
RUSSIAN.																			
Akmolinski	29.00	738 0	30.23	767.9	11.7	—11.3	71	sw.	11	5		0	8 ku						Major K. Lasarew.
Archangel	30.44	773.2	30.46	773.7	22.6	— 5.2	90	ese.	4	2			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.49	774.5	30.41	772.5	28.4	— 2.0	80	calm	0	0			10			0	0	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.61	752.1	30.16	766.0	8.6	—13.0	86	sw.	18	8			10			0.299	7.0		Meteorological Obs'y.
Bielosersk	29.98	761.5	30.48	774.2	28.4	— 2.0	100	ese.	2	1			10 n			0.008	0.2	snow & fog	
Dorpat	29.93	760.3	30.19	766.8	30.6	— 0.8	100	se.	11	5			10 n			0	0		Observatory.
Ekaterinburg	29.55	750.6	30.01	777.6	10.6	—11.9	84	e.	4	2			10					snowing	Meteorological Obs'y.
Elisawetgrad	29.83	757 7	30.31	769.8	32.9	0.5	98	e.	9	4			10			blank	blank		
Kasan	30.18	766.5	30.47	773.9	23.2	— 4.9	81	e.	2	1			10					light snow	Observatory.
Kem	30.20	768.7			20.5	— 6.1	95	calm	0	0			10			0	0	heavy cl'ds	
Kertch	30.19	766.9	30.21	767.4	42.3	5.7	90	ene.	7	3		0	7 n			c	0		Lagorio & Sastyrez.
Kieff	29.52	749.9	30.19	766.8	34.2	1.2	100	se.	9	4			10 n					rain & fog	Observatory.
Libau	29.86	758.4	29.88	759.0	31.5	— 0.3	86	se.			3		10			0	0		E. Quaas.
Lugan	30.11	764.9	30.33	770.3	33.8	1.0	96	sw.	2	1			10			0	0		Meteorological Obs'y.
Nikolaiev	30.18	766.5	30.25	768.4	39.6	4.2	100	calm	0	0			10 n			0.608	0.2		Capt. Kurdakow.
Pekin, Chilun	30.58	776.7	30.72	780.3	10.3	— 8.7	32	nw.	7	3		0	0						Physical Observatory.
Petrozavodsk	30.10	766 0	30.37	771.4	31.8	— 0.1	98	se.	7	3			10			0.004	0.1		Dr. Bergmann.
Pinsk																			
St. Petersburg	30.28	769.2	30.30	769.6	33.3	0.7	92	sse.	11	5			9 ku			0.008	0.2		Central Physical Obs'y.
Sevastopol																			
Semipalatinsk	29.62	752.4	30.35	779.8	9.3	—12.6	77	ese.	20	9			10			0	0		Major Lasarew.
Staroi Bykhov	29.82	757.5	30.31	769 8	30.9	— 0.6	92	se.	16	7			10			0	0		
Tashkend, Laboratory	28.61	726 7	30.21	767.3	49.3	9.6	70	calm	0	0			0			blank	blank		Teich, A. M.
Tiflis	28.84	732.5	30.27	768.9	53.8	12.1	58	calm	0	0		2 ck	0			0	0		Physical Observatory.
Tomsk	29.78	756.4	30.10	764.4	— 5.3	—20.7	85	calm	0	0			10					snowing	
Vladivostock	30.22	767.7	30.29	769.4	— 1.1	—18.4	72	ne.	7	3		0	0			0	0		
Warsaw	29.35	745 4	29.79	756.6	34.3	1.3	87	se.	20	9			10					heavy cl'ds.	Astronomical Obs'y.
Wilna	29.03	752.7	30.08	763 9	32.0	0.0	94	se.	13	6			10						Berg, Assistant.
Yeniseisk	29.99	761 5	30.31	769.9	— 4.0	—20.0	90	se.	7	3			10					snowing	M. O. Marks.
SCOTTISH.																			
Monach Lt			29.64	752.8	41	5.0	91	e.			4	0	0			0	0	clear	J. Youngehause
North Unst			29.77	756.1				e.			3	2	3	ne.		blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.54	750.3	29.65	753.0	47.3	8.5	67	w.	2.7	1.2		0	8			0.264	6.7	covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.65	753 2	29.71	754.7	48.2	9.0	70	se.	0.9	0.4		0	0			0	0	clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.77	679.9	29.61	752.0	26.2	— 3.2	94	sw.	4.0	1.8			10			0.169	4.3	covered	Domingo Martin.
Madrid, Royal Obs'y	27.56	700.0	29.94	760.5	23.7	— 4.6	100	calm	0.2	0.1		6	0	wnw.		0.622	15.8	light clouds	The Staff.
Murcia, Met. Obs'y	29.61	752.0	29.70	755.8	50.0	10.0	73	se.	1.6	0.7		2	3	s.		0.020	0.5	misty	Olayo Diaz, Director.
Oviedo	28.79	731.2	29.65	753.2	41.0	5.0	72	s.	10.3	4.6		1 8	0	calm		0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.67	728.2	29.58	751.3	44.4	6.9	79	se.	6.9	3.1			9			0.008	0.2	almost cov.	R. Gil Villanueva, Dir.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.70	754.3	29.75	755.7	75.2	24.0	87	n.	6.6	3.0	.....	3 c	5 ks	.....	ne.	0.295	7.5	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.81	757.2	29.91	759.8	52.7	11.5	86	nw.	4.5	2.0	.....	.....	10	.....	sw.	0.284	7.2	....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.01	702.3	30.10	704.6	75.9	24.4	92	se.	6.9	3.1	.....	5 cs	4 ku	se.	se.	0.217	5.5	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.67	753.5	29.80	756.9	74.6	23.7	95	nw.	1.4	0.6	.....	.....	10ks	.....	.....	0.26	6.6	rainy	José L. Yrastorza.
SWEDISH.																			
Hapsaranda	30.19	766.8	30.23	767.8	19.4	— 7.0	100	ne.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.04	762 9	30.09	764.2	23.7	— 4.6	95	nnw.	.....	.....	2	.....	10	.....	.....	0.185	4.7	.....	
Hernosand	30.00	762.0	30.05	763.3	29.5	— 1.4	96	e.	.....	.....	4	.....	10	.....	.....	0.063	1.6	.....	
Stockholm	29.63	752.7	29.81	757.2	35.6	2.0	85	sw.	.....	.....	6	.....	10	.....	.....	0.012	0.3	.....	
Wisby	29.68	753.9	29.74	755.4	34.9	1.6	89	sse.	.....	.....	6	.....	10	.....	.....	0	0	.....	
Sub-series.																			
Upsala	29.71	754.6	29.80	756.8	35.4	1.9	94	ese.	12.5	5.6	.....	.....	10	.....	.....	0 087	2.2	.....	S. G. Fineman.
SWISS.																			
Geneva	28.25	717.6	29.74	755.3	36.3	2.4	85	sw.	.....	.....	1	.....	10	.....	.....	0.169	4.3	foggy	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.08	764.1	55.6	13.1	76	ese.	2	1.0	.....	.....	10	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	29.92	759.9	61.7	16.5	.....	se.	.....	.....	2	.....	5	.....	.....	0.20	5.	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.10	764 5	64.9	18.3	50	ne.	.....	.....	2	6 c	.....	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.71	754.6	29.80	756.9	32	0.0	74	nw.	3	1.3	.....	.....	10 8	.....	.....	inap.	inap.	cloudy	J. O. Barnes.
Alpena, Michigan	29.23	742.4	29.94	760.5	19	— 7.2	84	n.	6	2.7	.....	.....	10 8	.....	.....	0.30	7.6	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.13	638.3	30.21	767.3	22	— 5.6	64	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	26.58	675.1	29.62	752.3	32	0.0	71	sw.	18	8.0	.....	0	5 8	.....	sw.	0.02	0.5	fair	B. O. Lenoir.
Atlanta, Georgia	28.97	735.8	30.20	767.1	34.5	1.4	89	w.	8	3.6	.....	0	0	.....	.....	0.32	8.1	clear	H. C. Smith.
Atlantic City, New Jersey	29.77	756.1	29.78	756.4	37	2.8	94	n.	7	3.1	.....	.....	10 n	.....	.....	0.62	15.7	light rain	Jas. M. Watson.
Augusta, Georgia	29.91	759.7	30.11	764.8	44	6.7	80	w.	7	3.1	.....	0	1 8	.....	.....	0.15	3.8	clear	John Healy.
Baltimore, Maryland	29.82	757.4	29.87	758.7	40	4.4	73	nw.	6	2.7	.....	0	6ks;fg	.....	sw.	0.05	1.3	clearing	Geo W Felger.
Barnegat, New Jersey	29.74	755.4	29.70	755.9	36.0	2.2	100	nw.	10	4.5	.....	.....	10 n	.....	.....	0.54	13.7	light rain	G. A. Hill.
Behring Id., Behring Sea	29.25	742.9	29.27	743.4	31.3	— 0.4	.....	se.	5	2.2	.....	0	8 n	.....	.....	0.08	2.0	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28 07	713.0	29.83	757.7	20	— 6.7	87	se.	17	7.6	.....	0	4 8	.....	.....	0	0	fair	A. Pritchard.
Benton, Fort, Montana	26.69	677.9	29.09	754.1	35	1.7	66	sw.	20	8.9	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	27.80	707.0	29.87	758.7	13	—10.6	83	e.	15	6.7	.....	.....	10 8	.....	.....	0.01	0.3	cloudy	Cyrus Cramer.
Block Island, Rhode Island	29.71	754.6	29.74	755.4	34	1.1	100	n.	22	9.8	.....	.....	10 n	.....	ne.	0.56	14.2	light rain	J. T. Elker.
Boise City, Idaho	27.08	687.8	30.00	763.5	34	1.1	92	w.	2	0.9	.....	.....	10 n	.....	.....	0.15	3.8	light rain	B. E. Light.
Boston, Massachusetts	29.63	752.6	29.79	756.7	27.0	— 2.8	94	n.	12	5.4	.....	.....	10 n	.....	.....	0.16	4.1	light snow	O. B. Cole.
Brownsville, Texas	30.17	766 3	30.22	767.6	51.3	10.7	79	n.	8	3.6	.....	.....	9 8	.....	n.	0	0	cloudy	M. McCarty.
Buffalo, New York	29.06	738.1	29.80	758.4	28	— 2.2	86	sw.	23	10.3	.....	.....	10 8	.....	sw.	0.13	3.3	cloudy	W. Finn.
Buford, Fort, Dakota	27.54	699.5	29.78	756.4	25	— 3.9	88	e.	4	1.8	.....	.....	10 8	.....	.....	0	0	cloudy	F. A. Mellen.
Burlington, Vermont	29.50	749.3	29.81	757.2	19.9	— 6.7	84	n.	5	2.2	.....	.....	10 n	.....	n.	0.10	2.5	light snow	G. U. Schaeffer.
Cairo, Illinois	29.82	757.4	30.24	768.1	30.0	— 1.1	78	s.	7	3.1	.....	0	0	.....	.....	0	0	clear	W. H. Ray.
Cape Henry, Virginia	29.83	757.7	29.85	758.2	44	6.7	100	nw.	16	7.2	.....	.....	10 n	.....	w.	1.43	36.3	cloudy	A. K. Alderson.
Cape May, New Jersey	29.78	750.4	29.81	757.2	45.5	7.5	80	nw.	18	8.0	.....	.....	10 n	.....	.....	0.63	16.0	light rain	W. E. Smith.
Cape Mendocino, California	29.31	744.5	29.99	761 7	46	7.8	100	nw.	19	8.5	.....	.....	fg.	.....	nw.	0.58	14.7	dense fog	J. J. McLean.
Cedar Keys, Florida	30.05	703.3	30.07	763.8	62	16.7	93	w.	8	3.6	.....	.....	10 8	.....	w.	0.10	2.5	cloudy	F. W. Mixer.
Champaign, Illinois	29.27	743.4	30.14	765.5	13.0	—10.6	70	sw.	12	5.4	.....	0	4 8	.....	sw	0	0	fair	L. A. Welsh.
Charleston, S. Carolina	29.94	760 5	30.00	762.0	52	11.1	86	w.	10	4.5	.....	0	3 8	.....	w.	1.09	27.7	clear	J. H. Smith.
Charlotte, N. Carolina	29.10	739.1	29.99	761.7	38.0	3.3	83	nw.	8	3.6	.....	0	fg.	.....	.....	0.16	4.1	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.37	746.0	30.23	767.8	34.5	1.4	65	nw.	7	3.1	.....	1 k	0	nw.	.....	0.06	1.5	clear	B. L. Goulding.
Cheyenne, Wyoming	23.73	602.7	30.01	762.2	39.5	4.2	29	w.	12	5.4	.....	.....	10 8	.....	.....	0	0	cloudy	E. McGovern.
Chicago, Illinois	29.33	745.0	30.09	764.3	9.3	—12.6	72	sw.	7	3.1	.....	0	0	.....	.....	inap.	inap.	clear	J. Mitchell.
Chincoteague, Virginia	29.76	755.9	29.78	756.4	42	5.6	92	nw.	16	7.2	.....	.....	10 ks	.....	n.	2.56	65.0	threatening	C. F. Dickens.
Cincinnati, Ohio	29.47	748.5	30.17	766.3	28	— 2.2	77	nw.	7	3.1	.....	0	1 8	.....	w.	0.04	1.0	clear	R. B. Watkins.
Cleveland, Ohio	29.22	742.2	30.01	762.2	23.3	— 4.8	94	w.	13	5.8	.....	.....	10 n	.....	w.	0.05	1.3	light snow	J. B. Newlin.
Coleman City, Texas	28.40	721.3	30.30	769.6	28	— 2.2	77	s.	3	1.5	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.17	740.9	30.08	764.0	26	— 3.3	64	w.	13	5.8	.....	.....	10 8	.....	w.	0.08	2.0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.25	717.5	30.27	768.8	30.0	— 1.1	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.37	669.8	29.77	756.1	39	3.9	50	nw.	8	3.6	.....	.....	10 8	.....	.....	0	0	cloudy	W. B. Lamar.
Davenport, Iowa	29.44	747.8	30.15	765.8	21	— 6.1	70	w.	4	1.8	.....	.....	10 8	.....	.....	inap.	inap.	cloudy	R. R. Martin.
Davis, Fort, Texas	25.26	641.0	30.20	767.1	35	1.7	72	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.14	714.7	29.97	761.2	35	1.7	79	sw.	10	4.5	.....	0	2 8	.....	sw.	0.26	6.6	clear	D. Moore.
Deadwood, Dakota	24.90	632.4	29.89	759.2	35	1.7	72	nw.	10	4.5	.....	.....	10 8	.....	inap.	inap.	inap.	cloudy	F. Willson.
Delaware Breakwater, Del.	29.80	756.9	29.82	757.4	38	3.3	100	nw.	23	10.3	.....	.....	10 0	.....	nw.	0.73	18.5	light rain	T. S. Townsend.
Denison, Texas	29.41	747.0	30.20	768.6	37.0	2.8	61	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24 41	620.0	29.93	760.2	32.0	0.0	52	se.	8	3.6	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.14	740.1	30.12	765.0	13	—10.6	80	nw.	1	0.4	.....	0	sk.	.....	.....	inap.	inap.	clear	F. W. Conrad.
Detroit, Michigan	29.22	742 2	29.98	761.5	27.0	— 2.8	88	w.	13	5.8	.....	.....	10 k	.....	w.	0.06	1.5	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.31	693.7	30.11	764.8	29	— 1.7	67	s.	5	2.2	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.33	745.0	30.10	764.5	12	—11.1	80	calm	0	.....	.....	0	3 s;fg	.....	n.	0	0	clear	J. Harvey Smith.
Duluth, Minnesota	29.22	742.2	30.03	762.7	10	—12.2	80	s.	1	0.4	.....	0	2 8	.....	.....	0.04	1.0	clear	N. B. Conger.
Eagle Pass, Texas	29.51	749.5	30.35	770.9	35.2	1.8	89	calm	0	0	.....	0	0	.....	.....	inap.	inap.	clear	F. Belford.
Eagle Rock, Idaho	25.08	637.0	30.00	762 0	31	— 0.6	85	sw.	32	14.3	.....	.....	10 8	.....	sw.	0.12	3.0	threatening	J. M. Clifford.
Eastport, Maine	29.80	756.9	29.87	758.7	24.0	— 4.4	88	n.	10	4.5	.....	.....	10 8	.....	n.	0.28	7.1	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.21	691.1	30.17	766.3	29	— 1.7	59	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.32	668.5	30.18	766.6	29.0	— 1.7	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.15	740.4	29.92	760.0	26	— 3.3	88	sw.	12	5.4	.....	.....	10 8	.....	.....	0.13	3.3	cloudy	Peter Wood.
Escanaba, Michigan	29.28	743.7	30.00	762.0	18.0	— 7.8	83	n.	4	1.8	.....	.....	10 8	.....	n.	0.02	0.5	cloudy	George Heathcote.
Fredericksburg, Texas	28 48	723.4	30.30	769.6	34	1.1	88	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	Frank Hailwegler.
Galveston, Texas	30.23	767.8	30.28	769.1	49	9.4	77	ne.	9	4.0	.....	0	hz	.....	.....	0.01	0.3	clear	E. O'C. Machuerney.
Grand Haven, Michigan	29.24	742.7	29.95	760.7	29.0	— 1.7	88	sw.	20	8.9	.....	.....	10 ks	.....	sw.	0.11	2.8	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.25	641.3	30.13	765.3	37	2.8	53	e.	2	0.9	.....	0	0	.....	.....	0	0	clear	Robert C. Lord.
Hatteras, North Carolina	29 81	757.2	29.83	757.7	55	12.8	100	sw.	18	8.0	.....	.....	10 8	.....	sw.	0.43	10.9	cloudy	R. M. Crawford.
Helena, Montana	25.46	746.7	29.84	757.9	32	0.0	88	sw.	21	9.4	.....	.....	10 8	.....	sw.	0	0	cloudy	N. C. Smith.
Henrietta, Texas	29.18	741.2	30 26	768.6	32	0.0	78	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. P. Sherry.
Huron, Dakota	28.43	722.1	29.97	761.2	14.8	— 9.6	67	se.	9	4.0	.....	.....	10 8	.....	.....	inap.	inap.	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.28	743.7	30.13	765.3	20	— 6.7	76	sw.	1	0.4	.....	0	sk.	.....	.....	inap.	inap.	clear	O. Schutze.
Indianola, Texas	30.24	768.1	30.28	769.1	50.0	10.0	64	ne.	20	8.9	.....	0	0	.....	.....	0	0	clear	I. A. Reed.
Jacksboro, Texas	29.02	737.1	30.26	768.6	34	1.1	60	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.00	762.0	30.05	763.3	63	17.2	90	w.	3	1.3	.....	.....	10 8	.....	.....	0.20	5.1	cloudy	J. W. Smith.
Keogh, Fort, Montana	26.95	684.5	29.65	753.1	31	— 0.6	71	e.	4	1.8	.....	0	7 8	.....	.....	0	0	fair	A. Schneider.
Keokuk, Iowa	29.42	747.3	30.12	765 0	17.0	— 8.3	76	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.05	763.3	30.07	763.8	72.0	22.2	98	calm	0	0	.....	0	0	.....	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	29.81	757.2	29.83	757.7	51	10.6	93	nw.	14	6.3	.....	.....	10 ks	.....	nw.	0.32	8.1	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.10	739.1	30.18	766.6	32.5	0.3	73	w.	8	3.6	.....	0	0	.....	.....	0.55	14.0	clear	J. A. Cody.
La Crosse, Wisconsin	29.23	742 4	30.08	764.0	7	—13.9	76	sw.	4	1.8	.....	.....	10 8	.....	.....	0.01	0.3	cloudy	S. C. Emery.
Leavenworth, Kansas	29.18	741.2	30.14	765.5	27	— 2.8	88	s.	1	0.4	.....	3 cs	0	.....	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.04	737.6	29.92	760.0	30.5	2.5	66	s.	2	0.9	.....	0	0 8	.....	.....	0	0	fair	W. Bell.
Little Rock, Arkansas	29.90	759.4	30.23	767.8	35	1.7	69	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. U. Simons.
Los Angeles, California	29.62	752.3	30.02	762.5	38	3.3	72	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.57	751.1	30.17	766.3	33.5	0.8	65	w.	4	1.8	.....	0	4 8	.....	.....	inap.	inap.	fair	L. M. Dey.
Lynchburg, Virginia	29.20	741.7	29.93	760.2	38	3.3	53	w.	12	5.4	.....	0	4 ks	.....	w.	0.03	0.8	fair	Lewis Dunne.
Mackinaw City, Michigan	29.30	744 2	30.00	762 0	16.0	— 8.9	83	ne.	10	4.5	.....	.....	10 n	.....	ne.	0.09	2.3	light snow	F. R. Day.
Macon, Fort, North Carolina	29.84	757.9	29.85	758.2	53	11.7	100	w.	8	3.6	.....	.....	10 8	.....	.....	1.02	25.9	cloudy	C. A. Smith.
Madison, Wisconsin	28.96	735 6	30.06	763.5	8	—13.3	76	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. P. Chaffee.
Maginnis, Fort, Montana	25.90	635.0	29.54	750.3	35	1.7	66	sw.	18	8.0	.....	0	0 8	.....	sw.	0.02	0.5	fair	F. Burke.

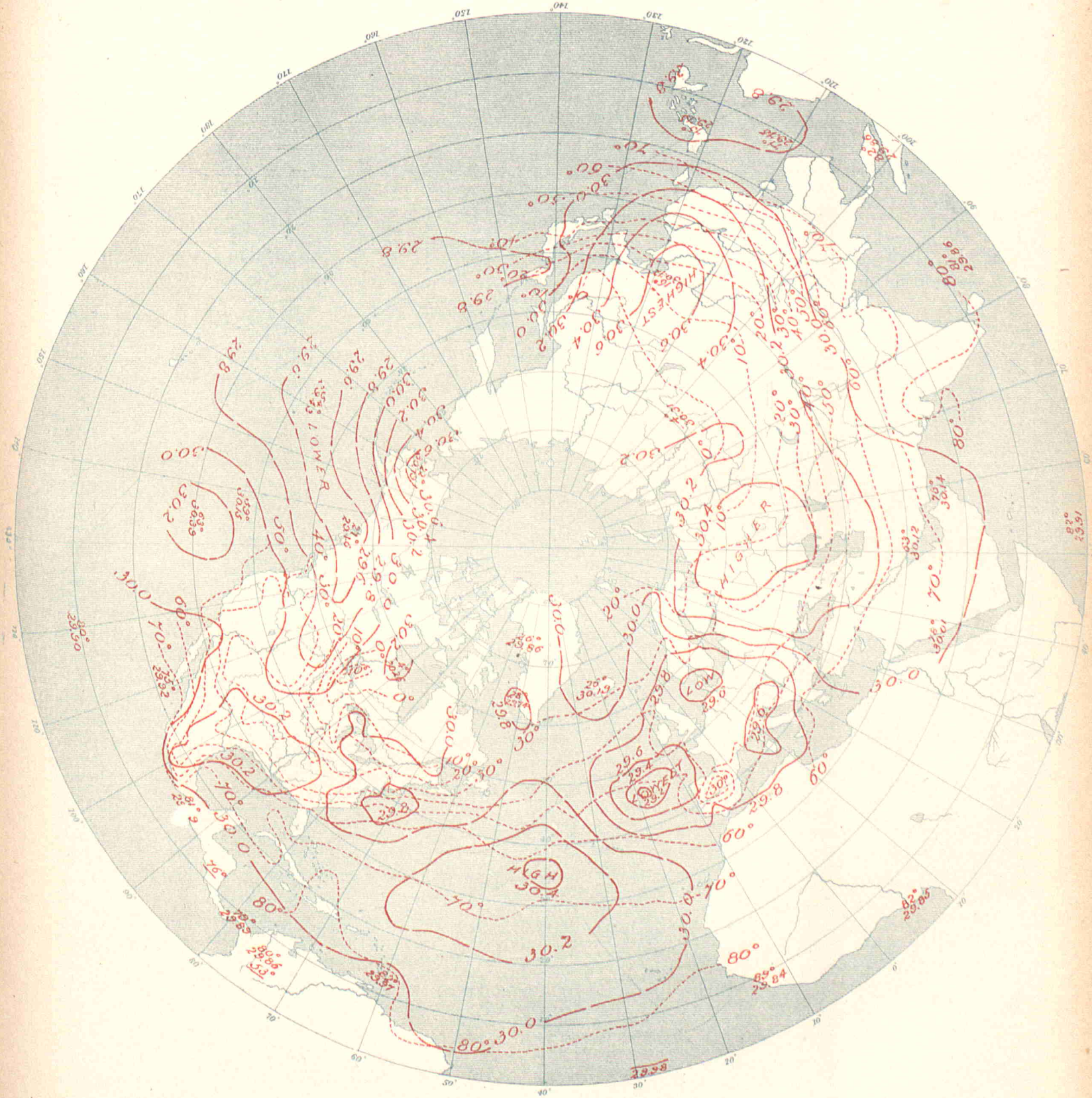
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	WEATHER.	OBSERVERS
UNITED STATES.—Cont'd.																			
McKavett, Fort, Texas	27.86	707.6	30.24	768.1	44	6.7	76	ne.	3	1.3		0	0			0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.17	740.9	29.95	760 7	23	— 5.0	73	sw.	2	0.9			10 n			0.40	10.2	light snow	J. Gilligan.
Memphis, Tennessee	29.89	759.2	30.25	768.3	35	1.7	69	calm	0	0			fg.			0	0	dense fog	D. T. Flannery
Milwaukee, Wisconsin	29.23	742.4	30.04	763.0	14	—10.0	64	w.	9	4.0		0	1 8			0.04	1.0	clear	W. Line
Missoula, Fort, Montana	26.41	670.8	29.87	758.7	33	0.6	81	sw.	10	4.5			8 s		w.	0.07	1.8	cloudy	I. H. Young.
Mobile, Alabama	30.20	767.1	30.24	768.1	41	5.0	77	n.	6	2.7		0	0			0.35	8.9	clear	C. A. Read.
Montgomery, Alabama	29.98	761.5	30.22	767 6	37	2.8	85	nw.	2	0.9		0	0			0.21	5.3	clear	J. B. McLaughlin.
Moorhead, Minnesota	28.91	734.3	30.02	762.5	— 7	—21.7	88	se.	5	2.2		0	0			0.09	2.3	clear	H. Bessant.
Morgantown, W. Virginia	29.01	736.8	30.08	764.0	30.5	— 0.8	83	w	20	8.9			10 n		w.	0.07	1.8	light snow	J. C. Sprigg, jr.
Mt. Washington, N. H	23.43	595 1	30.06	763.5	23.0	— 5.0	92	nw.	10	4.5			fg		nw.	0.00	1.5	dense fog	B. S. Pague.
Nashville, Tennessee	29.62	752.3	30.23	767.8	30.0	— 1.1	88	sw.	4	1.8		0	0			inap.	inap.	clear	L. N. Jesunofsky.
New Haven, Connecticut	29.65	753.1	29.77	756.1	29.5	— 1.4	100	n.	9	4.0			10 n		n.	0 37	9.4	light rain	J. H. Sherman.
New London, Connecticut	29.72	754 9	29.77	756.1	31	— 0.6	100	calm	0	0			10 n			0 28	7 1	light rain	J. G. Lynch
New Orleans, Louisiana	30.18	766.6	30.24	768.1	48.5	9.2	63	n.	6	2.7		0	0			0 28	7 1	clear	L. Dunne
Newport, Rhode Island	29.66	753.4	29.71	754 6	32.0	0.0	100	n.	12	5.4			10n;fg		n.	0.36	9.1	light rain	W. McGillivray.
New York, New York	29.62	752.3	29.81	757.2	36	2.2	100	ne.	4	1.8			10n;fg			0.28	7.1	light rain	J. B. Merrill.
Norfolk, Virginia	29.79	756.7	29.82	757.4	48	8.9	93	nw.	4	1.8			10 n			1.87	47.5	light rain	Wm. Davis.
North Platte, Nebraska	26.82	681.2	29.98	761 5	28.6	— 1.9	76	calm	0	0		0	0 s			0	0	clear	E. F. Brady.
Olympia, Washington Ty	29.88	758.9	29.92	760.0	38.0	3.3	82	s.	3	1.3		0	fg.			0	0	clear	A. Pollak.
Omaha, Nebraska	28.80	731.5	30.09	764.3	21.5	— 5.8	75	s.	3	1.3		0	10 n		w.	0.05	1.3	light snow	J. G. Linsley.
Oswego, New York	29.44	747.8	29.79	756.7	33.0	0.6	94	sw.	16	7.2			10 n			inap.	inap.	clear	L. M. Pindell.
Palestine, Texas	29.75	755.6	30.33	770.4	38.5	3.6	64	n.	7	3.1		0	0			0	0	clear	M. McGauran.
Pensacola, Florida	30.19	766.8	30.22	767.6	43.1	6.2	68	n	9	4.0		0	0			0 30	7.6	clear	T. T. Townsend.
Philadelphia, Pa	29.72	754.9	29.83	757.7	39	3.9	89	nw.	7	3.1			10n;fg		nw.	0 19	4.8	light rain	H. Hall.
Pike's Peak, Colorado	17.45	443 2	30.11	764.8	8	—13.3	69	w.			9	0	1 8			0	0	clear	C. N. Kitchel
Ploche, Nevada	23.91	608.1	30.11	764.8	32.4	0.2	44	s.	6	2.7		10 cs	0	w.		0	0	cloudy	C. N. Kitchel
Pittsburg, Pennsylvania	29.13	739 9	29.99	761.7	27.0	— 2.8	77	w.	12	5.4			10 s		w.	0.03	0.8	cloudy	W. A. Reid.
Poplar River, Montana	27.30	693.4	29.66	753.4				nw.			1		10 s			0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.20	767.1	30.21	767 3	52.5	11.4	58	n.	29	13.0		0	0			0.10	2.5	clear	H. B. Boyer.
Port Huron, Michigan	29.19	741.4	29.92	760.0	21.6	— 4.7	82	w.	8	3.6			10 n			0.37	9.4	light snow	W. O. Bailey.
Portland, Maine	29.79	756.7	29.84	757 9	26	— 3.3	88	n.	12	5.4			10 s		n.	0.15	3.8	cloudy	W. W. Eichelberger.
Portland, Oregon	29.95	760.7	30.02	762.5	39.6	4.2	88	sw.	3	1.3			10 s			1.48	37.6	cloudy	M. L. Hearne.
Portsmouth, N. C.					51	10.6	100	nw.			7		10 n		nw.	0.76	19.3	light rain	F. S. Coburn.
Prescott, Arizona	24.72	627.9	30.10	764.5	24.2	— 4.3	76	w.	2	0.9		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	29.71	754 6	29.74	755 4	40	4.4	89	ne.	6	2.7			10 n		ne.	0.64	16.3	light rain	P. T. Jenkins.
Punta Rassa, Florida	30.05	763 3	30.06	763 5	66.5	19.2	93	sw.	3	1.3			fg.			0	0	dense fog	W. J. Evans.
Red Bluff, California	29.72	754.9	30.09	764.3	47	8.3	93	n.	2	0.9			10 s			0.04	1.0	cloudy	J. R. Williams.
Rochester, New York	29.12	739.6	29.83	757.7	28	— 2.2	88	w.	15	6.7			10 n			0.03	0.8	light snow	E. W. McGann
Roseburg, Oregon	29.52	749 8	30.09	764 3	36.2	2.3	84	n.	2	0.9		0	0			0.68	17.3	clear	J. J. Nanry.
Sacramento, California	30.01	762 2	30.09	764.3	48.9	9.4	86	s.	5	2.2			10 s			0.10	2.5	cloudy	J. A. Barwick.
St. Louis, Missouri	29.54	750.3	30.18	766.6	25.1	— 3.8	94	s.	4	1.8			sk.			0	0	dense smoke	J. H. Weber.
St. Michael, Fort, Alaska	30.75	781.0	30.79	782.1	—22	—30.0	100	calm	0	0		0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.12	739.6	30.08	764.0	1.0	—17.2	72	sw.	1	0.4		8 cs	0			inap.	inap.	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.04	737.6	30.04	763.0	—12	—24.4	87	se.	3	1.3		0	fg.			0.02	0.5	clear	C. B Dilley.
Salt Lake City, Utah	25.51	647.9	30.05	763 3	45	7.2	63	se.	12	5.4			10 s			c	0	threatening	J. Craig.
San Antonio, Texas	29.58	751.3	30.30	769.6	38.5	3.6	82	n.	3	1.3		0	0			0	0	clear	T. J. Kenan.
San Diego, California	29.93	760.2	30.00	762.0	46.0	7.8	100	n.	3	1.3			fg.			0	0	dense fog	A. C. Dobbins
Sandusky, Ohio	29.29	744 0	30.02	762.5	22	— 5.6	87	w.	20	8.9			10 s			0.03	0.8	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.76	755.9	29.79	756.7	36.0	2.2	89	nw.	6	2.7			10 n			0.28	7.1	light rain	B. A. Blundon
San Francisco, California	30.04	763.0	30.11	764.8	51.5	10.8	90	se.	5	2.2			10 s		sw.	0.03	0.8	threatening	N. Gorom
Santa Fé, New Mexico	23.19	589 0	30.18	766.6	24	— 4.4	56	ne.	12	5.4		0	0			0	0	clear	H. G. Jones
Savannah, Georgia	29.99	761.7	30.09	764.3	51	10.6	72	nw.	12	5.4		8 ck	0	w.		1.20	30.5	cloudy	H. W. Ford.
Shaw, Fort, Montana	25.89	657.6	29.72	754.9	32	0.0	62	sw.	25	11.2		0	0			0	0	clear	A. L. Mathews
Shreveport, Louisiana	30.03	762.7	30.28	769 1	35	1.7	100	calm	0	0		2 c	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	28.90	734.0	30.23	767.8	26.5	— 3.1	79	s.	5	2.2		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.34	618.2	30.18	766.6	26.0	— 3.3	84	sw.	2	0.9		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.40	746.7	29.46	748.3	27	— 2.8	80	ne.	23	10.3		0	1 s		ne.	1.10	27.9	clear	F. W. Fickett.
Smith, Fort, Arkansas	29.72	754.9	30.22	767.6	27.0	— 2.8	88	calm	0	0		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	29.85	758.2	29.89	759.2	54	12.2	100	w.	10	4.5		1 ck	5 s	w.	w.	0.50	12.7	fair	O. Parker.
Spokane Falls, Wash. Ter.	27.75	704.8	29.88	758.9	29	— 1.7	88	ne.	2	0.9		0	0			0.48	12.2	clear	H. Clifford.
Springfield, Illinois	29.45	748.0	30.18	766.6	21.5	— 5.8	72	sw.	8	3.6		0	0			inap.	inap.	clear	T. B. Jennings
Springfield, Massachusetts	29.65	753.1	29.79	756.7	28.5	— 1.9	90	n.			1		10 n			0.10	2.5	snowing	Charles Mayr.
Springfield, Mo	28.66	728.0	30.19	766 8	30	— 1.1	77	sw.	8	3.6		0	0			0	0	clear	J. B. Marbury.
Starkville, Miss	29.77	756.1	30.27	768.8	36	2.2	79	calm	0	0		0	0			0.09	2.3	clear	O. Dill.
Stevenson, Fort, Dakota	27.81	706.4	29.87	758.7	14	—10.0	83	e.	6	2.7			10 s			0	0	cloudy	W. Burrows.
Stockton, Fort, Texas	27.08	687.8	30.22	767.6	41	5.0	67	sw.	24	10.7		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.63	752.6	29.69	754.1	34.8	1.6	89	ne.	23	10.3			10 n		ne.	0.35	8.9	light snow	G. Liebmann.
Thomas, Camp, Arizona	27.28	692.9	30.10	764.5	20	— 1.7	80	e.			1	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.26	743.2	30.00	762.0	25	— 3.9	88	sw.	14	6.3			10 n		w.	0.01	0.3	light snow	A. Buell.
Tucson, Arizona	27 56	700 0	30.06	763.5	41	5.0	67	s.	3	1.3		0	0			0	0	clear	J. L. Whiteside
Umatilla, Oregon	29.57	751.1	29.96	761.0	41	5.0	65	sw	23	10.3		2 cs	0	w.		inap.	inap.	clear	J. Daly.
Verde, Fort, Arizona					26.4	— 3.1	77	nw.			1	0	0			0	0	clear	D. Brooks
Vicksburg, Mississippi	30.01	762.2	30.28	769.1	39.4	4.1	71	ne.	5	2.2		0	0			0.01	0.3	clear	James Kenealy
Visalia, California	29.69	754.1	30.07	763.8	41.4	5.2	89	calm	0	0			10 s			0	0	cloudy	O. D. Stewart
Washakie, Fort, Wyoming	24.09	611.9	29.86	758.4	35.1	1.7	61	w.	12	5.4		0	4 ks		w.	0	0	fair	T. M. Ambler.
Washington, D. C.	29.77	756.1	29.89	759.2	37.4	3.0	64	nw.	6	2.7		0	1 s		nw	0 12	3.0	clear	B. M. Purssell.
West Las Animas, Colorado	25.81	655.6	29.97	761.2	19	— 7.2	58	w.	10	4.5		0	2 s			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.22	742.2	29.86	758.4	34	1.1	56	nw.	8	3.6			10 ks		w.	inap.	inap.	clear	B. F. Rough.
Wilmington, N. Carolina	29.85	758.2	29.91	759.7	55	12.8	86	nw.	11	4.9		0	9 s		w.	0.71	18.0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.53	648.5	30.06	763.5	41	5.0	76	sw.	17	7.6		0	8 s		w.	0	0	cloudy	J. Grover.
Yankton, Dakota	28.60	726.4	30.03	762 7	8	—13.3	76	e.	8	3.6		0	0			0	0	clear	J. R. Atfield
Yuma, Arizona	29.79	756.7	29.94	760.5	48.0	8.9	35	ne.	4	1.8		0	0			0	0	clear	W. S. Delano.
Sub-stations.																			
Bogota, U. S. Columbia	21.99	558.5			53.0	11.7	71	sw.	2	0.9		6 ck	2 ks	w.	w.	0	0	cloudy	Joaquin Gomez.
Havana, Cuba, W. I	29.98	761.5	30.04	763.0	66.3	19.1	92	se.	1	0.4		3cs;c	ks	w.		0	0	hazy	Benito Vines, S. J.
Kingston, Jamaica, W. I	30.03	762.7	30.04	763.0	73	22.8	79	n.	2	0.9		0	2 s		e.	0	0	fine	Robert Johnston.
Paramaribo, S. A	30.00	762.0	30.00	762 0	78	25.6	86	se.			1	4 ck	4 s	e.		0.400	10.2	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.30	744.2	29.86	758.4	80	26.7	85	calm			0	2 c	1 8	calm	calm	0	0	clear	Francisco J. Cisneros.
Rivas, Nicaragua, C. A					75.6	24.2	94	ne.			2	0	1 ks		ne.	0.13	3.3	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.84	757.9	29.90	759.4	17	— 8.3	61	nw.			6		5 k			0	0	fair	W. J. Fisher.
St. Thomas, W. I	30.00	762.0	30.12	765.0	77	25.0	76	ne.				1 k	5 ks	e.	ne.	0.04	1.0	fair	Aug. Walloe.
York Factory, H. B. A	30.19	766.8	30.26	768.6	— 3.5	—19.7	82	sw.	11	4.9		4 k	5 s	w.	w.	inap.	inap.	threatening	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower From.	Inch.	Mill	Character.	Direction from	
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay †	30.04	763.0	68.5	20.3	74	n.			1		0							blue sky.
H. M. S. Audacious, N. 2° 55′, E. 100° 49′	29.76	755.9	82	27.8	87	wnw.			1		2	wnw.						d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			68	20.0	79	nne.			1		0					1	nne.	blue sky.
H. M. S. Boadecia, Saldanha Bay, Cape Colony	29.81	757.2				wnw.			1		6							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.16	766.1	70	21.1	79	nne.			2		7	nne.						d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.45	773.4	42	5.6	75	ne.			3–0		10	nne.						overcast.
H. M. S. Comus, San Francisco, Cal	30.08	764.0	49.5	9.7	89	sse			1		10					4	wnw.	drizzling.
H. M. S Curacoa, Yokohama, Japan	29.76	755.9	47.5	8.6	69	calm			0		3							d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.82	757.4	63	17.2	57	w.			1		4	w.						d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	30.14	765.5	68	20.0	84	sse.			2–3		4	sse.						d. clouds.
H. M. S. Fawn, S. 25° 45′, E. 37° 09′	29.93	760.2	76.5	24.7	84	se.			2		4					2	se.	blue sky.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.88	758.9	58.5	14.7	84	nnw.			2		10							misty.
H. M. S. Heroine, N. 48° 10′ W. 8° 23′	29.46	748.3	45	7.2	84	nne.			3		8	nne.				4	nne	showery.
H. M. S. Iron Duke, N. 11° 51′, E. 111° 04′	29.75	755.6	77	25.0	95	wnw.			5–6		10	nw.				2–6	var.	d. clouds.
H. M. S. Kingfisher, S. 8° 42′ W. 79° 57′	29.93	760.2	68	20.0		se.			1		10	se.				2	se.	overcast.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	30.09	764.3	64.3	17.9	87	se.			2		7					2	s.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.86	758.4	61	16.1		n.			1							1	n.	d. clouds.
H. M. S. Magpie, N. 32° 44′ E. 129° 51′	30.20	767.1	49.3	9.6	66	nne.			2		4							misty.
H. M. S. Northampton, St. John Antigua, W. I.	30.02	762.5	81	27.2	74	ne.			4		3	ene.						d. clouds.
H. M. S. Rocket, S. 17° 12′, W. 73° 40′	29.93	760.2	73	22.8	95	se.			1		3					2-3	sw.	d. clouds.
H. M. S. Starling, N. 4° 12′, E. 5° 37′	29.85	758.2	81.7	27.6	97	w.			1		8							raining.
H. M. S. Superb, N. 35° 42′, E. 180° 39′ *	30.02	762.5	65	18.3	68	sw.			3		2	sswv.				3	sw.	d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.95	760.7	64	17.8	100	s.			1							2		overcast.
H. M. S. Sylvia, Sandy Point, Patagonia	28.98	736.1	48	8.9	71	w.			3		8							d. clouds.
H. M. S. Tourmaline, N. 16° 00′; E. 57° 00′	29.98	761.5				ene.			2		4	ne.						d. clouds.
H. M. S. Woodlark, N. 29° 06′ E. 50° 24′	30.02	762.5	62.5	16.9	72	nw.			5		7	nw.				4	nw.	squally.
H M. S. Zephyr, Chee-foo, China	30.57	776.5	23.5	— 4.7		nnw.			3-4		4	n.				4	ne.	d. clouds
Portuguese Naval																		
Tamega, Macao, China	30.02	762.4	71.6	22.0	74	nne.			2		4							d. clouds.
Swedish Naval.																		
Vanadis, N. 35° 24′, E. 19° 08′	30.00	761.9	65.5	18.6	66	ssw.			3		3							d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.05	763.3	44	6.7	67	n.	5	2.2			0			0	0			clear.
Navy Yard, Portsmouth, N. H.	29.86	758.4	24	— 4.4	?	ne.	5	2.2			10		ne.					snowing.
Naval Hospital, Yokohama, Japan*	29.79	756.7	42.5	5.8	42	calm			0		0			0	0			clear.
Adams, Sitka, Alaska*†	29.51	749.5	28	— 2.2	88	e.			3		2							fair.
Alaska, N. 37° 55′, W. 137° 33′	30.15	765.8	59	15.0	94	nnw.			1		2		nw.	0	0	sm'h	s.	fair.
Alliance, Hampton Roads, Va	29.82	757.4	48	8.9	?	wnw.			2		10			mod.	mod.			cloudy
Ashuelot, Nagasaki, Japan	30.17	766.3	49	9.4	77	n.			1		5		nnw.					fair.
Brooklyn, Keel Point, Patagonia	29.10	739.1	55	12.8	80	wnw.			8		8		wnw.	0	0	sm'h		fair.
Colorado, New York, N. Y.	29.83	757.7	35	1.7	?	calm	0	0			10		calm	0.55	14.0			foggy.
Enterprise, Norfolk, Va	29.84	757.9	51	10.6	100	w.			2		10					sm'h		cloudy.
Essex, Callao, Peru	29.86	758.4	65	18.3	83	calm			0		10							overcast.
Franklin, Norfolk, Va	29.81	757.2	50	10.0	93	ssw.	7	3.1			10			1.23	31.2			rainy.
Galena, Montevideo, Uruguay	29.88	758.9	09	20.6	79	nnw.			1		0					sm'h		clear.
Hartford, Sandy Point, Patagonia*	28.91	734.3	48	8.9	77	wsw.			1		17		w.	0	0	sm'h		cloudy.?
Independence, Mare Island, Cal	30.14	765.5	59	10.0	100	calm			0		10			0.3	8.			rainy.
Iroquois, Callao, Peru	29.95	760 7	63	17.2	94	calm			0		10							overcast.
Jamestown, Boston, Mass	29.87	758.7	33	0.6	100	nne.			2		10							sleeting.
Juniata, N. 35° 12′, W. 44° 40′*	30.49	774.4	66	18.9	66	n.			2		2		n.	0	0	long	n.	clear.
Kearsarge, Norfolk, Va	29.72	754 9	52	11.1	100	n.			1		10							cloudy.
Lackawanna, Callao, Peru*	29.90	759.4	64	17.8	89	var.			1		10							cloudy.
Lancaster, Naples, Italy*	29.60	751.8	56	13.3	93	sw.			3		10		sw.			sm'h		heavy rain.
Michigan, Erie, Pa	29.95	760.7	28	— 2.2	100	sw.			5		10							snowing.
Minnesota, New York, N. Y.	29.85	758.2	35	1.7	100	ne.	1	0.4			10							rainy.
Monocacy, Kobe, Japan	30.10	764.5	48	8.9	100	wnw.			2		10		calm					misty.
New Hampshire, Newport, R. I.	29.76	755.9	34	1.1	100	nne.			3		10		calm			mod	n.	rainy.
Nipsic, Lisbon, Portugal*	29.68	753.9	53	11.7	93	e.			2		10					sm'h		rainy.
Onward, Callao, Peru	30.04	763 0	62	16.7	94	n.			1		8		n.			long	w.	cloudy.
Palos, Tientsin, China*	30.69	779.5	16	— 8.9	100	calm			0		0							clear.
Pensacola, Callao, Peru*	29.83	757.7	61	16.1	94	n.	2	0.9			10			0	0	sm'h		misty.
Powhatan, Boston, Mass	29.83	757.7	29	— 1.7	100	n.			1		10							hazing.
Quinnebaug, Villefranche, France*	29.66	753.4	52	11.1	79	ssw.			2		10		ssw.			sm'h		cloudy.
Ranger, N. 16° 09′, W. 94° 22′	29.89	759.2	81	27.2	70	n.			6		2		calm			chop	n.	clear.
Richmond, Kobe, Japan*	30.05	763 3	46	7.8	85	wnw.			2		8		nw.	0	0			fair.
Saratoga, Newport, R. I.	30.69	779.5	31	— 0.6	100	ne.			3		10			light	light	sm'h		drizzling.
St. Louis, League Island, Pa	30.03	762 7	35	1.7	100	w.			2		10			0.22	5.6			cloudy.
Swatara, Hampton Roads, Va*	29.66	753.4	56	10.0	93	nw.			2		10		nw.			sm'h		light rain.
Tennessee, Fort Monroe, Va	29.83	757.7	49	9.4	85	wnw.	6	2.7			10			3.25	82.6			cloudy.
Vandalia, Hampton Roads, Va*	29.81	757.2	56	10.0	93	w.			1		10							cloudy.
Wabash, Boston, Mass	29.86	756.9	29	— 1.7	100	n.	5	2.2			10		n.					snowing.
Wachusetts, Mare Island, Cal*	30.03	762.7	50	10.0	100	var.			1		10		calm	0	0	sm'h		misty.
Wyandotte, Washington, D. C	30.25	768 3	43	0.1	83	nw.			3		2		nw.	0.4	10.			fair.
Yantic, Hampton Roads, Va	29.86	758.4	50	10.0	86	nw.			3		10							overcast.
Merchant Marine.																		
S. S. Grecian, N. 12° 00′, W. 26° 35′*	29.97	761.2	76	25.0	78	ne.			5		9		ne.	0	0	high	ne.	cloudy.
S. S Nova Scotian, N. 45° 58′ W. 55° 19′	29.95	760 7	35	1.7		s.			2		10		ese.			slt	se.	cloudy.
S. S. Scandinavian, N. 42° 39′ W. 69° 49′	29.79	756.7	38	3.3		n.			3		10		n.	rain	rain	high	s.	rain & snow
S. S. British Crown, N. 42° 10′, W. 63° 49′†	29.75	755.6	40	7.8		e.			3		10			13 h'r	13 h'r	h'vy	sw.	heavy rain.
S. S. Indiana, N. 49° 47′, W. 38° 01′			42	5.6	83	ese.			4		10		se.	h'vy	h'vy	mod.	se.	rainy.
S. S. Lord Clive, N. 39° 40′, W. 70° 00′*†	29.65	753.1				ne.			3		10			16 h'r	16 h'r	str'g	sw.	raining.
S. S. Ohio, N. 41° 44′ W. 64° 44′			58	14.4	94	nne.			2		10					mod.	ssw.	rainy.
S. S. Pennsylvania, Philadelphia, Pa†	29.74	755 4	35	1.7		wsw.			2		10		w.					rainy.
S. S. Stella, N. 49° 16′ W. 9° 20′	29.51	749.5	42.8	6		ese.			4		7		e.	6 h'r	6 h'r	4	e.	squally.
S. S. Anchoria, N. 55° 16′ W. 16° 07′†	29.86	756.9				e.			0–1		1		e.	0	0	sm'h		clear.
S. S. Bolivia, Glasgow, Scotland*†	29.70	754.4	32	0.0	79	calm			0		10			0	0			
S. S. Elysia, N. 39° 59′ W. 58° 05′ †	30.15	765.8	64	17.8		sw.			5		10		sw.	sh'rs	sh'rs	mod.	sw.	squally.
S. S. Ethiopia, N. 47° 55′ W. 44° 56′	30.05	763.3	35.5	1.9		w.			2		10		w.	snow	snow	mod.	wnw.	overcast
S. S. Galatia, N. 23° 10′, E. 37° 10′†	30.11	764.8	78	25.6	78	nne.			2		0			0	0	cross		clear.
S. S. Ailsa, N. 17° 58′, W. 76° 46′†	30.14	765 5	82	27.8	87	ne.			2		5		ne.	0	0	sm'h		fair.
S. S. Alvo, Kingston, Jamaica, W. I.	29.92	760.0	78	25.6		ese.			3–4		5	es	e.	0	0			fine.
S. S. Antillas, N. 24° 40′, W. 73° 30′ †	29.95	760.7	80	20.7		ene.			2		1		e.	0	0	mod.	ne.	clear.
S. S. Carroll, Halifax, N. S*†	29.95	760.7	40	4.4		se.			2		10		se.	rain	rain			cloudy.
S. S. Inchkeith, S. 39° 05′, E. 75° 20′	29.65	753.1	51	10.6	73	wsw.			7-9		5							showery.
Mertola, N. 44° 49′, W. 11° 20′	29.49	749.0	50.3	10.2	79	se.			3		10							overcast.
Ptolmey, N. 42° 30′, W. 58° 45′	29.92	760.0	51.5	10.8	93	sse.			3		9							overcast.
S. S. Mexico, N. 23° 04′, W. 111° 19′†	29.92	760 0	75	23.9	77	ne.			3		5		nne.			long	wnw.	fair.
S. S. Bothnia, N. 51° 02′, W. 14° 32′	29.64	752.8	54	12.2	74	ne.			4		5		n.	12 h'r	12h'r	cf'd		showery
S. S. Gallia, N. 46° 15′, W. 38° 00′	30.14	765.5	52	11.1	42	nw.			5		5		wnw.	sh'rs	sh'rs	light	nw.	fair.
S. S. Marathon, N. 35° 56′, E. 14° 51′	29.96	761 0	73	22.8		w.			0		4		w.	8 h'r	8 h'r	r'gh	w.	cloudy.
S. S. Pavonia, N. 42° 21′ W. 58° 12′*	29.93	760.2	56	13.3	94	wnw.			1		9		w.	10 h'r	10 h'r	mod.	sw.	cloudy
S. S. Scythia, N. 42° 41′, W. 54° 49′	29.99	761.7	55.5	13.1		wsw.			2		10		w.	5 h'r	5 h'r	cf'd	sw.	overcast.
S. S. Colina, N. 51° 10′, W. 36° 38′†	29.99	759.4				wnw.			2		1		w.	½ h'r	½ h'r	mod.	wnw.	clear.
S. S. France, N. 44° 08′, W. 57° 28′†	29.91	759.7	40.4	4		e.			1		k		e.	rain	rain	hv'y	e.	rainy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE—Continued.																		
S.S. Arizona, N. 51° 10′, W. 24° 56′	29.72	754.9	45	7.2		e.			4		10		ne.	sh'rs	sh'rs	sm'h		overcast.
S. S. Wisconsin, N. 44° 50′ W. 54° 55′	29.83	757.7	37	2.8		e.			3		10		se.	hail	hail	rg'h	wnw.	drizzling.
S. S. Bohemia, N. 40° 50′, W. 67° 30′†	29.73	755.1				wnw.			1		10		wnw.			long	wnw.	drizzling.
S. S. Cimbria, N. 50° 35′, W. 16° 20′	29.59	751.6	44.2	6.8		ene.			4		3		ne.	1 h'r	1 h'r	sm'h	e.	fair.
S. S. Frisia, N. 43° 36′, W. 54° 43′	29.99	761.7	47	8.3		w.			2–5		10		w.	rain	rain	r'gh	wsw.	raining.
S. S. Gellert, N. 50° 43′, W. 16° 53′	29.62	752 3	48	8 9		ene.			6		6		ene.	o	o	mod.	ene.	cloudy.
S. S. Silesia, Hamburg, Germany†	29.70	754.4	3 5	1.4	95	w.			3		10		w.	snow	snow			overcast.
S. S. Vandalia, N. 48° 14′, W. 36° 35′	30.11	764.8	4 0	8.3	95	nw.			5		8		nw.	o	o	mod.	nw.	cloudy.
S. S. Wieland, N. 45° 27′, W. 49° 48′	30.06	763 5				e.			3		10		ese.	rain	rain	high	se.	rain & snow.
S. S. City of Berlin, N 42° —′, W. 63° 30′	29.79	750.7	47	8.3	85	e.			4		10			24 h'r	24 h'r	mod.	sw.	drizzling.
S. S. Mentmore, N. 48° 11′, W 30° 11′ *†	29.91	759 7				n.			7		5		n.	o	o	hv'y	nw.	threatening
S. S. Hevelius, N. 50° 20′, W. 3° —′*†	29.75	755.6	48	8.9		e.			3		8		ene.	o	o	sm'h		hazy.
S. S. Sirius, N. 0° 10′, W. 29° 20′*	29.88	758.9				se.			2		2		se.	4 h'r	4 h'r	mod.	se.	clear.
S. S. Bulgarian, N. 48° 21′ W. 40° 34′ *	30.16	766.1				wnw.			5		8		nw.	3 h'r	3 h'r	light	wnw.	cloudy.
S. S. Colorado, N. 28° 45′, W. 79° 42′†	30.05	763.3	76	24.4		nw.			5		8		nw.	o	o	mod.	nw.	cloudy.
S. S. Rio Grande, N. 24° 30′. W. 83° 04′ †	30.09	764.3	76	24.4		se.			2		0			o	o	long	e.	clear.
S. S. San Marcos, N. 25° 39′, W. 84° 00 ′	30.16	766.1	74	23.3		calm			0		0					sm'h		clear.
S. S. Archimede, New York, N. Y †	29.70	754.4	50	10.0	r	w.			1		9		w.	light	light			rain & fog.
S. S. Hermod, N. 49° 38′, W. 10° 00′†	29.62	752.3	46.4	8.0		e.			2		8		se.	4 h'r	4 h'r	mod.	nne.	threatening.
S. S. John Hopkins, Boston, Mass*†	29.94	760.5	30	—1.1		n.			2		0?			light	light			overcast.?
S. S. Glenapp, N. 5° 20′, W. 29° 00′ †	29.84	757.9				ese.			3		9		ne.	5 h'r	5 h'r	high	ne.	raining.
S. S. Glenfyne, Pernambuco, Brazil*†	29.61	752.1				e.			2		1		e.	o	o			clear.
S. S. Toronto, N. 51° 11′, W. 20° 54′			45.0	7.2		ene.			6		2		ne.	o	o	short	ene.	clear.
S. S. Chalmette, N. 34° 32′, W. 70° 08′ †	29.83	757.7	58	14.4		wsw.			4		10		wsw.	4 h'r	4 h'r	r'gh	var.	cloudy.
S. S. Lone Star. N. 27° 32′. W. 87° 06′ †	30.09	764.3	67	19.4		n.			5		10			1 h'r	1 h'r	mod.	n.	cloudy.
S. S. New York, N. 25° 03′. W. 80° 15′†	30.15	765.8	75	23 9		calm			0		0					sm'h		clear.
S. S. Denmark, London, Eng †	29.72	754.9	30	—1.1		var.			1		10			o	o			dense fog.
S. S. Egypt, N. 50° 53′, W. 14° 45′*†	29.65	753.1				ene.			4		2		ene.	o	o	mod.	ene.	clear.
S. S. Erin, N. 41° 17′, W. 66° 21′	29.77	756.1	47	8.3		ese.			3		10		nw.	14 h'r	14 h'r	h'vy	sw.	rainy.
S. S. Greece, N 50° 30°, W 1° 32′*†	29.70	754.4	39	3.9		ese.			3		3		ese.	o	o	sm'h		fair.
S. S. Helvetia, Liverpool, Eng	29.07	753.6	28	—2.2		n.			1		10			o	o			foggy.
S. S. Holland, N. 40° 40′, W. 65° 01′			62	16.7		sw.			7		10		sw.	S h'r	S h'r	high	sw.	light rain.
S. S. City of Alexandria, N. 30° 30′, W. 79° 27′ †	30.11	764.8	71	21.7		w.			5		0		n.	o	o	small	w.	cloudy.
S. S. City of Merida, N. 19° 11′, W. 97° 08′*†	30.00	762.0	78.8	26.0		n.			3		10		n.	o	o	light	n.	cloudy.
S. S. Amsterdam, N. 48° 20′, W. 41° 10′*	30.15	765 8	44	6.7		w.			4							5	ww.	snowy.
S. S. Alene, N. 10° 15′ W. 79° 19′†	29.82	757.4	81	27.2		nne.			4							chop		hazy
S. S. Knickerbocker, N. 36° 15′, W. 74° 52′	29.80	756.9	53	11.7		wnw.			9								se.	
S. S. Olbers, N. 20° 30′, W. 59° 00′*†	30.02	762.5	77	25.0		e.			5-6								ene.	clear.
S. S. State of Nebraska, N. 44° 30′, W. 54° 20′†	29.92	760 0	42	5.6		ene.			2-3							con.		raining.
S. S. Western Texas, N. 37° 30′ W. 75° 27′			46	7.8		nnw.			1								ne.	threatening
S. S. America, N. 40° 41′ W. 63° 15′ *	29.91	759.7	54.0	12.2	93	sw.			6		9		sw.;ne.	o	o	r'gh	sw.	covered.
S. S. Braunschweig, N. 45° 50′ W. 8° 03′	29.54	750.3	50.0	10.0	72	nw.			2-3		4		wnw.	4 h'r	4 h'r	long	wsw.	fair.
S. S. Donau, N. 49° 45′. W. 10° 09′	29.59	751.6				ene.			3		10		e.	4 h'r	4 h'r	mod.	ese.	cloudy.
S. S. Elbe, N. 41° 26′, W. 62° 00′	29.87	758.7	59.9	15.5		sw.			6		6		sw.	1 h'r	1 h'r	r'gh	sw.	hazy.
S. S. Gen. Werder, N. 46° 06′ W. 43° 01′	30.13	765.3	43.7	6.5		w.			3		10		w.	rain	rain	sm'h	w.	cloudy.
S. S. Hohenstaufen, N. 5° 43′. W. 29° 08′	29.91	759.7	77.0	25.0		var.			2-4		10		se.	shr's	shr's	light	ne.	covered.
S. S. Neckar, N. 41° 51′, W. 66° 54′	29.86	758.4	51.5	10.8	100	s.			3		7		sw.	8 h'r	S h'r	cross	sw.	clearing.
S. S. Ohio, N. 41° 52′, W. 55° 04′	30.07	763.8				sw.			6		5?		wsw.	o	o	long	wsw.	cloudy?
S. S. Rhein, N. 48° 33′, W. 30° 43′	29.82	757.4				nnw.			6		5		nnw.	rain	rain	long	nnw.	fair.
S. S. Strassburg, S. 22° 53′, W. 40° 53′	29.97	761.2	78.0	25.6	93	se.			2-3		5		se.	o	o	sm'h	s.	fair.
S. S. Werra, N. 51° 04′, E. 1° 20′*†	29.78	756.4	37.4	3.0		ne.			1-2		10		nne.	snow	snow	mod.	ne.	hazy.
S. S. Belgic, N. 44° 13′. W. 163° 18 †	29.53	750.0	54	12.2	93	e.			6		2		ne.	3 h'r	3 h'r	hv'y	e.	clear
S. S. Coptic, N. 36° 41′ E. 154° 14′	29.81	757 2	50.5	10.3	65	w.			6		6		w.	rain	rain	h'vy	w.	raining.
S. S. Oceanic, Hong Kong, China*	30.02	762.5	63	17.2	72	ne.			2		2		ne.					clear.
S. S. Willamette, Seattle, Wash. Ter †	29.95	760.7	42	5.6	83	sse.			3		8		s.	0.90	22.9	long	wnw.	cloudy.
S. S. Oregon, N. 45° 23′, W. 12° 15′†	30.03	762.7	47	8.3	70	wnw.			3		5		sw.			mod.	w	squally.
S. S. Ancon, N. 36° 32′ W. 122° 04′†	30.04	763.0	54	12 2	87	nw.			5		5		nw.				wnw.	fair.
S. S. City of Chester, San Francisco, Cal*†	30.09	764.3	50	10.0	72	nw.			2		10					mod.		cloudy.
S. S. Dakota, Esquamalt, B. C			40	4.4	73	se.			6		10		se.	6 h'r	6 h'r	sm'h		cloudy.
S. S. Orizaba, N. 36° 20′, W. 123° 53′*†	30.07	763.8	55	12.8	80	wsw.			7		8		sw.			h'vy	sw.	cloudy.
S. S. State of California, N. 43° 36′ W. 124° 20′ *†	30.03	762.7	47	8.3		w.			3		5		nw.	o	o	short	ssw.	squally.
S. S. Australia, S. 9° 14′, W. 108° 45′	29.81	757.2	78	25.6	95	nne.			3		10		nne.	o	o	mod	ne.	clear.
S. S. City of New York, Sydney, N. S. W †	29.98	761.5	70	21.1	66	sw.			0		0			o	o			clear.
S. S. City of Pekin, Yokohama, Japan †	29.88	758.9	41	5.0	91	ne.			0		0			o	o	sm'h		clear.
S. S. City of Rio de Janeiro Panama, Panama †	29.89	759.2	79	26.1	82	calm			1		0			o	o	sm'h		fine.
S. S. City of Tokei, N. 30° 05′, W. 153° 42′†	29.86	758.4	66	18.9		se.			6		10		se.	light	light	h'vy	se.	squally.
S. S. Colima, N. 15° 36′, W. 96° 48′ †	29.89	759.2	74	23.3	86	ne.			3		1		ne.	o	o	sm'h	se.	clear
S. S. Grenada, N. 18° 58′, W. 104° 29′ †	29.83	757.7	70	24.4	82	nnw.			1		0			o	o	sm'h	wnw.	clear
S. S. Zealandia, S. 32° 11′, W. 172° 10′	30.27	768 8	67	19.4	89	sse.			3		1		sse.			sm'h		fine.
S. S. Muriel, Martinique, W. I. †	29.98	761.5	80	26.7		ene.			5		8					sm'h		raining.
S. S. Caracas, La Guayra, Venezuela†	30.04	763 0	78.5	25.8	89	calm			0		2		ene.	2 h'r	2 h'r	h'vy	nne.	fair.
S. S. Claudius, Port Limon, Costa Rica †	29.98	761.5				sw.			1		4		se.	2 h'r	2 h'r	long	ne.	fair.
S. S. Belgenland, N. 44° 27′, W. 48° 36′	30.09	764.3	45	7.2	84	s.			5		10		ssw.	10 h'r	10 h'r			cloudy.
S. S. Nederland, N. 49° 54′, W. 21° 32′			46	7.8		ne.			6		10		ne.	18 h'r	18 h'r	mod.	ne.	overcast.
S. S. Pennland, Sandy Hook, N. J	29.86	758.4	42	5.6	100	n.			2		10			10 h'r	10 h'r	sm. n	n.	misty
S. S. Rhynland, Antwerp, Belgium	29.79	756.7	32	0.0		calm			0		10			o	o			hazy
S. S. Switzerland, N. 50° 02′, W. 9° 09′†	29.63	752.6				sse.			2		10		sse.	5 h'r	5 h'r	long	wnw.	cloudy.
S. S. Waesland, Antwerp, Belgium	29.81	757.2	35	1.7	90	ssw.			4		10		sw.	o	o			misty
S. S. Leerdam, N. 43° 34′ W. 51° 50′ †	30.02	762.5	60	15.6	79	w.			4		10		wsw.	3 h'r	3 h'r	mod.	w.	cloudy.
S. S. P. Caland, N. 41° 03′, W. 64° 25′	29.72	751.9	59.5	15.3	98	ssw.			6		10		ssw.			o	ssw.	raining.
S. S. Schiedam, N 48° 09′ W. 31° 37′	29.87	758.7	51.6	10.9	77	nnw.			5		3		nne.	2 h'r	2 h'r	cross	nnw.	fair.
S. S. W. A. Scholten, Rotterdam, Holland	29.87	758 7				e.			3				se.	snow	snow			light snow.
S. S. State of Georgia, N. 54° 42′, W 18° 08′†	29.76	755.9	44	6.7		ne.			3		5		ne	o	o	sli't	nne.	showery.
S. S. Iowa, N. 51° 19′, W. 14° 04′*†	29.77	756.1	47	8.3		ne			4		2		ne.	o	o	mod.	ne.	clear.
S. S Celtic, N. 46° 58′. W. 45° 36′†	30.07	763.8	44	6.7		sw.			2		10			3 h'r	3 h'r	mod	ww.	overcast.
S. S. Lepanto, N. 50° 36′, E. 0° 13′			36	2.2		w.			5		10		sw.	o	o	sli't	w.	overcast.
S. S. Salerno, off Spurn Head, Eng						n.			2					o	o			foggy.
S. S. Catherine Whiting, Delaware Bay †	29.84	757 9	64	17.8		nnw.			5					rain	rain			
S. S. Saxon, Philadelphia, Pa†	29.86	758.4	38	3.3		nw.			6		10							
MISCELLANEOUS.																		
Bg. Aleira, N. 19° 00′, W. 74° 02′	30.06	763.5	82	27.8		e.			1				ne.	o	o	h'vy	n.	clear.
Bk. Alpha, N. 46° 43′ W. 6° 10′†	29.59	751.6	48	8.9		nw.			2		8		nw.	4 h'r	4 h'r	long	w.	raining.
Schr. Annie Lewis, Tampico, Mexico †	30.31	769.9	66	18.9		n.			4		8		n.	o	o	h'vy	n.	cloudy.
S. Annie M. Law, N. 20° 36′, E. 121° 11′*†	29.90	759.4	73	22.8		ene.			4		10		ene.	14 h'r	14 h'r	high	e.	drizzling.
Bk. Anna Thormann, S. 20° 51′, E. 52° 24′*	30.18	766.6	72.9	22.7	75	ese.			5		4 k		se.	o	o	mod.	ese.	fair.
S. S. Antonio Lopez, N. 20° 53′, W. 62° 33′*	30.17	766.3	79	26.1	78	e.			5		3			1 h'r	1 h'r	mod.	e.	fair.
Bgt. Arthur, N. 35° 40′, W. 38° 08′ *†	30.44	773 2				nnw.			4				nnw.	shr's	shr's	high	nnw.	
Schr. Anna Holton, N. 37° 31′, W. 72° 42′†	29.85	758.2	56	13.3		wnw.			5		10		w.	3 h'r	3 h'r	r'gh	ssw.	drizzling.
Bk. Champion, N. 21° 13′, W. 51° 50′			75.0	23.9		ene.			4		2		ene.	¼h'r	¼h'r	mod.	ene.	fair.
Schr. Chas. F. Heyer, N. 34° 53′, W. 75° 15′	29.82	757.4	63	17.2	100	w.			3		10 d		w.	1.27	32.3	r'gh	sw.	misty.
Br Clara M. Goodrich, Key Francis, W. I*†	30.01	762.2				sw.			1		5?		ne.	o	o			clear.?
Bkt. David Preston, Pensacola, Fla			62.0	16.7		ene.					0			o	o			
Bk. E. L. Pettingill, N. 10° 00′, W. 120° 30′*†	29.90	759.4	80	26.7		ese.			5		8		se.	shr's	shr's	r'gh	se.	rainy.
Schr. Edith R. Seward, Baltimore, Md*†	29.90	759 4	40	4.4		nw.			2		2			o	o			clear.
S. E. J. Spicer, N. 45° 32′, W. 29° 40′*	29.83	757.7	57	13.9		w.			7		5		n.	h'vy	h'vy	mod	n.	squally.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Eliza Barss, N. 36° 40′, W. 72° 00′†	29.67	753.6				W.			7		8		W.	4 h'r	4 h'r	mod.	sw.	cloudy.
S. Enoch Train, N. 35° 20′, W. 75° 00′						nw.			5		10		n.	rain	rain	sm'h		overcast.
Bk. Essex, Muscat, Arabia*†	30.04	763.0	78	25.6		n.			3					0	0			fine.
Schr. F. E McDonald, Rockland, Maine†	29.89	759.2	24	— 4.4		ne.			5					4 h'r	4 h'r			
S. S. Foscolia, New York, N. Y						wsw.			2		8			0	0			dull.
Bk. Freya, N. 20° 11′, W. 72° 07′			84	28.9		ese.			4		1		e.	0	0	mod	e.	fine.
S. J. W. Glidemeister, N. 46° 37′, W. 33° 15′ *	29.93	760.2	46.4	8	46	nnw.			6–7		6 ks		nnw.	shr's	shr's	6	nw.	squally.
Bg. George, N. 35° 50′, W. 59° 12′*†	30.29	769 4				sw.			4		10		sw.	light	light	short	sw.	cloudy.
Bk. Godeffroy, S. 53° 44′, W. 62° 26′ †	28.71	729.2				W.			5		6		w.	hv'y	hv'y	mod.	w.	fair.
Bk. Great Surge n, S. 19° 59′, E. 83° 12′ *†	30.08	764.0	78	25.6		ese.			4		2		ese.	0	0	mod.	ese.	fair.
Bk. Grey Eagle, N. 4° 35′, W. 27° 15′*†	29.80	756.9				e.			5		5		e.	1 h'r	1 h'r	light	ene.	fair
Bk. Hattie G. Mcfarland, New York, N. Y †	29.91	759.7	46	7.8		W.			1		10		W.	snow	snow			stormy.
Schr. Hattie Weston, N. 34° 10′, W. 74° 40′*†	29.90	759.4	70	21.1		ssw.			7		10		w.	4 h'r	4 h'r	hv'y	ssw.	cloudy.
Bk. Heinrich & Tonio, N. 54° 43′, E. 5° 35′ *†	29.57	751.1	41.5	5.3	100	wsw.			3		7		wsw.	4 h'r	4 h'r	sm'h		clearing.
Schr. Isabel Alberto, N. 26° 19′, W. 79° 29′ †	30.03	762.7				wsw.			2		3		wsw.	0	0	slt	s.	cloudy.
Schr. James Slater, N. 39° 21′, W. 74° 24′†	29.75	755.6	40	4.4		nw.			6		10		nw.	20 h'r	20 h'r	mod.	s.	raining.
Scer. Jennie N. Huddell, Savannah, Ga †	30.10	764.5	54	12.2		wnw.			1		2			0	0			fair.
Bk. Joseph A. Ropes, N. 0° 41′, E. 51° 57′*†	29.91	759.7	82	27.8	83	nne.			2		2			0	0	sm'h		fair.
Bkt. Josephine, N. 30° 38′, W. 41° 09′ †	30.36	771.1	72	22.2	58	ene.			5		2		ene.	2 h'r	2 h'r	long	n.	fair.
Bk. Julia H, N. 42° 26′, W. 40° 00′	30.25	768.3	54.8	12.7	74	nw.			6		10			2 h'r	2 h'r	6	con	raining.
S. S. J. W. Wilson, Key West, Fla †	30.06	763.5	72	22.2		ene.			2		0			0	0			clear.
Light House Tender, Laurel, Key West, Fla †	30.07	763.8	74	23.3		ne.			1		2		ne.	0	0	sm'h		clear.
Bk. Louise Adelaide, off Annapolis, Md			42	5.6		nw.			2				nw.	light	light			cloudy.
Bg. L. & W. Armstrong, N. 23° 30′, W. 60° 00′*†	30.36	771.1				e.			5		1		ese.	0	0	mod.	ese.	fine.
S. S. Madrid, N. 38° 03′, W. 65° 16′*†	30.02	762.5	68	20.0		ssw.			6		10			0	0	r'gh	ssw.	gloomy.
S. S. Malabar, Marseilles, France †	29.62	752.3				ne.			6		10		n.	0	0			cloudy.
Bk. Matilda C. Smith, N. 29° 54′, W. 70° 07′ *†	30.28	769.1				ssw.			6		8		W.	sq'll	sq'll	mod.	se.	threatening.
Schr. Minnie A. Bonsall, May Port, Fla †	30.08	764.0	66	18.9		nnw.			1				nnw.					cloudy.
S. Minnie N. Gerow, N. 31° 04′, W. 40° 31′*†	30.32	770.1				nne.			6		10		ne.			long	n.	fair.
S. M. P. Grace, S. 23° 07′, W. 130° 35′ *†	30.10	764.5	76	24.4		var.			4		3		e.	light	light	long	s.	fair.
Bg. Myrtle, Bear River, Nova Scotia*†	29.70	754.4				ne.			2		10		ne.	snow	snow			misty.
Bg. O. C. Clary, Demerara, British Guiana, S. A.*†	29.94	760.5	80	26.7	91	e.			3		10			0	0			
S. Orealia, N. 20° 12′, E. 91° 52′*	29.94	760.5				nnw.			2		2		nnw.			sm'h		fine.
Bk. Ottawa, N. 37° 28′, W. 61° 48′*	30.10	764.5	66	18.9		ssw.			5–6		10		ssw.	0	0	mod.	ssw.	cloudy.
S. Paramita, San Francisco, Cal †	30.07	763.8	51	10.6		W.			2		hz			0	0			
Bk. Pilgrim, N. 12° 51′, W. 47° 30′*†	29.98	761.5				ne.			5		1		ne.	2 h'r	2 h'r	long	ne.	clear.
S. S. Radnorshire, N. 9° 28′, E. 109° 25′*†	29.80	756.9				n.			6		8		n.	1 h'r	1 h'r	h'vy	n.	cloudy.
S. S. Raleigh, Une, N. Y*†	29.70	754.4	34	1.1		nne.			2		10			0	0			
Bk. Rebus, N. 40° 26′, W. 44° 56′ *	30.07	763.8	64	17.8		wsw.			5		4		wsw.	0	0	long	nw.	fair.
S. St. Francis, N. 30° 35′, W. 134° 50′†	30.39	771.9	63	17.2		ne.			3		7		ne.	4 h'r	4 h'r	long	nnw.	misty.
Bk. Scud, N. 21° 53′, W. 63° 00′*†	30.12	765.0				ene.			6		1		ene.	0	0	short	ene.	
Bk. Southern Belle, Flushing, Netherlands*†	29.70	754.4	45	7.2		wsw.			3		10							foggy.
S. S. Sunbeam, N. 18° 15′, W. 75° 43′	30.01	762.2	82	27.8	83	ene.			4		1		ne.	0	0	2	e.	d. clouds.
S. S. Strathleven, N. 5° 55′, E. 85° 35′	29.86	758.4	80.8	27.1	96	nne.			2		4		ne.	0	0	3	con.	d. clouds.
Schr. T. S. McLellan, N. 29° 22′, W. 74° 00′ *†	30.31	769 9	69	20.6		s.							nne.				nne.	
U. S. F. C. S. S. Fish Haw, Washington, D. C †	30.04	763.0	42	5.6	83	nw.			2		5		nw.	0	0			fair.
Bk. Usko, N. 55° 19′ W. 6° 05′*	29.62	752.3	40	4.4		ssw.			2		5?		se.	hail	hail	mod.	w.	clear.?
Bk. Vincenzo Accame, N. 35° 58′. W. 47° 15′†	30.47	773.8	68.0	20.0		var.			2		0			0	0			clear.
Schr. Walter L. Plummer, N. 36° 40′, W. 73° 30′*†	29.80	756.9				W.			5		10			5 h'r	5 h'r	r'gh	sw.	clearing.
Bk. Wandering Jew, Montevideo, Uruguay†	29.93	760.2	69	20.6		ne.			3		2		n.	0	0			clear.
Bk. Warden Law, Tocapilla, Peru, S. A*.	30.06	763.5				ne.			2		4		n.			sm'h	sw.	fair.
S. Wm. Woodbury, N. 46° 02′, W. 19° 18′*	29.28	743.7	54	12.2		se.			9		8		se.			cross	se.	covered.

International Chart I. December 11, 1882. Isobars and Isotherms.



By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 12, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.88	758.9	61.5	16.4	77	ne.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair...	Malaterre.
Algiers	.....	.....	29.83	757.7	68.0	20.0	58	wsw.	.....	.....	2	.....	0	.....	.....	0.016	0.4	clear.....	Thève.
La Calle	.....	.....	29.92	760.0	66.6	19.2	61	wnw.	.....	.....	5	.....	4	.....	.....	0.020	0.5	cloudy.....	Fonfrède.
Tunis	.....	.....	29.95	760.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.99	761.7	62.6	17.0	92	s.	.....	.....	3	.....	1	.....	.....	0	0	very fair.....	Pérès.
Tebessa	.....	.....	30.04	762.9	57.9	14.4	55	nw.	.....	.....	2	.....	2	.....	.....	0	0	fair.....	Dognon.
Geriville	.....	.....	.....	.....	61.2	16.2	43	s.	.....	.....	2	.....	3	.....	.....	0.079	2.0	pretty fair...	Lonchamp.
Laghouat	.....	.....	30.07	763.8	55.8	13.2	77	sw.	.....	.....	3	.....	1	.....	.....	0	0	very fair.....	Abraham.
Biskra	.....	.....	30.04	762.9	62.2	16.8	35	se.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	Malau.
Australian.																			
Melbourne, Victoria	29.82	757.4	29.91	759.7	59.9	15.5	82	sw.	4	1.8	.....	.....	1	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.32	744.7	29.88	759.0	43.3	6.3	93	sw.	.....	.....	3	.....	10	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.20	741.6	29.99	761.7	37.6	3.1	87	ene.	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.03	737.3	29.92	759 9	45.7	7.6	91	calm	.....	.....	0	.....	9 8	.....	.....	0.276	7.0	.....	Julius Mikolik.
Gratz	28.67	728.2	29.96	761.0	39.2	4.0	82	sw.	.....	.....	1	.....	10	.....	.....	0.484	12.3	.....	Andreas Rospini.
Hermannstadt	28.45	722.7	29.91	759.6	46.0	7.8	79	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.44	722.4	29.83	757.8	32.0	0.0	90	ne.	.....	.....	1	.....	10	.....	.....	0	0	gloomy.....	The Staff.
Lemberg	28.99	736.3	30.01	762.3	36.3	2.4	91	se.	.....	.....	1	.....	10	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.75	755.6	29.86	758.5	52.2	11.2	78	se.	.....	.....	1	.....	5	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.41	746.9	29.87	758.7	51.4	10.8	65	ne.	.....	.....	1	.....	7	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.57	751.0	29.85	758.2	48.2	9.0	87	se.	.....	.....	1	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.79	756.7	29.89	759-3	52.3	11.3	77	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Royal Academy.
Vienna	29.19	741.3	29.93	760.1	36.5	2.5	80	calm	.....	.....	0	.....	7	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.58	751.3	29.68	753.9	21.2	— 6.0	90	w.	6	2.7	.....	.....	1	.....	.....	0.160	4.1	misty.....	W. Roswell
Armagh, Observatory	29.39	746.3	29.65	753.1	23.6	— 4.7	93	ssw.	1	0.4	.....	.....	10	.....	.....	.....	.....	foggy.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.67	753.6	27.1	— 2.7	99	ese.	9	4.0	.....	.....	9	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	29.13	739.9	29.68	753.9	30.9	— 0.6	85	nne.	.....	.....	.....	.....	10	.....	.....	.....	.....	foggy.....	Thomas Mackereth.
Bradford, Yorkshire	29.30	744.2	29.69	754.1	21.8	— 5.7	77	ne.	.....	.....	1	.....	10	.....	.....	0.10	2.5	foggy.....	Mc Landsborough & Preston
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	80.0	26.7	74	ne.	.....	.....	4	.....	3	.....	.....	.....	.....	d. clouds.....	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	31.6	— 0.2	90	s.	.....	.....	0.0	.....	10	.....	.....	.....	.....	snowing.....	John McLaren.
Chatham, School M. E	29.60	751 8	29.74	755.4	31.2	— 0.4	99	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	misty.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.24	742 7	29.47	748.5	40.4	4.7	75	ese.	.....	.....	5	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Fort Napier, Natal	27.42	696.5	29.03	752.6	97.2	36.2	27	se.	.....	.....	1	.....	2	.....	.....	.....	.....	blue sky.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	87.0	30.6	72	n.	.....	.....	3	.....	2	.....	.....	.....	.....	blue sky.....	Sergt. John Robinson.
Gibraltar, Mediterranean	29.66	753.4	29.71	754.6	59.0	15.0	97	w.	.....	.....	3	.....	10	.....	.....	.....	.....	raining.....	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.48	748 8	29.69	754.1	24.8	— 4.0	99	nnw.	.....	.....	1	.....	.....	.....	.....	.....	.....	foggy.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.54	750.3	29.72	754 9	30.1	— 1.1	94	ese.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Guernsey	29.25	742.9	29.55	750.6	34.3	1.3	76	se.	.....	.....	2	.....	10	.....	.....	.....	.....	raining.....	A. Collenette, F. M. S
Kew, Observatory	29.67	753.6	29.71	754.6	30.6	— 0.8	85	e.	15	6.7	.....	.....	10	.....	.....	.....	.....	threatening.	The Staff.
Leicester, Museum	29.44	747.8	29.71	754.6	30.0	— 1.1	100	se.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	29.70	754.4	29.77	756.1	61.8	16.6	97	w.	.....	.....	2	.....	3	.....	.....	.....	.....	blue sky.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.13	765.3	30.17	766.3	76.0	24.4	85	ne.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds.....	C. S. Duncombe
Oscott, St. Mary's College	29.13	739.9	29.67	753.0	22.4	— 5.3	98	ene.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast.....	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.45	748.0	29.68	753.9	29.7	— 1.3	93	e.	.....	.....	3	.....	10	.....	.....	.....	.....	misty.....	The Staff.
Plymouth	29.43	747.5	29.51	749.5	37.7	3.2	81	e.	.....	.....	3	.....	10	.....	.....	.....	.....	gloomy.....	John Merrifield.
Sandwick Manse, Orkneys	29.56	749.3	29.61	752.1	30.6	— 0.8	100	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	d. clouds.....	Rev. C. Clouston, L L. D.
Scutari Cemetery, Turkey	29.87	758.7	29.93	760.2	62.8	17.1	96	se.	.....	.....	1	.....	9	.....	.....	.....	.....	d. clouds.....	W. H. Lyne.
Sheffield	29.44	747.8	29.74	755.4	25.0	— 3.9	100	calm	.....	.....	0	.....	10	.....	.....	0.420	10.7	misty.....	W. F. Cooper.
Silloth Rectory	29.65	753.1	29.68	753.9	23.6	— 4.7	84	e.	.....	.....	1	.....	2	.....	.....	0	0	d. clouds.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.70	754.4	26.0	— 3.3	78	ne.	5	2.2	.....	.....	10	.....	.....	.....	.....	misty.....	I. New.
Strathfield Turgiss	29.45	748.0	29.68	753.9	31.4	— 0.3	98	se.	.....	.....	1	.....	10	.....	.....	.....	.....	gloomy.....	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.44	747.8	29.46	748.3	41	5.0	91	e	.....	.....	6	.....	10	.....	.....	.....	.....	raining.....	W. Newcombe.
Valencia, Observatory	29.51	749.5	29.53	750.0	37.6	3.1	81	n.	7	3.1	.....	.....	2	.....	.....	.....	.....	misty.....	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.68	753.9	29.72	754.9	23	— 5.0	77	n.	27	12.1	.....	0	10 n	.....	n.	0.525	13.4	threatening.	H. J. Caudall, C. E
Chatham, N. B*	29.89	759.2	29.96	761.0	9	—12.8	83	nw.	8	3.6	.....	5 k	0	.....	.....	0.01	0.3	clear.....	G. A. Blair.
Father Point, Quebec*	30.12	765 0	30.14	765.5	8	—13.3	69	n.	8	3.6	.....	.....	5 8	calm	calm	0.03	0.8	clearing.....	J. McWilliams.
Fort Garry, Manitoba*	28.78	731.0	29.66	753.4	12	—11.1	83	ne.	8	3.6	.....	8 k	10 n	.....	ne.	0.50	12.7	light snow...	James Stewart.
Halifax, N. S*	29.05	753.1	29.79	756.7	22	— 5.6	90	nw.	15	6.7	.....	8 e	0	n.	.....	0.770	19.6	cloudy.....	A. Allison.
Kingston, Ontario*	29.96	761.0	30.33	770.4	6	—14.4	87	ne.	2	0.9	.....	.....	0	w.	.....	0.02	0.5	fair.....	A. P. Knight, M. A
Montreal, Quebec*	30.02	762.5	30.25	768.3	9	—12.8	100	sw.	1	0.4	.....	2 k	10 8	.....	.....	0.25	6.3	cloudy.....	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.55	750.6	30.35	770.9	7	—21.7	55	e.	0	2.7	.....	.....	5 k8	e.	e.	0.05	1.3	fair.....	Rev. R. Mosley.
Port Dover, Ontario	29.56	750.8	30.30	769.6	20	— 6.7	100	calm	0	0	.....	.....	10 c8	.....	.....	0.02	0.5	cloudy.....	H. Morgan.
Port Stanley, Ontario	29.60	751.8	30.29	769.4	23	— 5.0	92	s.	1	0.4	.....	0	10 n	.....	sw.	inap.	inap.	cloudy.....	M. Payne.
Quebec, Quebec*	29.84	757.9	30.19	766.8	5	—15.0	76	nw.	.....	.....	3	0	2 8	.....	nw.	0.20	5.1	fair.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.82	757.4	30.35	770.9	— 8	—22.2	.....	calm	0	0	.....	.....	0	.....	.....	inap.	inap.	clear.....	W. H. McIntyre.
Saugeen, Ontario*	29.49	749.0	30.27	768.8	13	—10.6	100	se.	7	3.1	.....	0	10 8	.....	.....	0.30	7.6	cloudy.....	
St. Andrews, N. B	29.94	760.5	29.09	761.7	11	—11.7	79	nw.	0	2.7	.....	.....	0	.....	.....	0.03	0.8	clear.....	
Sydney, C. B*	29.22	742.2	29.28	743.7	30	— 1.1	100	nw.	25	11.2	.....	.....	10 n	.....	.....	0.57	14.5	light snow.	T. C. Hill, C. E
Toronto, Ontario*	29.93	760.2	30.35	770.9	13	—10.6	80	nw.	5	2.2	.....	.....	10 8	.....	.....	0	0	cloudy.....	Magnetic Observatory.
Yarmouth, N. S*	29.87	758.7	29.94	760.5	24	— 4.4	76	n.	4	1.8	.....	.....	10 8	.....	n.	0.05	16.5	cloudy.....	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.71	729.2	30.22	767.6	14.0	—10.0	100	s.	.....	.....	1	.....	10 8	.....	.....	0.210	5.3	overcast.....	Wm. Wylie
St. Johns, Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.76	755 9	29.79	756.7	70.0	21.1	88	sw.	8.6	3.8	.....	0	5 k	.....	.....	0	0	light haze...	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper 0–10	Clouds. Amount and kind. Lower 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	OBSERVERS
Chinese (*Sub-series*).																			
Sung-shu-chwang	24.56	623.9	.....	.....	17.6	— 8.0	.....	nne.	.....	.....	1	.....	0	.....	.....	0	0	clear	Mission, S. J.
Tchang-kia-tchouang	30.47	773.8	30.58	776.6	17.6	— 8.0	86	se.	1.3	0.6	.....	0	0	.....	.....	0	0	clear	
Zi-Ka-Wei, near Shanghai	30.53	775.5	30.56	776.2	32.0	0.0	65	nnw.	11.6	5.2	.....	0	2 k	.....	.....	0.004	0.1	fair	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.78	756.4	29.83	757.6	35.1	1.7	88	wsw.	18	8	.....	.....	10	.....	.....	.....	.....	foggy	Oversergent Fischer.
Fance	29.77	756.1	29.79	756.6	34.5	1.4	94	wsw.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.92	759.9	29.96	761.0	27.0	— 2.8	59	se.	.....	.....	2	.....	9	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.97	761.2	29.99	761.7	28.6	— 1.9	.....	se.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	
Jacobshavn, Greenland	29.94	760.5	29.99	761.7	28.0	— 2.2	.....	se.	.....	.....	6	.....	5	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	30.06	763.6	30.11	764.7	26.1	— 3.3	91	ne.	.....	.....	7	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.55	750.6	29.59	751.5	27.7	— 2.4	81	n.	9	4	.....	.....	3	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.61	752.0	29.70	754.4	33.3	0.7	96	sw.	.....	.....	4	.....	1	.....	.....	.....	.....	.....	Loearer Oesterbol.
Upernavik, Greenland	29.93	760.3	29.98	761.5	18.0	— 7.8	.....	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.05	737.9	29.72	754.8	39.2	4	77	sse.	.....	.....	1	.....	kn	.....	.....	0	0	.....	M. Labroue, Director.
Alençon, Normal School	29.10	739.1	29.65	753.1	30.2	— 1	96	s.	.....	.....	1	.....	kn	.....	.....	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.42	747.3	29.69	754.1	30.9	— 0.6	83	ese.	.....	.....	1	c	0	.....	.....	0	0	.....	M. Fénéon, Command't.
Avignon, Normal School	29.70	754.3	29.78	756.3	50.7	10.4	68	ese.	.....	.....	1	.....	5	.....	se.	0	0	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.15	740.5	29.73	755.2	34.2	1.2	93	s.	.....	.....	1	o	8 kn	.....	sw.	0	0	very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.45	747.9	29.72	755.0	32.5	0.3	81	e.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Frère Eugène Marie.
Besançon, Normal School	28.81	731.7	29.71	754.7	36.7	2.6	93	nne.	.....	.....	1	c	0	ne.	.....	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.32	744.7	29.59	751.5	38.8	3.8	67	se.	.....	.....	2	.....	10	.....	.....	0	0	covered	M. Rayet, Director.
Bourges, Normal School	29.10	739.2	29.67	753.5	37.9	3.2	80	e.	.....	.....	1	.....	k	.....	e.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.21	741.8	29.45	748.0	34.2	1.2	81	se.	.....	.....	2	.....	10	.....	se.	0	0	.....	M. de Kermaréc, Dir.
Caen, Normal School	29.52	749.9	29.60	751.9	30.0	— 1.1	72	nw.	.....	.....	1	.....	10	.....	nw.	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.34	745.2	29.66	753.4	35.6	2.0	93	calm	.....	.....	0	.....	0	.....	.....	0	0	clear	M. Jadot, Director.
Charleville, Normal School	29.22	742.1	29.75	755.6	32.0	0	89	ne.	.....	.....	1	1	1	se.	ne.	0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.28	718.2	29.64	752.8	45.7	7.6	48	sse.	.....	.....	2	2 ck	0	.....	.....	0	c	¼ covered	M. Allnard, Director.
Cluny, Normal School	28.83	732.3	29.70	754.3	38.3	3.5	78	s.	.....	.....	2	.....	2	.....	s.	0.020	0.5	.....	M. de Villemontée, Dir.
Commercy, Normal School	28.83	732.3	29.76	756.0	32.0	0	90	e.	.....	.....	1	cs	.....	e.	e.	0	0	.....	Dr. Goulet, Director.
Gap, Normal School	27.29	693.1	29.88	759.0	35.6	2	78	n.	.....	.....	1	.....	7	.....	w.	1.18	30.	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.68	728.5	29.82	757.3	47.7	8.7	72	se.	.....	.....	1	.....	9	.....	se.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	28.99	736 4	29.80	756.8	32.0	0	78	sw.	.....	.....	1	cs	0	w.	.....	0	0	.....	M. Allard, Director.
Guéret	28.03	712.0	29.63	752.5	41.0	5	71	sw.	.....	.....	1	.....	cn	.....	sw.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.21	741.9	29.49	749.1	35.6	2	93	se.	.....	.....	2	.....	5	.....	se.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.00	736.5	29.50	750.7	52.2	11.2	54	e.	.....	.....	1	2 cs	0	.....	.....	0	0	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.38	746.3	29.48	748.9	34.5	1.4	89	e.	.....	.....	1	.....	10	.....	.....	0.012	0.3	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.65	727.8	29.73	755.1	41.9	5.5	68	sse.	.....	.....	2	.....	2	.....	sse.	0	0	slightly cl'dy	M. André, Director.
Mans, Normal School	29.34	745.1	29.66	753 3	31.5	— 0.3	89	sse.	.....	.....	3	.....	10	.....	.....	0	0	covered	M. Piboën, Director.
Marseille, Observatory	29.50	749.4	29.78	756 3	46.8	8.2	85	ese.	.....	.....	1	.....	10	.....	sse.	0.150	3.8	.....	M. Stephan, Director.
Mt. Louis	24.47	621.5	29.31	744.5	29.7	— 1.3	62	sw.	24.2	10.8	.....	.....	7	w.	.....	0	0	.....	M. Carré for Dr. Fines.
Montpellier, Normal School	29.60	751.7	29.76	755.8	43.9	6.6	82	w.	.....	.....	2	.....	5	se.	.....	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	28.94	735.1	29.75	755.7	32.7	0.4	86	nnw.	.....	.....	1	ck	0	.....	.....	0	0	.....	M. Hasse, Director.
Nantes, Observatory	29.43	747.5	29.59	751.6	36.3	2.4	75	se.	.....	.....	1–2	o	9 k; kn	.....	wsw.	0	0	.....	M. Larocque, Director.
Perpignan, Observatory	29.59	751.6	29.71	754.5	43.3	6.3	82	sw.	5.6	2.5	.....	.....	10	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.80	528.4	.....	.....	21.6	— 5.8	.....	w.	.....	.....	2	.....	5	.....	w.	0	0	cloudy	M. Vaussenat.
Privas, Normal School	28.71	729.1	29.80	756.8	41.0	5	84	s.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Taillen.
Puy de Dôme Obs'y, Summit	24.72	627.9	.....	.....	24.8	— 4.0	100	ssw.	.....	.....	2	.....	2	.....	.....	0.020	0.5	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.52	749.9	29.56	750.7	38.8	3.8	83	sse.	.....	.....	2	.....	8	.....	sw.	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.28	743.6	29.50	749.2	33.4	0.8	93	ssw.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Brotier, Director.
Rodez, Normal School	27 50	698.6	29.69	754.2	38.8	3.8	60	e.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Seger, Director.
Rouen, Normal School	29.66	753.3	29.71	754.5	33.1	0.6	88	se.	.....	.....	1	.....	10	se.	.....	0	0	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	31.1	— 0.5	100	ene.	.....	.....	2	.....	5	se.	.....	0	0	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.53	750.0	29.69	754.2	32.2	0.1	83	se.	.....	.....	1	.....	10	.....	.....	0	0	.....	M. Renou, Director.
Toulouse, Observatory	28.96	735.5	29.67	753.6	43.0	6.1	72	se.	.....	.....	3	.....	5	w.	.....	0	0	cloudy	M. Baillaud, Director.
Tours	29.45	748.1	29.63	752.6	33.8	1.0	81	e.	.....	.....	1	.....	2	sw.	ene.	0	0	slightly cl'dy	M. de Tastes.
Versailles, Observatory	29.18	741.2	29.67	753.7	31.6	— 0.2	85	se.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.45	748.1	29.60	751.9	49.3	9.6	66	ne.	4.0	1.8	.....	3 ck	0	wsw.	.....	0.004	0.1	.....	M. Cartier, Director.
German.																			
Ansbach	28.36	720.4	29.87	758.7	32.4	0.2	82	se.	.....	.....	2	.....	10	se.	.....	0	0	.....	Prof. Jnedt.
Bamberg	28.97	735.8	29.81	757.1	35.6	2.0	82	calm	.....	.....	0	.....	6	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.72	755.0	29.91	759.7	33.1	0.6	80	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.46	748.2	29.99	701.7	34.0	1.1	83	calm	.....	.....	0	.....	10	.....	.....	c.480	12.2	.....	Royal University Obs'y.
Carlsruhe	29.38	746.2	29.84	757.8	29.1	— 1.6	88	nw.	.....	.....	1	.....	10	sw.	.....	0	0	.....	Albert Senz.
Cassel	29.11	739.3	29.82	757.4	24.4	— 4.2	96	s.	.....	.....	1	.....	10	s.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.50	749.2	29.87	758.8	25.0	— 3.9	89	ne.	.....	.....	1	.....	10	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.35	720 0	29.83	757.6	34.2	1.2	76	e.	.....	.....	2	.....	10	e.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.82	757.4	29.91	759.6	29.3	— 1.5	94	sw.	.....	.....	3	.....	10	.....	.....	0	0	foggy	E. Preller.
Kiel	29.86	758.5	29.88	758.9	32.5	0.3	88	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.52	749.8	29.96	761.0	29.8	— 1.2	84	nne.	.....	.....	1	.....	10	.....	.....	0	0	foggy	H. Leppig, Asst.
Magdeburg	29.74	755 4	29.94	760.5	30.7	— 0.7	86	se.	.....	.....	1	.....	10	.....	.....	0.004	0.1	foggy	Weather Observatory.
Memel	29.87	758 8	29.92	760.0	35.6	2.0	93	ssw.	.....	.....	5	.....	10 8	.....	.....	.....	.....	.....	Issermann.
Munich	27.96	710.2	29.80	759.9	30.4	— 0.9	82	e.	.....	.....	2	.....	10	.....	.....	0.280	7.1	.....	Central Station.
Neufahrwasser	29.93	760.2	29.95	760.6	35.6	2.0	87	sw.	.....	.....	1	.....	9	.....	.....	0.161	4.1	.....	A. Lothes.
Neustadt, Palatinate	29.28	743.6	29.80	756.8	28.8	— 1.8	.....	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Dicknether.
Stuttgart	28.86	733.0	29.79	756.6	31.1	— 0.5	96	n.	.....	.....	1	.....	10	.....	.....	0.008	0.2	.....	Prof. Dr. Schoder.
Wustrow	29.89	759.1	29.91	759.7	32.9	0.5	92	sw.	.....	.....	5	.....	10	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.45	747.9	29.84	757.8	57.4	14.1	.....	s.	.....	.....	3.0	.....	10	.....	.....	0.205	5.2	covered	Schmidt & Wourtisch.
Indian.																			
Kurrachee	29.97	761.2	30.02	762.5	76.5	24.7	86	wsw.	14.0	6.3	.....	.....	7	sw.	.....	0	0	d. clouds	
Deesa	29.47	748.4	29.94	760.4	85.0	29.4	41	sw.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.90	759.6	29.94	760.5	78.6	25.9	70	nnw.	14.0	6.3	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.06	712 8	29.90	759.4	85.9	29.9	18	ene.	7.0	3.1	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.68	753.9	29.96	761.1	79.7	26.5	49	ene.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Belgaum	27.37	695.3	29.88	759.0	83.0	28.3	16	e.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.20	741.8	29.98	761.4	61.6	16.4	72	calm	0	0	.....	.....	3	.....	.....	0	0	d. clouds	
Roorkee	29.04	737.5	29.97	761.3	62.8	17.1	57	sw.	.....	.....	.....	.....	7	w.	.....	0	0	.....	
Agra	29.38	746.2	29.95	760.8	75.2	24.0	34	nw.	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.88	733.6	29.94	760.3	77.7	25.4	35	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.60	726 4	29.98	761.4	73.6	23.1	48	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.56	750.8	29.95	760.6	69.3	20.7	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.62	752.3	29 94	760.6	61.9	16.6	74	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.76	756.0	29.96	760.9	68.2	20.1	66	w.	1.9	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.89	708.5	29.97	761.2	62.5	16.9	65	nnw.	4.5	2.0	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.94	760 5	30.02	762 6	71.9	22.2	62	w.	1.0	0.4	.....	.....	0	.....	.....	0	0	d clouds	
Calcutta, Alipore	29.90	759.5	29.92	760.0	69.8	21.0	85	wnw.	1.0	0.4	.....	.....	1	.....	.....	0	0	blue sky	
Dhubri	29.81	757.1	29.93	760.2	71.2	21.8	77	calm	0.6	0.3	.....	.....	0	.....	.....	0	0	d. clouds	
Chittagong	29.82	757.5	29.92	759.8	73.2	22.9	83	w.	1.8	0.8	.....	.....	3	.....	.....	0	0	d. clouds	
Sibsagar	29.61	752.0	29.95	760.8	65.8	18.8	89	ne.	1.0	0 4	.....	.....	10	w.	w.	0	0	d. clouds	
Jeypore	28.51	724.1	29.97	761.1	77.2	25.1	47	nw.	2.4	1.1	.....	.....	4	nw.	.....	0	0	.....	
Italian.																			
Udine	29.47	748.5	29.89	759.1	49.5	9.7	66	e.	0.7	0.3	.....	.....	2	.....	.....	0.350	8.9	.....	Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	29.39	746.6	29.93	760.2	37.0	2.8	98	nw.	3.1	1.4			10			0.398	10.1		Prof. Schiapparelli.
Padua	29.78	756.5	29.90	759.4	45.1	7.3	96	ssw.	1.3	0.6			10			0.087	2.2		Prof. Dott. Lorenzoni.
Moncalieri	28.97	735.8	29.91	759.7	38.5	3.6	97	ne.	0	0			4			0.142	3.6		Prof. F. F. Denza.
Genoa	29.66	753.4	29.86	758.4	46.4	8.0	80	ne.	7.4	3.3			10	se.		0.429	10.9		Prof. G. M. Garibaldi
Mondovi	27.94	709.7	29.92	760.0	39.4	4.1	61	wsw.			2		6			0.120	3.2		Prof. D. C. Bruno.
Pesaro	29.89	759.1	29.94	760.4	45.0	7.2	93	n.	9.8	4.4			5			0	0		Prof. Luigi Guidi.
Florence	29.64	752.9	29.90	759.5	48.2	9.0	81	wsw.			2		10	sw.		0	0		Prof. Costantino Pittei.
Leghorn	29.74	755.3	29.82	757.5	48.6	9.2	88	ene.	4.9	2.2			10			0.205	5.2		Prof. P. Monte.
Rome	29.74	755.3	29.91	759.8	52.9	11.6	73	n.	0	0			1			0.240	6.1		Prof. P. Tachini.
Lecce	29.66	753.3	29.91	759.8	56.7	13.7	67	n.	3.1	1.4			3			0.591	15.0		Prof. C. de Giorgi
Cosenza	29.03	737.3	29.93	760.3	54.7	12.6	77	wsw.	3.1	1.4			5	sw.		0.402	10.2		Prof. D. Conti.
Cagliari	29.69	754.2	29.89	759.1	57.7	14.3	63	se.			2		5	sw.		0.024	0.6		Prof. A. Pacinotti.
Palermo	29.71	754.6	29.96	761.0	59.0	15.0	55	wsw.	3.1	1.4			5	nw.		0.067	1.7		Prof. G. Cacciatore.
Syracuse	29.89	759.3	29.94	760.4	57.7	14.3	67	wnw.	4.3	1.9			3	wnw.		0.118	3.0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.41	746.9	29.93	760.3	54.1	12.3	76	nne.	0	0			10	ne.		0.528	13.4		Prof. F. Brioschi.
Stelvio	21.86	555.2			18.0	— 7.8	94	ne.			4		10			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.88	555.8			23.4	— 4.8	70	e.			2		10			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.92	759.9	29.95	760.7	28.1	— 2.2	98	nw.			4		10 n		nw.	0.020	0.5	snowing	Hattori.
Awomori	29.90	759.4	29.94	760.5	23.8	— 4.6	53	wnw.	11.9	5.3			10 n			0.093	2.4	snowing	K. Ogawa.
Hakodate	29.89	759.3	29.91	759.6	19.5	— 6.9	77	w.	12.0	5.4			9			0.080	2.0		
Hamamatsu	29.96	761.0	29.99	761.7	40.7	4.8	74	calm			0	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					38.3	3.5	75	nne.	9.4	4.2			10ck;ks		nw.	0	0	overcast	
Kanazawa	29.96	760.9	30.06	763.6	37.9	3.3	68	wnw.	21.4	9.6			10			0.345	8.8	overcast	S. Endo.
Kioto	29.90	759.4	30.09	764.3	38.4	3.6	66	nw.	7.1	3.1		0	4 ck;s			0.003	0.1	fair	M. Tojima.
Nagasaki, I. M. Obs'y	30.11	764 7	30.32	770.2	34.1	1.2	37	nne.	14.7	0.6		0	1 s			0	0	clear	S. Takehayashi.
Niigata	29.94	760.5	29.98	761.5	31.5	— 0.3	97	w.	1.9	0.8			10 n			1.190	30.2	snowing	M. Morita.
Nobiru	29.94	760.5	29.96	760.9	24.0	— 4.4	94	nnw.	7.5	3.3		0	7 s;ks			0	0	fair	H. Midzushina.
Numazu	29.85	758.2	29.89	759.1	44.8	7.1	66	e.			4		10ks;s		w.	0	0	covered	R. Kaneda.
Osaka	30.07	763 8	30.09	764.2	39.2	4.0	68	nw.	12.1	5.4		2 ck	3 s;cs	w.	w.	0	0	fair	H. Omura.
Sapporo					13.5	—10.3	74	s.	2.4	1.1		0	0			0.010	0.2	clear	
Tokei Obs'y, Yeddo	29.84	757.9	29.92	759.9	41.0	5.0	65	nne.	4.4	2.0			10 s			0	0	overcast	The Staff.
Wakayama	30.04	763.0	30.10	764.5	41.7	5.4	61	nw.	10.8	4.8		4 ck	5 ck	w.	nw.	0	0	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.90	759.4	30.09	764.3	79.9	26.6	67	e.	15.0	6.7		3 cs;c	6 ks,ks	wnw.	e.	0.21	5.3	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.73	602.7	29.95	760.7	51.4	10.8	79	calm	0	0		3 c	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.39	619.5	30.22	767.6	47.8	8.8	86	nnw.			1	8 c	2 k;s	sw.		0	0	very cloudy	Prof. M. Leal.
Mazatlan	29.73	755.1	29.99	761.7	70.5	21.4	87	e.	1.6	0.8		5 cs	0	sw.		0	0	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	588 2	30.34	770.7	44.2	6.8	76	calm	0	0		0	0			0	0	fine	The Staff.
Morelia	24.45	621.0	30.36	771.0	41.5	5.3	73	se.			2	0	0			0	0	blue sky	M. Tena, M. D.
Pabellon, Aguascalientes	24.00	609.5	30.11	764.7	47.5	8.6	82	calm	0	0		4 c	2 k	s.	sw.	0	0	⅜ cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.44	595.4	30.17	766.2	56.1	13.4	32	calm	0	0		0	4			0	0	½ cloudy	Prof. P. Spina.
Zacatecas	22.50	573.0	30.27	768.6	49.0	9.6	56	ne.	4.0	1.7		0	4 s		sw.	0	0	⅜ cloudy	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.80	756.8	29.80	756.8	31.1	— 0.5		ese.			4					0	0		
Groningen	29.82	757.3	29.87	758.7	31.5	— 0.3		s.			2					0.012	0.3		
Helder	29.84	758.0	29.84	758.0	30.9	— 0.6		sse.			2					0	0		
Hellevoetsluis	29.81	757.2	29.81	757.2	28.2	— 2.1	87	ese.			2					0	0		
Utrecht	29.80	759.9	29.85	758.1	31.5	— 0.3	83	sse.			2		5			0	0	cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.39	746.5	29.45	748.1	34.2	1.2	78	sse.	7	3			10			0.071	1.8		
Brono	29.49	749.0	29.53	750.0	35.6	2.0	73	se.	9	4			10			0.208	6.8		
Christiania	29.34	745 3	29.49	749.1	34.5	1.4	93	s.	7	3			10			0.102	2.6		
Gjæsvær	29.81	757.2	29.84	757.8	35.4	1.9		ese.			4		10						
Lodingen	29.66	753.3	29.71	754.5	32.0	0.0	63	e.			2		3			0.004	0.1		
PORTUGUESE.																			
Angra, Azores	29.85	758.1	30.01	762.2	54.1	12.3	76	n.	9.8	4.4			3			1.085	27.5		Dr. J. A. Sampaio.
Campo Major	28.67	728.2	29.68	753.8	50.7	10.4	97	ssw.	6.3	2.8			10			0.551	14.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.74	755.3	29.82	757.5	64.0	17.8	50	wnw.	6.3	2.8			10			0.339	8.6		Capt. D. A. de Cunha.
Lisbon, Observatory	29.25	743.0	29.61	752.1	56.3	13.5	82	sw.	19.2	8.6			9			0.650	16.5		The Staff.
Ponta Delgada, Azores	29.91	759.8	29.98	761.6	57.6	14.2	58	nnw.	8.1	3.6			3	e.		0.224	5.7		
Saint Paul de Loando	29.68	753.8	29.88	758.9	76.8	24.9	90	nw.	1.8	0.8			4	sse.		0.189	4.8		
Serra da Estrella	24 79	629.6	29.58	751.2	34.7	1.5	91	sew.			4		10					rain & fog	
RUSSIAN.																			
Akmolinski	29.50	749 2	30.78	781.8	—19.7	—28.7	89	calm	0	0		0	0						Major K. Lasarew.
Archangel	30.35	771.0	30.37	771.5	28.0	— 2.2	92	s.	9	4			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.46	773.6	30.38	771.6	33.1	0.6	75	ese.	2	1			10 ks			0	0		Capt. Wisganow.
Barnaul	29.90	759.4	30.50	774.7	—27.6	—33.1	78	sw.	13	6			1			0	0		Meteorological Obs'y.
Bielosersk	30.01	762.3	30.51	775.0	28.4	— 2.0	100	se.	4	2			10 n			blank	blank	light fog	
Dorpat	29.82	757.3	30.07	763.7	34 3	1.3	100	se.	7	3			10 n			0	0		Observatory.
Ekaterinburg	29.81	757.2	30.93	785.6	— 8.5	—22.5	81	calm	0	0		1 cs	0			blank	blank	foggy	Meteorological Obs'y.
Elissawetgrad	29.79	750.6	30.26	768.6	33.1	0.0	90	ese.	9	4			10 n			0	0	heavy cld's	
Kasan	30.36	771.2	30.65	778.6	25.2	— 3.8	76	ese.	2	1			10						Observatory.
Kem	30.11	764.9			31.3	— 0.4	89	s.	18	8			10 ks			0	0	heavy cl'ds	
Kertch	30.09	764.3	30.11	764.8	39.4	4.1	93	ene.	4	2			10			0	0		Lagorio & Snetyrez.
Kieff	29.53	750.1	30.20	767.1	32.7	0.4	94	se.	4	2		cs	10ks;n						Observatory.
Libau	29.82	757.3	29.84	757.9	36.5	2.5	94	sse.			2		10			0.024	0.6		E. Quass.
Lugan	30.08	764.0	30.29	769.4	32.0	0.0	92	e.	9	4			10			0	0		Meteorological Obs'y.
Moscow	30.00	762.1	30.52	775.3	23.0	— 5.0	98	sse.	4	2			10 s			0	0		
Nikolaiev	30.11	764.8	30.19	766.7	39.7	4.3	97	ese.	13	6			10 n			0	0		Capt. Kurdakow.
Pekin, China	30.42	772.7	30.56	776.3	17.6	— 8.0	45	sw.	7	3		0	0						Physical Observatory.
Petrozavodsk	30.11	764.7	30.32	770.1	29.8	— 1.2	94	s.	11	5			10			0.004	0.1		Dr. Bergmann.
Pinsk																			
St. Petersburg	30.20	767.0	30.21	767.4	32.0	0.0	89	se.	20	9			10 n			0	0		Central Physical Obs'y.
Sevastopol	29.84	757.8	30.00	762.0	52.9	11.6	82	nw.	7	3		0	3 cs			0	0		
Semipalatinsk	29.91	759.8	30.69	779.4	—15.5	—26.4	84	w.	11	5			3			0.043	1.1		Major Lasarew.
Starol Bykhov	29.82	757.4	30.30	769.6	33.1	0.6	92	se.	18	8			10			0.010	0.4		
Tashkend, Laboratory	28.60	726.4	30.21	767.3	46.8	8.2	71	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.80	731.4	30.24	768.0	51.6	10.9	58	se.	7	3		0	0			0	0		Physical Observatory.
Tomsk																			
Vladivostock	30.23	767.8	30.30	769 5	5.4	—14.8	68	n.	4	2		0	0			0	0		
Warsaw	29.57	751.1	30.01	762.3	33.4	0.8	83	w.	4	2			10					heavy clouds	Astronomical Obs'y.
Wilna	29.03	752.6	30.06	763.6	37.8	3.2	95	sse.	4	2			10					heavy clouds	Berg, Assistant.
Yeniseisk	30.00	761.9	30.34	770.5	—18.0	—27.8	83	calm	0	0			0						M. O. Marks.
SCOTTISH.																			
Monach Lt.			29.61	752.1	40	4.4	91	sse.			4	5	3	s.		0	0	d. clouds	J. Youngclause
North Unst			29.57	751.3				n.			2	2	2	w.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.61	752.1	29.72	754.8	52.2	11.2	70	w.	1.0	0.7			0			0	0	¼ covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.73	755.1	29.79	756.6	52.0	11.1	63	se.	6.7	3.0		3	2	nw.		0	0	cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.69	678.0	29.71	754.6	40.1	4.5	83	s.	8.3	3.7			9			0	0	almost cov.	Domingo Martin.
Madrid, Royal Obs'y	27.52	699.1	29.83	757.6	36.9	2.7	88	ne.	4.3	1.9			10			0.189	4.8	covered	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	29.63	752.7	29.76	756.0	46.8	8.2	97	sw.	1.3	0.6		5	5	se.		0.039	1.0	covered	Olayo Diaz, Director.
Oviedo	28.55	725.1	29.41	746.9	53.2	11.8	50	s.	23.3	10.4		4 k	0	calm		0	0	fair	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.39	721.1	29.27	743.5	49.6	9.8	86	sse.	31.8	14.2			8			0.898	22.8	raining	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.69	754.2	29.75	755.6	77.2	25.1	92	ne.	2.2	1.0			10 n			0.197	5.0	light rain	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.69	754.1	29.79	756.6	55.2	12.9	99	se.	8.0	3.6			10		s.	1.314	33.4	raining	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.99	761.8	30.08	764.1	78.8	26.0	89	e.	14.8	6.6		1 cs	2 k	e.	e.	0.008	0.2	clear	Manuel Maese.
Tuguegarao, Philippine Id's	29.69	754.2	29.83	757.6	71.7	22.1	87	nnw.	21.5	9.6		0	7 ks		nne.	0.21	5.3	covered	José L. Yrastorza.
SWEDISH.																			
Hapsranda	29.93	760.1	29.97	761.1	30.9	— 0.6	96	s.			2		10			0.071	1.8		
Umea	29.79	756.6	29.84	757.9	31.3	— 0.4	96	sse.			2		10			0.161	4.1		
Hernoesand	29.65	753.2	29.71	754.5	35.6	2.0	82	se.			4		10			0.323	8.2		
Stockholm	29.43	747.6	29.61	752.1	36.0	2.1	94	ese.			2		10			0.020	0.5		
Wisby	29.60	751.7	29.65	753.2	36.3	2.4	96	ssw.			2		10			0.043	1.1	raining	
Sub-series.																			
Upsala	29.47	748.6	29.56	750.8	35.6	2.0	95	sse.	12.1	5.4			10			0.028	0.7		S. G. Fineman.
SWISS.																			
Geneva	28.35	720.2	29.83	757.6	38.5	3.6	65	e.			2		2			0	0	clear	The Observatory.
TURKISH.																			
Constantinople			29.97	761.2	61.2	16.2	50	ese.	10	4.5			4		sw.	0	0		The Observatory.
Valona			29.94	760.4	54.5	12.5		s.			1		5			0.63	16.	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.08	764.1	66.6	19.2	51	nw.			1	10 cs		sw.		0	0		Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.20	767.1	30.30	769.6	28.3	— 2.1	61	nw.	7	3.1			10 s		nw.	inap.	inap.	cloudy	J. G. Barnes.
Alpena, Michigan	29.47	748.5	30.18	766.6	23	— 5.0	88	s.	15	6.7			10 n			0.02	0.5	light snow	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.00	635.0	30.08	764.0	19	— 7.2	61	ne.	1	0.4		0	0			0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.16	689.9	30.18	766.6	— 5	—20.6	65	sw.	3	1.3		0	0			0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.09	738.9	30.32	770.1	32.5	0.3	64	nw.	6	2.7		0	0			0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.32	770.1	30.33	770.4	27	— 2.8	64	w.	7	3.1		5 c	0			0.07	1.8	fair	Jas. M. Watson.
Augusta, Georgia	30.20	767.1	30.40	772.1	32	0.0	78	nw.	2	0.9		0	0			0	0	clear	John Healy.
Baltimore, Maryland	30.33	770.4	30.38	771.6	33	0.6	68	nw.	6	2.7		7 cs	hz.	w.		0	0	fair	Geo W Felger.
Barnegat, New Jersey	30.27	768.8	30.29	769.4	30.0	— 1.1	82	w.	17	7.6		2 c	0			0.15	3.8	clear	G. A. Hill.
Behring Id., Behring Sea	29.35	745.5	29.37	746.2	33.7	0.9		e.	21	9.4			10 n			0.04	1.0	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.23	717.0	29.99	761.7	17	— 8.3	83	nw.	1	0.4		4 c	4 s			0	0	cloudy	A. Pritchard.
Benton, Fort, Montana	27.22	691.4	30.22	767.6	0	—17.8	72	ne.	2	0.9		0	7 ks			0	0	fair	S. Wheaton.
Bismarck, Dakota	27.95	709.9	29.96	761.0	5	—15.0	76	w.	12	5.4		0	0			0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	30.16	766.1	30.19	766.8	28	— 2.2	77	nw.	32	14.3		0	0			0.30	7.6	clear	J. T. Elker.
Boise City, Idaho	27.12	688.8	30.10	764.5	29	— 1.7	96	ne.	1	0.4			10 s			0.08	2.0	cloudy	B. E. Light.
Boston, Massachusetts	30.00	762.0	30.16	766.1	23.0	— 5.0	73	w.	13	5.8		0	0			0.28	7.1	clear	O. B. Cole.
Brownsville, Texas	29.96	761.0	30.01	762.2	64.5	18.1	92	s.	6	2.7			9 s		s.	0	0	cloudy	M. McCarty.
Buffalo, New York	29.53	750.0	30.33	770.4	22.2	— 5.4	85	e.	4	1.8		4 ck	5 s	w.	w.	inap.	inap.	cloudy	W. Finn.
Buford, Fort, Dakota	27.87	707.9	30.11	764.8	6	—14.4	100	w.	20	8.9			10 n		nw.	0.01	0.3	light snow	F. A. Mellen.
Burlington, Vermont	29.95	760.7	30.26	768.6	15.3	— 9.3	89	ne.	7	3.1			10 n		n.	0.04	1.0	light snow	G. C. Schaeffer.
Cairo, Illinois	29.76	755.9	30.18	766.6	38.8	3.8	64	s.	11	4.9		0	0			0	0	clear	W. H. Ray.
Cape Henry, Virginia	30.38	771.6	30.40	772.1	36	2.2	69	n.	6	2.7		0	3 s			0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.34	770.6	30.37	771.6	34.0	1.1	78	nw.	28	12.5		5 cs	0			0.05	1.3	fair	W. E. Smith.
Cape Mendocino, California	29.40	746.7	30.08	764.0	44	6.7	76	nw.	6	2.7			10 s		nw.	0.20	5.1	cloudy	J. J. McLean
Cedar Keys, Florida	30.21	767.3	30.23	767.8	49	9.4	71	ne.	9	4.0		0	2 ks		w.	0	0	clear	F. W. Mixer.
Champaign, Illinois	29.17	740.9	30.04	763.0	35.3	1.8	58	s.	20	8.9			10 s		s.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.28	769.1	30.34	770.6	43	6.1	83	n.	7	3.1		0	0			0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.47	748.5	30.36	771.1	31.0	— 0.6	68	nw.	3	1.3		0	fg.			0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.49	749.0	30.35	770.9	28.0	— 2.2	88	calm	0	0		4 cs	fg.			0	0	fair	B. L. Goulding.
Cheyenne, Wyoming	23.75	603.2	30.03	762.7	25.0	— 3.9	76	sw.	12	5.4			10 s			0	0	cloudy	E. McGovern.
Chicago, Illinois	29.23	742.4	29.99	761.7	35.1	1.7	69	s.	9	4.0			10 s		calm	0	0	threatening	J. Mitchell.
Chincoteague, Virginia	30.36	771.1	30.38	771.6	31	— 0.6	68	nw.	5	2.2		5 c	3 ks	nw.		0.02	0.5	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.58	751.3	30.28	769.1	30	— 1.1	78	e.	2	0.9		0	1 s		sw.	0	0	clear	R. B. Watkins.
Cleveland, Ohio	29.56	750.8	30.34	770.6	18.3	— 7.6	95	s.	8	3.6			10 s			inap.	inap.	cloudy	J. B. Newlin.
Coleman City, Texas	28.12	714.2	30.02	762.5	47	8.3	93	sw.	8	3.6		0	6 s			0	0	fair	L. Dorman.
Columbus, Ohio	29.40	746 7	30.31	769.9	28	— 2.2	77	s.	5	2.2		0	9 s		sw.	0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	27.99	710 9	30.01	762.2	49.4	9.7	86	s.	20	8.9		c	4 s			0	0	fair	J. McGlone.
Custer, Fort, Montana	26.68	677.7	30.08	764.0	18	— 7.8	58	n.	12	5.4		0	3 k			0	0	clear	W. B. Lamar.
Davenport, Iowa	29.23	742.4	29.94	760.5	41	5.0	57	s.	8	3.6			10 s			0	0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.18	639.6	30.12	765.0	45	7.2	80	calm	0	0		10 cs	0			0	0	cloudy	J. Williams.
Dayton, Washington T'y	28.02	711.7	29.85	758.2	41.2	5.1	52	sw.	10	4.5			10 s			0	0	cloudy	D. Moore.
Deadwood, Dakota	25.08	637.0	30.07	763.8	24	— 4.4	76	calm	0	0			10 s			0.08	2.0	cloudy	F. Willson.
Delaware Breakwater, Del.	30.38	771.6	30.40	772.1	30	— 1.1	78	w.	9	4.0		2 cs	0			inap.	inap.	clear	T. S. Townsend.
Denison, Texas	29.09	738.9	29.94	760.5	48.0	8.9	71	s.	18	8.0		0	4 s			0	0	fair	J. W. Byram.
Denver, Colorado	24.48	621.8	30.00	762.0	29.0	— 1.7	80	n.	3	1.3		0	5 s			0	0	fair	F. M. Neal.
Des Moines, Iowa	28.89	733.8	29.87	758.7	36	2.2	69	sw.	2	0.9		0	5 s		sw.	0	0	fair	F. W. Conrad.
Detroit, Michigan	29.52	749.8	30.28	769.1	32.0	0.0	88	se.	8	3.6			10 s			0.01	0.3	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.18	690.4	29.98	761.5	30	— 1.1	70	n.	15	6.5		0	8 s		n.	0	0	cloudy	V. P. Temple.
Dubuque, Iowa	29.09	738.9	29.86	758.4	39.3	4.1	65	s.	3	1.3		0	7 s		se.	0	0	fair	J. Harvey Smith.
Duluth, Minnesota	28.99	736.3	29.80	756.9	26	— 3.3	88	s.	1	0.4			10 s			0.23	5.8	cloudy	N. B. Conger.
Eagle Pass, Texas	29.23	742.4	30.07	763.8	45.0	7.2	83	calm	0	0		0	5 s			0	0	fair	F. Belford.
Eagle Rock, Idaho	25.16	639.1	30.08	764.0	29	— 1.7	80	sw.	18	8.0			10 s		sw.	0	0	cloudy	J. M. Clifford.
Eastport, Maine	29.94	760.5	30.01	762.2	13.0	—10.6	80	nw.	12	5.4		0	7 s		nw.	0.09	2.3	fair	D. C. Murphy.
Elliott, Fort, Texas	27 01	686.0	29.97	761.2	33	0.6	71	ne.	5	3.6		9 c	0	ne.		0	0	cloudy	W. J. Gundall.
El Paso, Texas	26 24	666.5	30.10	764.5	45.0	7.2	41	nw.	4	1.8		0	0			0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.55	750.6	30.32	770.1	27	— 2.8	77	sw.	6	2.7			10 s			0.22	5.6	cloudy	Peter Wood.
Escanaba, Michigan	29.21	741.9	29.93	760.2	32.5	0.3	90	se.	19	8.5			10 n		s.	0.06	1.5	light snow	George Heathcote.
Fredericksburg, Texas	28.23	717.0	30.05	763.3	58	14.4	100	sw.	12	5.4			10 s			0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.04	763.0	30.09	764.3	61	16.1	87	se.	10	4.5		8 cs	0	sw.		0	0	cloudy	E. O'C. Machernay.
Grand Haven, Michigan	29.34	745.2	30.05	763.3	28.0	— 2.2	77	se.	12	5.4			10 s		se.	0	0	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.28	642.1	30.16	766.1	40.5	4.7	67	n.	4	1.8		0	0			0	0	clear	Robert U. Lord.
Hatteras, North Carolina	30.36	771.1	30.38	771.6	42	5.6	73	n.	18	8.0		hz.	3 s			0	0	clear	R. M. Crawford.
Helena, Montana	25.59	650.0	29.97	761.2	21	— 6.1	87	calm	0	0		0	0			0.02	0.5	clear	N. C. Smith.
Henrietta, Texas	28.85	732.8	29.93	760.2	49	9.4	86	se.	11	4.9		0	2 s			0	0	clear	J. P. Sherry.
Huron, Dakota	28.40	721.3	29.94	760.5	25	— 3.9	70	nw.	2	0.9		0	3 s			0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.33	745.0	30.18	766 6	32	0.0	78	se.	9	4.0			10 s		se.	0	0	cloudy	O. Schutze.
Indianola, Texas	30.00	762.0	30.03	762.7	65.1	18.4	89	se.	4	1.8			10 s		se.	0	0	cloudy	I. A. Reed.
Jacksboro, Texas	28.70	729.0	29.94	760.5	49	9.4	71	s.	12	5.4		0	0			0	0	clear	D. J. Carr.
Jacksonville, Florida	30.22	767.6	30.27	768 8	44	6.7	83	nw.	2	0.9		0	fg.			0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.44	697.0	30.14	765.5	5	—15.0	54	nw.	6	2.7		0	0			0	0	clear	A. Schneider.
Keokuk, Iowa	29.20	741.7	29.91	759.7	40.5	4.7	60	s.	8	3.6		0	hz.			0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.10	764.5	30.12	765.0	70.0	21.1	94	ne.	5	2.2		3 c	2 s	w.		0	0	fair	R. H. Paxton.
Kittyhawk, North Carolina	30.39	771.9	30.41	772.4	40	4.4	65	n.	19	8.5		4 c	2 s	n.	ne.	0.01	0.3	fair	H. Mc P. Baldwin.
Knoxville, Tennessee	29.26	743.2	30.34	770.6	25	— 3.9	95	ne.	4	1.8		0	0			0	0	clear	J. A. Cody.
La Crosse, Wisconsin	28.97	735.8	29.82	757.4	20	— 3.3	64	n.	2	0.9		0	0			0.01	0.3	clear	S. C. Emery
Leavenworth, Kansas	28.92	734.6	29.88	759.9	40	4.4	65	calm	0	0			10 s		sw.	0	0	cloudy	A. W. Browne.
Lewiston, Idaho	28.99	736.3	29.87	758.7	36.0	2.2	69	e.	3	1.3			10 s			0	0	cloudy	W. Bell.
Little Rock, Arkansas	29.72	754.9	30.05	763.3	43	6.1	74	s.	4	1.8			10 s			0	0	cloudy	W. U. Simens.
Los Angeles, California	29.65	753.1	30.05	763.3	47	8.3	76	ne.	5	2.2			10 s			0	0	cloudy	T. S. Collins.
Louisville, Kentucky	29.62	752.3	30.22	767.6	38	3.3	61	s.	5	2.2		2 c	6 s		sw.	0	0	cloudy	L. M. Dey.

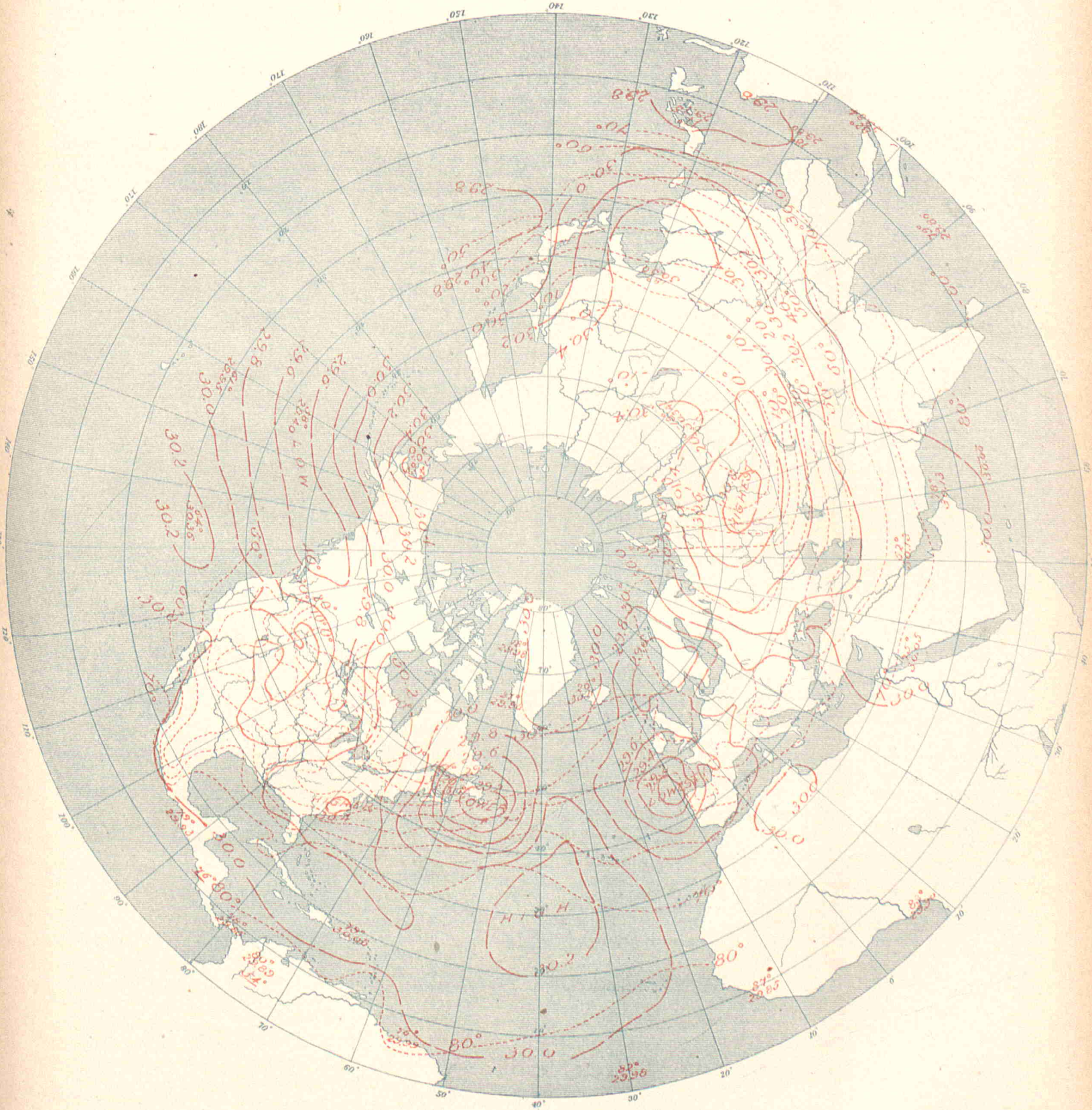
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.65	753.1	30.38	771.6	32	0.0	78	sw.	1	0.4		2 c	0			0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.40	746.7	30.10	764.5	22.0	— 5.6	87	se.	20	8.9			10 n		se.	inap.	inap.	light snow	F. R. Day.
Macon, Fort, North Carolina	30.38	771.6	30.38	771.6	37	2.8	72	n.	10	4.5		8 c	0			0	0	cloudy	C. A. Shaw.
Madison, Wisconsin	28.81	731.8	29.91	759.7	37	2.8	82	s.	14	6.3			10 s			0.01	0.3	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.34	643.6	29.88	758.9	8	—13.3	58	w.	4	1.8		0	0			0	0	clear	F. Burke.
McKavett, Fort, Texas																			J. E. Thatcher.
Marquette, Michigan	29.09	738.9	29.87	758.7	28	— 2.2	77	se.	6	2.7			10 n			0.08	2.0	light snow	J. Gilligan.
Memphis, Tennessee	29.80	756.9	30.16	766.1	40	4.4	65	se.	8	3.6		4 cs	1s;fg		se.	0	0	fair	D. T. Flannery
Milwaukee, Wisconsin	29.14	740.1	29.95	760.7	35	1.7	79	se.	10	4.5			10 n			0.02	0.5	light rain	W. Line.
Missoula, Fort, Montana	26.49	672.8	29.95	760.7	26	— 3.3	77	se.	2	0.9		0	4 s			0.01	0.3	fair	I. H. Young.
Mobile, Alabama	30.19	766.8	30.23	767.8	36	2.2	83	n.	3	1.3		2 c	0			0	0	clear	C. A. Read.
Montgomery, Alabama	30.05	763.3	30.29	769.4	31	— 0.6	81	calm	0	0		0	0			0	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	28.82	732.0	29.92	760.0	14	—10.0	80	nw.	12	5.4		0	0			0	0	clear	H. Bessant.
Morgantown, W. Virginia	29.33	745.0	30.40	772.1	29.0	— 1.7	88	s.	1	0.4		0	9 s			inap.	inap.	cloudy	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.51	597.1	30.14	765.5	5.0	—15.0	79	nw.	18	8.0		2 cs	3 ks			0.08	2.0	fair	B. S. Pague.
Nashville, Tennessee	29.64	752.8	30.25	768.3	29.5	— 1.4	94	se.	4	1.8		0	0			0	0	clear	L. N. Jesunofsky.
New Haven, Connecticut	30.12	765.0	30.24	768.1	24.5	— 4.2	78	nw.	5	2.2		3 cs	0			0.05	1.3	clear	J. H. Sherman.
New London, Connecticut	30.22	767.6	30.27	768.8	27	— 2.8	64	nw.	9	4.0		0	0			0.07	1.8	clear	J. G. Lynch.
New Orleans, Louisiana	30.11	764.8	30.17	766.3	47.0	8.3	86	e.	4	1.8		2 c	sk.			0	0	clear	L. Dunne.
Newport, Rhode Island	30.15	765.8	30.20	767.1	26.6	— 3.0	82	w.	10	4.5		1 c	1 s			0.42	10.7	clear	W. McGillivray.
New York, New York	30.12	765.0	30.31	769 9	30	— 1.1	88	sw.	4	1.8		3 cs	0			0.03	0.8	clear	J. B. Merrill.
Norfolk, Virginia	30.39	771 9	30.42	772.7	35	1.7	69	calm	0	0		6 ck	sk.	w.		0.02	0.5	fair	Wm. Davis.
North Platte, Nebraska	26.86	682.7	30.04	763.0	32.1	0.1	71	calm	0	0			10 s			0	0	cloudy	E. F. Brady
Olympia, Washington T'y.	29.62	752.3	29.66	753.4	37.0	2.8	89	s.	6	2.7			10 n			0.99	25.1	light rain	J. Dascomb.
Omaha, Nebraska	28.64	727.4	29.93	760.2	31.6	— 0.2	83	n.	6	2.7			10 s			0	0	cloudy	A. Pollak.
Oswego, New York	29.93	760.2	30.28	769.1	24.5	— 4.2	80	n.	8	3.6			10 s		nw.	0.02	0.5	cloudy	J. G. Linsley.
Palestine, Texas	29.49	749.0	30.07	763.8	55.0	12.8	77	s.	12	5.4			10 ks		sw.	0	0	cloudy	L. M. Pindell.
Pensacola, Florida	30.22	767.6	30.25	768.3	44.0	6.7	71	ne.	8	3.6		1 cs	0			0	0	clear	M. McGauran.
Philadelphia, Pa	30.24	768.1	30.35	770.9	33	0.6	78	nw.	6	2.7		2 ck	0	sw.		inap.	inap.	clear	T. T. Townsend.
Pike's Peak, Colorado	17.45	443.2	30.11	764.8	4	—15.6	83	sw.			7	0	8 s		sw.	0	0	cloudy	H. Hall.
Pioche, Nevada	23.89	606.8	30.06	763.5	36.2	2.3	40	sw.	18	8.0		3 cs	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.51	749.5	30.37	771.4	27.0	— 2.8	77	s.	1	0.4			10 s		s.	0	0	cloudy	W. A. Reid.
Poplar River, Montana	27.69	703.3	30.05	763.3				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.16	766.1	30.18	766.6	54.1	12.3	86	e.	5	2.2		0	0			0	0	clear	H. B. Boyer.
Port Huron, Michigan	29.54	750.3	30.27	768.8	22.0	— 5.6	92	se.	9	4.0			10 s			0.06	1.5	cloudy	W. O. Bailey.
Portland, Maine	30.06	763.5	30.11	764.8	22.0	— 5.6	73	nw.	7	3.1		0	8 s		nw.	0.44	11.2	clearing	W. W. Eichelborger.
Portland, Oregon	29.74	755 4	29.81	757.2	43.0	6.1	89	s.	16	7.2			10 n		s.	0.10	4.1	heavy rain	M. L. Hearne.
Portsmouth, N. C.					43	6.1	83	ne.			2	4 c	hz.			0.01	0.3	fair	F. S. Coburn.
Prescott, Arizona	24.73	628.1	30.10	764.5	36.8	2.7	66	sw.	11	4.9		0	5 s		w.	0	0	fair	W. H. Clendenon.
Provincetown, Mass.	30.08	764.0	30.11	764.8	25	— 3.9	73	nw.	18	8.0		3 k	2 s	nw.		0.60	15.2	fair	P. T. Jenkins.
Punta Rassa, Florida	30.14	765.5	30.14	765.5	62	16.7	78	ne.	14	6.3		4 ck	1 s	se.		inap.	inap.	fair	W. J. Evans.
Red Bluff, California	29.69	754.1	30.06	763.5	49	9.4	100	n.	1	0.4			10 s			0.06	1.5	cloudy	J. R. Williams.
Rochester, New York	29.61	752.1	30.32	770.1	21	— 6.1	70	w.	8	3.6			10x;hs		w.	0.07	1.8	cloudy	E. W. McGann
Roseburg, Oregon	29.46	748.3	30.03	762.7	42.5	5.8	74	s.	1	0.4			10 s			0	0	cloudy	J. J. Nanry.
Sacramento, California	30.02	762.5	30.10	764.5	48.0	8.9	93	se.	7	3.1			9 s			0.07	1.8	cloudy	J. A. Barwick.
St. Louis, Missouri	29.38	746.2	30.03	762.7	37.7	3.2	76	s.	13	5.8		0	2s;sk			0	0	clear	J. H. Weber
St. Michael, Fort, Alaska	30.60	777.2	30.62	777.7	—14	—25.6	100	calm	0	0		0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	28.87	733.3	29.83	757.7	20.0	— 6.7	84	se.	2	0.9		0	1 s			0.01	0.3	clear	P. F. Lyons.
St. Vincent, Minnesota	28.72	729.5	29.71	754.6	10	—12.2	89	nw.	9	4.0			10 n			0.06	1.5	light snow	C. B Dilley.
Salt Lake City, Utah	25.44	646.2	29.98	761.5	40	4.4	59	calm	0	0			10 n			0.11	2.8	light rain	J. Craig.
San Antonio, Texas	29.32	744 7	30.04	763 0	56.0	13.3	80	calm	0	0			10 s			0	0	cloudy	T. J. Kenan.
San Diego, California	29.96	761.0	30.03	762.7	52.3	11.3	85	e.	4	1.8			fg.		e.	0	0	dense fog	A. C. Dobbins.
Sandusky, Ohio	29.54	750.3	30.27	768.8	25.4	— 3.7	88	s.	9	4.0			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.26	768.6	30.30	769.6	31.0	— 0.6	78	nw.	12	5.4		0	0			0.08	2.0	clear	B. A. Blundon.
San Francisco, California	30.06	763.5	30.13	765.3	48.5	9.2	86	w.	8	3.6		0	3 s		nw.	0.05	1.3	clear	N. Gorom.
Santa Fé, New Mexico	23.11	587.0	30.10	764.5	36	2.2	56	calm	0	0		3 cs	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.24	768.1	30.34	770.6	41	5.0	70	nw.	4	1.8		0	hz.			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.24	666.5	30.07	763.8	4	—15.6	76	e.	3	1.3		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.84	757.9	30.09	764.3	43	6.1	68	se.	8	3.6			10 s		se.	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.57	725.7	29.90	759.4	36	2.2	85	s.	12	5.4		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.23	615.4	30.07	763.8	30.5	— 0.8	63	calm	0	0		0	1 s			0	0	clear	N. D. Lane.
Sitka, Alaska	29.52	749.8	29.59	751.6	14	—10.0	64	ne.	20	8.9		0	0			0	0	clear	F. W. Fickett.
Smith, Fort, Arkansas	29.44	747.8	29.94	760.5	41.0	5.0	57	e.	6	2.7		0	6 s			0	0	fair	J. B. Campbell.
Smithville, North Carolina	30.34	770.6	30.38	771.6	37	2.8	72	n.	6	2.7		2 c	0			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	27.70	703.6	29.83	757.7	33	0.6	88	s.	8	3.6			10 n			inap.	inap.	light snow	H. Clifford.
Springfield, Illinois	29.27	743.4	30.00	762.0	37.5	3.1	66	s.	15	6.7		hz.	4s;hs			0	0	fair	T. B. Jennings.
Springfield, Massachusetts	30.10	764.5	30.24	768.1	26.0	— 3.3	61	w.			1	0	1 n			0.05	1.3	clear	Charles Mayr.
Springfield, Mo.	28.41	721.6	29.94	760.5	41	5.0	88	s.	14	6.3			10 s			0	0	cloudy	J. B. Marbury.
Starkville, Miss.	29.74	755.4	30.24	768.1	36	2.2	79	se	6	2.7		3 c	3 s			0	0	fair	C. Dill.
Stevenson, Fort, Dakota	27.86	707.6	29.92	760.0	4	—15.6	76	w.	22	9.8		0	0			inap.	inap.	clear	W. Burrows.
Stockton, Fort, Texas	26.91	683.5	30.05	763.3	47	8.3	66	sw.	6	2.7		0	4 s			0	0	fair	J. F. Marshall.
Thatcher's Island, Mass.	30.13	765.3	30.19	766 8	22.5	— 5.3	73	nw.	25	11.2		8 k	0	w.		0.21	5.3	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.25	692.1	30.07	763.8	31.5	— 0.3	76	sw.			1	0	3 k			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.49	749 0	30.23	767.8	26	— 3.3	88	s.	4	1.8			10 s			inap	inap.	cloudy	A. Buell.
Tucson, Arizona	27.57	700.3	30.07	763.8	40	4.4	67	se.	2	0.9		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.44	747.8	29.83	757.7	43	6.1	56	sw.	12	5.4		hz.	4 s			0	0	fair	J. Daly.
Verde, Fort, Arizona					29.3	— 1.5	67	nw.			1	4 cs	0	w.		0	0	fair	D. Brooks.
Vicksburg, Mississippi	29.92	760.0	30.20	767.1	38.2	3.4	82	se.	8	3.6		0	0			0	0	clear	James Kenealy.
Visalia, California	29.69	754.1	30.07	763.8	43.0	6.1	86	se.	3	1.3		0	2 s			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.13	612.9	29.90	759.4	18.1	— 7.7	83	nw.	1	0.4		0	3 s			0.03	0.8	clear	T. M. Ambler.
Washington, D. C.	30.26	768.6	30.38	771.6	30.0	— 1.1	74	calm	0	0		8 ck	sk.	w.		0	0	cloudy	B. M. Purssell.
West Las Animas, Colorado	25.82	655.8	29.98	761.5	21.5	— 5.8	66	ne.	7	3.1		0	4 s		sw.	0	0	fair	F. H. Brandenburg.
Williamsport, Pa.	29.71	754.6	30.34	770.6	29.5	— 1.4	67	w.	7	3.1			10 s			0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.34	770.6	30.40	772.1	37	2.8	72	ne.	1	0.4		2 c	4 s			0	0	fair	Samuel A. Haney.
Winnemucca, Nevada	25.46	646.7	29.99	761.7	43	6.1	74	sw.	24	10.7		0	8 s		w.	0.01	0.3	cloudy	J. Grover.
Yankton, Dakota	28.54	724.9	29.97	761.2	20	— 6.7	73	nw.	3	1.3		6 cs	0			0	0	fair	J. H. Atfield.
Yuma, Arizona	29.79	756.7	29.94	760.5	44.5	6.9	52	e.	3	1.3		2 cs	0	nw.		0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8			54.0	12.2	77	sw.	2	0.9		7 ck	2 ks	w.	w.	0	0	cloudy	Joaquin Gomez.
Havana, Cuba, W. I.	30.01	762.2	30.07	763.8	68.1	20.1	93	calm	0	0		2 c	1 k	w.	e.	0	0	hazy	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	70	21.1	91	calm	0	0		9 cs	0			0	0	fair	Robert Johnston.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	76	24.4	91	e.			2	4 c	4 k	e.		1.200	30.5		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.33	745.0	29.89	759.2	80	26.7	85	calm			0	3 ck	3 ks	calm	calm	0	0	fair	Francisco J. Olmeros.
Rivas, Nicaragua, C. A.					76	24.4	94	ne.			2	0	8 ks		ne.	0	0	cloudy	Earl Flint.
St. Paul, Kodiak Id., Alaska																			W. J. Fisher.
St. Thomas, W. I.	29.99	761.7	30.11	764.8	78	25.6	74	e.				0	2 k		e.	0.25	6.3	fine	Aug. Walloe.
York Factory H. B. A.	30.15	765.8	30.22	767.6	—18.0	—27.8	67	nw.	14	6.3		4 k	4 s	nw.	nw.	0.05	1.3	threatening	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		WEATHER.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
BRITISH NAVAL.																		
H. M. S. Amethyst, Montevideo, Uruguay†	29.86	758.4	71.5	21.9	87	nw.			1		9	sw.						misty.
H. M. S. Audacious, N. 1° 21′, E. 103° 15′	29.74	755.4	82	27.8	87	w.			1		1	e.						blue sky.
H. M. S. Beacon, Lake Timsah, Egypt			68	20.0	60	nne.			1-2		4	sse.				1	nne.	d. clouds.
H. M. S. Boadicea, Saldanha Bay, Cape Colony	29.90	759.4				w.			1		5							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.04	763.0	69	20.6	79	n.			2		2	nnw.						d. clouds.
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.53	775.4	33	0.6	69	n.			2		0							blue sky.
H. M. S. Comus, San Francisco, Cal	30.11	764.8	48	8.9	89	nnw.			2		6	nw.						d. clouds.
H. M. S. Curacoa, Yokohama, Japan	29.78	756.4	45.5	7.5	76	n.			3		8	n.						d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.83	757.7	65	18.3	52	s.			1		1							blue sky.
H. M. Dock Yard, Bermuda, W. I	30.15	765.8	64	17.8	78	wnw.			1-2		7	wnw.						d. clouds.
H. M. S. Fawn, S. 27° 00′, E. 34° 39′	29.89	759.2	77.5	25.3	90	nnw.			2		4							blue sky.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.90	759.4	58	14.4	84	nnw.			1		10							d. clouds.
H. M. S. Heroine, N. 46° 30′, W. 11° 04′	29.11	739.4	52	11.1	86	e.			4		7	ese.				4-6	ese.	showery.
H. M. S. Iron Duke, N. 9° 12′, E. 108° 55′	29.86	758.4	78	25.6	82	nw.			4		10	nw.				2-6	var.	overcast
H. M. S. Kingfisher, S. 10° 20′, W. 78° 36′	29.89	759.2	68	20.0		se.			2		6	se.				2	se.	d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	30.08	764.0	63.3	17.3	76	s.			1		7							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20.′	29.87	758.7	62	16.7		n.			1							1	n.	d. clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.32	770.1	37.7	3.2	63	n.			3-5		2							squally.
H. M. S. Northampton, St. John's, Antigua, W. I	30.03	762.7	82	27.8	70	ne.			3		3	ne.						d clouds.
H. M. S Rocket, S. 18° 40′, W. 72° 07′	29.92	760.0	72	22.2	90	se.			2		3					2-3	sw.	misty.
H. M. S. Starling, N. 3° 51′, E. 7° 08′	29.90	759.4	83.3	28.5	90	calm			0		1							blue sky.
H. M. S. Superb N. 35° 25′, E. 21° 08′	29.98	761.5	63	17.2	72	sw.			4-5		3	wnw.				3	w.	raining.
H. M. S. Swiftsure, Callao Bay, Peru	29.94	760.5	65	18.3	100	s.			1									misty.
H. M. S. Sylvia, Sandy Point, Patagonia	29.00	736.6	44	6.7	97	wsw.			3-5		5	ssw.						squally.
H. M. S. Tourmaline, N. 16° 28′ E. 60° 10′	30.00	762.0				ne.			4		3	n.				2	ne.	squally.
H. M. S. Woodlark, N. 29° 49′, E. 48° 50′	30.03	762.7	61.5	16.4	77	nnw.			3		4	nnw.						d clouds.
H. M. S. Zephyr, Chee-foo, China	30.55	776.0	27.5	— 2.5		nnw.			4-6		4	nw.				3	nw.	squally.
PORTUGUESE NAVAL.																		
Tamega, Macao, China	30.19	766.8	60.8	16.0	67	ne.			8		0							blue sky.
SWEDISH NAVAL.																		
Vanadis, N. 33° 56′, E. 23° 00′	29.98	761.6	64.9	18.3	72	ssw.			4		8							raining.
UNITED STATES NAVAL.																		
Navy Yard, Pensacola, Fla	30.10	764.5	49	9.4	71	ne.	9	4.0			5		ne.	0	0			fair.
Navy Yard, Portsmouth, N. H	30.11	764.8	21	— 6.1	?	nne.	13	5.8			10		nne.	blank	blank			cloudy.
Naval Hospital, Yokohama, Japan*	29.89	759.2	43	6.1	67	n.			3		2		e.	0	0			clearing.
Adams, Sitka, Alaska *†	29.66	753.4	14	—10.0	81	nne.			0		0							clear.
Alaska, N. 38° 15′, W. 135° 42′	30.02	762.5	62	16.7	88	ene.			4		5		nw.	0	0	sm'h		fair.
Alliance, Hampton Roads, Va	30.39	771.9	38	3.3	90	wnw.			1		5			light	light			fair.
Ashuelot, Nagasaki, Japan	30.33	770.4	37	2.8	80	n.			1		2		n.					clear.
Brooklyn, Keel Point, Patagonia	29.11	739.4	53	11.7	73	sw.	43	19.2			2		sw.	0	0	sm'h		fair.
Colorado, New York, N. Y	30.34	770.6	30	— 1.1	78	w.	5	2.2			2			0	0			fair.
Enterprise, Norfolk, Va	30.40	772.1	35	1.7	80	calm			0		5		calm					fair.
Essex, Callao, Peru	29.89	759 2	64	17.8	100	calm			0		10					sm'h		overcast.
Franklin, Norfolk, Va	30.39	771.9	35	1.7	80	w	1	0.4			2		calm	0	0			fair.
Galena, Montevideo, Uruguay	29.74	755.4	70	21.1	84	nw.			2		10					sm'h		cloudy.
Hartford, Sandy Point, Patagonia*	28.90	735.6	47	8.3	69	w.			4		2		w.	0	0	sm'h		clear.
Independence, Mare Island, Cal	30.13	765.3	49	9.4	47	sw.			2		0			0.4	10.			clear.
Iroquois, Callao, Peru	29.91	759.7	66	18.9	94	calm			0		10							overcast.
Jamestown, Boston, Mass	30.08	764.0	19	— 7.2	100	w.			2		0							clear.
Juniata, N. 35° 12′, W. 41° 15′*	30.36	771.1	72	22.2	75	ssw.			3		5		calm	0	0	sm'h		fair.
Kearsarge, Norfolk, Va	30.40	772.1	37	2.8	90	sse.			1		8							fair.
Lackawanna, Callao, Peru*	29.87	758.7	65	18.3	89	calm			0		10							misty.
Lancaster, N. 40° 52′, E. 13° 52′*	29.82	757.4	56	13.3	87	n.			1		0					long	sw.	clear.
Michigan, Erie, Pennsylvania	30.06	763.5	34	1.1	61	s.			3		8		sw.					cloudy.
Minnesota, New York, N. Y	30.33	770.4	30	— 1.1	78	nw.	2	0.9			2							misty.
Monocacy, Kobe, Japan	30.02	762.5	50	10.0	93	wnw.			2		8		calm					fair.
New Hampshire, Newport, R. I	30.19	766.8	27	— 2.8	88	wnw.			4		0					mod.	nw.	clear.
Nipsic, Lisbon, Portugal*	29.57	751.1	59	15.0	81	sw.			2		10					sm'h		cloudy.
Onward, Callao, Peru†	30.03	762.7	03	17.2	100	calm			0		10		n.			long	w.	cloudy.
Palos, Tientsin, China*	30.52	775.2	17	— 8.3	100	w.			1		0							clear.
Pensacola, Callao, Peru*	29.82	757.4	64	17.8	94	calm	0	0			10			0	0	sm'h		cloudy.
Powhatan, Boston, Mass	30.11	764.8	20	— 6.7	100	w.			2		8							cloudy.
Quinnebaug, Villafranche, France*	29.81	757.2	57	13.9	62	wnw.			1		2		calm			sm'h		clear.
Ranger, N. 16° 09′, W. 94° 22′	29.96	761.0	81	27.2	66	nne.			4		2		n.			sm'h		clear.
Richmond, Kobe, Japan*	30.03	762.7	42	5.6	58	nw.			4		0			0	0			clear.
Saratoga, Newport, R. I	30.10	764 5	27	— 2.8	77	nw.			2-3		2			light	light	sm'h		clear.
St. Louis, League Island, Pa	30.56	776.2	29	— 1.7	89	sw.			1		5			0	0			fair.
Swatara, Norfolk, Va*	30.22	767.6	30	2.2	90	calm			0		2		calm			sm'h		fair.
Tennessee, Fort Monroe, Va	30.40	772.1	38	3.3	80	nw.	4	1.8			2			0.05	1.3			fair.
Vandalia, Hampton Roads, Va*	30.35	770.9	37	2.8	90	n.			1		2							fair.
Wabash, Boston, Mass	30.12	765.0	19	— 7.2	84	nw.	8	3.6			2		nw.	blank	blank			clear.
Wachusetts, Mare Island, Cal*	30.00	762.0	47	8.3	85	nw.			2		2		calm	0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.52	775.2	49	9.4	71	sw.			1		5		w.	0	0			fair.
Yantic, Hampton Roads, Va	30.44	773.2	38	3.3	80	nnw.			1		2							clear.
MERCHANT MARINE.																		
S. S. Grecian, S. 15° 40′ W. 24° 32′*	30.10	764.5	72	22.2	71	ne.			5		4		ne.	0	0	mod.	ne.	clear
S. S. Nova Scotian, N. 47° 52′ W. 50° 17′	29.11	739.4	40	4.4		se.			4		10		ssw.			sli't	s.	raining.
S. S. Polynesian, N. 38° 48′, W. 70° 28′*	30.15	765.8	45	7.2		nw.			7		5?		nnw.	0	0	r'gh	nw.	cloudy?
S. S. Scandinavian, Boston, Mass	30.17	766.3	24	— 4.4		wnw.			4		1			snow	snow			blue sky.
S. S. British Crown, N. 40° 13′ W. 68° 34′†	29.98	761 5	35	1.7		wnw.			6		10		wsw.	sleet	sleet	h'vy	nw.	overcast
S. S. Indiana, N. 48° 51′, W. 45° 21′			30	— 1.1	79	wnw.			8		10		nw.	sq'lls	sq'lls	hv'y	nw.	squally.
S. S. Lord Clive, N. 40° 05′, W. 65° 20′*†	29.90	759.4				nw.			0		9		nw.	sh'rs	sh'rs	cross	var.	squally.
S. S. Ohio, N. 43° 34′, W. 57° 53′†	29.12	739.6	37	2.8	90	wnw.			8		10					h'vy	wnw.	rainy.
S. S. Pennsylvania, Philadelphia, Pa			30	— 1.1		nw.			2		5		nw.					fair.
S. S. Stella, N. 49° 42′ W. 5° 09′	29.39	746.5	46.4	8		ese.			4		7?		ese.	8 h'r	8 h'r	4	ese.	overcast ?
S. S. Anchoria, N. 53° 51′, W. 24° 38′†	29.86	758.4				ne.			1		1		e.	sh'rs	shr's	sm'h		clear.
S. S. Bolivia, Glasgow, Scotland*†	29.58	751.3	25	— 3.9	100	ne.			1		10			0	0			
S. S. Elysia, N. 41° 42′, W. 53° 29′†	29.60	751.8	61	10.1		w.			6		8		w.	3 h'r	3 h'r	h'vy	wsw.	squally.
S. S. Ethiopia, N. 50° 28′ W. 38° 40′	29.99	761.7	40	4.4		ese.			4		7		se	0	0	sli't	wnw.	cloudy.
S. S. Galatia, N. 26° 35′, E. 34° 25′†	30.15	765.8	75	23.9	77	n.			2		5?		nw.	0	0	mod	nw.	cloudy.?
S. S. Ailsa, N. 17° 58′, W. 76° 46′†	30.08	764.0	80	26.7	87	ne.			2		5		ne.	0	0	sm'h		fair.
S. S. Alvo, Kingston, Jamaica, W. I	29.97	761.2	80	26.7		e.			2		0			0	0			fine.
S. S. Antillas, N. 28° 30′, W. 73° 38′			73	22.8		calm			0	5 ck			ne.	0	0	sm'h		clear.
S. S. Carroll, Halifax, N. S*†	29.85	758.2	24	— 4.4		nnw.			5		8		nnw.	snow	snow			snowy.
Inchkeith, S. 36° 48′ E. 78° 25′	30.10	764.5	56.4	13.6	81	sw.			4		5							d clouds.
Mertola, N. 46° 06′ W. 11° 39′	29.10	739.1	52.1	11.2	100	ne.			7		10							raining.
Ptolmey, N. 43° 20′, W. 53° 50′	29.22	742.2	45.5	7.5	84	sw.			10		9					high		squally.
S. S. Mexico, Mazatlan, Mexico†	30.08	764.0	71	21.7	75	e.			1		8		e.			mod.	wnw.	fair.
S. S. Bothnia, N. 50° 14′, W. 23° 04′	29.79	756.7	49	9.4	85	nnw.			4		6		nnw.	sh's	sh's	mod.	ne.	showery.
S. S. Gallia, N. 48° 25′, W. 30° 14′	29.98	761.5	50	10.0	65	nnw.			5		5		n.	sh's	sh's	light	nw.	showery.
S. S. Marathon, N. 36° 16′, E. 13° 48′	30.03	762.7	69	20.6		nw.			3		5		nw.	6 h'r	6 h'r	r'gh	nw.	cloudy.
S. S. Pavonia, N. 42° 17′, W. 50° 42′*	29.39	746.5	64	17.8	89	s.			7		10		sww.	4 h'r	4 h'r	long	ssw.	threatening.
S. S. Scythia, N. 41° 35′, W. 58° 43′	29.58	751.3	47	8.3		w.			8		7		w.	6 h'r	6 h'r	hv'y	w.	cloudy.
S. S. Colina, N. 49° 10′, W. 41° 25′						e.			3		10		sw.	4 mi	nutes	sm'h	ssw.	snowing.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
										Upper.	Lower.	Upper.	Lower.					
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. France, N. 42° 40′, W. 62° 20′†	29.79	756.7	33.8	1.		ne.			6		8		ne.	0	0	h'vy	ne.	cloudy.
S. S. Abyssinia, New York, N. Y *	30.24	768.1				nw.			0		0			0	0	sm'h		blue sky.
S. S. Arizona, N. 51° 32′ W. 15° 58′	29.59	751.6	46	7.8		n.			3		3		ne.	0	0	sm'h		fair.
S. S. Wisconsin, N. 43° 20′, W. 59° 30′	29.19	741.4	38	3.3		wnw.			9		8		wnw.	12 h'r	12 h'r	h'vy	wnw.	squally.
S. S. Bohemia, N. 40° 28′, W. 72° 00′†	30.18	766.6				wnw.			6		8		wnw.	0	0	long	wnw.	
S. S. Cimbria, N. 51° 05′, W. 25° 00′	29.77	756.1	43.5	6.4		nnw.			5		6		nne.	2 h'r	2 h'r	mod.	nne.	fair.
S. S. Frisia, N. 42° 29′. W. 59° 40′	29.54	756.3	49	9.4		wnw.			9		9		w.	rain	rain	h'vy	w.	cloudy.
S. S. Gellert. N. 50° 05′, W. 10° 00′	29.50	749.3	52	11.1		ne.			6		8		nne.	0	0	r'gh	ene.	squally.
S. S. Silesia, Hamburg, Germany†	29.85	758.2	31	—0.6	89	wsw.			4		10			0	0			overcast.
S. S. Vandalia, N. 46° 55′, W. 42° 00′	29.87	758.7	52.7	11.5	82	se.			6		10		sse.	0	0	r'gh	se.	cloudy.
S. S. Wieland, N. 47° 29′, W. 43° 48′	29.65	753.1				ese.			6–7		10		ese	8 h'r	8 h'r	h'gh	ese.	raining.
S. S. City of Berlin, N. 44° —′, W. 56° 30′			42	5.6	83	w.			8		10			sleet	sleet	high	w.	misty
S. S. Mentmore, N. 49° 16′, W. 24° 30′ *	29.83	757.7				nne.			5		2		ne.	0	0	r'gh	n.	clearing.
S. S. Hevelius, N. 51° —′ E. 3° —′ *†	29.73	755.1	32	0.0		ese.			5		9		ese.	0	0	sm'h		cloudy.
S. S. Sirius, S. 3° 00′, W. 30° 30′ *	29.91	759.7				se.			5		2		se.	0	0	sli't	se.	clear.
S. S. Bulgarian, N. 45° 59′, W. 34° 03′ *	30.14	765.5				e.			1		1		ne.	snow	snow			clear.
S. S. Colorado, N. 32° 52′, W. 77° 13′†	30.35	770.9	49	9.4		ne.			5		2		ne.	0	0	mod.	ne.	cloudy.
S. S. Rio Grande, N. 24° 48′, W. 80° 29′†	30.14	765.5	77	25.0		ne.			3		0?		ne.	0	0	long	ne.	overcast.?
S. S. San Marcos, N. 24° 32′, W. 81° 48′	30.24	768.1	76	24.4		ne.			4		0					sm'h		clear.
S. S. Archimede, New York, N. Yr..	30.23	767.8	34	1.1	?	wnw.			3		1		w.	0	0			clear.
S. S. Hermod, N. 49° 38′, W. 6° 26′†	29.42	747.3	48.2	9.0		s.			8		10		e.	6 h'r	6 h'r	high	se.	threatening.
S. S. Glenapp, N. 8° 20′, W. 28° 00′†	29.85	758.2				ene.			3		6		ne.	0	0	high	ne.	cloudy.
S. S. Glenfyne, Pernambuco, Brazil *†	29.61	752.1				e.			2		5?		ese.	0	0			clear?
S. S. Toronto, N. 51° 25′, W. 13° 52′			44.0	6.7		ne.			4		1		ne.	0	0	mod.	ne.	
S. S. Chalmette, N. 31° 28′, W. 80° 15′†	30.27	768.8	62	16.7		nne.			3		0			0	0	mod	e.	clear.
S. S. Lone Star, N. 24° 41′, W. 83° 32′†	30.11	764.8	72	22.2		nne.			4		3		e.	0	0	mod.	n.	fair.
S. S. New York, N. 25° 20′ W. 84° 20′†	30.19	766.8	76	24.4		e.			3		5?		e.			sm'h		clear.?
S. S. Denmark, London, Eng †	29.64	752.8	34	1.1		ese.			1		8		ese.	0	0			cloudy.
S. S. Egypt, N. 51° 49′, W. 8° 07′ *†	29.54	750.3				ene.			6		10		ene.	2 h'r	2 h'r	mod.	ene.	cloudy.
S. S. Erin, N. 40° 33′, W. 71° 03′	30.07	763.8	32	0.0		wnw.			7		2		nw.	8 h'r	8 h'r	r'gh	wsw.	sleeting.
S. S. Greece, Gravesend, Eng *†	29.68	753.9	32	0.0		sse.			4		10		sse.	0	0	sm'h		hazy.
S. S. Helvetia, Liverpool, Eng	29.62	752.3	31	—0.6		se.			1		8		se.	0	0			cloudy.
S. S. Holland, N. 41° 06′, W. 59° 21′	29.60	751.8	62	16.7		wnw.			8		8		nw.	3 h'r	3 h'r	h'vy	wnw.	cloudy.
S. S. City of Alexandria, N. 34° 49′, W. 75° 23′†	30.19	766.8	53	11.7		n.			5		0			0	0	small	nw.	clear.
S. S. City of Merida, N. 19° 11′, W. 96° 08′ *†	29.99	761.7	78.8	26.0		n.			1		10		n.	2 h'r	2 h'r	light	n	cloudy
S. S. Amsterdam, N. 47° 18′, W. 46° 45′ *	29.16	740.7	45	7.2		sse.			5							5	sw.	rain & fog.
S. S. Alene, Aspinwall, Panama†	29.83	757.7	83	28.3		nne.			3								n.	
S. S. Knickerbocker, N. 39° 35′, W. 74° 00′	30.31	769.9	30	—1.1		wnw.			6								sse.	clear.
S. S. Olbers, N 23° 47′ W. 62° 00′ *†	30.05	763.3	75	23.9		ne.			3–4								ne.	fine.
S. S. State of Nebraska, N. 42° 40′ W. 58° 20′			42	5.6		wnw.			7–8							high		h'y squalls.
S. S. America, N. 42° 54′, W. 56° 04′*	29.42	747.3	50.0	10.0	79	w.			9		8		w.	2 h'r	2 h'r	high	wsw.	showery.
S. S. Braunschweig, N. 43° 36′, W. 10° 07′	29.00	736 6	58.0	14.4	76	wsw.			7		5		wsw.	12 h'r	12 h'r	h'vy	sw.	stormy.
S. S. Donau, N. 50° 20′, W. 2° 46′	29.57	751.1				ese.			5		10		ese.	12 h'r	12 h'r	mod.	ese.	cloudy.
S. S. Elbe, N. 43° 56′, W. 53° 07′	29.21	741.9	50.9	10.5		sw.			6		10		sw.	3 h'r	3 h'r	r'gh	sw.	covered.
S. S. Gen. Werder, N. 44° 47′, W. 49° 12′	29.37	746.0	51.8	11.0		ssw.			7		10		sw.	14 h'r	14 h'r	r'gh	ssw.	raining.
S. S. Hohenstaufen, N. 1° 54′, W. 30° 17′	29.88	758.9	82.4	28.0		var.			2–4		5		se.	3 h'r	3 h'r	mod	e.	covered.
S. S. Neckar, N. 43° 26′, W. 50° 06′	29.28	743.7				wsw.			7		9		wsw.	8 h'r	8 h'r	high	sw.	hazy
S. S. Ohio, N. 43° 36′, W. 49° 22′	29.46	748.3				ssw.			6		10		sw.	6 h'r	6 h'r	r'gh	sw.	foggy.
S. S. Rhein, N 47° 30′ W. 37° 50′	30.03	762.7				s.			5		7		sw.	0	0	mod.	w.	cloudy.
S. S. Strassburg, S. 25° 38′ W. 44° 00′	30.00	762.0	76.0	24.4	95	var.			3		5			0	0	sm'h	se.	fair.
S. S. Belgic, N. 43° 26′, W. 159° 09′ †	29.50	749.3	58	14.4	82	s.			3		3		sw.	1 h'r	1 h'r	r'gh	e.	clear.
S. S. Coptic, N. 36° 25′, E. 150° 09′	29.75	755.6	50.0	10.0	86	n.			5		2		n.	9 h'r	9 h'r	mod	n.	raining.
S. S. Oceanic, Hong Kong, China *	30.00	762.0	63	17.2	67	n.			1		2		n.					clear.
S. S. Willamette, Seattle, Wash. Ter †	29.66	753.4	42	5.6	83	sse.			3		9		sse.	0.96	24.4	long	wnw.	cloudy.
S. S. Oregon, Portland, Oregon†	29.77	756.1	44	6.7	92	sw.			4		10		sw.					heavy rain.
S. S. Ancon, San Francisco, Cal†	30.06	763.5	49	9.4	78	w.			1		0							clear.
S. S. City of Chester, San Francisco, Cal. *†	30.10	764.5	49	9.4	85	w.			2		2							clear.
S. S. Dakota. N. 45° 58′. W. 124° 38′			54	12.2	100	s.			0		10		s.	12 h'r	12 h'r	r'gh	s	cloudy
S. S. Orizaba, N. 33° 46′, W. 118° 25′ *†	30.10	764.5	60	15.6	55	calm			0		0			0	0	sm'h	nw.	clear.
S. S. State of California, N. 38° 36′, W. 123° 10′ *†	30.09	764.3	50	10.0		nnw.			3		0			0	0	sm'h	nw.	clear.
S. S. Australia, S. 4° 27′. W. 107° 29′	29.79	756.7	79	26.1	82	ne.			4		1		ne.	0	0	mod.	ne.	clear.
S. S. City of New York, Sydney, N. S. W †	29.98	761.5	68	20.0	61	ssw.			1		0			0	0			clear.
S. S. City of Pekin, N. 34° 50′, E. 140° 56′ †	29.79	756.7	52	11.1	86	ne.			6		10		ne.	light	light	mod.	ne.	rainy.
S. S. City of Rio de Janeiro, Panama Panama†	29.86	758.4	78	25.6	82	nw.			2		0			0	0	sm'h		clear.
S. S. City of Tokel, N. 30° 00′, W. 158° 41′ †	29.95	760.7	61	16.1		calm			0				w.	sh'rs	sh'rs	light	w.	fine.
S. S. Colima, N. 15° 00′, W. 93° 15′ †	29.93	760.2	79	26.1	82	e.			3		5?		e.	0	0	mod.	se.	cloudy.?
S. S. Grenada, N. 22° 48′, W. 106° 16′†	29.93	760.2	75	23.9	86	nnw.			1		10		nnw.	0	0	sm'h	wnw.	cloudy.
S. S. Zealandia, Auckland, New Zealand	30.25	768.3	65	18.3	89	ne.			4		6		ne.			sm'h		fine.
S. S. Muriel, Martinique, W. I	29.97	761.2	80	26.7		ene.			5		0			0	0	sm'h		fair.
S. S. Caracas, La Guayra, Venezuela †	30.02	762.5	78.5	25.8	89	calm			0		2		e.	1½ h'r	1½ h'r	h'vy	nne.	fair.
S. S. Claudius, Port Limon, Porto Rico†	29.96	761.0				se.			1		6		se.	5 h'r	5 h'r	long	ne.	fair.
S. S. Belgenland, N. 43° 44′, W. 53° 50′	29.39	746.5	56	13.3	87	sw.			9		8		sw.	6 h'r	6 h'r	h'vy		cloudy.
S. S. Nederland, N. 49° 52′, W. 15° 54′			44	6.7		nne.			5		8		ne.	2 h'r	2 h'r	mod.	ne.	squally.
S. S. Rhynland, Antwerp, Belgium	29.91	759.7	32	0.0		se.			2		2		sse.	0	0			clear
S. S. Switzerland, N. 50° 47′ W. 16° 39′ †	29.64	752.8				n.			5		5		n.	0	0	mod.	n.	fair.
S. S. Waesland, Antwerp, Belgium	29.85	758.2	31	—0.6	89	ese.			4		4		e.	0	0			fair.
S. S. Leerdam, N. 45° 15′, W. 46° 43′†	29.33	745.0	58	14.4	91	s.			5		10		sw.	14 h'r	14 h'r	r'gh	sw.	squally.
S. S. P. Caland, N. 40° 32′, W. 67° 51′	30.06	763.5	27.6	3.1	86	wnw.			6		6		wnw.			6	wnw.	fair.
S. S. Schiedam, N. 48° 33′, W. 26° 01′	29.87	758.7	52.5	11.4	83	nnw.			5		5		n.	3 h'r	3 h'r	h'vy	ne.	squally.
S. S. W. A. Scholten, Rotterdam, Holland						sse.			3		10			0	0			
S. S. State of Georgia, N. 53° 45′, W. 26° 06′†	29.80	758.4	43	6.1		nne.			3		3		n.	0	0	sli't	w.	clear.
S. S. Iowa, off Salters, Scotland *†	29.03	752.6	44	6.7		e.			4		5		e.	rain	rain	mod.	e.	fair.
S. S. Celtic, N. 44° 58′, W. 52° 44′†	29.13	739.9	46	7.8		wsw.			7		10		wsw.	12 h'r	12 h'r	long	w.	cloudy.
S. S. Lepanto, N. 50° 12′, W. 3° 44′			48	8.9		ese.			6		0		se.	0	0			dull.
S. S. Salerno, Hull, Eng *	29.47	748.5				calm			0					0	0			foggy
S. S. Catherine Whiting, Philadelphia, Pa†	30.30	769.6	40	4.4		wnw.			1		0			0	0			
S. S. Saxon, Philadelphia, Pa †	30.37	771.4	44	6.7		nw.			3		2		nw.					
MISCELLANEOUS.																		
Bg. Aleira, N. 20° 21′, W. 73° 30′	30.11	764.8	82	27.8		ene.			6		1		ne.	0	0	h'vy		clear.
Bk. Alpha, N. 46° 46′, W. 8° 20′ †	29.32	744.7	50	10.0		wsw.			2		8		w.	6 h'r	6 h'r	long	s.	raining.
Schr. Annie Lewis, Tampico, Mexico †	30.18	766.0	66	18.9		wsw.			2		1?		wsw.	0	0	long	ne.	cloudy.?
S. Annie M. Law, N. 17° 45′ E. 118° 58′ *†	29.76	755.9	75	23.9		nne.			5		10		ene.	7 h'r	7 h'r	high	e.	
Bk Anna Thormann, S. 27° 02′. E. 50° 15′ *	30.21	767 3	76.6	24.8	77	e.			4		1 k		se.	0	0	mod.	e.	clear.
S. S. Antonio Lopez, N. 23° 09′, W. 58° 29′ *	30.20	767.1	77	25.0	75	e.			4		2			0	0	mod.	e.	clear.
Bgt. Arthur, N. 34° 33′, W. 36° 06′ * †	30.38	771.6				nnw.								0	0	high	n.	
Schr. Anna A. Holton, N. 35° 21′, W. 72° 44′ †	30.25	768.3	62?	16.7?		nw.			4		2		nw.	0	0	mod.	nw.	clear.
Bg. Belle of the Bay, N. 26° 50′, W. 75° 00 *†	30.04	763.0				n.			0		3		ne.	0	0	long	n.	clear
Bk. Champion, N. 21° 13′, W. 57° 56′			76.0	24.4		ene.			4		2		ese.	0	0	mod.	ese.	fair.
Schr. Chas. F. Heyer, N. 36° 00′, W. 74° 12′	30.10	772.1	40	7.8	77	n.			2	0	4 k		n.	0	0	mod	n.	d. clouds.
Bg. Clara M. Goodrich, Key Francis, W. I *†	30.01	762.2				ne.			1		8?		ne	0	0			clear ?
Bkt. David Preston, Pensacola, Fla			63.0	17.2		n.								0	0			flue.
Schr. Edith R. Seward, Baltimore, Md *†	30.40	772.1	33	0.6		nw.			2		5							light rain.
S. E. J. Spicer, N. 46° 00′, W. 20° 42′ *	29.87	758.7	57	13.9		nne.			6		7		ne.	hv'y	hv'y			squally.
Bk. Eliza Barss, N. 38° 30′. W. 70° 45′ †	30.21	767.3				nw.			6		8		nw.	0	0	mod.	nw	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.	Character.	Direction from.	
MISCELLANEOUS.—Continued.																		
S Enoch Train, N. 36° 18′, W. 74° 40′	.....	.....	...	.....	.....	n.	.....	.....	4	.....	0	...	.....	0	0	sm'h	.....	clear.
Bk. Essex, Muscat, Arabia*†	30.03	762.7	78	25.6	.....	ne.	.....	.....	3	.....	.....	.....	.....	0	0	.....	.....	fine.
Schr. F. E. McDonald, Rockland, Maine†.	30 09	764.3	24	— 4.4	.....	nnw.	.....	.....	1	.....	.....	.....	.....	2 h'r	2 h'r	.....	.....	
S. S. Foscolia, New York, N. Y.	.....	.....	...	.....	.....	calm	.....	.....	0	.....	5	.....	.....	0	0	.....	.....	dense fog.
Bk. Freya, N. 19° 47′, W. 74° 57′ ..	.....	.....	83	28.3	.....	e.	.....	.....	5	.....	1	.....	e.	0	0	mod.	e.	clear.
S. J. W. Gildemeister, N. 47° 05′, W. 28° 06′ *	29.93	760.2	50.9	10.5	51	n.	.....	.....	5	.....	4 ks	.....	n.	¼h'r	¼h'r	6	var.	d. clouds.
Bg. George, N. 34° 55′, W. 58° 30′ *†	30.11	764.8	...	.....	.....	nw.	.....	.....	7	.....	10	.....	nw.	h'vy	h'vy	cross	var.	cloudy.
Bk. Gronsvaer, Wellington, New Zealand†	30.14	765.5	73.2	22.9	92	nnw.	.....	.....	7	.....	3	.....	sw.	0	0	.....	.....	stormy.
Bk. Godeffroy, S. 54° 50′, W. 63° 13′†	28.56	725.4	41.5	5.3	95	ene.	.....	.....	2	.....	10	.....	.....	rain	rain	r'gh	w; s	rainy.
Bk. Great Surgeon, S. 20° 41′, E. 80° 34′ *†	30.14	765 5	79	26.1	.....	se.	.....	.....	4	.....	3	.....	se.	0	0	long	ssw.	fair.
Bk. Grey Eagle, N. 1° 44′ W. 28° 28′ *†	29.80	756.9	.....	.....	.....	se.	.....	.....	5	.....	1	.....	ese.	0	0	light	n.	fair.
Bk Hattie G. McFarland, New York, N. Y †	30.46	773.7	42	5.6	.....	n.	.....	.....	1	.....	3	.....	n.	0	0	.....	.....	
Schr Hattie Weston, N. 34° 11′, W. 74° 55′ *†	30.30	769.6	62	16.7	.....	n.	.....	.....	2	.....	10	.....	ne.	0	0	long	ne.	cloudy.
Schr. Isabel Alberto, N. 28° 05′, W. 79° 43†	30.16	766.1	.....	.....	.....	ene	.....	.....	3	.....	6	.....	e.	0	0	high	n.	fair.
Schr. James Slater, N. 40° 23′, W. 73° 58′†	30.25	768.3	36	2.2	.....	wnw.	.....	.....	4	.....	0	.....	.....	0	0	light	se.	clear.
Schr. Jennie N. Huddell, N. 32° 30′, W. 79° 10′†	30.31	769.9	57	13.9	.....	ne.	.....	.....	3	.....	2	.....	se.	0	0	short	ne.	fair
Bk. Joseph A. Ropes, S. 0° 50′, E. 51° 36′ *†	29.93	760.2	82	27.8	83	nne.	.....	.....	3	.....	3	.....	ne.	0	0	sm'h	.....	fair.
Bkt. Josephine, N. 28° 25′, W. 39° 26′†	30.31	769.9	72	22.2	67	e.	.....	.....	5	.....	2	.....	e.	0	0	mod.	e.	fair.
Bk. Julia H, N. 42° 44′, W 39° 06′	30.01	762.2	62.0	16.7	94	ssw.	.....	.....	4	.....	8	.....	.....	3 h'r	3 h'r	5	w.	misty.
S. S. J. W. Wilson, N. 26° 06′, W. 82° 15′†	30.12	765.0	70	21.1	.....	ne.	.....	.....	5	.....	2	.....	ne.	0	0	r'gh	ne.	fair.
Light House Tender, Laurel, N. 26° 25′, W. 82° 15′†	30.18	766.6	69	20.6	.....	ne.	.....	.....	2	.....	3	.....	ne.	0	0	sm'h	.....	clear.
Bk. Louise Adelaide, off York River, Va	.....	.....	34	1.1	.....	nw.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear.
Bg. L. & W. Armstrong, N. 20° 52′, W. 59° 46′ *†	30.18	766.6	.....	.....	.....	e.	.....	.....	6	.....	1	.....	ene.	0	0	mod.	ene.	fine.
S. S. Madrid, N. 38° 34′, W. 60° 24′*†	29.96	761.0	59	15.0	.....	w.	.....	.....	9	.....	6	.....	w.	sh'rs	sh'rs	r'gh	w.	squally.
S. S. Malabar, Marseilles, France†	29.77	756.1	.....	.....	.....	ne.	.....	.....	6	.....	10	.....	ne.	18 h'r	18 h'r	.....	.....	raining.
Bk. Matilda C. Smith, N. 31° 14′, W. 71° 10′ *†	30.35	770.9	.....	.....	.....	n.	.....	.....	6	.....	4	.....	n.	3 h'r	3 h'r	r'gh	nw.	fine.
Schr. Minnie A. Bonsall, May Port, Fla†	30.29	769.4	68	20.0	.....	nne.	.....	.....	1	.....	2	.....	...	.....	.....	.....	.....	
S. Minnie N. Gerow, N. 31° 04′, W. 43° 30′*†	30.31	769.9	.....	.....	.....	sse.	.....	.....	4	.....	3	.....	n.	.....	.....	long	e.	fine.
S. M. P. Grace, Pitcairn Island, Oceanica *†	30.18	766.6	75	23.9	.....	e.	.....	.....	3	.....	1	.....	e.	0	0	long	ssw.	fair.
Bg. Myrtle, Bear River, Nova Scotia*†	29.80	756.9	.....	.....	.....	n.	.....	.....	7	.....	10	.....	n.	snow	snow	.....	.....	cloudy.
Bg. O. C. Clary, N. 7° 30′, W. 58° 22′ *†	29.96	761.0	80	26.7	91	ene.	.....	.....	4	.....	10	.....	ne.	0	0	sm'h	e.	
S. Orealla, N. 20° 30′, E. 90° 00′*	29.96	761.0	.....	.....	.....	nw.	.....	.....	2	.....	.....	.....	.....	.....	.....	long	ssw.	fine.
Bk. Ottawa, N. 36° 57′, W. 58° 03′ *	29.85	758.2	65	18.3	.....	wsw.	.....	.....	7	.....	4	.....	w.	5 h'r	5 h'r	cross	var.	fair.
S Paramita, San Francisco, Cal †	30.13	765.3	50	10.0	.....	sw.	.....	.....	3	.....	.....	.....	.....	0	0	.....	.....	
Bk. Pilgrim, N. 14° 40′, W. 50° 38′*†	30.10	764.5	.....	.....	.....	ne.	.....	.....	5	.....	1	.....	ne.	0	0	long	ne.	clear.
S. S. Radnorshire, N. 11° 36′, E. 109° 58′ *†	29.80	756.9	.....	.....	.....	n.	.....	.....	8	.....	5	.....	n.	5 h'r	5 h'r	h'vy	n;ne.	cloudy.
S. S. Raleigh, Rondout, N. Y *†	30.10	764.5	30	— 1.1	.....	nw.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	fine.
Bk. Rebus, N. 41° 53′, W. 40° 56′ *	29.78	756.4	65	18.3	.....	wsw.	.....	.....	6	.....	8	.....	wsw.	light	light	long	wsw.	squally.
S. St. Francis, N. 31° 34′, W. 135° 15′†	30.36	771.1	64	17.8	.....	ese.	.....	.....	2	.....	8	.....	e.	0	0	long	nnw.	cloudy.
Bk. Scud, N. 24° 22′, W. 64° 54′*†	30.15	765.8	.....	.....	.....	e.	.....	.....	4	.....	3	.....	e.	0	0	sm'h	ene.	clear.
S. S. Sunbeam, N. 19° 09′, W. 79° 54′	30.04	763.0	83	28.3	75	ne.	.....	.....	4	.....	5	.....	ne.	0	0	2	e.	d. clouds.
S. S. Strathleven, N. 5° 54′, E. 89° 50′	29.86	758.4	79.0	26.1	100	nnw.	.....	.....	2	.....	10	.....	nw.	0	0	3	con.	raining.
Schr. T. S. McLellan, N. 29° 00′, W. 73° 00′ *†	30.35	770.9	68	20.0	.....	ssw.	.....	.....	.....	.....	.....	.....	sw.	.....	.....	.....	nne.	
U. S. F. C. S. S. FishHawk, Washington, D. C†.	30.43	772.9	34	1.1	79	calm	.....	.....	0	.....	6	.....	.....	0	0	.....	.....	fair.
Bk. Usko, Maidens Light, Ireland*	29.58	751.3	40	4.4	.....	calm	.....	.....	0	.....	4	.....	se.	0	0	mod.	se.	foggy.
Bk. Vincenzo Accame, N. 36° 10′, W. 48° 58′†	30.11	764.8	71.6	22.0	.....	sw.	.....	.....	6	.....	7	.....	sw.	70 mi	nutes	.....	sw.	
Schr. Walter L. Plummer, N. 37° 37′, W. 72° 53′*†	30.40	772.1	.....	.....	.....	nnw.	.....	.....	4	.....	8	.....	nnw.	0	0	r'gh	nw.	clearing.
Bk. Wandering Jew, Montevideo, Uruguay †	29.77	756 1	74	23.3	.....	wnw.	.....	.....	6	.....	9	.....	w.	0	0	.....	.....	threatening.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.05	763.3	.....	.....	.....	ne.	.....	.....	1	.....	2	.....	nnw.	.....	.....	sm'h	s.	fair.
S. Wm. Woodbury, N. 46° 02′, W. 20° 00′*	29.60	751.8	53	11.7	.....	nne.	.....	.....	6	.....	8	.....	ne.	.....	.....	long	se.	covered.

International Chart I. December 12, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 13, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.62	752.3	63.7	17.6	78	ne.	.....	.....	1	.....	2	.....	.....	0	0	fair	Malaterre.
Algiers	.....	.....	29.79	756.7	65.5	18.6	44	s.	.....	.....	5	.....	8	.....	.....	0	0	very cloudy	Thève.
La Calle	.....	.....	29.86	758.4	59.0	15.0	68	sw.	.....	.....	4	.....	4	.....	.....	0	0	cloudy	Fonfréde.
Tunis	.....	.....	29.97	761.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.78	756.5	66.9	19.4	79	w.	.....	.....	2	.....	4	.....	.....	0	0	cloudy	Pérès.
Tebessa	.....	.....	30.04	762.9	59.7	15.4	51	s.	.....	.....	6	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	50.0	10.0	52	sw.	.....	.....	7	.....	3	.....	.....	0	0	pretty fair	Louchamp.
Laghouat	.....	.....	30.03	762.7	51.1	10.6	38	ne.	.....	.....	0	.....	3	.....	.....	0	0	pretty fair	Abraham.
Biskra	.....	.....	30.07	763.8	65.1	18.4	18	se.	.....	.....	2	.....	5	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	29.62	752.3	29.71	754.6	60.0	15.6	68	wsw.	19	8.5	.....	.....	10	.....	.....	0.01	0.3	squally	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.45	748.0	30.01	762.3	45.3	7.4	92	s.	.....	.....	2	.....	3	.....	.....	0	0	.....	Prof. Ivan Stezir.
Cracow, I. R Observatory	29.20	741.6	30.00	761.9	33.3	0.7	96	ne.	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.10	739.1	30.00	762.0	40.6	4.8	94	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.70	729.0	30.00	762.1	34.5	1.4	93	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.59	726.2	30.04	763.1	48.7	9.3	86	se.	.....	.....	1	.....	5	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.57	725.6	29.98	761.4	29.5	— 1.4	95	se.	.....	.....	1	.....	10	.....	.....	0	0	foggy	The Staff.
Lemberg	29.00	736.7	30.02	762.5	38.7	3.7	95	se.	.....	.....	2	.....	10	.....	.....	0.012	0.3	.....	Dr. T. Stanecki.
Pola	29.93	760.1	30.04	763.0	51.8	11.0	85	w.	.....	.....	1	.....	5	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.56	750.8	30.02	762.6	45.1	7.3	89	s.	.....	.....	1	.....	10	.....	.....	0.079	2.0	.....	Joseph Midlinszky, S. J.
Szegedin	29.76	756.0	30.06	763.4	41.0	5.0	97	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy	Karl Stancel.
Trieste	29.98	761.4	30.08	764.0	48.6	9.2	95	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Royal Academy.
Vienna	29.28	743.6	30.02	762.6	34.5	1.4	91	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.59	751.6	29.69	754.1	25.6	— 3.6	97	w.	10	4.5	.....	.....	10	.....	.....	0.030	0.8	snowing	W. Boswell
Armagh, Observatory	29.42	747.3	29.68	753.9	22.7	— 5.2	90	ssw.	2	0.9	.....	.....	0	.....	.....	.....	.....	blue sky	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.58	751.3	32.5	0.3	94	e.	5	2.2	.....	.....	10	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	29.03	737.1	29.57	751.1	32.4	0.2	97	ene.	3	1.3	.....	.....	10	.....	.....	.....	.....	snowing	Thomas Mackereth.
Bradford, Yorkshire	29.39	746.5	29.68	753.9	33.7	0.9	88	ne.	.....	.....	2	.....	10	.....	.....	0.12	3.0	snowing	McLandsborough&Preston
Bridgetown, Barbadoes	29.92	760.0	29.95	760.7	81.0	27.2	70	ne.	.....	.....	4	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H C.
Cardington	.....	.....	.....	.....	37.0	2.8	90	s.	.....	.....	0.4	.....	8	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E	29.43	747.5	29.56	750.8	40.9	4.9	82	se.	.....	.....	1	.....	8	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.21	741.9	29.44	747.8	39.5	4.2	95	nnw.	.....	.....	2	.....	10	.....	.....	.....	.....	drizzling	The Staff.
Fort Napier, Natal	27.61	701.3	29.82	757.4	64.0	17.8	100	se.	.....	.....	1	.....	9	.....	.....	.....	.....	raining	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.57	751.1	29.80	756.9	86.0	30.0	92	w.	.....	.....	2	.....	3	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	29.71	754.6	29.76	755.9	57.0	13.9	97	sw.	.....	.....	2	.....	8	.....	.....	.....	.....	gloomy	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.46	748.3	29.67	753.0	21.7	— 5.7	99	ne.	.....	.....	1	.....	.....	.....	.....	.....	.....	foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.37	746.0	29.55	750.6	42.9	6.1	79	se.	.....	.....	1	.....	2	.....	.....	.....	.....	blue sky	The Staff.
Guernsey	29.16	740.1	29.46	748.3	45	7.2	87	s.	.....	.....	1	.....	6	.....	.....	.....	.....	d. clouds	A. Corbenette, F. M. S
Kew, Observatory	29.51	749.5	29.55	750.6	44.1	6.7	77	ne.	9	4.0	.....	.....	5	.....	.....	.....	.....	misty	The Staff.
Leicester, Museum	29.29	744.0	29.56	750.8	34.0	1.1	98	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.92	760.0	30.00	762.0	63.8	17.7	98	se.	.....	.....	3	.....	2	.....	.....	.....	.....	blue sky	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.08	764.0	30.12	765.0	75.0	23.9	88	s.	.....	.....	1	.....	5	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	28.97	735.8	29.52	749.8	32.8	0.4	92	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	rain & fog	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.30	744.2	29.52	749.8	39.8	4.3	91	se.	.....	.....	1	.....	4	.....	.....	.....	.....	misty	The Staff.
Plymouth	29.30	745.7	29.44	747.8	43.8	6.6	98	ene.	.....	.....	2	.....	10	.....	.....	.....	.....	drizzling	John Merrifield.
Sandwick Manse, Orkneys	29.55	750.6	29.66	753.4	32	0.0	97	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.88	758.9	29.95	760.7	56.2	13.4	79	nne.	.....	.....	2	.....	0	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	29.29	744.0	29.58	751.3	33.3	0.7	97	ne.	.....	.....	1	.....	10	.....	.....	0.17	4.3	gloomy	W. P. Cooper.
Silloth Rectory	29.58	751.3	29.61	752.1	31.2	— 0.4	90	n.	.....	.....	1	.....	10	.....	.....	0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.59	751.6	31.9	— 0.1	90	ne.	4	1.8	.....	.....	10	.....	.....	.....	.....	snowing	I. New.
Strathfield Turgiss	29.32	744.7	29.54	750.3	41.0	5.3	91	s.	.....	.....	1	.....	8	.....	.....	.....	.....	d. clouds	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.40	746.7	29.42	747.3	42	5.6	100	e.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.63	752.6	29.65	753.1	33.6	0.9	84	n.	5	2.2	.....	.....	4	.....	.....	.....	.....	misty	The Met'g'l Office,
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.22	767.6	30.26	768.6	18	— 7.8	94	nw.	6	2.7	.....	0	5 n	.....	nw.	0	0	.....	H. J. Cundall, C. E
Chatham, N. B*	30.30	769.6	30.37	771.4	1	—17.2	91	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear	G. A. Blair.
Father Point, Quebec*	30.30	769.6	30.32	770.1	7	—13.9	73	nw.	8	3.6	.....	.....	1c s	.....	calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.18	741.2	30.14	765.5	—20	—28.9	100	n.	11	4.9	.....	0	0	.....	.....	0	0	clear	James Stewart.
Halifax, N. S*	30.19	766.8	30.33	770.4	12	—11.1	61	w.	5	2.2	.....	0	0	.....	.....	0.050	1.3	clear	A. Allison.
Kingston, Ontario*	29.47	748.5	29.82	757.4	28	— 2.2	96	s.	22	9.8	.....	.....	10 n	.....	.....	0.05	1.3	light snow	A. P. Knight, M. A
Montreal, Quebec*	29.84	757.9	30.07	763.8	4	—15.6	99	n.	2	0.9	.....	.....	10 n	.....	.....	0.01	0.3	hazy	C. H. McLeod, C. E.
Parry Sound, Ontario*	28.86	733.0	29.58	751.3	27	— 2.8	88	e.	24	10.7	.....	.....	10 n	.....	e.	0.10	2.5	light snow	Rev. R. Mosley.
Port Dover, Ontario	28.90	734.0	29.60	751.8	30	2.2	100	s.	24	10.7	.....	.....	10 n	.....	.....	0.00	1.5	light rain	H. Morgan.
Port Stanley, Ontario	28.96	735.6	29.62	752.3	37	2.8	89	s.	20	8.9	.....	.....	10 k	.....	sw.	0.10	2.5	light rain	M. Payne.
Quebec, Quebec*	29.88	758.9	30 24	768.1	5	—15.0	87	e.	.....	.....	1	.....	10 n	.....	e.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.31	744.5	29.80	756.9	14	—10.0	87	e.	18	8.0	.....	.....	10 s	.....	se.	0	0	threatening	W. H. McIntyre.
Saugeen, Ontario*	28.77	730 7	29.50	749.3	33	0.6	88	se.	10	4.5	.....	.....	10 s	.....	.....	0.05	1.3	light snow	
St. Andrews, N. B	30.29	769.4	30.34	770.6	10	—12.2	80	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Sydney, C. B*	30.07	763.8	30.14	765.5	23	— 5.0	84	nw.	20	8.9	.....	0	0	.....	.....	0.05	1.3	clear	T. C. Hill, C. E
Toronto, Ontario*	29.29	744.0	29.68	753.9	33	0.6	88	s.	25	11.2	.....	.....	10 n	.....	.....	0.12	3.0	light snow	Magnetic Observatory
Yarmouth, N. S*	30.26	768.6	30.33	770.4	15	— 9.4	64	ne.	2	0.9	.....	8 cs	sk.	.....	.....	0	0	fair	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.09	713.5	29.55	750.6	33	0.6	100	sw.	.....	.....	3	.....	10 s	.....	sw.	0.200	5.1	snowing	Wm. Wyhe
St. Johns, Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Delany
Cape Colony.																			
Cape St. Francis Lt. House	30.13	765.3	30.16	766.1	66.0	18.9	73	sw.	21.2	9.5	.....	0	8 k	.....	.....	0.100	2.5	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.39	619.4	.....	.....	24.8	— 4.0	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.30	769.5	30.41	772.3	22.8	— 5.1	75	calm	6.3	2.8	.....	0	0	.....	.....	0	0	clear	**Mission, S. J.**
Zi-Ka-Wei, near Shanghai	30.40	772.2	30.43	772.8	36.1	2.3	77	wnw.	8.5	3.8	.....	.....	10	.....	.....	0	0	covered	**M. Marc Dechevrens, S.J.**
DANISH.																			
Copenhagen	29.92	760.0	29.97	761.2	35.2	1.8	93	e.	20	9	.....	.....	10	.....	.....	.....	.....	.....	**Oversergeant Fischer.**
Fanoe	29.86	758.4	29.88	758.9	32.5	0.3	92	ese.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	**Overloerer Lauridsen.**
Godthaab, Greenland	30.07	763.7	30.11	764.8	23.7	— 4.6	79	nne.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	**S. Kleinschmidt.**
Ivigtut, Greenland	29.92	760.0	29.94	760.5	29.8	— 1.2	.....	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	30.10	764.5	30.15	765.7	22.3	— 5.4	.....	se.	.....	.....	6	.....	5	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	30.05	763.2	30.09	764.3	26.2	— 3.2	89	ne.	.....	.....	7	.....	2	.....	.....	.....	.....	.....	**A. O. Thorlacius.**
Thorshavn	29.61	752.1	29.65	753.0	33.8	1.0	94	ne.	9	4	.....	.....	10	.....	.....	.....	.....	.....	**Overloerer Bergh.**
Vestervig	29.85	758.1	29.94	760.5	30.9	— 0.6	96	ene.	.....	.....	4	.....	10	.....	.....	.....	.....	snowing	**Loerer Oesterbol.**
Upernavik, Greenland	30.10	764.6	30.15	765.8	19.9	— 6.7	.....	calm	.....	.....	0	.....	1	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.00	736.5	29.65	753.0	51.1	10.6	95	calm	.....	.....	0	ck	n	.....	.....	0	0	.....	**M. Labroue, Director.**
Alençon, Normal School	29.04	737.0	29.59	751.6	38.8	3.8	87	s.	.....	.....	1	.....	kn	ne.	ne.	0	0	.....	**M. Nicot, Director.**
Arras, Engineer School	29.38	746.2	29.65	753.0	35.2	1.8	96	se.	.....	.....	1	.....	n	.....	e.	0	0	.....	**M. Fénéon, Command't.**
Avignon, Normal School	29.09	754.1	29.77	756.1	50.7	10.4	89	se.	.....	.....	2	.....	10	.....	.....	0	0	raining	**M. Giraud, Director.**
Bar-sur-Seine	29.12	739.6	29.69	754.0	43.2	6.2	73	sse.	.....	.....	1	.....	10	.....	.....	0	0	covered	**M. Saillard, Director.**
Beauvais, Normal School	29.39	746.6	29.67	753.6	37.0	2.8	86	se.	.....	.....	1	.....	10	.....	.....	0	0	covered	**M. Frère Eugène Marie.**
Besançon, Normal School	28.81	731.7	29.71	754.6	42.4	5.8	73	nne.	.....	.....	1	.....	kn	.....	ene.	0	0	.....	**M. Gobin, Director.**
Bordeaux, Observatory	29.29	743.9	29.55	750.5	54.1	12.3	57	se.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	**M. Rayet, Director.**
Bourges, Normal School	29.09	738.8	29.65	753.0	43.7	6.5	63	ne.	.....	.....	1	.....	kn	.....	ne.	0	0	.....	**M. Malet, Director.**
Brest, Naval Observatory	29.17	740.8	29.41	747.0	48.9	9.4	92	e.	.....	.....	2	.....	2	.....	e.	3.90?	99.0?	.....	**M. de Kermaréc, Dir.**
Caen, Normal School	29.43	747.4	29.50	749.4	42.1	5.6	70	sw.	.....	.....	1	.....	5	.....	sw.	0	0	cloudy	**M. Berson, Director.**
Châlons-sur-Marne, N.Sch'l	29.35	745.4	29.67	753.6	44.1	6.7	90	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	**M. Jadot, Director.**
Charleville, Normal School	29.23	742.5	29.75	755.7	37.4	3	80	ese.	.....	.....	1	.....	10	.....	.....	0	0	covered	**M. Grimard, Director.**
Clermont-Ferrand Obs'y	28.29	718.5	29.01	752.2	58.5	14.7	52	sse.	.....	.....	2	5 c; ck	0	.....	.....	0	0	½ covered	**M. Allnard, Director.**
Cluny, Normal School	28.82	732.1	29.69	754.1	52.5	11.4	71	sw.	.....	.....	2	.....	8	.....	sw.	0	0	.....	**M. de Villemontée, Dir.**
Commercy, Normal School	28.86	733.1	29.76	755.8	38.8	3.8	83	e.	.....	.....	1	.....	ks	e.	e.	0	0	.....	**Dr. Coulet, Director.**
Gap, Normal School	27.32	694.0	29.90	759.4	39.9	4.4	93	.....	.....	.....	.....	.....	10	.....	.....	0	0	.....	**M. Jeangirard, Director.**
Gréasque, du Rhone	28.08	728.4	29.81	757.2	48.4	9.1	86	se.	.....	.....	4	.....	10	.....	se.	0.591	15.	raining	**M. Kina, Director.**
Grenoble, Normal School	29.04	737.6	29.84	757.9	37.4	3	80	se.	.....	.....	2	.....	kn	.....	s.	0	0	.....	**M. Ablard, Director.**
Guéret	28.05	712.4	29.63	752.5	50.0	10	66	s.	.....	.....	1	.....	k	.....	sw.	0	0	.....	**M. Delorme, Dir.**
Lamballe, Normal School	29.18	741.1	29.45	747.9	46.4	8	86	se.	.....	.....	2	.....	1	.....	se.	0	0	.....	**M. Ollivrault, Director.**
Lescar, Normal School	28.97	735.7	29.52	749.9	55.0	12.8	59	e.	.....	.....	1	0	5 kn	.....	.....	0	0	cloudy	**M. Chauvin, Director.**
Lorient, Naval Observatory	29.35	745.0	29.46	748.2	51.8	11.0	71	e.	.....	.....	1	.....	2	e.	ese.	0.016	0.4	¼ covered	**Lt. T. Carré, Director.**
Lyon, St. Genis-Laval	28.66	728.0	29.72	754.8	49.3	9.6	78	ne.	.....	.....	1	.....	10 cn	.....	sse.	0	0	covered	**M. André, Director.**
Mans, Normal School	29.26	743.3	29.58	751.4	34.9	1.6	86	s.	.....	.....	1	.....	5	.....	ssw.	0.035	0.9	fair	**M. Piboën, Director.**
Marseille, Observatory	29.51	749.6	29.78	756.5	50.4	10.2	91	ese.	.....	.....	4	.....	10	.....	se.	0.791	20.1	.....	**M. Stephan, Director.**
Mt. Louis	24.47	621.4	29.31	744.4	40.1	4.5	83	sw.	16.8	7.5	.....	.....	5	w.	.....	0.106	2.7	.....	**M. Caré for Dr. Fines.**
Montpellier, Normal School	29.55	750.6	29.72	754.9	52.5	11.4	97	e.	.....	.....	3	.....	10	.....	.....	0.358	9.1	raining	**M. Galzin, Director.**
Nancy, Normal School	28.91	734.2	29.71	754.5	39.2	4.0	80	wsw.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	**M. Hasse, Director.**
Nantes, Observatory	29.38	746.3	29.54	750.4	53.1	11.7	68	s.	.....	.....	1–2	1 c	0	.....	.....	0.024	0.6	.....	**M. Larocque, Director.**
Perpignan, Observatory	29.52	749.7	29.63	752.5	57.0	13.9	77	s.	16.8	7.5	.....	.....	8	wsw.	s.	0	0	.....	**Dr. Fines, Director.**
Pic-du-Midi, Summit	20.82	528.9	.....	.....	24.8	— 4.0	.....	sw.	.....	.....	2	.....	5	.....	*w.	0.031	0.8	cloudy	**M. Vaussenat.**
Privas, Normal School	28.72	729.4	29.79	756.6	50.0	10	84	s.	.....	.....	4	.....	10	.....	.....	0.276	7.0	raining	**M. Tathen.**
Puy de Dôme Obs'y, Summit	24.78	629.5	.....	.....	35.2	1.8	100	ssw.	.....	.....	6	.....	8	.....	ssw.	0	0	½ covered	**M. Allnard, Director.**
Rochefort, Naval Obs'y	29.50	749.3	29.53	750.1	50.7	10.4	82	sse.	.....	.....	1	.....	5	.....	sse.	2.52	64.	½ covered	**Lt. E. Decante, Director.**
Roche-sur-Yon, N. School	29.29	743.9	29.50	749.4	47.5	8.6	76	se.	.....	.....	1	.....	0	.....	.....	0	0	clear	**M. Brotier, Director.**
Rodez, Normal School	27.48	698.0	29.61	752.0	51.1	10.6	74	e.	.....	.....	1	.....	5	.....	sw.	0	0	cloudy	**M. Seger, Director.**
Rouen, Normal School	29.57	751.0	29.62	752.4	39.2	4	90	se.	.....	.....	1	.....	10	sw.	.....	.....	.....	raining	**M. Mouillot.**
Saint Lô	.....	.....	.....	.....	45.5	7.5	71	sse.	.....	.....	2	.....	5	nw.	sw.	0	0	cloudy	**M. Delaplanche, Dir.**
Saint Maur, Observatory	29.48	748.8	29.65	753.0	40.8	4.9	89	sse.	.....	.....	1	.....	10	.....	sw.	0.008	0.2	.....	**M. Renou, Director.**
Toulouse, Observatory	28.93	734.8	29.64	752.9	46.2	7.9	68	ne.	.....	.....	1	.....	8	sw.	.....	0.016	0.4	very cloudy	**M. Baillaud, Director.**
Tours	29.61	752.1	29.79	756.6	45.7	7.6	83	ene.	.....	.....	1	.....	1	.....	sw.	0.012	0.3	clear	**M. de Tastes.**
Versailles, Observatory	29.14	740.1	29.63	752.6	39.2	4.0	87	s.	.....	.....	1	.....	.....	.....	.....	0	0	.....	**Dr. A. Bérigny, Director.**
Sub-series.																			
St. Martin du Hinx	29.39	746.6	29.54	750.4	56.7	13.7	60	sw.	9.8	4.4	.....	0	9 k	.....	sw.	0	0	.....	**M. Cartier, Director.**
GERMAN.																			
Ansbach	28.40	721.3	29.90	759.5	33.1	0.6	74	se.	.....	.....	2	.....	9	se.	.....	0	0	.....	**Prof. Jaedt.**
Bamberg	29.04	737.5	29.87	758.8	36.0	2.2	77	s.	.....	.....	1	.....	9	.....	.....	0	0	.....	**Prof. Dr. Hoh.**
Berlin	29.68	753.8	29.86	758.5	35.4	1.9	93	se.	.....	.....	2	.....	10	.....	.....	0.087	2.2	.....	**Prof. Dr. Arndt.**
Breslau	29.43	747.6	29.97	761.1	36.7	2.6	91	calm	.....	.....	0	.....	10	.....	.....	0.028	0.7	foggy	**Royal University Obs'y.**
Carlsruhe	29.38	746.2	29.83	757.6	34.2	1.2	76	sw.	.....	.....	1	.....	10	sw.	.....	0	0	hazy	**Albert Senz.**
Cassel	29.06	738.2	29.78	756.3	27.3	— 2.6	94	s.	.....	.....	1	.....	6	s.	.....	0	0	.....	**Dr. H. Möhl.**
Frankfort-on-the-Main	29.47	748.4	29.85	758.1	33.1	0.6	80	sw.	.....	.....	1	.....	10	.....	.....	0	0	.....	**Physical Society.**
Friedrichshafen	28.39	721.0	29.80	758.5	37.4	3.0	93	sw.	.....	.....	2	.....	5	sw.	.....	0	0	.....	**Wilhelm, Chief Tel.**
Hamburg	29.78	756.5	29.87	758.7	33.1	0.6	92	ese.	.....	.....	3	.....	10	.....	.....	0	0	foggy	**E. Preller.**
Kiel	29.87	758.6	29.88	759.0	34.5	1.4	88	ese.	.....	.....	2	.....	10	.....	.....	0	0	.....	**Prof. Dr. G. Karsten.**
Leipsic, Astron'l Obs'y	29.48	748.9	29.92	760.0	34.5	1.4	74	sse.	.....	.....	1	.....	1	.....	.....	0	0	.....	**H. Leppig, Asst.**
Magdeburg	29.69	754.0	29.88	759.0	34.5	1.4	74	se.	.....	.....	2	.....	0	.....	.....	0	0	foggy	**Weather Observatory.**
Memel	30.11	764.9	30.16	766.1	35.4	1.9	95	se.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy	**Issermann.**
Munich	28.03	711.9	29.86	758.0	30.7	— 0.7	82	e.	.....	.....	1	.....	2	.....	.....	0	0	.....	**Central Station.**
Neufahrwasser	30.04	763.0	30.06	763.4	35.8	2.1	89	se.	.....	.....	1	.....	10	.....	.....	0	0	foggy	**A. Lothes.**
Neustadt, Palatinate	29.27	743.4	29.79	756.6	36.9	2.7	89	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	**Dicknether.**
Stuttgart	28.85	732.7	29.76	756.0	38.8	3.8	70	nw.	.....	.....	1	.....	6	w.	.....	0.016	0.4	.....	**Prof. Dr. Schoder.**
Wustrow	29.93	760.2	29.96	760.9	33.3	0.7	92	ese.	.....	.....	2	.....	10	.....	.....	0	0	.....	**Profs. Brandes & Reimer**
GREEK.																			
Athens	29.61	752.1	30.00	761.9	61.5	16.4	.....	nw.	.....	.....	2.0	0	3 k	.....	.....	0	0	.....	**Schmidt & Wourlisch.**
INDIAN.																			
Kurrachee	29.96	761.0	30.01	762.2	75.8	24.3	64	wsw.	20.0	8.9	.....	.....	3	.....	.....	0.20	5.1	d. clouds	
Deesa	29.46	748.3	29.94	760.4	80.9	27.2	52	wsw.	7.0	3.1	.....	.....	6	w.	.....	0	0	d. clouds	
Bombay	29.90	759.3	29.93	760.3	78.7	25.9	72	nw.	11.0	4.9	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.66	712.7	29.90	759.4	84.8	29.3	21	ssw.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.68	753.8	29.96	761.0	77.5	25.3	65	n.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Belgaum	27.38	695.4	29.90	759.4	80.6	27.0	29	nne.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.15	740.4	29.92	760.0	64.6	18.1	58	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	28.98	736.0	29.90	759.4	67.2	19.6	60	calm	0	0	.....	.....	0	w.	.....	0	0	.....	
Agra	29.36	745.7	29.93	760.2	77.2	25.1	36	nw.	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.88	733.6	29.93	760.3	77.7	25.4	44	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.60	726.4	29.98	761.5	71.5	21.9	53	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.54	750.2	29.93	760.1	69.3	20.7	52	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.59	751.6	29.92	759.9	62.6	17.0	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.74	755.3	29.93	760.2	67.4	19.7	69	w.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.87	707.9	29.94	760.5	63.2	17.3	53	wnw.	4.4	2.0	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.83	757.7	29.92	759.8	72.2	22.3	65	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Allpore	29.88	759.0	29.90	759.6	70.5	21.4	80	wnw.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.76	756.0	29.88	759.1	71.8	22.1	77	calm	0.1	0.04	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.85	758.1	29.94	760.5	73.4	23.0	79	wsw.	1.5	0.7	.....	.....	2	.....	.....	0	0	d. clouds	
Sibsagar	29.57	751.1	29.92	759.9	64.1	17.8	90	se.	1.0	0.4	.....	.....	10	w.	w.	0	0	d. clouds	
Jeypore	28.49	723.5	29.94	760.6	75.6	24.2	46	w.	1.2	0.5	.....	.....	5	w.	.....	0	0	d. clouds	
ITALIAN.																			
Udine	29.66	753.3	30.08	763.9	47.7	8.7	85	.....	.....	.....	.....	.....	10	.....	.....	0.004	0.1	.....	**Prof. Giovanni Clodig.**

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	29.54	750.4	30.08	764.0	39.2	4.0	97	sw.	1.8	0.8	.....	.....	10	.....	.....	0.110	2.8	.....	Prof. Schiapparelli.
Padua	29.97	761.1	30.08	764.0	41.2	5.1	98	n.	1.3	0.6	.....	.....	10	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.15	740.3	30.09	764.2	39.2	4.0	95	ne.	1.3	0.6	.....	.....	10	.....	.....	0.732	18.6	.....	Prof. F. F. Denza.
Genoa	29.81	757.2	30.01	762.2	45.7	7.6	84	ne.	7.4	3.3	.....	.....	10	s.	.....	0.276	7.0	.....	Prof. G. M. Garibaldi.
Mondovi	28.10	713.8	30.08	764.1	39.2	4.0	80	w.	.....	.....	2	.....	8	.....	.....	0.197	5.0	.....	Prof. D. C. Bruno.
Pesaro	30.07	763.8	30.12	765.1	41.4	5.2	94	n.	6.3	2.8	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.78	756.3	30.04	762.9	53.2	11.8	68	w.	.....	.....	2	.....	10	.....	.....	0.043	1.1	.....	Prof. Costantino Pittei.
Leghorn	29.86	758.5	29.95	760.7	53.4	11.9	78	ene.	6.3	2.8	.....	.....	10	.....	.....	0.039	1.0	.....	Prof. P. Monte.
Rome	29.87	758.7	30.05	763.2	52.5	11.4	72	ene.	1.3	0.6	.....	.....	10	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	29.87	758.8	30.13	765.3	57.2	14.0	69	nne.	3.1	1.4	.....	.....	2	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.19	741.3	30.09	764.3	53.6	12.0	76	sw.	1.8	0.8	.....	.....	0	.....	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.65	753.2	29.85	758.1	63.1	17.3	71	se.	.....	.....	4	.....	4	.....	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.79	756.6	30.04	763.0	59.9	15.5	48	calm	0	0	.....	.....	8	.....	.....	0	0	.....	Prof. G. Caccintore.
Syracuse	30.02	762.6	30.07	763.7	56.8	13.8	78	s.	4.3	1.9	.....	.....	3	sw.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.55	750.5	30.08	764.0	54.1	12.3	80	se.	0	0	.....	.....	2	sw.	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.01	559.2	.....	.....	21.2	— 6.0	95	sw.	.....	.....	6	.....	10	.....	.....	0	0	misty.	Prof. P. F. Denza.
Valdobbia	22.04	559.7	.....	.....	23.0	— 5.0	71	e.	.....	.....	2	.....	10	.....	.....	0.394	10.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.00	763.4	30.09	764.2	24.1	— 4.4	52	nw.	.....	.....	4	.....	10 n	.....	nw.	0.094	2.4	snowing	Hattori.
Awomori	30.00	762.0	30.04	763.0	18.1	— 7.7	88	w.	8.0	3.8	.....	.....	10 n	.....	.....	0.220	5.6	snowing	K. Ogawa.
Hakodate	30 00	762.0	30.01	762.3	13.5	—10.3	90	n.	6.0	2.7	.....	.....	9	.....	.....	0.090	2.3	.....	
Hamamatsu	30.14	765.5	30.17	766.3	34.6	1.4	69	nw.	.....	.....	2	0	0	.....	.....	0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y	.....	.....	.....	.....	30.8	— 0.7	67	n.	2.6	1.2	.....	0	0	.....	.....	0	0	clear	
Kanazawa	30.16	766.0	30.27	768.8	33.0	0.6	89	n.	7.9	3.5	.....	.....	9	.....	.....	0.050	1.3	cloudy	S. Endo.
Kioto	30.09	764.3	30.28	769.1	32.3	0.2	62	wnw.	2.9	1.2	.....	0	1 8	.....	.....	0.005	0.1	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.14	765.5	30.35	771.0	34.5	1.4	39	ne.	5.1	2.3	.....	0	0	.....	.....	0	0	clear	S. Takehayashi.
Niigata	30.15	765.8	30.18	766.6	27.6	— 2.4	89	n.	13.0	5.8	.....	.....	10 n	.....	nw.	0.160	4.1	light snow	M. Morita.
Nobiru	30.07	763.7	30.08	764.1	24.4	— 4.2	90	nw.	6.7	2.9	.....	3 ck	6 n	.....	.....	0.040	1.0	snowing	H. Midzushima.
Numazu	30.03	762.7	30.06	763.6	33.7	0.9	74	ene.	.....	.....	2	0	0	.....	.....	0	0	clear	R. Kaneda.
Osaka	30.27	769.0	30.29	769.3	31.7	— 0.2	70	w.	3.5	1.5	.....	0	0	.....	.....	0	0	clear	H. Omura.
Sapporo	.....	.....	.....	.....	14.0	—10.0	77	se.	4.2	1.9	.....	1	0	.....	.....	0	0	clear	
Tokei Obs'y, Yeddo	30.03	762.8	30.11	764.9	32.1	0.1	63	n.	3.0	1.3	.....	0	0	.....	.....	0	0	clear	The Staff.
Wakayama	30.23	767.8	30.29	769.3	38.4	3.6	67	n.	4.8	2.1	.....	2 ck	8 ck	.....	nw.	0	0	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.92	760.0	30.11	764.8	78.8	26.0	62	e.	21.5	9.6	.....	2 cs;c	4 kn	w.	se.	0.16	4.1	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.74	602.9	29.96	760.9	57.9	14.4	54	n.	imp.	imp.	.....	2 c;ck	0	.....	.....	0	0	clear	Prof. Vicente Fernandez.
Leon	24.39	619.5	30.23	767.8	46.4	8.0	86	nw.	.....	.....	1	5 c	0	.....	.....	0	0	½ cloudy	Prof. M. Leal.
Mazatlan	29.71	754.6	29.97	761.2	71.0	21.7	88	n.	1.0	0.8	.....	0	0	.....	.....	0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	588.2	30.32	770.2	46.9	8.3	70	calm	0	0	.....	1 c	3 ks	.....	.....	0	0	.....	The Staff.
Morelia	24.31	617.5	30.18	766.6	41.4	5.2	72	se.	.....	.....	1	2 c	1 k	s.	s.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.03	610.3	30.15	765.7	48.7	9.3	74	calm	0	0	.....	5 c	1 s	sw.	sw.	0	0	½ cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.4	30.11	764.9	56.3	13.5	53	calm	0	0	.....	.....	10	.....	.....	0.331	8.4	covered	Prof. P. Spina.
Zacatecas	22.58	573.4	30.27	768.9	49.8	10.0	56	nw.	8.6	3.8	.....	0	1 s	.....	sw.	0	0	blue sky	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.67	753.6	29.67	753.6	38.5	3.6	.....	se.	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Groningen	29.73	755.2	29.79	756.6	32.9	0.5	.....	e.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	29.71	754.6	29.71	754.6	33.1	0.6	.....	e.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	29.70	754.3	29.70	754.3	35.1	1.7	85	ese.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Utrecht	29.09	754.0	29.73	755.2	35.4	1.9	83	ese.	.....	.....	2	.....	5	.....	.....	0	0	cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.85	758.2	29.91	759.8	37.0	2.8	66	sse.	9	4	.....	.....	5	.....	.....	0	0	.....	
Brono	29.08	753.9	29.72	754.9	39.2	4.0	88	wsw.	29	13	.....	.....	10	.....	.....	.....	.....	raining	
Christiania	29.93	760.1	30.08	764.0	30.2	— 1.0	98	e.	0	0	.....	.....	10	.....	.....	0.012	0.3	foggy	
Gjæsvær	29.30	744.2	29.32	744.8	33.3	0.7	.....	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing	
Lodingen	29.40	746.7	29.45	747.9	34.2	1.2	92	calm	.....	.....	0	.....	10	.....	.....	0.138	3.5	snowing	
PORTUGUESE.																			
Angra, Azores	29.88	758.9	30.04	762.9	56.8	13.8	86	wsw.	3.1	1.4	.....	.....	5	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	28.03	727.1	29.64	752.8	47.8	8.8	97	wnw.	0.7	0.3	.....	.....	10	.....	.....	0.118	3.0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.82	757.5	29.91	759.8	59.0	15.0	50	wsw.	4.9	2.2	.....	.....	7	n.	.....	0.102	2.6	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.20	743.3	29.63	752.5	50.4	10.2	95	ssw.	1.3	0.6	.....	.....	0	.....	.....	0.109	4.3	.....	The Staff.
Ponta Delgada, Azores	30.01	762.2	30.08	764.0	61.2	16.2	55	wnw.	2.5	1.1	.....	.....	4	.....	.....	0.028	0.7	.....	
Saint Paul de Loando	29.62	752.3	29.82	757.3	77.9	25.5	88	nw.	1.8	0.8	.....	.....	8	.....	.....	0.039	1.0	.....	
Serra da Estrella	24.79	629.6	29.58	751.4	34.0	1.1	86	sw.	.....	.....	1	.....	10	.....	.....	1.378*	35.0*	foggy	
RUSSIAN.																			
Akmolinski	29.04	752.9	30.94	785.8	—21.5	—29.7	84	e.	2	1	.....	0	0	.....	.....	.....	.....	.....	Major K. Lasarew.
Archangel	30.24	768.2	30.26	768.7	29.5	— 1.4	92	s.	13	6	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	30.43	772.9	30.35	770.9	31.0	— 0.2	81	e.	13	6	.....	.....	10	.....	.....	0	0	heavy cl'ds.	Capt. Wisganow.
Barnaul	30.43	773.0	31.05	788.7	—34.2	—36.8	77	sw.	4	2	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Bleloserek	30.04	763.0	30.55	775.9	20.1	— 6.6	100	s.	9	4	.....	.....	10 s	.....	.....	0	0	.....	
Dorpat	30.02	762.6	30.28	769.1	33.8	1.0	100	se.	4	2	.....	.....	10 n	.....	.....	0.134	3.4	.....	Observatory.
Ekaterinburg	29.65	753.0	30.71	779.9	13.6	—10.2	99	wnw.	9	4	.....	.....	10	.....	.....	0	0	light clouds	Meteorological Obs'y.
Elissawetgrad	29.85	758.3	30.34	770.5	27.7	— 2.4	83	e.	11	5	.....	.....	10 s	.....	.....	c	0	.....	
Kasan	30.48	774.1	30.78	781.7	17.8	— 7.9	72	se.	4	2	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kem	30.04	763.1	.....	.....	34.0	1.1	87	sw.	18	8	.....	.....	10 ks	.....	.....	0	0	heavy cl'ds.	
Kertch	30.02	762.6	30.04	763.1	34.0	1.1	89	ene.	13	6	.....	0	8 n	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	29.01	752.0	30.28	769.1	28.9	— 1.7	90	se.	11	5	.....	.....	10ks;h	.....	.....	.....	.....	.....	Observatory.
Libau	30.12	765.0	30.14	765.6	35.1	1.7	91	ene.	.....	.....	1	.....	10	.....	.....	0.028	0.7	.....	E. Quaas.
Lugan	30.07	763.8	30.29	769.4	23.4	— 4.8	81	ene.	13	6	.....	.....	10	.....	.....	blank	blank	.....	Meteorological Obs'y.
Moscow	30.09	764.2	30.03	778.0	7.2	—13.8	96	ese.	5.6	2.5	.....	.....	0	.....	.....	0	0	.....	
Nikolaiev	30.19	766.8	30.26	768.7	29.8	— 1.2	92	e.	22	10	.....	.....	10 n	.....	.....	0	0	.....	Capt. Kurdakow.
Pekin, China	30.19	766.8	30.33	770.4	23.2	— 4.9	60	calm	0	0	.....	0	7 n	.....	.....	.....	.....	.....	Physical Observatory.
Petrozavodsk	30.12	765.0	30.33	770.4	30.6	— 0.8	92	ssw.	7	3	.....	.....	10	.....	.....	0.039	1.0	.....	Dr. Bergmann.
Pinsk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
St. Petersburg	30.31	769.8	30.32	770.2	32.0	0.0	98	s.	11	5	.....	.....	10 n	.....	.....	0.004	0.1	.....	Central Physical Obs'y.
Sevastopol	29.83	757.6	29.99	761.8	45 3	7.4	85	calm	0	0	.....	.....	10 n	.....	.....	blank	blank	.....	
Semipalatinsk	30.31	769.8	31.11	790.2	—27.4	—33.0	81	w.	4	2	.....	.....	4	.....	.....	0	0	.....	Major Lasarew.
Starol Bykhov	29.92	760.0	30.41	772.5	27.3	— 2.0	85	se.	11	5	.....	.....	10	.....	.....	0	0	.....	
Tashkend, Laboratory	28.48	723.5	30.10	764.4	43.9	6.6	66	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.73	729 7	30.17	766.3	49.3	9.6	66	ese.	4	2	.....	3 cs	0	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.00	777.3	30.95	786.1	—36.6	—38.1	79	s.	7	3	.....	0	0	.....	.....	.....	.....	.....	
Vladivostok	30.24	768.1	30.31	769.8	— 0.4	—18.0	70	n.	4	2	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.58	751.3	30.02	762.4	36.0	2.2	96	se.	11	5	.....	.....	10	.....	.....	.....	.....	hv'y clouds	Astronomical Obs'y.
Wilna	29.78	756.4	30.22	767.6	34.9	1.6	93	se.	4	2	.....	.....	10	.....	.....	.....	.....	hv'y clouds	Berg, Assistant.
Yeniseisk	30.52	775 3	30.87	784.0	—25.6	—32.0	80	w.	7	3	.....	.....	4	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.62	752.3	37	2.8	90	ne.	.....	.....	4	5	3	e.	.....	0	0	.....	J. Youngclause.
North Unst	.....	.....	29.74	755.4	.....	.....	.....	s.	.....	.....	6	2	4	sse.	.....	blank	blank	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.56	750.8	29.67	753.5	55.9	13.3	86	e.	0.7	0.3	.....	.....	9	.....	.....	0.043	1.1	foggy	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.69	754.1	29.75	755.6	54.7	12.6	62	se.	7.0	3.4	.....	.....	10	.....	.....	0.102	2.6	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	29.62	676.1	29.63	752.5	41.5	5.3	82	s.	10.5	4.7	.....	.....	10	.....	.....	0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.33	694.2	29.61	752.0	39.4	4.1	100	n.	9.4	4.2	.....	.....	10	.....	.....	0.587	14.9	raining	The Staff.

*Total for four days,

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	29.46	748.2	29.59	751.6	49.5	9.7	93	ne.	1.3	0.6	.....	5	5	w.	.....	0.173	4.4	raining	Olayo Diaz, Director.
Oviedo	28.61	726.8	29.47	748.5	56.8	13.8	50	s.	13.4	6.0	.....	5 8	1 k	calm	se.	0	0	fair	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.58	725.9	29.47	748.5	50.9	10.5	88	sw.	4.3	1.9	.....	.....	9	.....	.....	0.322	8.2	raining	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.78	756.5	29.84	758.0	77.5	25.3	76	e.	0	0	.....	1 c	2 ks	.....	.....	0.157	4.0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.56	750.9	29.66	753.4	51.8	11.0	87	calm	0	0	.....	.....	10	.....	sw.	0.710	18.0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I.	29.97	761.2	30.06	763.5	78.4	25.8	89	ne.	15.7	7.0	.....	2 8	5 k*	ne.	ne.	0.087	2.2	d. clouds	Manuel Maese.
Tuguegarao, Philippine Is'ds	29.83	757.7	29.96	761.0	68.8	20.4	89	nw.	11.1	5.0	.....	0	8 ks	.....	ne.	Inap.	Inap.	.....	José L. Yrastorza.
SWEDISH.																			
Haparanda	29.86	758.4	29.90	759.4	32.0	0.0	89	s.	.....	.....	4	.....	2	.....	.....	0.106	2.7	.....	
Umea	29.92	759.9	29.97	761.2	28.6	— 1.9	86	sw.	.....	.....	2	.....	1	.....	.....	0	0	.....	
Hernosand	29.96	761.0	30.01	762.3	30.2	— 1.0	88	calm	.....	.....	0	.....	0	.....	.....	0.094	2.4	.....	
Stockholm	29.99	761.8	30.17	766.3	30.7	— 0.7	90	calm	.....	.....	0	.....	9	.....	.....	0.031	0.8	.....	
Wisby	30.04	763.0	30.10	764.5	35.2	1.8	96	se.	.....	.....	2	.....	10	.....	.....	0.024	0.6	raining	
Sub-series.																			
Upsala	30.06	763.6	30.15	765.8	32.2	0.1	98	ssw.	7.2	3.2	.....	.....	10	.....	.....	0	0	.....	S. O. Fineman.
SWISS.																			
Geneva	28.40	721.4	29.89	759.1	36.1	2.3	80	s.	.....	.....	1	.. ..	10	.....	.....	0	0	foggy	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.00	762.0	55.4	13.0	78	n.	10	4.5	.....	.....	4	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.09	764.3	57.6	14.2	.....	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.96	760.9	66.0	18.9	55	e.	.....	.....	1	10 c	.....	sw.	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.05	763.3	30.14	765.5	30	— 1.1	74	s.	10	4.5	.....	.....	10 8	.....	.....	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	28.88	733.5	29.59	751.6	31	— 0.6	86	se.	2	0.9	.....	.....	10 8	.....	.....	0.03	0.8	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.10	637.5	30.18	766.6	20	— 6.7	64	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.07	687.6	30.10	764.5	— 3	—19.4	68	w.	28	12.5	.....	.....	10 8	.....	w	0	0	cloudy	B. O. Lenoir.
Atlanta, Georgia	28.86	733.0	30.09	764.3	45.5	7.5	88	e.	4	1.8	.....	.....	10 n	.....	sw.	0.34	8.6	light rain	H. C. Smith.
Atlantic City, New Jersey	30.06	763.5	30.08	764 0	41	5.0	82	se.	11	4.9	.....	.....	10 8	.....	.....	0	0	cloudy	Jas. M. Watson.
Augusta, Georgia	29.92	760.0	30.12	765.0	48	8.9	86	n.	3	1.3	.....	.....	10 8	.....	w.	0	0	cloudy	John Healy.
Baltimore, Maryland	30.02	762.5	30.07	763.8	38	3.3	89	se.	5	2.2	.....	.....	10 n	.....	sw.	0.01	0.3	light rain	Geo W Felger.
Barnegat, New Jersey	30.08	764.0	30.10	764.5	42.0	5.6	82	s.	11	4.9	.....	.....	10 8	.....	sw.	0	0	cloudy	G. A. Hill.
Behring Id., Behring Sea	29.63	752.6	29.65	753.1	36.1	2.3	.....	e.	16	7.2	.....	.....	10 n	.....	sw.	0.38	9.7	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.31	719.1	30.07	763.8	9	—12.8	80	se.	3	1.3	.....	.....	10 8	.....	.....	0	0	cloudy	A. Pritchard.
Benton, Fort, Montana	27.06	687.3	30.06	763.5	6	—14.4	76	nw.	8	3.6	.....	.....	10 8	.....	nw.	0	0	cloudy	S. Wheaton.
Bismarck, Dakota	28.08	713.2	30.09	764.3	0	—17.8	72	e.	2	0.9	.....	.....	10 8	.....	.....	0	0	cloudy	Cyrus Cramor.
Block Island, Rhode Island	30.21	767.3	30.24	768.1	38	3.3	89	s	9	4.0	.....	.....	10s;ks	.....	s.	0	0	cloudy	J. T. Eiker.
Boise City, Idaho	27.17	690.1	30.15	765.8	33	0.6	88	nw.	3	1.3	.....	.....	10 8	.....	.....	0	0	cloudy	B. E. Light.
Boston, Massachusetts	30.12	765.0	30.28	769.1	24.0	— 4.4	88	nw.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog	O. B. Cole.
Brownsville, Texas	29.95	760.7	30.00	762.0	64.3	17.9	92	calm	0	0	.....	0	4 8	.....	.....	0	0	fair	M. McCarty.
Buffalo, New York	28.92	734.6	29.72	754.9	33.8	1.0	84	se.	24	10.7	.....	.....	10 n	.....	sw.	Inap.	Inap.	light snow	W. Finn.
Buford, Fort, Dakota	27.81	706.4	30.05	763 3	8	—13.3	80	ne.	14	6.3	.....	.....	10 8	.....	.....	0	0	light snow	F. A. Mellen.
Burlington, Vermont	29.80	756.9	30.11	764.8	21.9	— 5.6	76	s.	20	8.9	.....	.....	10 8	.....	s.	Inap.	Inap.	cloudy	G. O. Schaeffer.
Cairo, Illinois	29.64	752.8	30.06	763.5	39.8	4.3	75	n.	22	9.8	.....	0	1 8	.....	n.	Inap.	Inap.	clear	W. H. Ray.
Cape Henry, Virginia	30.02	762.5	30.04	763.0	49	9.4	86	s.	16	7.2	.....	.....	10 8	.....	w	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.01	762.2	30.04	763.0	45.0	7.2	76	se.	8	3.6	.....	.....	10 n	.....	.....	0.02	0.5	light rain	W. E. Smith.
Cape Mendocino, California	29.49	749.0	30.17	766.3	52.5	11.4	94	se.	26	11.6	.....	.....	10 8	.....	se.	0	0	cloudy	J. J. McLean.
Cedar Keys, Florida	30.11	764.8	30.13	765.3	61	16.1	93	se.	3	1.3	.....	.....	fg.	.....	.....	0	0	dense fog	F. W. Mixer.
Champaign, Illinois	29.04	737.6	29.92	760.0	28.0	— 2.2	77	nw.	28	12.5	.....	.....	9 8	.....	nw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	29.99	761.7	30.05	763.3	57	13.9	86	sw.	5	2.2	.....	0	4 8	.....	sw.	0	0	fair	J. H. Smith.
Charlotte, N. Carolina	29.14	740.1	30.04	763.0	43.0	6.1	74	sw.	3	1.3	.....	.....	10 n	.....	sw.	0.02	0.5	light rain	D. O'Donoghue.
Chattanooga, Tennessee	29.19	741.4	30.05	763 3	44.5	6.9	88	s.	6	2.7	.....	.....	10 n	.....	sw.	0.27	6.9	light rain	B. L. Goulding.
Cheyenne, Wyoming	23.72	602.5	30.00	762.0	42.1	5.6	27	w.	40	17.9	.....	.....	10 8	.....	.....	0	0	cloudy	E. McGovern.
Chicago, Illinois	29.07	738.4	29.83	757.7	21.1	— 6.1	67	w.	16	7.2	.....	0	2 ks	.....	w.	0.24	6.1	clear	J. Mitchell.
Chincoteague, Virginia	30.00	762.0	30.02	762.5	48	8.9	93	se.	9	4.0	.....	.....	10 ks	.....	w.	Inap.	Inap.	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.09	738.9	29.79	756.7	44	6.7	93	s.	10	4.5	.....	.....	10 n	.....	s.	0.04	1.0	light rain	R. B. Watkins.
Cleveland, Ohio	28.90	734.0	29.69	754.1	37.8	3.2	84	s.	13	5.8	.....	.....	10 n	.....	sw.	0.07	1.8	light rain	J. B. Newlin.
Coleman City, Texas	28.21	716.5	30.11	764.8	41	5.0	67	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	28.81	731.8	29.72	754.9	40	4.4	82	s.	8	3.6	.....	.....	10 n	.....	.....	0.12	3.0	light rain	D. Cuthbertson.
Concho, Fort, Texas	28.12	714.2	30.14	765.5	38.6	3.7	65	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.45	671.8	29.85	758.2	25	— 3.9	64	nw.	4	1.8	.....	.....	10 8	.....	.....	0	0	cloudy	W. B. Lamar.
Davenport, Iowa	29.34	745.2	30.05	763.3	13	—10.6	70	nw.	12	5.4	.....	0	hz.	.....	.....	0	0	clear	R. R. Martin.
Davis, Fort, Texas	25.22	640.6	30.10	765.1	46	7.8	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington Ty	28.02	711.6	29.85	758.2	43	6.1	100	sw.	2	0.9	.....	.....	10 n	.....	.....	2.06	52.3	heavy rain	D. Moore.
Deadwood, Dakota	24.96	634.0	29.95	760.7	29	— 1.7	80	s.	3	1.3	.....	.....	10 8	.....	.....	0	0	cloudy	F. Willson.
Delaware Breakwater, Del	30.06	763.5	30.08	764.0	43	6.1	100	se.	10	4.5	.....	.....	10 8	.....	s.	0	0	threatening	T. S. Townsend.
Denison, Texas	29.24	742.7	30.09	764.3	40.0	4.4	95	n.	10	4.5	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24.51	622.5	30.03	762.7	40.0	4.4	43	e.	8	3.6	.....	0	2 8	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.13	739.9	30.11	764 8	12	—11.1	61	n.	4	1.8	.....	0	0	.....	.....	0.01	0.3	clear	F. W. Conrad.
Detroit, Michigan	28.86	733.0	29.62	752.3	43.0	6.1	74	s.	13	5.8	.....	.....	10 n	.....	w.	0.10	2.5	light rain	C. F. R. Wappenhans.
Dodge City, Kansas	27.44	697.0	30.24	768.1	21	— 6.1	73	w.	2	0.9	.....	0	5 8	.....	.....	0	0	fair	V. P. Temple.
Dubuque, Iowa	29.22	742.2	29.99	761.7	10.5	—11.9	80	w.	9	4.0	.....	0	0	.....	.....	0.01	0.3	clear	J. Harvey Smith.
Duluth, Minnesota	29.03	737.3	29.84	757.9	12.4	—10.9	69	w.	36	16.1	.....	0	0	.....	.....	0	0	clear	N. B. Conger.
Eagle Pass, Texas	29.27	743.4	30.11	764.8	44.0	6.7	83	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.12	638.0	30.04	763.0	33.	0.0	74	sw.	28	12.5	.....	0	7 8	.....	sw.	0	0	fair	J. M. Clifford.
Eastport, Maine	30.26	768.6	30.33	770.4	15.0	— 9.4	83	nw.	7	3.1	.....	3 c	5 8	.....	.....	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.29	693.2	30.25	768.3	23	— 5.0	64	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.38	670.0	30.24	768.1	49.0	4.4	42	nw.	12	5.4	.....	0	2 8	.....	nw.	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	28.91	734.3	29.68	753.9	37	2.8	82	s.	20	8.9	.....	.....	10 n	.....	.....	0.03	0.8	light rain	Peter Wood.
Escanaba, Michigan	28.92	734.6	29.64	752.8	20.0	— 6.7	70	w.	10	8.0	.....	.....	10 8	.....	w.	Inap.	Inap.	threatening	George Heathcote.
Fredericksburg, Texas	28.23	717.0	30.05	763.3	53	11.7	80	w.	5	2.2	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	29.96	761.0	30.01	762.2	66	18.9	93	sw.	8	3.6	.....	.....	fg.	.....	.....	Inap.	Inap.	dense fog	E. O'C. MacInernay.
Grand Haven, Michigan	28.96	735.6	29.67	753.6	29.0	— 1.7	77	w.	24	10.7	.....	.....	10 8	.....	w.	0.51	13.0	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.39	644.9	30.27	768.8	39	3.9	76	e.	3	1.3	.....	0	0	.....	.....	0	0	clear	Robert O. Lord.
Hatteras, North Carolina	30.09	764.3	30.11	764.8	60	15.6	75	s.	24	10.7	.....	6 k	3 ks	se.	w.	0	0	threatening	R. M. Crawford.
Helena, Montana	25 44	646.2	29.82	757.4	20	— 6.7	100	sw.	2	0.9	.....	.....	10 n	.....	calm	0.01	0.3	light snow	N. C. Smith.
Henrietta, Texas	29.02	737.1	30.10	764.5	35	1.7	69	n.	4	1.8	.....	0	2 8	.....	n.	0	0	clear	J. P. Sherry.
Huron, Dakota	28.60	726.4	30.14	765.5	2.8	—16.2	66	w.	5	2.2	.....	0	3 8	.....	.....	0	0	clear	S. W. Glenn.
Indianapolis, Indiana	28.99	736.3	29.84	757.9	36	2.2	70	nw.	10	4.5	.....	.....	10 8	.....	nw.	0.01	0.3	cloudy	O. Schutze.
Indianola, Texas	29.98	761.5	30.01	762.2	62.4	16.9	94	sw.	6	2.7	.....	0	fg.	.....	.....	0.13	3.3	clear	I. A. Reed.
Jacksboro, Texas	28.88	733.5	30.12	765.0	38	3.3	73	n.	4	1.8	.....	0	2 8	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.07	763.8	30.12	765.0	57	13.9	100	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	J. W. Smith.
Keogh, Fort, Montana	27.12	688.8	29.82	757.4	20	— 6.7	87	ne.	1	0.4	.....	.....	10 n	.....	ne.	0.01	0.3	light snow	A. Schneider.
Keokuk, Iowa	29.38	746.2	30.09	764.3	18.6	— 7.8	76	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.07	763.8	30.09	764.3	73.0	22.8	90	e.	2	0.9	.....	3 c	0	w.	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.06	763.5	30.08	764.0	53.5	11.9	76	s.	22	9.8	.....	0	8 ks	.....	sw.	0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	28.93	734.8	30.01	762.2	37	2.8	95	e.	3	1.3	.....	.....	10 8	.....	.....	0.07	1.8	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.11	739.4	29.99	761.0	5	—15.0	76	w.	5	2.2	.....	0	0	.....	.....	0.04	1.0	clear	S. C. Emery.
Leavenworth, Kansas	29.23	742.4	30.19	766.8	21	— 6.1	84	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	28.99	735.6	29.84	757.9	37.0	2.8	94	e.	2	0.9	.....	.....	10 n	.....	.....	1.47	37.3	heavy rain	W. Bell.
Little Rock, Arkansas	29.71	754.6	30.04	763.0	47	8.3	77	n.	10	4.5	.....	0	3 ks	.....	nw.	Inap.	Inap.	clear	W. U. Simons.
Los Angeles, California	29.73	755.1	30.13	765 3	52	11.1	69	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.24	742.7	29.84	757.9	50	10.0	71	w.	13	5.8	.....	.....	10 8	.....	w.	0.01	0.3	cloudy	L. M Dey.

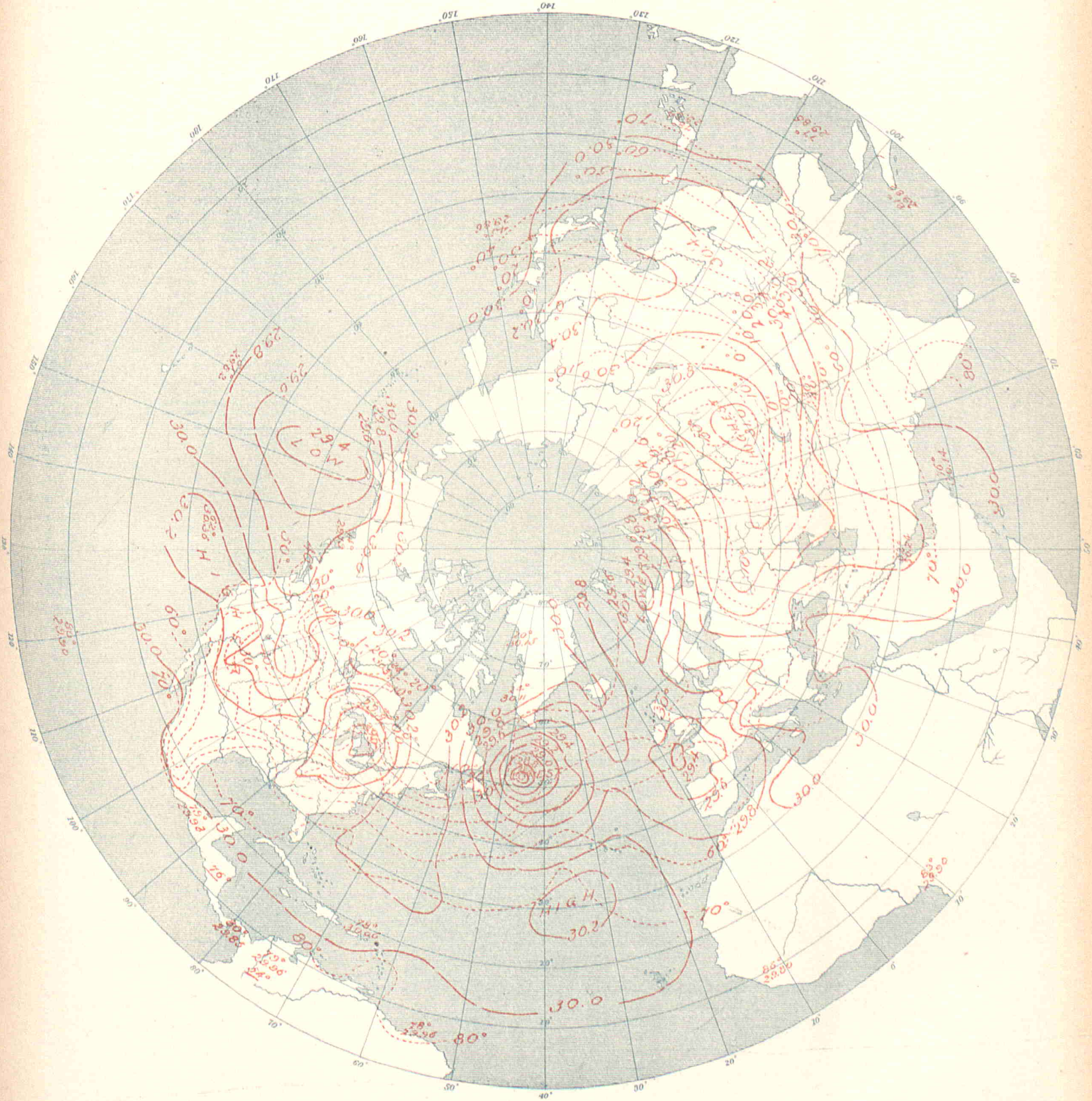
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.30	744.2	30.02	762.5	36.2	2.3	79	s.	2	0.9	.....	.....	10 n	.....	s.	0.18	4.6	light rain..	Lewis Duane.
Mackinaw City, Michigan	28.84	732.5	29.54	750.3	31.5	— 0.3	94	nw.	12	5.4	.....	.....	10 n	.....	.....	0.43	10.9	light snow...	F. R. Day.
Macon, Fort, North Carolina	30.08	764.0	30.09	764.3	53	11.7	100	se.	8	3.6	.....	4 cs	6 k	.....	sw.	0	0	cloudy.....	C. A. Shaw.
Madison, Wisconsin	28.79	731.3	29.89	759.2	8	—13.3	55	nw.	18	8.0	.....	0	0	.....	.....	0	0	clear.....	F. P. Chaffee.
Maginnis, Fort, Montana	25.12	638.0	29.66	753.4	32	0.0	71	ne.	5	2.2	.....	.....	10 s	.....	.....	0.11	2.8	cloudy.....	F. Burke.
McKavett, Fort, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. E. Thatcher.
Marquette, Michigan	28.84	732.5	29.62	752.3	19	- - 7.2	70	nw.	24	10.7	.....	0	4 s	.....	.....	0.01	0.3	fair.....t.....	J. Gilligan.
Memphis, Tennessee	29.68	753.9	30.04	763.0	50	10.0	64	w.	2	0.9	.....	.....	10 s	.....	.....	0.25	6.3	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	28.98	736.1	29.80	756.9	14	—10.0	64	w.	22	9.8	.....	0	1 s	.....	w.	0.01	0.3	clear.....	W. Line
Missoula, Fort, Montana	26.40	670.5	29.80	758.4	30	— 1.1	88	calm	0	0	.....	.....	10 n	.....	.....	0.11	2.8	light snow..	I. H. Young.
Mobile, Alabama	30.01	762.2	30.05	763.3	55	12.8	96	s.	2	0.9	.....	4cs;ck	1 ks	w.	s.	0.02	0.5	fair.....	C. A. Read.
Montgomery, Alabama	29.82	757.4	30.06	763.5	47	8.3	93	calm	0	0	.....	.....	10 n	.....	.....	0.14	3.6	light rain....	J. B. McLaughlin.
Moorhead, Minnesota	28.97	735.8	30.08	764.0	—10	—23.3	100	n.	10	4.5	.....	0	0	.....	.....	0	0	clear.....	H. Bessant.
Morgantown, W. Virginia	28.75	730.2	29.82	757.4	41.0	5.0	86	sw.	8	3.6	.....	.....	10 s	.....	sw.	inap.	inap.	threatening.	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.64	600.4	30.27	768.8	14.0	—10.0	100	s.	36	16.1	.....	.....	fg.	.....	s.	0	0	dense fog....	B. S. Pague.
Nashville, Tennessee	29.33	745.0	29.94	760.5	51.0	10.6	83	sw.	13	5.8	.....	.....	10 ks	.....	w.	0.02	0.5	cloudy.....	L. N. Jesunofsky.
New Haven, Connecticut	30.08	764.0	30.20	767.1	22	— 5.6	87	ne.	7	3.1	.....	.....	10 s	.....	s.	0	0	cloudy.....	J. H. Sherman.
New London, Connecticut	30.18	766.6	30.23	767.8	25	— 3.9	73	n.	4	1.8	.....	.....	10 s	.....	s.	0	0	cloudy.....	J. G. Lynch.
New Orleans, Louisiana	29.97	761.2	30.03	762.7	64.0	17.8	93	s.	9	4.0	.....	0	5s;fg	.....	s.	0	0	fair.....	L. Dunne.
Newport, Rhode Island	30.20	767.1	30.24	768.1	30.8	— 0.7	82	ne.	6	2.7	.....	.....	10s	.....	se.	0	0	cloudy.....	W. McGillivray.
New York, New York	29.93	760.2	30.12	765.0	33	0.6	88	e.	11	4.9	.....	.....	10s;fg	.....	s.	0.04	1.0	cloudy..	J. B. Merrill.
Norfolk, Virginia	30.00	762.0	30.03	762.7	50	10.0	77	s.	11	4.9	.....	.....	10ks;fg	.....	s.	0	0	cloudy.....	Wm. Davis.
North Platte, Nebraska	26.96	684.8	30.12	765.0	27.6	— 2.4	74	s.	9	4.0	.....	0	3 s	.....	.....	inap.	inap.	clear.....	E. F. Brady.
Olympia, Washington T'y	29.75	755.6	29.79	756.7	38.0	3.3	89	calm	0	0	.....	.....	10 n	.....	.....	1.13	28.7	light rain....	J. Dascomb.
Omaha, Nebraska	28.92	734.6	30.21	767.3	9.2	—12.7	76	w.	12	5.4	.....	0	0	.....	.....	0.02	0.5	clear.....	A. Pollak.
Oswego, New York	29.50	749.3	29.84	757.9	30.0	— 1.1	77	s.	16	7.2	.....	.....	10 n	.....	.....	0.05	1.3	light snow...	J. G. Linsley.
Palestine, Texas	29.44	747.8	30.02	762.5	59.5	15.3	100	s.	4	1.8	.....	.....	10n;fg	.....	.....	0.02	0.5	light rain.....	L. M. Pindell.
Pensacola, Florida	30.03	762.7	30.06	763.5	54.0	12.2	93	calm	0	0	.....	0	4 s	.....	w.	0	0	fair.....	M. McGauran.
Philadelphia, Pa	29.99	761.7	30.10	764.5	38	3.3	72	se.	6	2.7	.....	.....	10 s	.....	s.	0	0	cloudy.....	T. T. Townsend.
Pike's Peak, Colorado	17.56	446.0	30.22	767.6	13	—10.6	64	nw.	.....	.....	9	0	1 s	.....	.....	0	0	clear.....	H. Hall.
Ploche, Nevada	24.14	613.1	30.31	769.9	28.2	— 2.1	70	n.	4	1.8	.....	0	3 ks	.....	w.	0	0	clear.....	C. N. Kitchel.
Pittsburg, Pennsylvania	28.93	734.8	29.79	756.7	37.0	2.8	89	se.	9	4.0	.....	.....	10 s	.....	se.	0.07	1.8	cloudy.....	W. A. Reid.
Poplar River, Montana	27.54	699.5	29.90	759.4	.....	.....	.....	nw.	.....	.....	1	.....	10 n	.....	.....	0.04	1.0	light snow..	W. D. Maxwell.
Port Eads, Louisiana	30.06	763.5	30.07	763.8	64.0	17.8	97	se.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	H. B. Boyer.
Port Huron, Michigan	28.84	732.5	29.57	751.1	32.8	0.4	100	sw.	12	5.4	.....	.....	10 n	.....	.....	0.12	3.0	light snow..	W. O. Bailey.
Portland, Maine	30.25	768.3	30.30	769.6	20.5	— 6.4	76	n.	5	2.2	.....	.....	10 s	.....	n.	0	0	cloudy.....	W. W. Eichelberger.
Portland, Oregon	29.67	753.6	29.74	755.4	43.5	6.4	100	nw.	8	3.6	.....	.....	10 n	.....	s.	6.13	155.7	heavy rain..	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	58	14.4	87	s.	2	0.9	.....	3 cs	4 ks	sw.	sw.	0	0	fair.....	F. S. Coburn.
Prescott, Arizona	24.87	631.7	30.24	768.1	27.6	— 2.4	80	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	W. H. Clendenon.
Provincetown, Mass.	30.27	768.8	30.30	769.6	32	0.0	88	s.	8	3.6	.....	.....	10 s	.....	s.	0	0	cloudy.....	P. T. Jenkins.
Punta Rassa, Florida	30.10	764.5	30.10	764.5	67	19.4	97	e.	4	1.8	.....	.....	10 s	.....	se.	0	0	cloudy.....	W. J. Evans.
Red Bluff, California	29.90	759.4	30.27	768.8	42	5.6	100	n.	1	0.4	.....	0	2 ks	.....	.....	0	0	clear.....	J. R. Williams.
Rochester, New York	29.07	738.4	29.78	756.4	32	0.0	88	s.	24	10.7	.....	.....	10 s	.....	.....	0	0	threatening.	E. W. McGann
Roseburg, Oregon	29.44	747.8	30.00	762.0	57	13.9	69	s.	8	3.6	.....	.....	10 s	.....	.....	0.01	0.3	threatening.	J. J. Nanry.
Sacramento, California	30.20	767.1	30.28	769.1	44.0	6.7	93	se.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	J. A. Barwick.
St. Louis, Missouri	29.41	747.0	30.06	763.5	32.4	0.2	86	nw.	12	5.4	.....	.....	10 s	.....	nw.	0	0	cloudy.....	J. H. Weber.
St. Michael, Fort, Alaska	30.26	768.6	30.30	769.6	— 7	—21.7	100	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	A. P. Leavitt.
St. Paul, Minnesota	29.02	737.1	29.98	761.5	0.0	—14.4	76	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	P. F. Lyons.
St. Vincent, Minnesota	29.14	740.1	30.13	765.3	—13	—25.0	87	n.	11	4.9	.....	0	0	.....	.....	0.01	0.3	clear.....	O. B Dilley.
Salt Lake City, Utah	25.62	650.7	30.16	766.1	45	7.2	63	calm	0	0	.....	0	8 s	.....	.....	inap	inap.	cloudy.....	J. Craig.
San Antonio, Texas	29.31	744.5	30.03	762.7	48.5	9.2	93	w.	1	0.4	.....	0	fg.	.....	.....	0	0	clear.....	T. J. Kenan.
San Diego, California	30.04	763.0	30.11	764.8	47.0	8.3	93	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	A. C. Dobbins.
Sandusky, Ohio	28.93	734.8	29.66	753.4	37	2.8	89	sw.	14	6.3	.....	.....	10 n	.....	.....	0.32	8.1	light rain....	M. H. Perry.
Sandy Hook, New Jersey	30.08	764.0	30.12	765.0	42.0	5.6	65	se.	10	4.5	.....	10 k	0	se.	.....	0	0	cloudy.....	B. A. Blundon.
San Francisco, California	30.22	767.6	30.29	769.4	49	9.4	80	s.	6	2.7	.....	0	fg.	.....	.....	0	0	clear.....	N. Gorom.
Santa Fé, New Mexico	23.27	591.0	30.26	768.6	34	1.1	50	n.	2	0.9	.....	1 cs	0	.....	.....	0	0	clear.....	H. U. Jones.
Savannah, Georgia	29.98	761.5	30.08	764.0	54	12.2	80	w.	4	1.8	.....	0	4 ks;fg	.....	w.	0.01	0.3	fair.....	H. W. Ford.
Shaw, Fort, Montana	26.14	663.9	29.97	761.2	2	—16.7	75	ne.	10	4.5	.....	.....	10 n	.....	.....	inap.	inap.	light snow..	A. L. Mathews.
Shreveport, Louisiana	29.72	754.9	29.98	761.5	60	15.6	100	calm	0	0	.....	.....	fg.	.....	.....	0.07	1.8	dense fog....	E. N. Meekins.
Sill, Fort, Indian Territory	28.83	732.3	30.16	766.1	32	0.0	81	n.	16	7.2	.....	0	2 s	.....	.....	0	0	clear.....	W. M. Mattingly.
Silver City, New Mexico	24.40	619.7	30.24	768.1	36.0	2.2	58	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	N. D. Lane.
Sitka, Alaska	29.72	754.9	29.79	756.7	13.5	—10.3	71	ne.	9	4.0	.....	0	0	.....	.....	0	0	clear.....	F. W. Fickett.
Smith, Fort, Arkansas	29.59	751.6	30.09	764.3	37.0	2.8	72	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	J. B. Campbell.
Smithville, North Carolina	30.04	763.0	30.08	764.0	54	12.2	93	s.	12	5.4	.....	0	4 s	.....	.....	0	0	fair.....	O. Parker.
Spokane Falls, Wash. Ter.	27.69	703.3	29.82	757.4	37	2.8	96	sw	4	1.8	.....	.....	10 n	.....	.....	0.27	6.9	light rain....	H. Clifford.
Springfield, Illinois	29.28	743.7	30.01	762.2	27.5	— 2.5	77	nw.	13	5.8	.....	0	7 s	.....	nw.	0.01	0.3	fair.....	T. B. Jennings.
Springfield, Massachusetts	30.08	764.0	30.22	767.6	20.0	— 6.7	80	ne.	.....	.....	1	.....	10 n	.....	.....	0	0	cloudy.....	Charles Mayr.
Springfield, Mo.	28.61	726.7	30.14	765.5	28	— 2.2	82	n	0	2.7	.....	0	fg.	.....	.....	0	0	clear.....	J. B. Marbury.
Starkville, Miss.	29.51	749.5	30.01	762.2	56	13.3	93	s.	8	3.6	.....	.....	10 s	.....	s.	0.31	7.9	cloudy.....	O. Dill.
Stevenson, Fort, Dakota	28.03	711.9	30.09	764.3	— 1	—18.3	72	e.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy.....	W. Burrows
Stockton, Fort, Texas	27.03	686.5	30.17	766.3	49	9.4	71	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear.....	J. F. Marshall.
Thatcher's Island, Mass.	30.16	766.1	30.22	767.6	33.6	0.9	78	se.	4	1.8	.....	.....	10 s	.....	se.	0	0	cloudy.....	G. Liebmann.
Thomas, Camp, Arizona	27.42	696.5	30.24	768.1	33	0.6	71	se.	.....	.....	1	0	0	.....	.....	0	0	clear.....	J. T. Fitzgerald.
Toledo, Ohio	28.90	734.0	29.64	752.8	39	3.9	73	sw.	12	5.4	.....	.....	10 n	.....	sw.	0.16	4.1	heavy rain..	A. Buell.
Tucson, Arizona	27.72	704.1	30.22	767.6	43	6.1	60	s.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	J. L. Whiteside.
Umatilla, Oregon	29.43	747.5	29.82	757.4	45	7.2	96	se.	3	1.3	.....	.....	10 n	.....	.....	0.72	18.3	light rain....	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	30	— 1.1	71	n.	.....	.....	1	0	0	.....	.....	0	0	clear.....	D. Brooks.
Vicksburg, Mississippi	29.76	755.9	30.04	763.0	60.2	15.7	93	s.	5	2.2	.....	.....	10 s	.....	.....	0.11	2.8	cloudy.....	James Kenealy.
Visalia, California	29.90	759.4	30.28	769.1	40.4	4.7	90	e.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	O. D. Stewart
Washakie, Fort, Wyoming	24.12	612.6	29.88	758.9	42.2	5.7	79	w.	9	4.0	.....	0	1 s	.....	.....	0	0	clear.....	T. M. Ambler.
Washington, D. C.	29.93	760.2	30.05	763.3	35.0	1.7	92	calm	0	0	.....	.....	10 n	.....	sw.	0.14	3.6	heavy rain..	B. M. Purssell.
West Las Animas, Colorado	25.95	659.1	30.11	764.8	21	— 6.1	73	ne.	7	3.1	.....	0	7 s	.....	ne.	0	0	fair.....	F. H. Brandeaburg.
Williamsport, Pa.	29.33	745.0	29.96	761.0	35.3	1.8	77	s.	12	5.4	.....	.....	10 s	.....	.....	0	0	threatening.	R. F. Hough.
Wilmington, N. Carolina	30.01	762.2	30.07	763.8	58	14.4	87	s.	9	4.0	.....	3 c	2 s	w.	.....	0	0	fair.....	Samuel A. Haney.
Winnemucca, Nevada	25.65	651.5	30.18	766.6	47	8.3	52	sw	26	11.6	.....	0	8 s	.....	w	0	0	cloudy.....	J. Grover.
Yankton, Dakota	28.78	731.0	30.21	767.3	2	—16.7	72	calm	0	0	.....	0	0	.....	.....	0.09	2.3	clear.....	J. H. Attfeld.
Yuma, Arizona	29.97	761.2	30.12	765.0	50.0	10.0	58	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8	.....	.....	54.0	12.2	77	calm	0	0	.....	0 c	2 ks	w.	nw.	0	0	cloudy.....	Joaquim Gomez.
Havana, Cuba, W. I.	30.00	762.0	30.00	763.5	69.7	20.9	91	e.	4	1.8	.....	5c;ck	0	sw.	.....	0	0	fair.....	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	72	22.2	88	calm	0	0	.....	0	7 s	.....	e.	0	0	cloudy.....	Robert Johnston.
Paramaribo, S. A.	29.96	761.0	29.96	761.0	78	25.6	86	e.	.....	.....	3	4 ck	4 s	e.	.....	1.500	38.1	fair.....	Dr. C. J. Herng.
Puerto Berrio, U. S. Col'mbia	29.40	746.7	29.96	761.0	79	26.1	89	calm	.....	.....	0	.....	10 ks	.....	calm	1.05	26.7	cloudy.....	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	76	24.4	95	ne.	.....	.....	2	0	1 ks	.....	ne.	0.25	6.3	clear.....	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.31	744.5	29.37	746.0	26	— 3.3	76	ne.	.....	.....	4	.....	10 n	.....	.....	0.31	8.0	cloudy.....	W. J. Fisher.
St. Thomas, W. I.	29.97	761.2	30.09	764.3	78	25.6	69	e.	.....	.....	.....	0	3 k	.....	e.	0	0	fine.....	Aug. Wallee.
York Factory H. B. A.	30.30	769.6	30.37	771.4	—24.6	—31.1	.....	nw.	17	7.6	.....	4 k	4 s	nw.	nw.	0.05	1.3	cloudy.....	Forres ne & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill	Character.	Direction from	
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	29.75	755.6	70	21.1	81	se.			4		8							d. clouds.
H. M. S. Antelope, N. 31° 18′, E. 29° 25′	29.98	761.5	70	21.1		wnw.			3		7	wnw.				2	sw.	d. clouds.
H. M. S. Audacious, N. 1° 21′, E. 103° 15′	29.79	756.7	80	26.7	91	ne.			1		1	ne.				2	wnw.	showery.
H. M. S. Beacon, Lake Timsah, Egypt			72	22.2	63	s.			1		2	s.				1	s.	blue sky
H. M. S. Boadicea, Saldanha Bay, Cape Colony	30.25	768.3				sse.			3		2							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.00	762.0	72	22.2	63	calm			0		0							d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.41	772.4	35	1.7	80	w.			2		0							blue sky.
H. M. S. Comus, San Francisco, Cal	30.30	769.6	46	7.8	100	sse.			2		0							misty.
H. M. S. Curacoa, Yokohama, Japan	29.92	760.0	39.5	4.2	72	n.			2–4		4	wnw.						foggy.
H. M. S. Diamond, Sydney, N. S. W*†	29.65	753.1	63	17.2	57	e.			1		5	n.						squally.
H. M. Dock-Yard, Bermuda, W. I.	30.27	768.8	62	16.7	71	nnw.			1–2		0							blue sky
H. M. S. Fawn, S. 29° 28′ E. 32° 01′	29.88	758.9	71.5	21.9	95	sw.			4		5	nnw.						d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.93	760.2	58	14.4	84	n.			3		10					4	sse.	overcast.
H. M. S. Heroine, N. 43° 15′, W. 12° 33′	29.58	751.3	54	12.2	79	nnw.			6		8							misty.
H. M. S. Iron Duke, N. 6° 42′ E. 107° 09′	29.85	758.2	77	25.0	90	ne.			3–4		6	nne.				7	nne.	squally.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	29.88	758.9	65.3	18.5	81	calm			0		7	nne.				6	ne.	d. clouds.
H. M. S. Liffey, S. 29° 50′, W. 71° 20′	29.88	758.9	64	17.8		n.			1		0							blue sky'
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.35	770.9	37.3	2.9	65	calm			0		0							d. clouds.
H. M. S. Northampton, St. John's Antigua, W. I.	30.00	762.0	80.5	26.9	80	ne.			3		3	ne						blue sky
H. M. S. Rocket, S. 20° 00′, W. 70° 30′	29.93	760.2	72	22.2	95	se.			1		2							d. clouds.
H. M. S. Serapis, N. 48° 00′, W. 8° 45′	29.37	746.0	50	10.0	90	nne.			7		10					2–3	sw.	squally.
H. M. S. Starling, N. 3° 40′, E. 8° 47′	29.90	759.4	82.7	28.2	97	calm			0		6					7	nne.	raining.
H. M. S. Superb, N. 34° 49′ E. 23° 50′*	30.06	763.5	60	15.6	94	wnw.			5–6		0							d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.96	761 0	65	18.3	100	s			1		5					5	w.	blue sky.
H. M. S. Sylvia, Sandy Point, Patagonia	29.38	746.2	44	6.7	71	wsw.			4–6		6	wsw.						d. clouds.
H. M. S. Tourmaline, N. 10° 50′ E. 03° 10′	30.01	762.2				nne.			2		1	ne.						squally.
H. M. S. Woodlark, Mohammerah, Asiatic Turkey	30.14	765.5	61.5	16.4	71	nnw.			1		8	calm						blue sky.
H. M. S. Zephyr, Chee-foo, China	30.44	773.2	36.5	2.5	80	ssw.			1		0					1	sw.	d. clouds.
Portuguese Naval.																		
Tamega, Macao, China	30.19	766.7	59.0	15.0	73	ne.			5		0							blue sky
Swedish Naval.																		
Vanadis, N. 32° 50′, E. 26° 10′	30.02	762.6	65.5	18.6	60	wnw.			5		6							blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	29.99	761.7	59	15.0	87	ene.	2	0.9										d clouds.
Navy Yard, Portsmouth, N. H	30.29	769.4	20	— 6.7	?	ne.	2	0.9			2		ene.	0	0			fair.
Naval Hospital, Yokohama, Japan.	29.93	760 2	36	2.2	56	n.			3		10		ne.	0	0			cloudy.
Adams, Sitka, Alaska *†	29.85	758.2	11	—11.7	79	ne.			2		0			0	0			clear.
Alaska, N. 38° 20′, W. 132° 46	30.05	763.3	61	16.1	82	s.			5		0							clear.
Alliance, Norfolk, Va	29.99	761 7	48	8.9	100	sw.			2		0			0	0	sm'h		clear.
Ashuelot, Nagasaki, Japan	30.40	772.1	37	2.8	80	nw.			1		10			0	0			cloudy.
Brooklyn, Keel Point, Patagonia	29.45	748.0	49	9.4	77	sw.	38	17.0			2		nw.					clear.
Colorado, New York, N. Y	30.25	768.3	32	0.0	100	ne.	2	0.9			2		sw.	0.05	1.3	sm'h		fair.
Enterprise, Norfolk, Va	30.05	763.3	54	12.2	79	se.			2		10			0	0			cloudy.
Essex, Callao, Peru	29.93	760.2	66	18.9	89	se.			1		5		sw.					fair.
Franklin, Norfolk, Va	30.02	762.5	52	11.1	72	s.	15	6.7			10					sm'h		overcast.
Galena, Montevideo, Uruguay	29.67	753.6	69	20.6	95	ese.			3		10		wsw.	0	0			cloudy.
Hartford, Straits of Magellan, Patagonia	29.34	745.2	42	5.6	83	wsw.			4		10		ese.			mod.		cloudy.
Independence, Mare Island, Cal	30.28	769.1	46	7.8	100	n.			4		8		w.	0	0	sm'h		fair.
Iroquois, Callao, Peru	29.95	760.7	66	18.9	90	sse.			1		2			0	0			clear.
Jamestown, Boston, Mass	30.29	769.4	18	— 7.8	100	nw.			2		8							cloudy.
Juniata, N. 35° 40′, W. 36° 53′*	30.03	762.7	71	21.7	80	s.			1		10							foggy.
Kearsarge, Norfolk, Va	30.07	763.8	50	10.0	86	s.			4		8		calm	0	0	mod.	sw.	cloudy.
Lackawanna, Callao, Peru*	29.90	759.4	66	18.9	90	sse.			3		10							cloudy.
Lancaster, N. 43° 13′, E. 10° 21′*	29.89	759.2	58	14.4	93	se.			0–1		10		se.					cloudy.
Michigan, Erie, Pa	29.67	753.6	35	1.7	80	w.			4		10		se.			sm'h		cloudy.
Minnesota, New York, N. Y	30.22	767.6	33	0.6	79	nne.	1	0.4	5		10		ne.					cloudy.
Monocacy, Kobe, Japan	30.27	768.8	38	3.3	80	calm			0		2		calm					foggy.
New Hampshire, Newport, R. I	30.30	769.6	31	— 0.6	89	ne.			1		10		calm			sm'h		fair.
Nipsic, Lisbon, Portugal*	29.59	751.6	51	10.6	86	e.			1		0					sm'h		cloudy.
Onward, Callao, Peru†	30.05	763.3	65	18.3	100	sse.			1		10					sm'h		hazy.
Palos, Tientsin, China*	30.28	769.1	27	— 2.8	100	ssw.			1		0		n.			long	w.	cloudy.
Pensacola, Callao, Peru*	29.84	757.9	66	18.9	90	s.	5	2.2			10							clear.
Powhatan, Boston, Mass	30.29	769.4	20	— 6.7	100	nw.			1		10		s.	0	0	sm'h		cloudy.
Quinnebaug, Villafranche, France*	29.91	759.7	55	12.8	80	ese.			1		10							misty.
Ranger, N. 15° 50′, W. 93° 52′	29.93	760.2	79	26.1	82	n.			1		0		ese.			sm'h		raining.
Richmond, Kobe, Japan*	30.23	767.8	39	3.9	71	nnw.			1		0					long		clear.
Saratoga, Newport, R. I	30.18	766.6	30	— 1.1	78	ne.			1–2		10			0	0			clear.
St. Louis, League Island, Pa	30.37	771.4	35	1.7	89	ese.			2		10			0	0	sm'h		overcast.
Swatara, Norfolk, Va*	29.89	759.2	50	10.0	78	sse.			1		10		sw.	0	0			cloudy.
Tennessee, Fort Monroe, Va	30.02	762.5	50	10.0	86	sse.	24	10.7			8		calm			sm'h		cloudy.
Vandalia, Norfolk, Va*	30.00	762.0	50	10.0	86	se.			1		10			0	0			squally.
Wabash, Boston, Mass	30.32	770 1	20	— 6.7	70	calm	0	0			10							cloudy.
Wachusetts, Mare Island, Cal*	30.17	766.3	46	7.8	100	var.			1		2			0.35	8.9			foggy.
Wyandotte, Washington, D. C	29.92	760.0	46	7.8	92	sw.			2		2		calm	0	0	sm'h		clear.
Yantic, Hampton Roads, Va	30.05	763.3	49	9.4	85	s.			5		2		w.	1.9	48.			fair.
Merchant Marine.																		clear.
S. S. Grecian, N. 19° 45′, W. 23° 05′*	30.10	764.5	71	21.7	75	ne.			4		4		ne.	0	0	sm'h		clear.
S. S. Nova Scotian, N. 50° 27′, W. 45° 15′	28.41	721.6	37	2.8		ssw.			5		10		ssw.			cf'd	var.	raining.
S. S. Polynesian, N. 40° 46′, W. 64° 37′*	30.21	767.3	40	4.4		n.			3		5?		n.	0	0	mod.	n	cloudy.?
S. S. Scandinavian, Boston, Mass	30.28	769.1	31	— 0.6		ese.			3									blue sky.
S. S. Indiana, N. 47° 51′, W. 49° 25′†	29.29	744 0	33	0.6	71	nw.			5		8		rain	rain				blue sky.
S. S. Lord Clive, N. 43° 00′, W. 59° 40′†*	30.09	764.3				nnw.			4		7		nw.	hail	hail	r'gh	nw.	squally.
S. S. Ohio, N. 45° 12′, W. 51° 11′			35	1.7	90	w.			7		9		nnw.	0	0	mod.	n.	cloudy.
S. S. Pennsylvania, Philadelphia, Pa†	30.02	762.5	32	0.0		s.			2		1?		w.			h'vy	wnw.	overcast
S. S. Castor, N. 40° 22′, W. 67° 45′*	30.12	765.0	39.2	4		ne.			4		6		sw.					overcast.?
S. S. Stella, N. 50° 34′, W. 0° 15	29.50	749.3	50.0	10		sse.			3		4		ne.	0	0	3	ne.	fair.
S. S. Anchoria, N. 52° 08′, W. 32° 30′†	29.56	750 8				se.			7		10		se.	4 h'r	4 h'r	2	se.	d. clouds.
S. S. Bolivia, Glasgow, Scotland *†	29.60	751.8	23	— 5.0	100	wsw.			1		10		se.	sh'rs	sh'rs	mod.	se.	overcast.
S. S. Elysia, N. 43° 08′, W. 48° 49′	29.90	759.4	39	3.9		wnw.			6		10			0	0			
S. S. Ethiopia, N. 52° —′ W. 33° 00′	29.42	747.3	42	5.6		s.			6		10		wnw.			h'vy	wnw.	rain & hail.
S. S. Galatia, N. 29° 20′, E. 32° 30′ †	30.09	764.3	60.3	19.1	84	n.			5		0		se	3 h'r	3 h'r	r'gh	s.	overcast.
S. S. Ailsa, N. 17° 58′, W. 76° 46′	30.08	764.0	80	26.7	96	ne.			2		5		ne.	0	0	sm'h	n.	clear.
S. S. Alvo, Kingston, Jamaica, W. I	30.02	762.5	80	26.7		var.			2–3		7ks			0	0	sm'h		fair.
S. S. Antillas, N. 32° 00′, W. 73° 45′			73	22.8		ne.			2		2		ne.	0	0	sm'h	nw.	cloudy.
S. S. Carroll, Hawksbury, C. B*†	30.30	769.6	28	— 2.2		nnw.			7		6		nnw.	snow	snow			flue.
Mertola, N. 45° 58′, W. 12° 36′	29.59	751.6	50.5	10.3	93	n.			7		5							squally.
Ptolmey, N. 44° 10′. W. 48° 46′	29.59	751.6	38.2	3.4		w.			9		9					high		d. clouds.
S. S. Mexico, N. 23° 58, W. 108° 57′†	30.10	764.5	76	24.4	60	wnw.			3		0							squally.
S. S. Bothnia, N. 49° 18′, W. 31° 23′	29.39	746.5	51	10.6	86	sw.			6		8		sw.	4 h'r	4 h'r	cf'd		clear.
S. S. Gallia, N. 50° 22′, W. 22° 03′	29.86	750.9	49	9.4	71	calm			0		0			0	0			heavy rain.
S. S. Marathon, N. 37° 34′ E. 9° 16′	29.85	758.2	68	20.0		s.			3		4?		s.	0	0	sm'h	s.	clear.
S. S. Pavonia, N. 44° 25′, W. 43° 49′ *	29.47	748.5	53	11.7	86	wsw.			7		9		wsw.	3 h'r	3 h'r	long	wsw.	cloudy.?
S. S. Scythia, N. 41° 05′, W. 63° 31′	30.30	769.6	39	3.9		nw.			2		3		nw.	5 h'r	5 h'r	sm'h	wnw.	squally.
S. S. Colina, N. 49° 20′, W. 43° 05′†	28 85	732.8				wsw.			9		10		wsw.	½ h'r	½ h'r	r'gh	wsw.	cloudy.
																		heavy snow

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. France, N. 40° 30′, W. 74° 00′	.....	.....	33.8	1	.....	ne.	.....	.....	0	.....	k	.....	ene.	0	0	h'vy	e.	cloudy.
S. S. Abyssinia, N. 40° 40′, W. 67° 49′ *...	30.30	769.6	40	4.4	82	se.	.....	.....	1	.....	10	.....	se.	0	0	sm'h	.....	overcast.
S. S. Wisconsin, N. 41° 40′, W 64° 00′	30.20	767.1	32	0.0	.....	n.	.....	.....	3	.....	0	.....	.....	0	0	sm'h	.....	clear.
S. S. Cimbria, N. 50° 40′, W. 31° 45′	29.28	743.7	45.5	7.5	.....	se.	.....	.....	8	.....	10	.....	se.	2 h'r	2 h'r	r'gh	se.	covered.
S. S. Gellert N. 50° 05′, W. 2° 05′	29.49	749.0	55	12.8	.....	se.	.....	.....	5	.....	10	.....	.....	10 h'r	10 h'r	mod.	se.	covered.
S. S. Silesia, Elbe River, Germany †	29.90	759.4	32.2	0.1	97	sse.	.....	.....	3–4	.....	10	.....	.....	0	0	.....	.....	overcast.
S. S. Vandalia, N. 45° 50′, W. 45° 46′	29.19	741.4	43.3	6.3	94	w.	.....	.....	9	.....	10	.....	w.	0	0	h'vy	w.	heavy gale.
S. S. Wieland, N. 49° 17′, W. 37° 26′	29.21	741.9	.....	.....	.....	s.	.....	.....	3	.....	8	.....	sw.	6 h'r	6 h'r	long	sw.	fine.
S. S. City of Berlin, N. 44° —′, W. 52° —′	29.66	753.4	36	2.2	?	wnw.	.....	.....	6	.....	9	.....	wnw.	sleet	sleet	high	wnw.	cloudy.
S. S. Mentmore, N. 50° 22′, W. 18° 54′*	29.87	758.7	.....	.....	.....	ne.	.....	.....	4	.....	2	.....	ene.	0	0	mod.	n.	fair.
S. S. Hevelius, N. 51° 15′, E. 4° 24′ *†	29.69	754.1	40	4.4	.....	ese.	.....	.....	5	.....	8?	.....	se.	0	0	sm'h	.....	clear ?
S. S. Sirius, S. 6° 40′, W. 32° 30′*	29.90	759.4	.....	.....	.....	e.	.....	.....	2	.....	2	.....	ese.	0	0	mod.	ese.	clear.
S. S. Bulgarian, N. 51° 05′, W. 27° 27′*	29.73	755.1	.....	.....	.....	ese.	.....	.....	5	.....	10	.....	ese.	0	0	sl't	ese.	cloudy.
S. S. Colorado, N. 37° 15′, W. 74° 40′ †	30.15	765.8	53	11.7	.....	se.	.....	.....	4	.....	8	.....	ssw.	0	0	mod.	se.	cloudy.
S. S. Rio Grande, N. 30° 04′, W. 79° 30′ †	30.12	765.0	70	21.1	.....	ne.	.....	.....	1	.....	4?	.....	ne.	4 h'r	4 h'r	mod.	ne.	overcast.†
S. S. San Marcos, N. 27° 50′, W. 80° 00′	30.24	768.1	70	24.4	.....	sw.	.....	.....	4	.....	.....	.....	.....	.....	.....	sm'h	.....	clear.
S. S. Archimede, New York, N. Y†	30.01	762.2	46	7.8	77	se.	.....	.....	3	.....	6	.....	sw.	0	0	.....	.....	cloudy.
S. S. Hermod, N. 49° 50′, W. 3° 00′ †	29.46	748.3	50.0	10.0	.....	ese.	.....	.....	3	.....	8	.....	ese.	8 h'r	8 h'r	mod.	ese.	threatening.
S. S. John Hopkins, Boston, Mass*†	30.24	768.1	33	0.6	.....	se.	.....	.....	4	.....	8	.....	s.	rain	rain	.....	.....	stormy.
S. S. Glenapp, N. 10° 20, W. 27° 00′ †	29.86	758.4	.....	.....	.....	ene.	.....	.....	5	.....	7	.....	ene.	2 h'r	2 h'r	high	ne.	cloudy.
S. S. Glenfyne, S. 10° 19′, W. 35° 25′*†	29.63	752.6	.....	.....	.....	ese.	.....	.....	4	.....	5?	.....	ese.	0	0	sm'h	ese.	cloudy.†
S. S. Toronto, N. 51° 48′, W. 7° 18′	.....	.....	35.0	1.7	.....	nne.	.....	.....	4	.....	6	.....	nne.	0	0	sm'h	ne.	hazy.
S. S. Chalmette, N. 27° 11′, W. 80° 05′ †	30.13	765.3	71	21.7	.....	wsw.	.....	.....	1	.....	3	.....	sw.	3 h'r	3 h'r	sm'h	se.	clear.
S. S. Lone Star, N. 25° 55′, W. 79° 48′ †	30.13	765.3	75	23.9	.....	sse.	.....	.....	2	.....	3	.....	sw.	0	0	sm'h	.....	squally.
S. S. New York, N. 27° 45′. W. 87° 30′ †	30.13	765.3	70	24.4	.....	calm	.....	.....	0	.....	8	.....	sw.	.....	.....	sm'h	.....	cloudy.
S. S. Denmark, London, Eng†	29.53	750.0	48	8.9	.....	se.	.....	.....	2	.....	5?	.....	se.	0	0	.....	.....	cloudy.†
S. S. Egypt, Mersey River, Eng *†	29.60	751.8	.....	.....	.....	ene.	.....	.....	5	.....	10	.....	ene.	0	0	.....	.....	hazy.
S. S. Erin, New York, N. Y.	30.15	765.8	.....	.....	.....	ne.	.....	.....	6	.....	10	.....	ne.	6 h'r	6 h'r	.....	.....	gloomy.
S. S. Helvetia, Liverpool, Eng	29.63	752.6	34	1.1	.....	s.	.....	.....	1	.....	10	.....	.....	snow	snow	.....	.....	snowing.
S. S. Holland, N. 41° 24′, W. 53° 09′ ..	29.91	759.7	44	6.7	.....	nw.	.....	.....	7	.....	8	.....	nw.	3 h'r	3 h'r	h'vy	nnw.	cloudy.
S. S. City of Alexandria, N. 39° 19′, W. 74° 11′ †	30.00	762.0	47	8.3	.....	sse.	.....	.....	4	.....	9	.....	se.	0	0	small	se.	threatening.
S. S. City of Merida, N. 19° 11′, W. 96° 08′ *†	29.96	761.0	73.4	23.0	.....	nw.	.....	.....	1	.....	10	.....	nw.	0	0	.....	.....	cloudy.
S. S. Amsterdam, N. 46° 44′, W. 48° 00′ *	29.30	744.2	34	1.1	.....	wnw.	.....	.....	0–7	.....	.....	.....	.....	.....	.....	8	w.	snowy.
S. S. Alene, Aspinwall, Panama†	29.84	757.9	82	27.8	.....	nne.	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	n.	
S. S. Olbers, N. 27° 02′, W. 64° 30′ *†	30.08	764.0	74	23.3	.....	ene.	.....	.....	2–3	.....	.....	.....	.....	.....	.....	.....	nne.	clear.
S. S. State of Nebraska, N. 41° 35′, W. 62° 30′†	30.19	766.8	37	2.8	.....	nnw.	.....	.....	3–4	.....	.....	.....	.....	.....	.....	sm'h	.....	d. clouds.
S. S. America, N. 44° 12′, W 48° 45′*	29.65	753.1	38.5	3.6	81	w.	.....	.....	6	.....	9	.....	w.	0	0	h'vy	w	overcast.
S. S. Braunschweig, N. 41° 15′, W. 12° 01′	29.49	749.0	56.0	13.3	75	wnw.	.....	.....	6	.....	5	.....	nnw.	8 h'r	8 h'r	light	wnw.	cloudy.
S. S. Elbe, N. 40° 40′, W. 44° 40′	29.24	742.7	37.4	3.0	.....	wsw.	.....	.....	8	.....	10	.....	wsw.	3 h'r	3 h'r	high	wsw.	covered.
S. S. Gen. Werder, N. 43° 48′, W. 51° 50′	29.79	756.7	35.6	2.0	.....	w.	.....	.....	7	.....	10	.....	wnw.	4 h'r	4 h'r	h'vy	w.	cloudy.
S. S. Hohenstaufen, S. 1° 43′, W. 31° 19′	29.91	759.7	80.6	27.0	.....	ese.	.....	.....	5	.....	4	.....	ese.	0	0	light	ese.	fair.
S. S. Neckar, N. 45° 08′, W. 46° 53′	29.53	750.0	.....	.....	.....	wnw.	.....	.....	9	.....	10	.....	wnw.	0	0	h'vy	w.	
S. S. Ohio, N. 44° 53′, W. 43° 52′	29.46	748.3	.....	.....	.....	w.	.....	.....	9–10	.....	9	.....	wsw.	6 h'r	6 h'r	h'vy	wsw.	cloudy.
S. S. Rhein, N. 46° 22′, W 42° 55′	29.44	747.8	.....	.....	.....	wsw.	.....	.....	9	.....	8	.....	wsw.	rain	rain	high	wsw.	cloudy.
S. S. Strassburg, S. 28° 37′, W. 47° 12′	30.79	782.1	75.0	23.9	95	n.	.....	.....	3–4	.....	8	.....	n.	1 h'r	1 h'r	mod.	n.	cloudy.
S. S. Werra, N. 49° 56′, W. 10° 51′	29.65	753.1	45.5	7.5	.....	n.	.....	.....	4–5	.....	4	.....	n.	2 h'r	2 h'r	.....	nne.	raining.
S. S. Belgic, N. 42° 51′, W. 152° 57′†	29.37	746.0	60	15.6	71	s.	.....	.....	4	.....	5	.....	ssw.	2 h'r	2 h'r	mod.	e.	fair.
S. S. Coptic, N. 35° 49′, E. 144° 21′	29.84	757.9	50.0	10.0	85	n.	.....	.....	6–8	.....	8	.....	n.	6 h'r	6 h'r	mod.	wnw.	raining.
S. S. Oceanic, Hong Kong, China *	29.98	761.5	64	17.8	53	nne.	.....	.....	5	.....	3	.....	ne.	.....	.....	.....	.....	clear.
S. S. Willamette, Seattle, Wash. Ter.†	29.83	757.7	38	3.3	90	calm	.....	.....	0	.....	10	.....	s.	0.43	10.9	long	wnw	foggy.
S. S. Oregon, Portland, Oregon†	29.73	755.1	45	7.2	92	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	heavy rain.
S. S. Ancon, San Francisco, Cal †	30.21	767.3	49	9.4	85	s.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
S. S. City of Chester, off Mendocino, Cal *†	30.29	769.4	49	9.4	78	nw.	.....	.....	1	.....	fg.	.....	.....	.....	.....	long	nw	clear.
S. S. Dakota, N. 44° 12′, W. 124° 50′	.....	.....	52	11.1	86	ssw.	.....	.....	8	.....	10	.....	ssw.	24 h'r	24 h'r	r'gh	ssw.	cloudy.
S. S. Orizaba, N. 32° 40′ W. 117° 14′ *†	30.10	764.5	59	15.0	94	calm	.....	.....	0	.....	0	.....	.....	.....	.....	sm'h	nw.	clear.
S. S. State of California, San Francisco, Cal. *†	30.23	767.8	45	7.2	.....	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear.
S. S. Australia, N. 0° 12′, W. 166° 34′	29.76	755.9	77	25.0	82	ne.	.....	.....	4	.....	1	.....	ne.	1 h'r	1 h'r	mod.	ne.	clear.
S. S. City of New York, Sydney, N. S. W†	29.93	760 2	68	20.0	61	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear.
S. S. City of Pekin, N. 35° 30′, E. 145° 40′ †	29.86	758.4	45	7.2	92	nnw.	.....	.....	7	.....	10	.....	nnw.	0	0	rg'h	nw.	cloudy.
S. S. City of Rio de Janeiro, N. 7° 18′, W. 80° 00′†	29.85	758.2	80	26.7	82	n.	.....	.....	3	.....	8	.....	n.	0	0	light	n.	fair.
S. S. State of Tokei, N. 30° 01′, W. 161° 06′ †	29.82	757.4	67	19.4	.....	sw.	.....	.....	6	.....	10	.....	sw.	0	0	light	w.	overcast.
S. S. Colima, Champerico, Mexico†	29.93	760.2	76	24.4	86	calm	.....	.....	0	.....	3	.....	calm	0	0	mod	nw.	clear.
S. S. Grenada, N. 23° 04′, W. 108° 42′†	29.95	760.7	75	23.9	77	nw.	.....	.....	5	.....	0	.....	.....	0	0	mod.	nw.	clear.
S. S. Zealandia, S. 34° 50′, E 174° 04 ...	30.19	766.8	68	20.0	90	n.	.....	.....	3	.....	0	.....	n.	.....	.....	mod.	e.	cloudy.
S. S. Muriel, Dominica, W. I.	29.97	761.2	80	26.7	.....	ene.	.....	.....	5	.....	8	.....	.....	6 h'r	6 h'r	sm'h	.....	drizzling.
S. S. Caracas, La Guayra, Venezuela †	30.02	762 5	78	25.6	78	sw.	.....	.....	1	.....	0	.....	.....	0	0	h'vy	nne.	fine.
S. S. Claudius, N. 9° 50′, W. 81° 20′ †	29.95	760.7	.....	.....	.....	ne.	.....	.....	5	.....	9	.....	.....	sq 'lls	sq'lls	short	ne.	fair.
S. S. Belgenland, N. 42° 32′, W. 56° 30′	30.16	766.1	35	1.7	?	nw.	.....	.....	7	.....	9	.....	nw.	2 h'r	2 h'r	h'vy	nw.	cloudy.
S. S. Nederland, N. 49° 37′ W. 10° 17′	.....	.....	45	7.2	.....	ene.	.....	.....	6	.....	10	.....	ene.	0	0	r'gh	ene.	squally.
S. S. Penniand, New York, N. Y	30.15	765.8	34	1.1	90	ene.	.....	.....	2	.....	10	.....	.....	4 h'r	4 h'r	.....	.....	overcast.
S. S. Rhynland, Antwerp, Belgium	29.79	756.7	39	3.9	.....	sse.	.....	.....	2	.....	4	.....	sse.	0	0	.....	.....	fine
S. S. Switzerland, N. 51° 11′, W. 23° 47′†	29.84	757.9	.....	.....	.....	sse.	.....	.....	1	.....	2	.....	ssw.	2 h'r	2 h'r	mod.	wnw.	fair.
S. S. Waesland, Antwerp, Belgium	29.72	754.9	40	4.4	82	ese.	.....	.....	3	.....	7	.....	sse.	0	0	.....	.....	fair.
S. S. Leerdam, N. 47° 18′, W. 40° 45′ †	29.21	741.9	51	10.6	79	sw.	.....	.....	9	.....	8	.....	sw.	8 h'r	8 h'r	h'vy	sw.	stormy.
S. S. P. Caland, N. 40° 24′, W. 73° 33′	30.06	763.5	41.5	5.3	81	se.	.....	.....	4	.....	7	.....	se.	.....	.....	.....	.....	cloudy.
S. S. Schiedam, N. 48° 57′, W. 20° 54′	29.74	755.4	57.2	14.0	62	var.	.....	.....	2	.....	2	.....	ne.	0	0	cross	ene.	fair.
S. S. W. A. Scholten, Rotterdam, Holland	.....	.....	37.0	2.8	100	se.	.....	.....	4	.....	3	.....	s.	0	0	.....	.....	
S. S. State of Georgia, N. 52° 14′, W. 33° 19′ †	29.39	746.5	39	3.9	.....	ese.	.....	.....	8	.....	10	.....	.....	5 h'r	5 h'r	r'gh	sw.	rainy.
S. S. Celtic, N. 43° 35′, W. 56° 27′ †	29.98	701.5	30	2.2	.....	nnw.	.....	.....	6	.....	10	.....	nw.	sh'rs	sh'rs	h'vy	wnw.	cloudy.
S. S. Lepanto, N. 49° 06′, W. 9° 02′	.....	.....	47	8.3	.....	ne.	.....	.....	9	.....	10	.....	nne.	24 h'r	24 h'r	h'vy	nw.	rainy.
S. S. Salerno, Hull, Eng*	29.52	749.8	.....	.....	.....	calm	.....	.....	0	.....	.....	.....	.....	0	0	.....	.....	foggy.
S. S. Aries, N. 40° 25′, W. 73° 15′ *†	30.05	763.3	.....	.....	.....	sse.	.....	.....	5	.....	9	.....	sse.	0	0	short	sse.	threatening.
S. S. Catherine Whiting, Philadelphia, Pa †	30.06	763.5	34	1.1	.....	se.	.....	.....	1	.....	10	.....	ne.	0	0	.....	.....	
S. S. Saxon, N. 40° 02′, W. 73° 45′ †	30.15	765.8	42	5.6	.....	s.	.....	.....	5	.....	10	.....	s.	.....	.....	sm'h	.....	
MISCELLANEOUS.																		
Bg. Aletra, N. 23° 30′, W. 74° 28′ ..	30.13	765.3	79	26.1	.....	e.	.....	.....	6	.....	3?	.....	ene.	2 h'r	2 h'r	mod.	ene.	cloudy.†
Bk. Alpha, N. 45° 50′, W. 11° 30′†	29.53	750.0	57	13.9	.....	n.	.....	.....	6	.....	6	.....	n.	8 h'r	8 h'r	r'gh	n.	cloudy.
Schr. Annie Lewis, Tampico, Mexico †	30.17	766.3	70	21.1	.....	wsw.	.....	.....	1	.....	8?	.....	wsw.	0	0	long	ne.	cloudy.†
S. Annie M. Law, N. 17 ′00′, E. 118° 58′*†	29.78	756.4	75	23.9	.....	nne.	.....	.....	5	.....	8	.....	ne.	0	0	high	n.	
Bk. Anna Thormann, S. 27° 25′ E. 47° 39′*	30.19	766.8	74.7	23.7	88	ene.	.....	.....	4	.....	1 k	.....	ne.	0	0	mod.	e.	misty.
S. S. Antonio Lopez, N. 25° 21′, W. 58° 10′ *	30.21	767.3	70	24.4	73	e.	.....	.....	2	.....	5	.....	.....	1 h'r	1 h'r	mod.	e.	fair.
Bk. Aquidneck, S. 23° 17′, W. 43° 00′ *†	30.00	762.0	80	26.7	.....	e.	.....	.....	3	.....	0	.....	.....	0	0	light	e.	clear.
Bgt. Arthur, N. 33° 15′, W. 33° 47′ *†	30.30	769.6	.....	.....	.....	wnw.	.....	.....	5	.....	.....	.....	wnw.	.....	.....	mod.	ne.	
Schr. Anna Holton, N. 34° 40′, W. 73° 01′†	30.19	766.8	62	16.7	.....	se.	.....	.....	4	.....	10	.....	s.	0	0	mod.	se.	cloudy.
Bg. Belle of the Bay, N. 25° 53′, W. 76° 43′*†	30.03	762.7	.....	.....	.....	sse.	.....	.....	5	.....	2	.....	ese.	0	0	sm'h	ne.	clear.
Bk. Champion, N. 21° 14′, W. 60° 50′	.....	.....	75.0	23.9	.....	ene.	.....	.....	4	.....	2	.....	ese.	0	0	mod.	ese	fair.
Schr. Chas. F. Heyer, N. 37° 00′, W. 74° 36′	30.22	767.6	55	12.8	93	sse.	.....	.....	1	.....	10 8	.....	.....	0	0	sm'h	.....	cloudy.
Bg. Clara M. Goodrich, Key Francis, W. I.*†	30.01	762.2	.....	.....	.....	ne.	.....	.....	1	.....	4	.....	ne.	0	0	.....	.....	clear.
Bkt. David Preston, Pensacola, Fla	.....	.....	68.0	20.0	.....	n.	.....	.....	.....	.....	5	.....	nw.	0	0	.....	.....	fine.
Bk. E. L. Pettingill, N. 8° 44′, W. 120° 15′*†	29.90	759.4	80	26.7	.....	s.	.....	.....	2	.....	8	.....	s.	18 h'r	18 h'r	cross	.....	squally.
Schr. Edith R. Seward, Baltimore, Md.*†	30.01	762.2	38	3.3	.....	se.	.....	.....	1	.....	.....	.....	.....	1 h'r	1 h'r	.....	.....	
S. E. J. Spicer, N. 46° 25′, W. 24° 40′ *	29.84	757.9	52	11.1	.....	ssw.	.....	.....	4	.....	10	.....	ssw.	sq 'lls	sq 'lls	cross	.....	overcast.
Bk. Eliza Barss, N. 39° 06′, W 71° 00′†	30.29	769.4	.....	.....	.....	s.	.....	.....	5	.....	2	.....	sw.	0	0	sm'h	.....	clear.
S. Enoch Train, N. 37° 20′, W. 74° 40′	.....	.....	.....	.....	.....	sse.	.....	.....	4	.....	10	.....	sw.	0	0	light	e.	overcast.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper 0–10	Lower 0–10	Upper From.	Lower From.	Inch.	Mill.	Character.	Direction from.	
MISCELLANEOUS.—Continued.																		
Bk. Essex, N. 21° 16′ E. 6° 12′ *†	30.04	763.0	76	24.4	.....	ne to n	.....	.....	4	.....	3	.....	.....	0	0	.....	.....	fine.
Schr. F E. McDonald, Rockland, Maine †	30.33	770.4	19	— 7.2	.....	ne.	.....	.....	4	.....	.....	.....	.....	0	0	.....	.....	threatening.
S. S. Foscolia, New York, N. Y	.....	.....	.....	.....	.....	w.	.....	.....	7	.....	10	.....	.....	19 h'r	19 h'r	.....	.....	heavy rain.
Bk. Freya, N. 19° 48′, W. 77° 26′	.....	.....	83	28.3	.....	ene.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	.....	fine.
S. J. W. Gildemeister, N. 47° 30′ W. 25° 27′ *	29.82	757.4	48.2	9	48	se.	.....	.....	4	9 ck	.....	se.	.....	0	0	4	var.	d clouds.
Bg. George, N. 33° 08′, W. 58° 36′ *†	30.30	769 6	.....	.....	.....	nnw.	.....	.....	5	.....	8	.....	n.	0	0	r'gh	nw.	clearing.
Bk. Gronsvaer, Wellington, New Zealand †	30.13	765.3	12.0	—11.1	92	n.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	fine.
Bk. Godeffroy, S. 55° 23′, W. 62° 03′†	28.96	735.6	40.6	4.8	74	sw.	.....	.....	5	.....	6	.....	sw.	rain	rain	mod.	w.	squally.
Bk. Great Surgeon, S. 21° 10′, E. 78° 43′*†	30.08	764.0	79	26.1	.....	se.	.....	.....	1	.....	5	.....	se.	0	0	long	ssw.	fair.
Bk. Grey Eagle, S. 1° 00′, W. 29° 56′*†	29.80	756.9	.....	.....	.....	sse.	.....	.....	5	.....	0	.....	.....	0	0	light	ese.	fair.
Bk. Hattie G. McFarland, New York, N. Y†	30.15	765.8	44	6.7	.....	s.	.....	.....	4	.....	10	.....	s.	1 h'r	1 h'r	.....	.....	
Schr. Hattie Weston, N. 36° 00′ W. 75° 00′ *†	30.20	767.1	63	17.2	.....	sew.	.....	.....	4	.....	10	.....	ssw.	0	0	mod.	s.	cloudy.
Schr. Isabel Alberto, N. 30° 22′, W. 79° 50′ †	30.09	764.3	.....	.....	.....	se.	.....	.....	2	.....	10	.....	s.	shr's	shr's	cross	var.	showery.
Schr. Jennie N. Huddell, N. 33° 07′, W. 79° 00′†	30.07	763.8	65	18.3	.....	s.	.....	.....	3	.....	5	.....	sw.	0	0	long	se.	fair.
Bk. Joseph A. Ropes, S. 1° 50′, E. 51° 03′ *†	29.96	761.0	82	27.8	79	nne.	.....	.....	1	.....	2	.....	.....	0	0	mod.	nne.	fair.
Bkt. Josephine, N. 28° 08′, W. 38° 49′†.	30.26	768.6	75	23.9	46	ese.	.....	.....	3	.....	0	.....	.....	0	0	long	nne.	clear.
Bk. Julia H., N. 43° 52′. W 35° 50′	29.56	750.8	57.4	14.1	81	wsw.	.....	.....	5	.....	3	.....	.....	8 h'r	8 h'r	5	w.	d. clouds.
S. S. J. W. Wilson, N. 28° 08′, W. 83° 03′†	30.08	764.0	68	20.0	.....	calm	.....	.....	0	.....	fg.	.....	.....	0	0	sm'h	.....	foggy.
Light House Tender, Laurel, N. 28° 50′, W. 83° 10′†	30.10	764.5	65	18.3	.....	calm	.....	.....	0	.....	9	.....	sw.	light	light	sm'h	.....	hazy.
Bk. Louise Adelaide, York River, Va*†	30.04	763.0	45	7.2	.....	sse.	.....	.....	1	.....	.....	.....	sw.	3 h'r	3 h'r	.....	.....	cloudy.
Bg. L. & W. Armstrong, N. 17° 52′, W. 59° 52′*†	30.10	764.5	.....	.....	.....	ene.	.....	.....	6	.....	1	.....	ene.	0	0	mod.	ene.	clear.
S. S. Madrid, N. 38° 23′ W. 56° 08′ *†	30.20	768.6	55	12.8	.....	nnw	.....	.....	5	.....	4	.....	nnw.	sh'rs	sh'rs	r'gh	n.	fair
S. S. Malabar, Marseilles, France	.....	.....	.....	.....	.....	ne.	.....	.....	9	.....	10	.....	ne.	14 h'r	14 h'r	.....	.....	raining.
Bk. Matilda C. Smith, N. 32° 09′ W. 72° 34′*†	30.38	771.6	.....	.....	.....	sse.	.....	.....	6	.....	6	.....	ssw.	0	0	mod.	se.	threatening.
Schr. Minnie A. Bonsall, May Port, Fla †	30.14	765.5	68	20.0	.....	calm	.....	.....	0	.....	fg.	.....	.....	.....	.....	.....	.....	foggy.
S. Minnie N. Gerow, N. 31° 41′, W. 45° 55′*†	30.12	765.0	.....	.....	.....	sw.	.....	.....	5	.....	10	.....	w.	.....	.....	sm'h	w.	rainy.
S. M. P. Grace, S. 25° 35′, W. 130° 15′ *†	30.20	767.1	77	25.0	.....	e.	.....	.....	1	.....	0	.....	.....	0	0	long	ssw.	fair.
Bg. Myrtle, Bear River, Nova Scotia*†	30.20	767.1	.....	.....	.....	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	.....	cloudy.
Bg. O. C. Clary, N 9° 50′, W. 59° 50′*†	29.96	761.0	80	26.7	91	ne.	.....	.....	4	.....	10	.....	ne.	0	0	.....	.....	
S. Orealla, N. 20° 28′, E. 89° 20′*	29.97	761.2	.....	.....	.....	nw.	.....	.....	2	.....	.....	.....	.....	.....	.....	sm'h	.....	fine.
Bk. Ottawa, N. 36° 08′, W. 54° 01′*	30.09	764.3	63	17.2	.....	nw.	.....	.....	5–6	.....	5	.....	nw.	1 h'r	1 n'r	mod.	nw.	fair.
S. Paramita, San Francisco, Cal†	30.13	765.3	50	10.0	.....	ne.	.....	.....	2	.....	.....	.....	.....	0	0	.....	.....	
Bk. Pilgrim, N. 16° 30′, W. 53° 44′*†	30.10	764.5	.....	.....	.....	ne.	.....	.....	5	.....	.....	.....	ne.	1 h'r	1 h'r	long	ne.	fair.
S. S. Radnorshire, N. 13° 00′, E. 110° 10′*†	29.88	758.9	.....	.....	.....	n.	.....	.....	7*	.....	2	.....	n.	0	0	h'vy	n.	clear.
S. S. Raleigh, Rondout, N Y*†	30.00	762 0	32	0.0	.....	ne.	.....	.....	7	.....	10	.....	.....	.....	.....	.....	.....	snowing.
Bk. Rebus, N. 43° 15′, W. 37° 24′*	29.41	747.0	58	14.4	.....	w.	.....	.....	7	.....	8	.....	w.	h'vy	h'vy	cross	w.	squally.
S. St. Francis, N. 33° 36′, W. 134° 43′†	30.36	771.1	62	16.7	.....	s.	.....	.....	3	.....	8	.....	s.	3 h'r	3 h'r	long	nnw.	misty.
Schr. S. B. Hubbard, New London, Conn.†	30.19	766.8	42	5.6	.....	se.	.....	.....	5	.....	10	.....	.....	0	0	.....	.....	threatening.
Bk. Scud, N. 26° 13′, W. 66° 24′ *†	30.17	766.3	.....	.....	.....	nne.	.....	.....	4	.....	3	.....	nne.	0	0	long	se.	fine.
Bk. Southern Belle, off Beachy Head, Eng *†	29.50	749.3	44	6.7	.....	s.	.....	.....	6	.....	2	.....	.....	0	0	.....	.....	clear.
S. S. Sunbeam, N. 21° 01′, W. 83° 45′	30.06	763.5	78	25.6	91	ne.	.....	.....	4	.....	8	.....	ne.	0	0	2	ene.	d. clouds.
S. S. Strathleven, N. 6° 03′. E. 93° 30′	29.82	757.4	80.5	26.9	89	ene.	.....	.....	1	.....	8	.....	ene.	0	0	2	s.	d. clouds.
Schr. T. S. McLellan, N. 28° 20′, W. 72° 30′*†	30.30	769.6	70	21.1	.....	ne.	.....	.....	.....	.....	.....	.....	sw.	.....	.....	.....	nne.	
U. S. F. C. S. S. Fish Hawk, Washington, D. C†	30.17	766.3	43	6.1	75	calm	.....	.....	0	.....	10	.....	s.	0.06	1.5	.....	.....	raining.
Bk. Usko, Belfast, Ireland	.....	.....	38	3.3	.....	e.	.....	.....	1	.....	5	.....	ene.	0	0	.....	.....	foggy.
Bk. Vincenzo Accame, N. 36° 50′, W. 49° 10′†	30.05	763.3	69.8	21.0	.....	wnw.	.....	.....	6	.....	5	.....	nw.	2¼ h'r	2¼ h'r	.....	wnw.	foggy.
Schr. Walter L. Plummer, N. 38° 10′, W. 72° 30′*†	30.20	767.1	.....	.....	.....	sse.	.....	.....	4	.....	10	.....	s.	0	0	sm'h	.....	threatening.
Bk. Wandering Jew, Montevideo, Uruguay †	29.69	754.1	69	20.6	.....	sw.	.....	.....	6	.....	4	.....	sw.	0	0	.....	.....	squally.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.08	764.0	.....	.....	.....	sw.	.....	.....	1	.....	2	.....	sw.	.....	.....	sm'h	s.	fair.
S. Wm. Woodbury, N. 46° 10′, W. 18° 30′ *	29.81	757.2	54	12.2	.....	nne.	.....	.....	7	.....	6	.....	n.	.....	.....	long	ne.	squally.

International Chart I. December 13, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.

W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 14, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.78	756.4	64.8	18.2	78	s.	.....	.....	6	.....	3	.....	.....	0.984	25.0	pretty fair...	Malaterre.
Algiers	.....	.....	29.74	755.3	60.1	15.6	73	wnw.	.....	.....	3	.....	6	.....	.....	4.181	106.2	cloudy	Thève.
La Calle	.....	.....	29.82	757.4	67.6	19.8	34	s.	.....	.....	5	.....	4	.....	.....	0.098	2.5	cloudy	Foufrède.
Tunis	.....	.....	29.89	759.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.81	757.1	46.0	7.8	100	w.	.....	.....	2	.....	10	.....	.....	0.992	25.2	covered	Pérès.
Tebessa	.....	.....	29.96	760.9	61.9	16.6	42	s.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair...	Dognon.
Geriville	.....	.....	.....	.....	38.5	3.6	72	e.	.....	.....	4	.....	5	.....	.....	0	0	cloudy	Lonchamp.
Laghouat	.....	.....	29.92	759.9	52.2	11.2	39	ene.	.....	.....	4	.....	3	.....	.....	Imap.	Imap.	pretty fair...	Abraham.
Biskra	.....	.....	29.93	760.3	61.2	16.2	29	s.	.....	.....	1	.....	10	.....	.....	0.126	3.2	covered	Malau.
Australian.																			
Melbourne, Victoria	29 73	755.1	29.82	757.4	56.0	13.3	71	w.	12	5.4	.....	.....	9	.....	.....	0.21	5.3	squally	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.47	748.6	30.03	762.8	47.1	8.4	84	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.24	742.7	30.04	763 1	33.3	0.7	89	ne.	4.9	2.2	.....	.....	1	.....	.....	0	0	....	Dr. Wierzbiski.
Eperies	29.17	740.8	30.07	763.8	41.7	5.4	94	s.	.....	.....	2	.....	10	....	.....	0	0	....	Julius Mikolik.
Gratz	28.69	728.8	29.98	761.6	38.5	3.6	87	sw.	.....	.....	1	.....	6	.....	.....	0	0	....	Andreas Rospini.
Hermannstadt	28.66	727.9	30.13	765.2	45.7	7.6	73	se.	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	29.07	725.5	29.97	761.1	31.6	— 0.2	96	ene.	.....	.....	1	.....	10	.....	.....	0	0	foggy	The Staff.
Lemberg	29.28	738.4	30.10	764.4	37.6	3.1	91	s.	.....	.....	3	.....	10	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.97	761.1	30.08	764.0	56.7	13.7	86	s.	.....	.....	1	.....	10	.....	.....	0.055	1.4	.....	I. R. Hydrographic Office.
Szathmar	29.61	752 2	30.08	764.1	46.4	8.0	88	ne.	.....	.....	2	....	10	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.78	756.5	30.07	763.8	47.8	8.8	78	s.	.....	.....	2	.....	4	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.02	762 5	30.12	765.1	48.7	9.3	96	calm	.....	.....	0	.....	10	.....	.....	0.098	2.5	foggy	Royal Academy.
Vienna	29.26	743.2	30.01	762.2	35.8	2.1	98	calm	.....	.....	0	....	10	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.72	754.9	29.82	757.4	21.7	— 5.7	75	wnw.	5	2.2	.....	.....	1	.....	.....	0	0	misty	W. Boswell
Armagh, Observatory	29.61	752.1	29.87	758.7	22.7	— 5.2	96	ssw.	2	0.9	.....	.....	.....	.....	.....	.....	.....	foggy	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.78	756.4	33.1	0.6	99	ne.	4	1.8	.....	.....	10	.....	.....	.....	.....	foggy	John Hartnup.
Bolton, Sharples	29.22	742.2	29.77	756.1	35.0	1.7	92	ene.	3	1.3	.....	.....	10	.....	.....	.....	.....	overcast	Thomas Mackereth.
Bradford, Yorkshire	29.37	746 0	29.76	755.9	35.1	1.7	94	ne.	.....	.....	2	.....	10	.....	.....	0.02	0.5	overcast	McLandsborough&Preston
Bridgetown, Barbadoes	29.89	759.2	29.92	760.0	83.0	28.3	67	ne.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	36.0	2.2	100	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E	29.58	751.3	29.72	754.9	37.9	3.3	99	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.44	747.8	29.67	753.6	46.2	7.9	91	ene.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	The Staff.
Fort Napier, Natal	27.82	706.6	30.03	762.7	58.0	14.4	94	se.	.....	.....	3	.....	10	.....	.....	.....	.....	raining	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	87.0	30.6	72	nw.	.....	.....	3	.....	2	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.01	762.2	30.06	763.5	54.0	12.2	93	sw.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.64	752.8	29.84	757.9	22.8	— 5.1	99	ene.	.....	.....	1	.....	.....	.....	.....	.....	.....	foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.54	750 3	29.71	754.6	38.4	3.6	100	n.	.....	.....	1	.....	10	.....	.....	.....	.....	foggy	The Staff.
Guernsey	29.34	745.2	29.65	753.1	48.5	9.2	92	ene.	.....	.....	1	.....	10	.....	.....	.....	.....	drizzling	A. Collenette, F. M. S
Kew, Observatory	29.68	753.9	29.72	754.9	37.6	3.1	98	n.	8	3.6	.....	.....	10	.....	.....	.....	.....	foggy	The Staff.
Leicester, Museum	29.49	749.0	29.76	755.9	34.5	1.4	97	ne.	.....	.....	1	.....	10	.....	.....	blank	blank	overcast	J. C. Smith.
Malta, Mediterranean	.....	.....	.....	.....	65.4	18.6	98	e.	.....	.....	2	.....	6	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.00	762.0	30.05	763.3	72.5	22.5	?	sw.	.....	.....	1	.....	7	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	29.20	741.7	29.74	755.4	33.0	0.6	98	nne.	.....	.....	3	.....	10	.....	.....	.....	.....	foggy	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.49	749.0	29.72	754.9	35.0	1.7	100	nne.	.....	.....	1	.....	10	.....	.....	.....	.....	foggy	The Staff.
Plymouth	29.59	751.6	29.66	753.4	45.2	7.3	94	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	gloomy	John Merrifield.
Sandwick Manse, Orkneys	29.64	752.8	29.75	755.6	37	2.8	88	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.09	764.3	30.15	765.8	53.0	11.7	74	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	gloomy	W. H. Lyne.
Sheffield	29.48	748.8	29.77	756.1	36.2	2.3	95	ne.	.....	.....	1	.....	10	.....	.....	0.01	0.3	gloomy	W. F. Cooper.
Silloth Rectory	29.78	756.4	29.81	757.2	28.5	— 1.9	80	n.	.....	.....	1	.....	4	.....	.....	0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.78	756.4	34.0	1.1	90	nne.	5	2.2	.....	.....	10	.....	.....	.....	.....	gloomy	I. New.
Strathfield Turgiss	29.40	746 7	29.63	752.6	37.1	2.8	96	se.	.....	.....	1	.....	10	.....	.....	.....	.....	foggy	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.66	753.4	29.68	753.9	48	8.9	92	n.	.....	.....	2	.....	8	.....	.....	.....	.....	gloomy	W. Newcombe.
Valencia, Observatory	29.79	756.7	29.82	757.4	37.0	2.8	67	s.	2	0.9	.....	.....	5	.....	.....	.....	.....	d. clouds	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.53	750.0	29.57	751.1	25	— 3.9	95	e.	19	8.5	.....	.....	10 n	....	calm	0.025	0.6	light snow	H. J. Cundall, C. E
Chatham, N. B*	29.52	749.8	29.59	751.6	26	— 3.3	92	se.	12	5.4	.....	.....	10 n	.....	se.	0.30	9.1	heavy snow	G. A. Blair.
Father Point, Quebec*	29.56	750.8	29.58	751.3	23	— 5.0	92	ne.	30	13.4	.....	.....	10 8	.....	calm	0.03	0.8	heavy snow	J. McWilliams.
Fort Garry, Manitoba*	29.52	749.8	30.51	774.9	—25	—31.7	100	n.	11	4.9	.....	0	0	....	.....	0	0	clear	James Stewart.
Halifax, N. S*	29.33	745.0	29.46	748.3	32	0.0	100	e.	30	13.4	.....	.....	10 n	.....	.....	0.300	7.6	heavy snow	A. Allison.
Kingston, Ontario*	29.27	743.4	29.62	752 3	25	— 3.9	84	w.	15	6.7	.....	5 c	5 k	nw.	nw	0.27	6.9	cloudy	A. P. Knight, M. A
Montreal, Quebec*	29.24	742.7	29.45	748 0	26	— 3.3	88	w.	22	9.8	.....	.....	10 n	.....	.....	1.48	37.6	heavy snow	C. H. McLeod, C. E.
Parry Sound, Ontario*	28.96	735 6	29.70	754 4	14	—10.0	83	w.	10	4.5	.....	.....	10 n	.....	w.	0.08	2.0	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.11	739 4	29.85	758.2	22	— 5.6	86	w.	11	4.9	.....	.....	10 cs	.....	.....	0.10	2.5	cloudy	H. Morgan.
Port Stanley, Ontario	29.19	741.4	29.87	758.7	23	— 5.0	84	w.	12	5.4	.....	.....	10 n	.....	w.	0.07	1.8	cloudy	M. Payne.
Quebec, Quebec*	29.10	739.1	29.43	747.5	19	— 7.2	100	e.	.....	.....	.....	.....	10 n	.....	e.	1.50	38.1	heavy snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.06	738.1	29.54	750.3	19	— 7.2	84	nw.	8	3.6	.....	.....	10 n	.....	.....	0.62	15.7	light snow	W. H. McIntyre.
Saugeen, Ontario*	28.98	736.1	29.73	755.1	24	— 4.4	96	w.	18	8.0	.....	.....	10 8	.....	.....	0.21	5.3	cloudy	
St. Andrews, N. B	29.22	742.2	29.27	743.4	33	0.6	94	s.	16	7.2	.....	.....	10 n	....	.....	0.56	14.2	light rain	
Sydney, C. B*	29.70	754.4	29.76	755.9	18	— 7.8	96	calm	0	0	.....	.....	1c n	.....	.....	0	0	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.34	745.2	29.75	755 6	24	— 4.4	88	w.	15	6.7	.....	.....	10 ks	....	.....	0.01	0.3	light snow	Magnetic Observatory.
Yarmouth, N. S*	29.31	744 5	29.38	746.2	37	2.8	85	w.	8	3.6	.....	.....	10k	.....	w.	0.30	7.6	cloudy	Lt. F. E. Wilmot, R N.
Sub-arctic.																			
Mount Forest	28.29	718.6	29.80	756.9	20.0	— 6.7	85	nw.	.....	.....	4	.....	10 8	.....	nw.	0.182	4.6	overcast	Wm. Wylie
St. Johns, Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Delany
Cape Colony.																			
Cape St. Francis Lt. House	30.23	767.8	30.26	768.6	67.0	19.4	83	e.	9.4	4.2	.....	0	9 ks	.....	.....	0.070	1.8	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
Chinese (Sub-series).																			
Sung-shu-chwang	24.58	624.2	.....	.....	16.3	— 8.7	.....	ene.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.19	766.8	30.30	769.6	28.4	— 2.0	100	calm	2.9	1.3	.....	.....	10	.....	.....	0.138	3.5	covered	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.21	767.4	30.24	768.1	50.0	10.0	82	ese.	9.6	4.3	.....	.....	4 k	.....	.....	0	0	cloudy.....	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.89	759 3	29.94	760.5	34.7	1.5	93	sse.	13	6	.....	.....	10	.....	.....	.....	.....	hazy	Oversergent Fischer.
Fanoe	29.85	758.3	29.87	758.8	31.5	— 0.3	96	se.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Overlooerer Lauridsen.
Godthaab, Greenland	30.11	764.9	30.16	766.0	21.6	— 5.8	82	nne.	.....	.....	4	.....	4	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	30.09	764.3	30.11	764.8	19.9	— 6.7	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	30.24	768.2	30.29	769.4	12.6	—10.8	.....	calm	.....	.....	0	.....	3	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	30.10	764.6	30.15	765.7	24.4	— 4.2	89	ne.	.....	.....	6	.....	2	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.73	755.2	29.77	756.1	38.1	3.4	85	ne.	16	7	.....	.....	7	.....	.....	.....	.....	.....	Overlooerer Bergh.
Vestervig	29.80	756.9	29.89	759.3	32.5	0.3	96	ene.	.....	.....	2	.....	1	.....	.....	.....	.....	foggy.....	Loearer Oesterbol.
Upernavik, Greenland	30.44	773.2	30.49	774.4	12.7	—10.7	.....	e.	.....	.....	2	.....	3	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.16	740.6	29.81	757.2	52.9	11.6	93	calm	.....	.....	0	.....	kn	.....	.....	0	0	.....	M. Labroue, Director.
Alençon, Normal School	29.08	738.7	29.63	752.7	40.6	4.8	100	ne.	.....	.....	1	.....	fg	.....	.....	0	0	foggy.....	M. Nicot, Director.
Arras, Engineer School	29.42	747.2	29.68	753.9	39.2	4.0	98	sse.	.....	.....	1	.....	n	.....	w.	0	0	.....	M. Fénéon, Command't.
Avignon, Normal School	29.78	756.3	29.85	758.3	55.0	12.8	86	se.	.....	.....	2	.....	10	.....	se.	0.646	16.4	covered	M. Giraud, Director.
Bar-sur-Seine	29.20	741.6	29.75	755.7	47.8	8.8	73	s.	.....	.....	1	.....	8	.....	.....	0.134	3.4	prinkling...	M. Saillard, Director.
Beauvais, Normal School	29.41	746.9	29.68	753.9	37.6	3.1	93	se.	.....	.....	1	.....	10	.....	.....	0		foggy.....	M. Frère Eugène Marie.
Besançon, Normal School	28.89	733.9	29.80	756.8	50.7	10.4	76	nne.	.....	.....	1	.....	kn	.....	nne.	0.31	8.	.....	M. Gobin, Director.
Bordeaux, Observatory	29.49	749.0	29.75	755.7	52.2	11.2	86	wsw.	.....	.....	1	.....	8	.....	ssw.	0.437	11.1	very cloudy.	M. Rayet, Director.
Bourges, Normal School	29.21	741.8	29.76	755.8	49.1	9.5	67	sw.	.....	.....	1	.....	n	.....	sw.	1.744	44.3	.....	M. Matet, Director.
Brest, Naval Observatory	29.39	745.6	29.64	752 8	48.6	9.2	94	e.	.....	.....	2	.....	10	.....	e.	0	0	.....	M. de Kermaréc, Dir.
Caen, Normal School	29.50	749.4	29.58	751.4	35.8	2.1	82	.....	.....	.....	.....	.....	10	.....	.....	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch	29.35	745.5	29.67	753.7	53.1	11.7	84	se.	.....	.....	2	.....	2	e.	se.	0.106	2.7	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.29	743.3	29.79	756.6	41.0	5	85	ese.	.....	.....	1	.....	10	.....	.....	.....	.....	raining.....	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.42	721.9	29.76	756.0	55.4	13.0	59	ssw.	.....	.....	2	.....	8	.....	s.	0.126	3.2	¾ covered..	M. Allurd, Director.
Cluny, Normal School	28.95	735.4	29.82	757.4	53.4	11.9	67	sw.	.....	.....	1	.....	9	.....	sw.	.....	.....	raining.....	M. de Villemontée, Dir.
Commercy, Normal School	28.92	734.6	29.81	757.1	41.4	5.2	97	se.	.....	.....	1	.....	k	se.	se.	0.20	5.	.....	Br. Goulet, Director.
Gap, Normal School	27.38	695.4	29.98	761.4	41.0	5	84	n.	.....	.....	1	.....	9	.....	.....	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.74	730.0	29.87	758.6	54.5	12.5	76	se.	.....	.....	3	.....	10	.....	se.	0.606	15.4	.....	M. Kina, Director.
Grenoble, Normal School	29.06	738.0	29.85	758.1	43.5	6.4	70	ese.	.....	.....	2	.....	km	.....	s.	0	0	.....	M. Ablard, Director.
Guéret	28.19	715.9	29.76	756.0	45.5	7.5	86	sw.	.....	.....	1	.....	n	.....	s.	0.12	3.	.....	M. Delorme, Dir.
Lamballe, Normal School	29.37	746.1	29.64	752 9	50.0	10	86	se.	.....	.....	1	.....	5	.....	se.	0	0	cloudy.....	M. Ollitrault, Director.
Lescar, Normal School	29.27	743.4	29.84	757.8	49.3	9.6	76	w.	.....	.....	1	.....	10	.....	.....	0.583	14.8	covered.....	M. Chanvin, Director.
Lorient, Naval Observatory	29.52	749.8	29.62	752.4	51.4	10.8	86	se.	.....	.....	1	.....	8	.....	s.	0.012	0.3	¾ covered...	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.75	730.2	29.80	756.8	55.0	12.8	64	sse.	.....	.....	2	.....	10 cn	.....	s.	0.138	3.5	covered.....	M. André, Director.
Mans, Normal School	29.31	744.5	29.63	752.5	43.3	6.3	98	nne.	.....	.....	1	.....	10	.....	.....	0.161	4.1	foggy.....	M. Pihoën, Director.
Marseille, Observatory	29.54	750.4	29.82	757.3	57.2	14.0	78	e.	.....	.....	2	.....	10	.....	se.	0.012	0.3	.....	M. Stephan, Director.
Mt. Louis	24.61	625.2	29.46	748.2	34.3	1.3	100	n.	11.2	5.0	.....	.....	10	.....	.....	0.205	5.2	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.68	753.9	29.86	758.5	56.1	13.4	94	sse.	.....	.....	2	.....	10	.....	.....	0.563	14.3	heavy rain..	M. Galzin, Director.
Nancy, Normal School	28.97	735.9	29.77	756.2	42.4	5.8	88	ssw.	.....	.....	1	ck	0	.....	.....	0.079	2.0	.....	M. Hasse, Director.
Nantes, Observatory	29.52	749.9	29.69	754.0	47.1	8.4	94	se.	.....	.....	0-1	.....	10	.....	.....	0.161	4.1	d-ase fog	M. Larocque, Director.
Perpignan, Observatory	29.73	755.2	29.84	758.0	54.0	12.2	63	n.	7.4	3.3	.....	.....	10	.....	ssw.	0.059	1.5	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.93	531.6	.....	.....	22.3	— 5.4	.....	sw.	.....	.....	1	.....	fg	.....	sw.	0.394	10.0	dense fog	M. Vaussenat.
Privas, Normal School	28.79	731.2	29.84	758.0	57.2	14	69	s.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Taillen.
Puy de Dôme Obs'y, Summit	24.85	631.1	.....	.....	34.3	1.3	100	sw.	.....	.....	6	.....	8	.....	.....	0.075	1.9	foggy	M. Allurd, Director.
Rochefort, Naval Obs'y	29.66	753.3	29.69	754.1	47.8	8.8	97	s.	.....	.....	1	.....	10	.....	s.	0.28	7.	raining..	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.44	747.7	29.65	753.2	51.3	10.7	90	sse.	.....	.....	2	.....	5	.....	se.	0.346	8.8	cloudy	M. Brotier, Director.
Rodez, Normal School	27 66	702.5	29.80	756.8	49.5	9.7	79	nw.	.....	.....	1	.....	10	.....	s.	0.374	9.5	covered.....	M. Seger, Director.
Rouen, Normal School	29.60	751.9	29.65	753.1	41.7	5.4	97	se.	.....	.....	1	.....	10	se.	.....	.....	.....	raining.....	M. Moullot.
Saint Lô	.....	.....	.....	.....	41.9	5.5	69	ne.	.....	.....	1	.....	5	e.	ne.	0	0	cloudy.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.49	749.1	29.66	753.3	49.3	9.6	91	ene.	.....	.....	1	.....	10	.....	s.	0.150	3.8	.....	M. Renou, Director.
Toulouse, Observatory	29.18	741.2	29.90	759.5	48.7	9.3	77	s.	.....	.....	1	.....	10	w.	.....	0	0	covered.....	M. Baillaud, Director.
Tours	29.46	748.2	29.63	752.6	49.3	9.6	89	ssw.	.....	.....	1	.....	10	.....	sw.	0.205	5.2	rainy.....	M. de Tastes.
Versailles, Observatory	29.16	740.6	29.65	753.1	45.0	7.2	100	s.	.....	.....	1	.....	.....	.....	.....	0.236	6.0	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.72	755.0	29.87	758.8	49.1	9.5	95	sw.	4.0	1.8	.....	.....	10 kn	.....	w.	1.480	37.6	covered.....	M. Cartier, Director.
German.																			
Ansbach	28.43	722.0	29.93	760.3	34.5	1.4	78	calm	.....	.....	0	.....	5	.....	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.05	737.9	29.89	759.2	35.6	2.0	80	calm	.....	.....	0	.....	6	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.69	754.0	29.87	758.6	38.7	3.7	70	se.	.....	.....	2	.....	4	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.45	747.9	29.98	761 4	34.7	1.5	93	ese.	.....	.....	1	.....	9	.....	.....	0	0	foggy	Royal University Obs'y.
Carlsruhe	29.42	747.3	29.87	758.7	39.2	4.0	80	ne.	.....	.....	1	.....	9	sw.	.....	0	0	hazy.....	Albert Senz.
Cassel	29.09	738.9	29.80	757.0	30.9	— 0.6	90	s.	.....	.....	2	.....	5	s.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.51	749.6	29.89	759.3	35.4	1.9	71	e.	.....	.....	1	.....	9	.....	.....	0.028	0.7	.....	Physical Society.
Friedrichshafen	28 41	721.5	29.87	758.7	42.1	5.6	88	sw.	.....	.....	2	.....	5	sw.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.78	756.4	29.87	758.6	29.8	— 1.2	100	ese.	.....	.....	2	.....	10	.....	.....	0	0	dense fog.....	E. Preller.
Kiel	29.84	758.0	29.86	758.4	34.3	1.3	88	calm	.....	.....	0	.....	4	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.46	748.3	29.90	759.4	38.1	3.4	70	ssw.	.....	.....	1	.....	7	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.66	753.4	29.86	758.4	27.9	— 2.3	92	ese.	.....	.....	1	3 c	0	wsw.	.....	0	0	.....	Weather Observatory.
Memel	30.05	763.2	30.10	764.4	34.3	1.3	92	se.	.....	.....	2	.....	10s	.....	.....	.....	.....	.....	Issermann.
Munich	28.04	712 2	29.89	759.3	31.5	— 0.3	80	ne.	.....	.....	2	.....	3	sw.	.....	0	0	.....	Central Station.
Neufahrwasser	30.03	762.7	30.04	763.1	34.0	1.1	94	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.31	744.5	29.84	757.8	37.0	2.8	89	calm	.....	.....	0	.....	10	n.	.....	0	0	foggy.....	Dicknether.
Stuttgart	28.87	733.4	29.78	756.5	43.2	6.2	82	n.	.....	.....	1	.....	5	w.	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	29.89	759.2	29.91	759.8	32.4	0.2	96	ese.	.....	.....	2	.....	10	.....	.....	0	0	foggy	Profs. Brandes & Reimer
Greek.																			
Athens	29.76	756.0	30.15	765.8	60.3	15.7	.....	n.	.....	.....	1.0	0	7 k	.....	.....	0.004	0.1	.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.94	760.4	29.99	761.7	76.1	24.5	41	wnw.	13.0	5.8	.....	.....	7	w.	.....	0	0	d. clouds	
Deesa	29.43	747.4	29.91	759.6	77.1	25.1	37	wsw.	10.0	4.5	.....	.....	0	.....	.....	0	0	blue sky.....	
Bombay	29.87	758.7	29.91	759.6	77.4	25.2	73	nnw.	19.0	8.5	.....	.....	0	.....	.....	0	0	blue sky.....	
Poona, Yarrowda	28.02	711.8	29.86	758.4	84.6	29.2	17	wnw.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky.....	
Trichinopoly	29.65	753.0	29.93	760.2	78.4	25.8	58	ne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Belgaum	27.34	694.4	29.86	758.3	81.1	27.3	30	ne.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky.....	
Lahore	29.11	739.3	29.87	758.6	69.7	20.9	53	calm	0	0	.....	.....	2	.....	.....	0	0	blue sky.....	
Roorkee	28.94	734.9	29.85	758.2	70.8	21.6	64	calm	0	0	.....	.....	7	w.	.....	0	0	.....	
Agra	29.30	744.3	29.88	758.8	75.2	24.0	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Nagpur	28.84	732.6	29.89	759.2	77.7	25.4	41	ene.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky.....	
Jubbulpore	28.54	724.8	29.91	759.8	72.7	22.6	57	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Lucknow	29.48	748.8	29.86	758.5	71.2	21.8	56	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Allahabad	29.54	750.3	29.86	758.5	68.4	20.2	73	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Patna	29.70	754.3	29.89	759.1	67.4	19.7	69	n.	2.3	1.0	.....	.....	0	.....	.....	0	0	blue sky.....	
Hazaribagh	27.83	706.9	29.99	759.4	63.7	17.6	55	nw.	6.0	3.0	.....	.....	0	.....	.....	0	0	blue sky.....	
Cuttack	29.79	756.7	29.87	758.7	71.1	21.7	64	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Calcutta, Alipore	29.85	758.2	29.87	758.7	68.7	20.4	75	wnw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Dhubri	29.73	755.2	29.85	758 2	70.7	21.5	74	calm	0.5	0.2	.....	.....	0	.....	.....	0	0	blue sky.....	
Chittagong	29.78	756.3	29.87	758.7	71.6	22.0	82	calm	1.3	0.6	.....	.....	0	.....	.....	0	0	blue sky.....	
Sibsagar	29.53	750.0	29.88	758.8	66.3	19.1	94	ne.	2.0	0.9	.....	.....	10	w.	w.	0.06	1.5	overcast.....	
Jeypore	.....	.....	.....	.....	75.0	23.9	.....	nw.	4.8	2.2	.....	.....	8	.....	nw.	0	0	d. clouds.....	
Italian.																			
Udine	29.71	754.6	30.13	765.2	47.7	8.7	81	n.	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
ITALIAN.—Continued.																			
Milan	29.60	751.8	30.13	765.4	40.6	4.8	97	w.	1.8	0.8			10			0.720	18.3		Prof. Schiapparelli.
Padua	29.99	761.8	30.11	764.7	47.5	8.6	85	n.	3.1	1.4			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.20	741.6	30.14	765.5	38.8	3.8	95	ne.	0.7	0.3			10			0.150	3.8		Prof. F. F. Denza.
Genoa	29.84	757.8	30.03	762.8	44.1	6.7	81	ne.	15.4	6.9			10	s.		1.543	39.2		Prof. G. M. Garibaldi.
Mondovi	28.14	714.7	30.12	765.0	39.2	4.0	80	w.			2		8			0.480	12.2		Prof. D. C. Bruno.
Pesaro	30.07	763.8	30.12	765.1	46.4	8.0	100	w.	8.7	3.9			10			0	0		Prof. Luigi Guidi.
Florence	29.77	756.2	30.03	762.8	55.8	13.2	75	s.			2		10			0	0		Prof. Costantino Pittei.
Leghorn	29.87	758.7	29.94	760.4	54.7	12.6	79	ne.	9.4	4.2			10			0	0		Prof. P. Monte.
Rome	29.85	758.3	30.03	762.8	55.8	13.2	73	n.	1.8	0.8			10			0	0		Prof. P. Tachini.
Lecce	29.89	759.1	30.14	765.6	58.6	14.8	81	se.	17.4	7.8			4			0	0		Prof. C. de Giorgi.
Cosenza	29.21	741.9	30.11	764.9	52.9	11.6	76	sse.	2.5	1.1			3	se.		0	0		Prof. D. Conti.
Cagliari	29.59	751.6	29.78	756.5	63.7	17.6	84	se.			4		10			0	0		Prof. A. Pacinotti.
Palermo	29.71	754.5	29.96	760.9	65.7	18.7	55	sse.	1.8	0.8			1			0	0		Prof. G. Caccintore
Syracuse	30.02	762.6	30.07	763.7	60.1	15.6	82	se.	6.3	2.8			8	se.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.53	750.1	30.06	763.4	58.1	14.5	67	e.	0	0			3	sw.		0	0		Prof. F. Brioschi.
Stelvio	22.09	561.0			28.0	— 2.2	98	sw.			7		10			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.10	561.3			27.1	— 2.7	69	sw.			2		10			0	0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.29	769.4	30.32	770.2	31.7	— 0.2	69	w.			2		9 n		nw.	0.114	2.9	snowing	Hattori.
Awomori	30.22	767.6	30.26	768.6	25.3	— 3.7	97	sw.	14.4	6.4			10 n			0.093	2.4	snowing	K. Ogawa.
Hakodate	30.18	766.7	30.20	767.0	23.0	— 5.0	72	nw.	12.0	5.4			9			0.010	0.3		
Hamamatsu	30.29	769.3	30.32	770.0	39.7	4.3	58	calm			0	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					35.3	1.8	79	nne.	6.2	2.8		8 cs	0			0	0	cloudy	
Kanazawa	30.32	770.2	30.43	773.0	34.7	1.5	79	se.	2.0	1.2			10			0.020	0.5	overcast	S. Endo.
Kioto	30.23	767.8	30.42	772.6	36.0	2.6	77	nw.	0.5	0.2			10s;ck			0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	30.19	766.9	30.41	772.3	38.5	3.6	75	calm	0	0		0	0			0	0	clear	S. Takehayashi.
Niigata	30.36	771.1	30.39	771.9	34.4	1.3	74	w.	10.4	4.6		0	2 ck			0.005	0.1	fair	M. Moritu.
Nobiru	30.26	768.6	30.28	769.0	32.4	0.2	96	w.	16.6	7.4		0	2 s			0	0	fair	H. Midzushima.
Numazu	30.27	768.9	30.31	769.8	39.0	3.9	76	nne.			4		10 ks		w.	0	0	covered	R. Kaneda.
Osaka	30.42	772.5	30.43	773.0	34.2	1.2	77	nw.	4.0	1.8		0	8 s			0	0	cloudy	H. Omura.
Supporo					5.7	—14.6	77	s.	4.8	2.1		0	3			0	0	clear	
Tokei Obs'y, Yeddo	30.24	768.1	30.32	770.2	35.8	2.1	61	nnw.	9.2	4.1		0	1 s			0	0	clear	The Staff.
Wakayama	30.38	771.6	30.44	773.1	35.8	2.1	72	ne.	2.4	1.1		0	0			0	0	clear	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.85	758 2	30.04	763.0	79.6	26.4	64	e.	22.0	9.8		1 cs	4 k;ks		ese.	0.04	1.0	fair	Oliver & Figon.
MEXICAN.																			
Guanajunto	23.72	602.4	29.94	760.4	52.9	11.6	74	sw.	inap.	inap.		1 c	0	e.		0	0	clear	Prof. Vicente Fernandez.
Leon	24.38	619.2	30.23	767.8	46.0	7.8	84	nnw.			1	2 c	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.66	753.4	29.92	760.1	68.0	20.0	87	e.	5.3	2.3		4 cs	0	sw.		0	0	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23 15	588.0	30.32	770.0	46.2	7.9	80	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.23	615.5	30.05	763.2	41.9	5.5	71	se.			2	0	0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascullentes	24.02	610.0	30.13	765.3	46.4	8.0	76	calm	0	0		1 c	0	w.		0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.42	594.9	30.56?	766.2?	54.5	12.5	44	calm	0	0		0	2			0	0	clear	Prof. P. Spina.
Zacatecas	22.56	573.1	30.26	768.5	49.3	9.6	58	ne.	4.0	1.8		0	0			0	0	blue sky	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.72	755.0	29.72	755.0	39.0	4.2		ese.			2					0	0		
Groningen	29.76	755.8	29.81	757.2	33.0	0.9		e.			1					0	0		
Helder	29.77	756.2	29.77	756.2	30.0	2.2		e.			1					0.055	1.4		
Hellevoetsluis	29.73	755.1	29.73	755.1	35.8	2.1	89	ene.			1					0.110	2.8		
Utrecht	29.73	755 1	29.78	756.3	37.0	3.1	76	ese.			2		5			0.059	1.5	cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.77	756.1	29.83	757.7	35.2	1.8	90	se.	2	1			10					rain & snow	
Brono	29.81	757.1	29.85	758.1	33.4	0.8	75	calm	0	0			6			0	0		
Christiania	29.85	758.3	30.01	762.2	32.5	0.3	83	ne.	0	0			10			0.004	0.1	foggy	
Gjæsvær	29.87	758.7	29.89	759.3	19.4	— 7.0		nw.			6		8						
Lodingen	29.88	758.9	29.93	760 1	24.8	— 4.0	72	n.			2		3			0	0		
PORTUGUESE.																			
Angra, Azores	29.67	753.6	29.83	757.6	60.1	15.6	79	nw.	11.2	5.0			4			1.220	31.0		Dr. J. A. Sampaio.
Campo Major	28.87	733.4	29.89	759.1	50.2	10.1	67	nnw.	3.1	1.4			7			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.05	763.3	30.14	765.5	64.4	18.0	53		2.5	1.1			0	n.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.01	752.1	29.98	761.4	51.8	11.0	57	nne.	9.8	4.4			1			0.120	3.2		The Staff.
Ponta Delgada, Azores	29.78	756.5	29.85	758.3	66.2	19.0	83	w.	21.7	9.7			3			0.102	2.6		
Saint Paul de Loando	29.61	752.1	29.81	757.2	76.6	24.8	82	nw.	1.8	0.8			5	s.		0.102	2.6		
Serra da Estrella	25 06	630.4	29.98	761.6	27.0	— 2.8	98	nnw.			2		1						
RUSSIAN.																			
Akmolinski	29.44	747.7	30.69	779.5	— 9.4	—23.0	76	sw.	7	3		0	5 ks						Major K. Lasarew.
Archangel	30.19	766.8	30.21	767.3	25.5	— 3.6	91	s.	13	6			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.38	771.7	30.30	769.7	32.4	0.2	75	ese.	10	7			10			0	0	heavy clouds	Capt. Wisganow.
Barnaul	30.32	770.2	30.94	785.8	—31.7	—35.4	75	calm	0	0			0			0	0		Meteorological Obs'y.
Bielosersk	29.97	761.3	30.50	774.0	5.9	—14.5	89	sse.	9	4		0	2 s			0	0		
Dorpat	29.97	761.1	30.22	767.7	20.6	— 3.0	100	se.	4	2			10 n			0.020	0.5	light snow	Observatory.
Ekaterinburg	29.66	751.7	30.05	778.4	17.8	— 7.9	92	W.	11	5		3 c	0			0	0	light clouds	Meteorological Obs'y.
Ellsawetgrad	29.92	759.9	30.41	772.3	21.2	— 6.0	85	ese.	2	1			10 s			0	0		
Kasan	30.44	773.2	30.74	780.7	20.3	— 6.5	68	ese.	2	1			10						Observatory.
Kem	30.02	762.4			26.6	— 3.0	87	sw.	9	4		0	3 ks			0	0	light clouds	
Kertch	30.13	765.3	30.15	765.8	31.6	— 0.2	89	ene.	4	2		0	8 n			0	0		Lagorio & Sastyrez.
Kieff	29.05	753 0	30.33	770.3	23.7	— 4.6	90	se.	9	4		cs	10ks;n						Observatory.
Libau	30.05	763.2	30.07	763.8	34.7	1.5	91	se.			1		10			0	0		E. Quass.
Lugan	30.13	765.2	30.35	770.9	16.9	— 8.4	70	ne.	13	6			9			0	0		Meteorological Obs'y.
Moscow	30.06	763.0	30.02	777.7	— 0.8	—18.2	89	ese.	2.2	1.0			0			0	0		
Nikolaiev	30.28	769.1	30.35	771.0	27.7	— 2.4	92	ese.	4	2			10 n			0.012	0.3		Capt. Kurdakow.
Pekin, China	30.11	764 9	30.20	768.5	24.3	— 4.3	73	calm	0	0			0 k						Physical Observatory.
Petrosavodsk	30.08	764.0	30.29	769.4	21.9	— 5.6	90	sw.	11	5			10			0.004	0.1		Dr. Bergmann.
Pinsk																			
St. Petersburg	30.27	768.9	30.29	769.3	19.4	— 7.0	83	sse.	11	5		ck	8 k			0.050	1.5	light clouds	Central Physical Obs'y.
Sevastopol	29.95	760.8	30.12	765.0	42.3	5.7	94	sw.	11	5			10 n			0.098	2.5	heavy cl'ds.	
Semipalatinsk	30.21	767.3	31.01	787 6	—28.8	—33.8	81	e.	10	7			6			0	0		Major Lasarew.
Starol Bykhov	29.93	760.2	30.43	772.9	16.5	— 8.6	82	ene.	18	8			10			0	0		
Tashkend, Laboratory	28.72	729.6	30.41	772.5	25.2	— 3.8	82	se.	2	1			8			0	0	light clouds	Teich, A. M.
Tiflis	28.73	729.7	30.19	766.7	44.1	0.7	73	calm	0	0		0	5 s			0	0		Physical Observatory.
Tomsk	30.46	773.7	30.80	782.2	—23.6	—30.9	78	s.	11	5		0	0						
Vladivostock	30.32	770.0	30.38	771.7	4.6	—15.2	70	n.	11	5		0	0			0	0		
Warsaw	29.62	752.4	30.06	763 6	34.3	1.3	96	s.	7	3			10					heavy cl'ds.	Astronomical Obs'y.
Wilna	29.75	755.6	30.19	766.8	30.0	— 0.8	96	sso.	4	2			10					heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.01	777.4	30.96	786.3	—30.3	—34.6	82	calm	0	0			2						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.69	754.1	44	6.7	92	s.			4	3	0			0.3	8.	d. clouds	J. Youngclause.
North Unst			29.68	753.9				s.			6		7			blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.66	753.4	29.76	756.0	56.1	13.4	87	e.	3.1	1.4			10			0.043	1.1	foggy	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.71	754.7	29.77	756.2	51.4	10.8	75	nw.	1.6	0.7		2	3	n.		0.831	21.1	cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.88	682,8	29.93	760.3	39.6	4.2	88	s.	2.0	0.9			9			0.098	2.5	almost cov.	Domingo Martin.
Madrid, Royal Obs'y	27.62	701.6	29.91	759.7	42.6	5.9	69	ne.	3.1	1.7			9			0.252	6.4	almost cov.	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
Spanish.																			
Marcia, Met. Obs'y	29.64	752.9	29.76	756.0	54.7	12.6	75	nw.	4.7	2.1	.....	2	3	s.	.....	0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.01	736.9	29.85	758.2	49.3	9.6	49	se.	8.7	3.9	.....	2 k	3 k	nw.	e.	0	0	fair	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.96	735.6	29.87	758.7	48.2	9.0	85	calm	0	0	.....	.....	1	.....	.....	0.165	4.2	almost clear	R. Gil Villanueva, Dir.
Spanish.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.84	757.8	29.89	759.2	76.8	24.9	75	n.	3.3	1.5	.....	0	1 k	.....	.....	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.82	757.5	29.93	760.1	53.1	11.7	80	nw.	8.0	3.6	.....	0	6	.....	nw.	0	0	....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.94	760.4	30.03	762.7	75.2	24.0	97	e.	11.2	5.0	.....	2 c	5 kn	n.	e.	0.157	4.0	raining	Manuel Maese.
Tuguegarao, Philippine Id's	29.86	758.5	29.99	761.8	71.0	21.7	85	nnw.	6.5	2.9	.....	.....	9 ks	.....	ne.	inap.	inap.	.....	José L. Yrastorza.
Swedish.																			
Haparanda	29.97	761.2	30.01	762.2	24.1	— 4.4	95	sw.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	30.02	762.5	30.07	763.8	14.0	—10.0	94	calm	.....	.....	0	.....	9	.....	.....	0	0	.....	
Hernosand	30.01	762.3	30.06	763.6	11.8	—11.2	85	calm	.....	.....	0	.....	5	.....	.....	0	0	.....	
Stockholm	29.87	758.7	30.05	763.2	34.7	1.5	98	calm	.....	.....	0	.....	10	.....	.....	0.047	1.2	foggy	
Wisby	29.96	761.0	30.02	762.5	36.0	2.2	96	se.	.....	.....	2	.....	10	.....	.....	0.291	7.4	.....	.....
Sub-series.																			
Upsala	29.94	760.5	30.03	762.7	32.5	0.3	96	e.	4.3	1.9	.....	.....	10	.....	.....	0.051	1.3	snow & fog	S. G. Fineman.
Swiss.																			
Geneva	28 47	723.0	29.95	760.8	33.8	1.0	97	s.	.....	.....	1	.....	10	.....	.....	0.209	5.3	foggy	The Observatory.
Turkish.																			
Constantinople	.....	.....	30.20	767.0	52.0	11.1	73	n.	8	3.5	.....	.....	10	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.17	766.2	56.7	13.7	.....	nw.	.....	.....	1	.....	2	.....	.....	0	0	slightlycl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.98	761.4	61.2	16.2	72	n.	.....	.....	1	.....	2 n	.....	n.	0.04	1.0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	29.62	752.3	29.71	754.6	32	0.0	65	nw.	6	2.7	.....	0	9 s	.....	nw.	0.21	5.3	cloudy	J. O. Barnes.
Alpena, Michigan	29.11	739.4	29.82	757.4	19	— 7.2	84	w.	13	5.8	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.14	638.5	30.22	767.6	27	— 2.8	70	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.28	692.9	30.31	769.9	— 8	—22.2	61	ne.	12	5.4	.....	0	7 s	.....	n.	inap.	inap.	fair	B. O. Lenoir.
Atlanta, Georgia	28.82	732.0	30.05	763.3	42.5	5.8	78	w.	1	0.4	.....	0	2 s	.....	.....	0.16	4.1	clear	H. C. Smith.
Atlantic City, New Jersey	29.84	757.9	29.85	758.2	28	— 2.2	70	nw.	7	3.1	.....	2 c	0	.....	.....	0.54	13.7	clear	Jas. M. Watson.
Augusta, Georgia	29.86	758.4	30.06	763.5	40	4.4	89	calm	0	0	.....	.....	fg.	.....	.....	inap.	inap.	dense fog	John Healy.
Baltimore, Maryland	29.86	758.4	29.91	759.7	36	2.2	61	w.	4	1.8	.....	0	sk.	.....	.....	0.26	6.6	clear	Geo W Felger.
Barnegat, New Jersey	29.83	757.7	29.85	758.2	30.1	— 1.1	56	nw.	18	8.0	.....	1 c	0	.....	.....	0.49	12.4	clear	G. A. Hill.
Behring Id., Behring Sea	29.89	759.2	29.91	759.7	33.8	1.0	.....	e.	7	3.1	.....	.....	10 n	.....	.....	0.01	0.3	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.70	729.0	30.46	773.7	3	—16.1	76	nw.	7	3.1	.....	0	4 s	.....	nw.	0	0	fair	A. Pritchard.
Benton, Fort, Montana	27.21	691.1	30.21	767.3	— 2	—18.9	68	ne.	6	2.7	.....	0	5 s	.....	.....	0	0	fair	S. Wheaton.
Bismarck, Dakota	28.47	723.1	30.48	774.2	—16	—26.7	100	nw.	4	1.8	.....	0	0	.....	.....	0.04	1.0	clear	Cyrus Cramor.
Block Island, Rhode Island	29.64	752.8	29.67	753.6	33	0.6	78	nw.	12	5.4	.....	0	0	.....	.....	1.38	35.1	clear	J. T. Eiker.
Boise City, Idaho	27.34	694.4	30.32	770.1	30	— 1.1	85	nw.	2	0.9	.....	0	1 s	.....	.....	0	0	clear	B. E. Light.
Boston, Massachusetts	29.42	747.3	29.58	751.3	31.0	— 0.6	68	w.	16	7.2	.....	0	0	.....	.....	0.58	14.7	clear	O. B. Cole.
Brownsville, Texas	29.90	759.4	29.95	760.7	70.0	21.1	94	s.	10	4.5	.....	.....	10 s	.....	s.	0	0	cloudy	M. McCarty.
Buffalo, New York	29.03	737.3	29.83	757.7	25	— 3.9	73	sw.	27	12.1	.....	.....	10 s	.....	sw.	0.15	3.8	cloudy	W. Finn.
Buford, Fort, Dakota	28.32	719.3	30.56	776.2	—20	—28.9	100	calm	0	0	.....	0	0	.....	.....	0.14	3.6	clear	F. A. Mellen.
Burlington, Vermont	29.25	742.9	29.56	750.8	33.0	0.6	85	w.	10	4.5	.....	.....	10 s	.....	w.	0.23	5.8	cloudy	G. C. Schaeffer.
Cairo, Illinois	29.59	751.6	30.01	762.2	34.8	1.6	86	n.	3	1.3	.....	hz.	4 s; fg	.....	.....	0	0	fair	W. H. Ray.
Cape Henry, Virginia	29.90	759.4	29.92	760.0	38	3.3	72	sw.	8	3.6	.....	0	3 s	.....	.....	0.35	8.9	clear	A. K. Alderson.
Cape May, New Jersey	29.84	757.9	29.87	758.7	36.0	2.2	69	nw.	28	12.5	.....	0	0	.....	.....	0.43	10.9	clear	W. E. Smith.
Cape Mendocino, California	29.59	751.6	30.27	768.8	53	11.7	93	se.	11	4.9	.....	.....	fg.	.....	se.	0.04	1.0	dense fog	J. J. McLean.
Cedar Keys, Florida	30.00	762.0	30.02	762.5	62	16.7	93	nw.	9	4.0	.....	0	6 s	.....	w.	0.28	7.1	fair	F. W. Mixer.
Champaign, Illinois	29.15	740.4	30.02	762.5	26.8	— 2.9	64	nw.	1	0.4	.....	.....	10 s	.....	nw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	29.94	760.5	30.00	762.0	50	10.0	93	nw.	4	1.8	.....	0	fg.	.....	.....	0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.11	739.4	30.00	762.0	37.0	2.8	82	sw.	3	1.3	.....	0	fg.	.....	.....	0.02	0.5	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.18	741.2	30.04	763.0	34.0	1.1	85	ne.	1	0.4	.....	4 cs	fg.	.....	.....	0.01	0.3	fair	B. L. Goulding.
Cheyenne, Wyoming	23.98	609.1	30.26	768.6	42.1	5.6	27	nw.	16	7.2	.....	0	4 s	.....	.....	0	0	fair	E. McGovern.
Chicago, Illinois	29.25	742.9	30.01	762.2	18.1	— 7.7	76	nw.	7	3.1	.....	0	0	.....	.....	0	0	clear	J. Mitchell.
Chincoteague, Virginia	29.88	758.9	29.90	759.4	35	1.7	79	w.	4	1.8	.....	5 cs	0	w.	.....	0.50	12.7	fair	C. F. Dickens.
Cincinnati, Ohio	29.32	744.7	30.02	762.5	32	0.0	78	sw.	1	0.4	.....	.....	10 s	.....	sw.	0.13	3.3	cloudy	R. B. Watkins.
Cleveland, Ohio	29.17	740.9	29.96	761.0	21	— 6.1	89	sw.	9	4.0	.....	.....	10 n	.....	w.	0.28	7.1	light snow	J. B. Newlin.
Coleman City, Texas	28.10	713.7	30.00	762.0	42	5.6	76	se.	3	1.5	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.06	738.1	29.96	761.0	28	— 2.2	64	w.	5	2.2	.....	0	9 s	.....	.....	0.18	4.6	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.00	711.2	30.02	762.5	40.6	4.8	67	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.92	683.8	30.32	770.1	11	—11.7	64	n.	2	1.0	.....	.....	10 s	.....	.....	0.42	10.7	cloudy	W. B. Lamar.
Davenport, Iowa	29.38	746 2	30.09	764.3	25	— 3.9	64	n.	6	2.7	.....	.....	10 s	.....	n.	0	0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.22	640.6	30.16	766.1	57	13.9	77	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28 26	717.8	30.09	764.3	39.7	4.3	97	s.	8	3.6	.....	.....	10 s	.....	.....	2.84	72.1	cloudy	D. Moore.
Deadwood, Dakota	25.36	644.1	30.34	770.6	16	— 8.9	87	e.	4	1.8	.....	.....	10 n	.....	.....	0.27	6.9	light snow	F. Wilson.
Delaware Breakwater, Del	29.86	758.4	29.88	758.9	36	2.2	61	nw.	16	7.2	.....	0	2 k	.....	w.	0.32	8.1	clear	T. S. Townsend.
Denison, Texas	29.14	740.1	29.99	761 7	37.0	2.8	82	calm	0	0	.....	0	2 s	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24 67	626.6	30.19	766.8	50.0	10.0	56	e.	2	0.9	.....	0	5 s	.....	.....	0	0	fair	F. M. Neal.
Des Moines, Iowa	29 17	740.9	30.15	765.8	22	— 5.6	73	ne.	7	3.1	.....	.....	10 s	.....	ne.	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.17	740.9	29.93	760.2	27.3	— 2.6	88	w.	4	1.8	.....	.....	10 n	.....	.....	0.10	2.5	light snow	C. F. R. Wappenhans.
Dodge City, Kansas	27.37	695.2	30.17	766.3	29	— 1.7	67	n.	18	8.0	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.32	744.7	30.10	764.5	16.7	— 8.5	70	nw.	1	0.4	.....	0	0	.....	.....	0.12	3.0	clear	J. Harvey Smith.
Duluth, Minnesota	29.35	745.5	30.16	766.1	— 1	—18.3	68	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	N. B. Conger.
Eagle Pass, Texas	29.18	741.2	30.02	762.5	44.0	6.7	83	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.31	642.9	30.23	767.8	40	4.4	76	sw.	20	8.9	.....	0	6 ks	.....	sw.	0	0	fair	J. M. Clifford.
Eastport, Maine	29.22	742.2	29.28	743.7	35.0	1.7	89	s.	24	10.7	.....	.....	10 s	.....	s.	0.22	5.6	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.15	689.6	30.11	764.8	26	— 3.3	67	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. J. Gundall.
El Paso, Texas	26.33	668.8	30.19	766.8	41.0	5.0	43	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.11	739.4	29.88	758.9	25	— 3.9	73	sw.	12	5.4	.....	.....	10 s	.....	.....	0.35	8.9	cloudy	Peter Wood.
Escanaba, Michigan	29.20	741.7	29.92	760.0	11.0	—11.7	80	w.	7	3.1	.....	0	0	.....	.....	0.04	1.0	clear	George Heathcote.
Fredericksburg, Texas	28.18	715.8	30.00	762.0	49	9.4	66	calm	0	0	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	29.92	760.0	29.98	761.5	62	16.7	100	n.	3	1.3	.....	.....	fg.	.....	.....	0	0	dense fog	E. O'C. Machernay.
Grand Haven, Michigan	29.22	742.2	29.93	760.2	24.0	— 4.4	88	nw.	15	6.7	.....	.....	10 s	.....	nw.	0.03	0.8	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.35	643.9	30.23	767.8	39	3.9	70	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	Robert O. Lord.
Hatteras, North Carolina	29.95	760.7	29.97	761.2	43	6.1	93	nw.	4	1.8	.....	7 c	hz	sw.	.....	0.84	21.3	fair	R. M. Crawford.
Helena, Montana	25.73	653.5	30.11	764.8	13	—10.6	83	calm	0	0	.....	.....	10 s	.....	.....	0.04	1.0	cloudy	N. C. Smith.
Henrietta, Texas	28.94	735.1	30.02	762.5	32	0.0	88	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. P. Sherry.
Huron, Dakota	28.84	732.5	30.38	771.6	— 5.0	—20.6	65	nw.	7	3.1	.....	0	0	.....	.....	0.02	0.5	clear	S. W. Glenn.
Indianapolis, Indiana	29.14	740.1	29.99	761.7	28	— 2.2	77	w.	4	1.8	.....	.....	10 s; fg	.....	w.	0	0	cloudy	O. Schutze.
Indianola, Texas	29.95	760.7	29.98	761.5	66.8	19.3	99	sw.	17	7.6	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	I. A. Reed.
Jacksboro, Texas	28.74	730.0	29.98	761.5	38	3.3	66	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	29.98	761.5	30.03	762.7	62	16.7	87	calm	0	0	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.69	703 3	30.39	771.9	9	—12.8	60	e.	2	0.9	.....	.....	10 s	.....	.....	0.04	1.0	cloudy	A. Schneider.
Keokuk, Iowa	29.33	745.0	30.04	763.0	25.5	— 3.6	88	n.	6	2.7	.....	.....	10 s	.....	n.	0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.00	762.0	30.02	762.5	71.0	21.7	94	calm	0	0	.....	3 c	0	w.	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	29.94	760.5	29.96	761.0	41.5	5.3	44	nw.	11	4.9	.....	4 k	3 s	nw.	w.	0.45	11.4	fair	H. Mc P. Baldwin.
Knoxville, Tennessee	28.95	735.3	30.03	762.7	30	— 1.1	94	ne.	1	0.4	.....	5 c	sk.	w.	.....	0.02	0.5	fair	J. A. Cody.
La Crosse, Wisconsin	29.23	742.4	30.08	764.0	13	—10.6	61	n.	3	1.3	.....	0	0	.....	.....	0.01	0.3	clear	S. C. Emery.
Leavenworth, Kansas	29.13	739.9	30.09	764.3	32	0.0	78	n.	6	2.7	.....	3 k	0	nw.	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.19	741.4	30.07	763.8	39.0	3.9	89	e.	1	0.4	.....	.....	10 n	.....	.....	1.86	47.2	light rain	W. Bell.
Little Rock, Arkansas	29.67	753.6	30.00	762.0	46	7.8	53	nw.	4	1.8	.....	.....	10 ks	.....	nw.	0	0	cloudy	W. U. Simons.
Los Angeles, California	29.73	755.1	30.13	765.3	50	10.0	52	ne.	10	4.5	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.39	746.5	29.99	761.7	34.5	1.4	71	sw.	1	0.4	.....	.....	sk	.....	.....	0	0	dense smoke	L. M Dey.

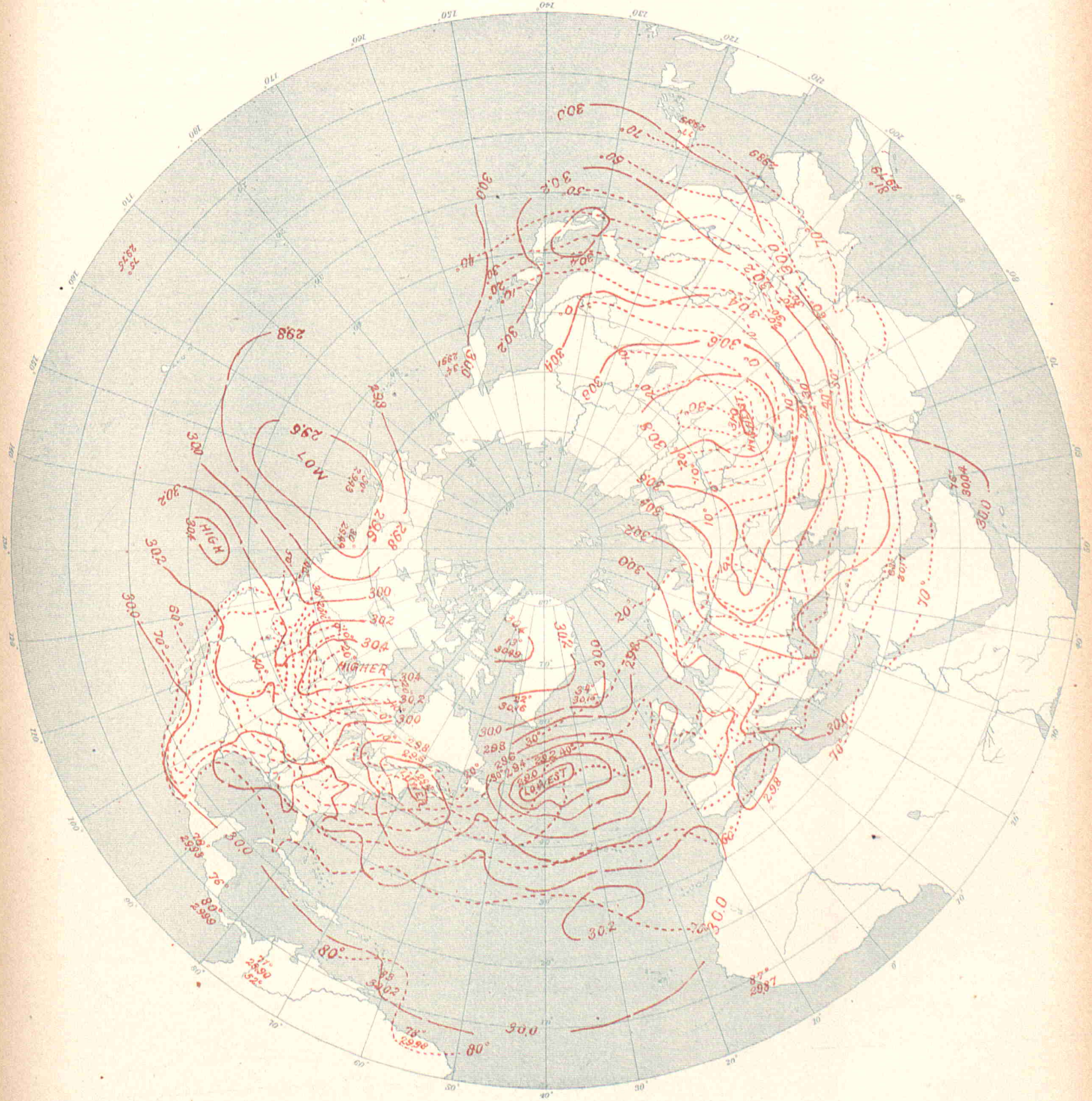
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
								Direction.	Velocity.		Force.	Amount and kind.		Direction.					
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.21	741.9	29.94	760.5	38	3.3	45	calm	0	0		0	0			0.01	0.3	clear	Lewis Duane.
Mackinaw City, Michigan	29.18	741.2	29.88	758.9	19.5	— 6.9	76	nw.	23	10.3			10 s		nw.	0.02	0.5	cloudy	F. R. Day.
Macon, Fort, North Carolina	29.95	760.7	29.96	761.0	45	7.2	76	nw.	12	5.4		8c;cs	0	sw.		0.03	0.8	cloudy	C. A. Shaw.
Madison, Wisconsin	28.97	735.8	30.07	763.8	12	—11.1	80	nw.	8	3.6		8 cs	0	nw.		0.03	0.8	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.50	647.7	30.04	763.0	8	—13.3	58	nw.	4	1.8			10 n		ne.	0.16	4.1	light snow	F. Burke.
McKavett, Fort, Texas																			J. E. Thatcher.
Marquette, Michigan	29.14	740.1	29.92	760.0	14	—10.9	64	nw	20	8.9			10 s			0.02	0.5	cloudy	J. Gilligan.
Memphis, Tennessee	29.63	752.6	29.99	761.7	42	5.6	86	calm	0	0		10 cs	sk.	se.		0	0	cloudy	D. T. Flannery
Milwaukee, Wisconsin	29.19	741.4	30.00	762.0	13	—10.6	80	w.	12	5.4		0	5 s			0	0	fair	W. Line
Missoula, Fort, Montana	26.68	677.7	30.14	765.5	34	1.1	100	calm	0	0			10 n			0.23	5.8	light rain	J. H. Young.
Mobile, Alabama	29.96	761.0	30.00	762.0	59	15.0	100	nw.	1	0.4			fg.			0.27	6.9	dense fog	C. A. Read.
Montgomery, Alabama	29.78	756.4	30.02	762.5	47.9	8.8	97	calm	0	0			fg.			0.13	3.3	dense fog	J. B. McLaughlin.
Moorhead, Minnesota	29.21	741.9	30.32	770.1	—12	—24.4	100	n.	8	3.6		0	0			0.03	0.8	clear	H. Bessant.
Morgantown, W. Virginia	28.94	735.1	30.01	762.2	32.5	0.3	80	sw.	4	1.8		0	7 k		w.	0.18	4.6	fair	J. C. Sprigg, jr.
Mt. Washington, N. H.	22.96	583.2	29.59	751 6	7.0	—13.9	100	w.	54	24.2			10n;fg		w.	0.54	13.7	light snow	B. S. Pague.
Nashville, Tennessee	29.37	746.0	29.98	761.5	33.0	0.6	88	calm	0	0		5 cs	0	w.		0	0	fair	L. N. Jesunofsky.
New Haven, Connecticut	29.60	751.8	29.72	754 9	27	— 2.8	59	w.	10	4.5		0	0			0.82	20.8	clear	J. H. Sherman.
New London, Connecticut	29.69	754.1	29.74	755.4	31	— 0.6	68	w.	7	3.1		0	0			0.49	12.4	clear	J. G. Lynch.
New Orleans, Louisiana	29.92	760.0	29.98	761.5	64.5	18.1	92	sw.	6	2.7			fg.			inap.	inap.	dense fog	L. Dunne.
Newport, Rhode Island	29.61	752.1	29.66	753.4	32.3	0.2	70	w.	20	8.9		0	0			1.42	36.1	clear	W. McGillivray.
New York, New York	29.64	752.8	29.83	757.7	29	— 1.7	77	w.	11	4.9		0	7 s		w.	0.52	13.2	fair	J. B. Merrill.
Norfolk, Virginia	29.89	759 2	29.92	760.0	41	5.0	57	w.	3	1.3		0	3s;hz			0.25	6.3	clear	Wm. Davis.
North Platte, Nebraska	27.16	689.9	30.32	770.1	23.6	— 4.7	72	nw.	8	3.6		0	4 s			0	0	fair	E. F. Brady.
Olympia, Washington Ty.	30.01	762.2	30.05	763.3	40.0	4.4	89	s.	2	0.9		0	0			0.14	3.6	clear	J. Accomb.
Omaha, Nebraska	28.93	734.8	30.22	767.6	21.6	— 5.8	82	n.	16	7.2			10 s			0	0	cloudy	A. Pollak.
Oswego, New York	29.33	745.0	29.68	753.9	30.0	— 1.1	77	w.	24	10.7			10 s		w.	0.56	14.2	cloudy	J. G. Linsley.
Palestine, Texas	29.43	747.5	30.01	762.2	45.5	7.5	83	w.	2	0.9		0	0			inap.	inap.	clear	L. M. Pindell.
Pensacola, Florida	29.97	761.2	30.00	762.0	59.9	15.5	100	nw.	4	1.8			10s;fg		nw.	0.02	0.5	cloudy	M. McGauran.
Philadelphia, Pa	29.79	756.7	29.90	759.4	31.5	— 0.3	88	nw.	4	1.8		0	0			0.40	10.2	clear	T. T. Townsend.
Pike's Peak, Colorado	17.72	450.1	30.38	771.6	18	— 7.8	80	nw.			9	0	5 s			0	0	fair	H. Hall.
Ploche, Nevada	24.20	641.7	30.37	771.4	36.2	2.3	46	w.	2	0.9		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.11	739.4	29.97	761.2	25.0	— 3.9	88	s.	8	3.6			10 s			0.04	1.0	cloudy	W. A. Reid.
Poplar River, Montana								nw.			1	0	0			0.03	0.8	clear	W. D. Maxwell.
Port Eads, Louisiana	30.01	762.2	30.02	762.5	63.5	17.5	99	nw.	4	1.8			fg.			0	0	dense fog	H. B. Boyer.
Port Huron, Michigan	29.16	740.7	29.89	759.2	20.2	— 6.6	91	w.	12	5.4			10 s			0.09	2.3	cloudy	W. O. Bailey.
Portland, Maine	29.39	746.5	29.44	747.8	33.0	0.6	67	w.	12	5.4		0	0			0.44	11.2	clear	W. W. Elchelberger.
Portland, Oregon	30.01	762.2	30.08	764.0	55.2	12.9	90	sw.	12	5.4		0	4 s		s.	4.42	112.3	fair	M. L. Hearne.
Portsmouth, N. C.					44	6.7	83	nw.			4	2 cs	6 s	sw.		0.49	12.4	cloudy	F. S. Coburn.
Prescott, Arizona	24.92	633.0	30.30	769.6	29	— 1.7	70	w.	2	0.9		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	29.54	750.3	29.57	751.1	32	0.0	88	w.	15	6.7		1 k	0	w.		1.62	41.1	clear	P. T. Jenkins.
Punta Rassa, Florida	30.00	762 0	30.01	762.2	67.5	19.7	97	s.	3	1.3			10ks;fg		w.	0	0	cloudy	W. J. Evans.
Red Bluff, California	29.95	760.7	30.32	770.1	43	6.1	100	calm	0	0		c	0			0	0	clear	J. R. Williams.
Rochester, New York	29.05	737.9	29.76	755.9	24	— 4.4	88	sw.	8	3.6			10 k		w.	0.04	1.0	cloudy	E. W. McGann
Roseburg, Oregon	29.67	753.6	30.24	768.1	54.6	12.6	84	e.	7	3.1			10 s		sw.	0.66	16.8	threatening	J. J. Naury.
Sacramento, California	30.23	767.8	30.31	769 9	42.7	5.9	93	se.	2	0.9		0	0			c	0	clear	J. A. Barwick.
St. Louis, Missouri	29.37	746.0	30.02	762.5	30.7	— 0.7	86	sw.	6	2.7			8 s			0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.83	757.7	29.87	758.7	— 7	—21.7	100	calm	0	0		0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.22	742.2	30.18	766.6	9.0	—12.8	76	nw.	6	2.7		2 cs	0			0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.46	748.3	30.45	773 4	—13	—25.0	93	n.	11	4.9		0	0			0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.74	653.8	30.28	769.1	46	7.8	56	calm	0	0			10 s			0	0	cloudy	J. Craig.
San Antonio, Texas	29.24	742.7	29.96	761.0	48.0	8.9	86	calm	0	0		0	0			9	0	clear	T. J. Kenan.
San Diego, California	30.02	762.5	30.09	764.3	49.0	9.4	80	calm	0	0		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.22	742.2	29.95	760.7	23.3	— 4.8	73	w.	11	4.9			10 s			0 03	0.8	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.80	756.9	29.82	757.4	29.0	— 1.7	67	w.	13	5.8		5 k	0	w.		0.49	12.4	fair	B. A. Blundon.
San Francisco, California	30.23	767.8	30.30	769.6	51	10.6	93	n	8	3.6			0	fg.		0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.27	591.0	30.26	768.6	32	0.0	47	e.	1	0.4			0			0	0	clear	H. U. Jones.
Savannah, Georgia	29.94	760.5	30.04	763.0	53	11.7	77	nw.	6	2.7			0	fg.		0.04	1.0	clear	H. W. Ford.
Shaw, Fort, Montana	26.34	669.0	30.17	766 3	6	—14.4	76	ne.	6	2.7			0	7 s		inap.	inap.	fair	A. L. Mathews.
Shreveport, Louisiana	29.69	754.1	29.94	760.5	49	9.4	77	n.	3	1.3		4 c	0			0	0	fair	E. N. Meekins.
Sill, Fort, Indian Territory	28.71	729.2	30.04	763.0	32.5	0.3	80	n.	16	7.2			0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.37	619.0	30.21	767.3	36.5	2.5	56	nw.	2	0.9			0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.36	745.7	29.44	747.8	30	— 1.1	82	e.	6	2.7			10 ks		e.	0.10	2.5	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.49	749.0	29.99	761.7	33.0	0.6	88	e.	2	0.9		0	fg.			0	0	clear	J. B. Campbell.
Smithville, North Carolina	29.94	760.5	29.98	761.5	44	6.7	93	n.	3	1.3		1 cs	0			0.19	4.8	clear	O. Parker.
Spokane Falls, Wash. Ter.	27.94	709.7	30.07	763.8	34	1.1	96	ne.	2	0.9			10 n			0.16	4.1	light rain	H. Clifford.
Springfield, Illinois	29.30	744.2	30.03	762.7	29	— 1.7	77	ne.	4	1.8			10 s			0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	29.53	750.0	29.67	753.6	29.2	— 1.6	91	sw.			2	0	2 k		w.	0.40	10.2	clear	Charles Mayr.
Springfield, Mo	28.50	723.9	30.02	762.5	32.5	0.3	83	s.	2	0.9		0	fg.			0	0	clear	J. B. Marbury.
Starkville, Miss	29.47	748.5	29.97	761.2	56	13.3	93	s.	6	2.7			fg.			0	0	dense fog	O. Dill.
Stevenson, Fort, Dakota	28.43	722.1	30.49	774.4	—23	—30.6	100	w.	3	1.3		0	0			0.13	3.3	clear	W. Burrows
Stockton, Fort, Texas	26.96	684.8	30.10	764.5	46	7.8	56	sw.	4	1.8		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.49	749.0	29.55	750.6	29.3	— 1.5	67	nw.	20	8.9		0	3 s		nw.	1.10	27.9	clear	G. Liebmann.
Thomas, Camp, Arizona	27 41	696.2	30.23	767.8	27.5	— 2.5	90	e.			1	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.21	741.9	29.95	760.7	26	— 3.3	77	sw.	10	4.5			10 n			0.08	2.0	light snow	A. Buell.
Tucson, Arizona	27.70	703.6	30.20	767.1	40	4.4	67	s.	4	1.8		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.69	754.1	30.08	764.0	41	5.0	92	se.	3	1.3		0	6 s			0.62	15.7	fair	J. Daly.
Verde, Fort, Arizona					28.7	— 1.8	80	n.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.68	753.9	29.95	760.7	59.8	15.4	98	sw.	6	2.7		0	10n;fg			0.02	0.5	light rain	James Kenealy.
Visalia, California	29.91	759.7	30.29	769.4	38.0	3.3	89	w.	2	0.9			0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.37	619.0	30.14	765.5	31.0	— 0.6	78	w	4	1.8		0	1 ks			0	0	clear	T. M. Ambler.
Washington, D. C.	29.79	756.7	29.91	759.7	35.0	1.7	56	w.	1	0.4		0	0			0.31	7.9	clear	B. M. Purssell.
West Las Animas, Colorado	26.01	660.6	30.17	766.3	21	— 6.1	73	nw.	4	1.8		0	1 s			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.22	742.2	29.84	757.9	27	— 2.8	59	w.	16	7.2			10 ks		w.	0.13	3.3	cloudy	B. F. Hough.
Wilmington, N. Carolina	29.95	760.7	30.01	762.2	46	7.8	83	n.	1	0.4		3 c	0	w.		0.16	4.1	clear	Samuel A. Haney.
Winnemucca, Nevada	25.82	655.8	30.35	770.9	43	6.1	50	sw.	12	5.4		0	3 s		w.	0	0	clear	J. Grover.
Yankton, Dakota	28.92	734.6	30.35	770.9	4	—15.6	76	n.	16	7.2		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.94	760.5	30.10	764.5	50.1	10.1	52	ne.	5	2.2		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.00	558.8			51.5	10.8	84	se.	1	0.4		3 c	2 ks	w.	nw	0.09	2.3	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.94	760.5	30.01	762.2	66.7	19.3	94	calm	0	0		2 c	1s;ks	sw.	ne.	0	0	hazy	Benito Vines, S. J.
Kingston, Jamaica, W. I.	29.99	761.7	30.00	762.0	71	21.7	79	n.	2	0.9		0	0			0	0	fine	Robert Johnston.
Paramaribo, S. A.	29.98	761.5	29.98	761.5	78	25.6	86	se.			2	5 k	8 ks	e.		0.070	1.8		Dr. C. J. Herrig.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.90	759.4	77	25.0	94	calm			0		10 ks		s.	1.48	37.6	cloudy	Francisco J. Olsneros.
Rivas, Nicaragua, C. A.					70	24.4	94	ne.			2	3 c	1 ks		ne.	0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.37	746.0	29.43	747.5	30	— 1.1	77	ne.			5		10 n			0.42	10.7	cloudy	W. J. Fisher.
St. Thomas, W. I.	29.93	760.2	30.05	763.3	78	25.6	77	e.				1 c	2 k		e.	0.33	8.4	fine	Ang. Walloe.
York Factory, B. A.	30.39	771.9	30.46	773.7	—23.0	—30.6		nw.	14	6.3		2 c	0	nw.		0	0	fair	Forrestue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
BRITISH NAVAL.																		
H. M. S. Amethyst, Montevideo, Uruguay †	29.89	759.2	65.5	18.6	73	n.			1		4	sw.						d. clouds.
H. M. S. Antelope, N. 32° 10′, E. 26° 37′	30.05	763.3	70	21.1		nnw.			3		6	nnw.				2	nw.	d. clouds.
H. M. S. Audacious, N. 1° 21′ E. 103° 15′	29.76	755.9	79	26.1	86	n.			1		4	ne.						showery.
H. M. S. Beacon, Lake Timsah, Egypt			68	20.0	69	nnw.			1		0					1	nnw.	blue sky.
H. M. S. Boadecia, Saldanha Bay, Cape Colony	30.01	762.2				se.			3-4		1							blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.07	763.8	68	20.0	84	wnw.			3		2	nnw.						d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.20	767.1	50.5	10.3	89	se.			1		0							blue sky.
H. M. S. Comus, San Francisco, Cal	30.31	769.9	48	8.9	92	n.			2		3	nw.						foggy.
H. M. S Curacoa, Yokohama, Japan	30.20	767.1	41.5	5.3	65	n.			3		0							blue sky.
H. M. S. Diamond, Sydney, N. S. W*†	29.58	751.3	68	20.0	56	calm			0		0							blue sky.
H. M. Dock-Yard, Bermuda, W. I.	29.85	758.2	69	20.6	90	ssw.			3-4		8	ssw.						d. clouds.
H. M. M. Eclipse, N. 18° 11′ E. 72° 49′	29.81	757.2	79	26.1		nw.			2-3		3					1		d. clouds.
H. M. S. Fawn, S. 29° 16′, E. 31° 23′	30.02	762.5	65.5	18.6	90	se.			4		10					3	sse.	raining.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.90	759.4	59	15.0	84	n.			4		1							misty.
H. M. S. Heroine, N. 40° 46′ W. 13° 37′	29.85	758.2	56	13.3	74	sw.			2-3		6	calm				4	nne	misty.
H. M. S. Iron Duke, N. 4° 32′, E. 105° 53′	29.85	758.2	78	25.6	95	ne.			4		5	ne.				8	ne.	d. clouds.
H. M. S. Lark, S. 53° 52′, E. 151° 14′	29.76	755.9	68.3	20.2	77	s.			4		0					1	s.	blue sky.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.84	757.9	62	16.7		n.			1		1	n.						d. clouds.
H. M. S. Magpie, N. 32° 44′ E. 129° 51′	30.40	772.1	41.7	5.4	82	calm			0		0							blue sky.
H. M. S. Monarch N. 35° 42′ E. 18° 04′			64	17.8		ese.			3-4		6	ese.				1	ese.	d. clouds
H. M. S. Rocket, Iquique, Peru	29.95	760.7	64	17.8	94	calm			0		2					2-3	sw.	d. clouds.
H. M. S. Serapis, N. 43° 18′ W. 9° 57′	29.90	759.4	52	11.1	66	nnw.			2		4					3	nnw.	d. clouds.
H. M. S. Superb, N. 34° 31′, E. 25° 59′*	30.15	765.8	64	17.8	?	ne.			2		3	ne.				3	ne.	d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.97	761.2	65	18.3	100	s.			1		4							d. clouds.
H. M. S. Sylvia, Sandy Point, Patagonia	29.91	759.7	46	7.8	76	wnw.			2-4		10							raining.
H. M. S. Tourmaline, N. 17° 20′, E. 66° 00′	29.96	761.0				nne.			2		0							blue sky.
H. M. S. Woodlark, Off Bassorah, Asiatic, Turkey	30.07	763.8	62.5	16.9	78	s.			1		6	calm						misty
H. M. S. Zephyr, Chee-foo, China	30.26	768.6	25.5	— 3.6		calm			0		7					2	ne.	squally.
PORTUGUESE NAVAL.																		
Tamega, Macao, China	30.10	764.5	64.4	18.0	62	n.			2		0							blue sky.
UNITED STATES NAVAL.																		
Navy Yard, Pensacola, Fla	29.93	760.2	61	16.1	88	ne.	4	1.8			10		sE.	0	0			foggy.
Navy Yard, Portsmouth, N. H	29.51	749.5	29	— 1.7	?	nw.	12	5.4			0			0.7	18.			clear.
Naval Hospital, Yokohama, Japan*	30.15	765.8	37.5	3.1	54	nnw.			4		0			0	0			clear.
Adams, Sitka, Alaska*†	29.47	748.5	28	— 2.2	88	sw.			2		10							light snow.
Alaska, N. 38° 25′, W. 129° 11′			60	15.6	88	sse.			2		0			0	0	long	ne.	clear.
Alliance, Norfolk, Va	29.91	759.7	40	4.4	91	calm			0		5			light	light			fair.
Ashuelot, Nagasaki, Japan	30.41	772.4	43	6.1	91	ne.			1		1							clear.
Brooklyn, Keel Point, Patagonia	29.99	761.7	49	9.4	85	s.	35	15.6			5		s.	0.01	0.3	sm'h		fair.
Colorado, New York, N. Y	29.84	757.9	31	— 0.6	89	nw.	2	0.9			0			0.12	3.0			clear.
Enterprise, Norfolk, Va	29.96	761.0	40	4.4	73	w.			2		5		w.					fair.
Essex, Callao, Peru	29.91	759.7	63	17.2	94	calm			0		5?		nw.			sm'h	wnw.	cloudy.?
Franklin, Norfolk, Va	29.91	759.7	39	3.9	63	wsw.	3	1.3			2			0.24	6.1			fair.
Galena, Montevideo, Uruguay	29.77	756.1	65	18.3	78	w.			1		8		w.			sm'h		fair.
Hartford, Swallow Bay, Patagonia*	29.85	758.2	46	7.8	92	wnw.			6		10		w.	light	light	sm'h		rainy.
Independence, Mare Island, Cal	30.30	769.6	46	7.8	100	nnw.			2		2			0	0			clear.
Iroquois, Callao, Peru	29.91	759.7	64	17.8	94	calm			0		8							fair.
Jamestown, Boston, Mass	29.56	750.8	29	— 1.7	78	w.			2		0							hazy.
Juniata, N. 36° 10′, W. 32° 18′*	29.97	761.2	66	18.9	73	wnw.			5		5		n.	0	0	mod.	nw.	fair.
Kearsarge, Norfolk, Va	29.91	759.7	42	5.6	74	wnw.			1		2		wnw.			sm'h		fair.
Lackawanna, Callao, Peru	29.88	758.9	66	18.9	78	calm			0		8		se.					cloudy.
Lancaster, Leghorn, Italy*	29.90	759.4	57	13.9	93	ene.			3		8		s.			sm'h		fair.
Michigan, Erie, Pa	29.67	753.6	25	— 3.9	74	nw.			6		10		e.					cloudy.
Minnesota, New York, N. Y	29.85	758.2	32	0.0	89	nw.	9	4.0			10		nw.					hazy.
Monocacy, Sakate Bay, Inland sea, Japan	30.38	771.6	44	6.7	92	nnw.			1		10		calm					cloudy.
New Hampshire, Newport, R. I	29.71	754.6	33	0.6	79	wnw.			5		0					sm'h		clear.
Nipsic, Lisbon, Portugal*	29.90	759.4	54	12.2	73	nne.			2		0					sm'h		clear.
Onward, Callao, Peru	30.03	762.7	63	17.2	94	sse.			1		5		n.			long	w.	fair.
Palos, Tientsin, China*	30.16	766.1	29	— 1.7	100	n.			1		10		calm					cloudy.
Penascola, Callao, Peru*	29.86	758.4	65	18.3	94	calm	0	0			10					sm'h		cloudy.
Powhatan, Boston, Mass	29.61	752.1	27	— 2.8	88	w.			1		0							clear.
Quinnebaug, Villefranche, France*	29.91	759.7	60	15.6	76	s.			1		8		calm			sm'h		cloudy.
Ranger, N. 15° 48′, W. 93° 39′	29.93	760.2	81	27.2	82	calm			0		2					sm'h		clear.
Richmond, Takamatsu Bay, Japan*	30.42	772.7	41	5.0	83	s.			2		5		s.	0	0			fair.
Saratoga, Newport, R. I	29.60	751.8	32	0.0	89	wnw.			4		0			light	light	sm'h		clear.
St. Louis, League Island, Pa	30.12	765.0	28	— 2.2	88	nw.			1		2			0.5	13.			clear.
Swatara, Norfolk, Va*	29.78	756.4	38	3.3	71	sw.			1		2		sw.			sm'h		fair.
Tennessee, Fort Monroe, Va	29.90	759.4	46	7.8	76	s.	6	2.7			5			0.10	2.5			fair.
Vandalia, Norfolk, Va	29.92	760.0	40	4.4	73	wsw.			1		2							fair.
Wabash, Boston, Mass	29.58	751.3	29	1.7	67	w.	10	4.5			2		w.	0.08	2.0			clear.
Wachusetts, Mare Island, Cal*	30.19	766.8	45	7.2	100	calm			0		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	29.91	759.7	52	11.1	86	s.			1		5		nw.	0	0			fair.
Yantic, Hampton Roads, Va	30.03	762.7	42	5.6	83	sw.			1		2							fair.
MERCHANT MARINE.																		
S. S. Grecian, N. 23° 40′, W. 21° 15′*	30.14	765.5	69	20.6	70	nne.			4		4		nne.	½h'r	½h'r	high	nne.	clear.
S. S. Nova Scotian, N. 51° 53′ W. 39° 19′	28.84	732.5	43	6.1		ene.			4		10		ne.	cf'd		e;s		showery
S. S. Polynesian, N. 42° 24′, W., 58° 51′ *	29.67	753.6	45	7.2		se.			6		10		se.	0	0	mod.	se.	cloudy.
S. S. Scandinavian, Boston, Mass	29.66	753.4	40	4.4		wsw.			3		2			0	0			d. clouds.
S. S. Indiana, N. 47° 36′, W. 52° 00′			35	1.7	80	w.			4		2		w.			mod.	w.	fine.
S. S. Lord Clive, N. 45° 10′, W. 54° 00′*†	29.80	756.9				wnw.			4		6		wnw.	0	0	mod.	nw.	cloudy.
S. S. Ohio, N. 46° 30′ W. 43° 56′			37	2.8	90	w.			7		10		w.			hv'y	wsw.	squally.
S. S. Pennsylvania, Philadelphia, Pa†	29.79	756.7	27	— 2.8		n;w			2		1		nw.					clear.
S. S. Castor, N. 40° 11′ W. 64° 00′*	29.60	751.9	44.6	7		w.			5		3		w.			3	ne.	fair.
S. S. Auchoria, N. 50° 34′ W. 38° 05′†	29.10	740.7				sw.			1		1		w.	shr's	sh'rs	h'vy	wsw.	clear.
S. S. Bolivia, Glasgow, Scotland*†	29.92	760.0	26	— 3.3	100				1		1			fg.				
S. S. Elysia, N. 44° 48′, W. 44° 07′ †	29.62	752.3	46	7.8		wnw.			6		10		wnw.	0	0	h'vy	wnw.	cloudy.
S. S. Ethiopia, N. 53° 32′ W. 26° 51′	29.12	739.6	50	10.0		se.			2		4		se.	4 h'r	4 h'r	r'gh	se.	cloudy.
S. S. Galatia, Bitter Lake, Egypt†	30.13	765.3	65.3	18.5	73	n.			4		5?		n.	0	0			cloudy.?
S. S. Ailsa, N. 17° 58′, W. 76° 46′†	30.08	764.0	82	27.8	91	ene.			2		1		ne.	0	0	sm'h		fair.
S. S. Alvo, Kingston, Jamaica, W. I	29.98	761.5	80	26.7		calm			0		6 k			0	0			cloudy.
S. S. Antillas, N. 36° —′, W. 73° 50′ †			56	13.3		nw.			4		4?		n.	1 h'r	1 h'r	h'vy	n.	cloudy.?
S. S. Ambrose, New York Bay, N. Y†	29.70	754.4	34	1.1		wsw.			3				wsw.	0	0			fine.
S. S. Carroll, Pictou, P. E. Island			28	— 2.2		se.			6		10		se.	snow	snow			hy. snow.
S. S. City of Agra, S. 40° 55′, E. 149° 15′	29.64	752.8				w.			6		10							squally.
Bk. Commewyne, N. 13° 35′ W. 59° 45′	29.96	761.0	82.2	27.9	67	ene.			4		4							d. clouds.
S. S. Gordon Castle, N. 3° 39′, E. 100° 33′	29.81	757.2	81.5	27.5	83	s.			3		5							d clouds.
S. S. Inchkeith, S. 30° 12′, E. 83° 41′	29.97	761.2	67.2	19.6	74	ssw.			5		4							d. clouds.
Mertola, N. 46° 00′, W. 12° 00′	29.85	758.2	51.4	10.8	79	s.			2		5							d. clouds.
Ptolmey, N. 44° 56′, W. 43° 40′	29.36	745.7	.44	6.7		w.			9		9							squally.
S. S. Mexico, La Paz, Lower Cal†	30.07	763.8	73	22.8	63	ne.			2		0					sm'h		hazy.
S. S. Bothnia, N. 48° 21′, W. 39° 08′	29.17	740.9	49	9.4	85	w.			6-7		9			rain	rain	r'hg	w.	
S. S. Gallia, N. 51° 28′, W. 12° 45′	29.75	755.6	49	9.4	57	se.			4		2		e.	0	0	sm'h		fair.
S. S. Marathon, N. 37° 18′, E. 4° 15′	29.73	755.1	70	21.1		nnw.			2		8		w.	0	0	sm'h	wnw.	cloudy
S. S. Pavonia, N. 46° 36′, W. 36° 52′*	29.23	742.4	50	10.0	?	wnw.			6		8		w.	12 h'r	12h'r	h'vy	w.	squally.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE—Continued.																		
S. S. Scythia, N. 40° 36′, W. 69° 42′	29.65	753.1	42	5.6		wnw.			5		8?		wnw.	3 h'r	3 h'r	rg'h	wnw.	clear.?
S. S. Colina, N. 48° 32′, W. 43° 51′†	28.82	732.0				wsw.			9		7		wsw.	¾h'r	¾h'r	r'gh	wsw.	cloudy.
S. S. Abyssinia, N. 42° 30′, W. 61° 14′ *	29.39	746.5	52	11.1	7	sse.			0		10		sw.	2 h'r	2 h'r	r'gh	s.	gloomy.
S. S. Bohemia, New York, N. Y.†	29.75	755.6				wnw.			2–3		6		nw.	rain	rain			foggy.
S. S. Cimbria, N. 49° 40′, W. 37° 10′	28.92	734.6	45.5	7.5		sw.			7		10		wsw.	2 h'r	2 h'r	hv'y	sw.	rainy.
S. S. Gellert, N. 52° 50′, E. 3° 06′	29.61	752.1	50	10.0		ene.			3		3		ene.	0	0	sm'h	se.	fair.
S. S. Silesia, N. 54° 10′, E. 7° 50′ †	29.85	758.2	34.2	1.2	97	se.			4		10		se.	0	0			overcast.
S. S. Vandalia, N. 44° 51′, W. 46° 48′	29.62	752.3	42.8	6.0	91	nw.			6–7		10		nw.	0	0	hv'y	nw.	gale.
S. S. Wieland, N. 51° 01′, W. 30° 04′	29.21	741.9				sw.			4		5		sw.	2 h'r	2 h'r	r'gh	sw.	fine.
S. S. Mentmore, N. 50° 57′, W. 12° 41′ *	29.75	755.6				ese.			5		2		e.	0	0	sm'h	e.	fair.
S. S. Hevelius, N. 51° 15′, E. 4° 24′*†	29.74	755.4	41	5.0		ese.			3		10		s.			sm'h		light rain.
S. S. Sirius, S. 10° 00′, W. 34° 40′*	29.94	760.5				e.			2		2		ese.	0	0	sm'h	ese.	clear.
S. S. Bulgarian, N. 51° 37′ W. 20° 31′ *	29.36	745.7				ssw.			1		8		wsw.	9 h'r	9 h'r	high	w.	cloudy.
S. S. Colorado, New York, N.Y†	29.75	755.6	46	7.8		nw.			4		2		nw.	8 h'r	8 h'r			clear.
S. S. Rio Grande, N. 33° 30′. W. 75° 36′ †	29.94	760.5	63	17.2		nnw.			2		0			0	0	sm'h	ne.	clear.
S. S. San Marcos, N. 31° 52′, W. 79° 00′			63	17.2		n.			1		1		n.	0	0	sm'h		clear.
S. S. Archimede, New York, N. Y†	29.70	754 4	48	8.9	63	wnw.			4		3		w.	8 h'r	8 h'r			fair.
S. S. John Hopkins, Boston, Mass			29	—1.7		wnw.			5		0			0	0			clear.
S. S. Glenapp, N. 12° 30′, W. 26° 00′ †	29.86	758.4				e.			5		8		ene.	0	0	high	ne.	cloudy.
S. S. Glenfyne, S. 12° 10′, W. 37° 10′ *†	29.65	753.1				e.			4		10		ene.			sm'h	e.	rainy.
S. S. Chalmette, N. 24° 26′, W. 82° 53′ †	30.03	762.7	72	22.2		e.			4		3			0	0	sm'h		hazy.
S. S. Lone Star, N. 30° 55′, W. 79° 36′ †	29.97	761.2	68	20.0		n.			2		8		n.	0	0	sm'h		cloudy.
S. S. Denmark, London, Eng †	29.70	754.4	46	7.8		calm			0		10			0	0			foggy.
S. S. England, Mersey River, Eng	29.71	754.6				ne.			2		10		ne.	snow	snow			overcast.
S. S. Erin, New York, N. Y	29.70	754.4	34	1.1		nw.			6		6		nw.	11 h'r	11 h'r			fine.
S. S. Helvetia, Liverpool, Eng			38	3.3		e.			1		10			snow	snow			overcast.
S. S. Holland, N. 42° 24′, W. 47° 12′	29.76	755.9	42	5.6		nw.			7		8		w.	1 h'r	1 h'r	h'vy	nw.	cloudy.
S. S. City of Merida, N. 19° 11′, W. 96° 08′ ††	29.92	760 0	78.8	26.0		nw.			1		5		nw.	0	0	light	e.	cloudy.
S. S. Amsterdam, N. 45° 46′, W. 49° 10′*	29.64	752.8	35	1.7		wnw.			6							8	wsw.	cloudy.
S. S. Alene, N. 11° 15′ W. 78° 39′†	29.82	757.4	81	27.2		nne.			4								nne.	hazy
S. S. Olbers, N. 30° 02′, W. 67° 00′ *†	29.85	758 2	72	22.2		sw.			6								w.	raining.
S. S. State of Nebraska, N. 40° 42′, W. 68° 30′†	29.02	752.3	43	6.1		w.			7							con.		cloudy.
S. S. America, N. 45° 44′ W. 41° 44′ *	29.33	745.0	47.5	8.6	74	w.			7–9		9		w.	0	0	h'vy	var.	squally.
S. S. Braunschweig, N. 37° 45′ W. 14° 20′	29.98	761.5	62.0	16.7	66	wsw.			3		0		w.	4 h'r	4 h'r	light	nnw.	cloudy.
S. S. Elbe, N. 48° 37′, W. 35° 39′	29.08	738.6	46.4	8.0		wsw.			5		4		sw.	2 h'r	2 h'r	high	wsw.	cloudy.
S. S. Gen. Werder, N. 42° 59′ W. 55° 32′	29.83	757.7	41.0	5.0		s.			1		9			0	0	mod	nw.	cloudy.
S. S. Hohenstaufen, S. 5° 46′. W. 32° 32′	29.91	759.7	82.4	28.0		ese.			5		4		ese.	0	0	light	ese.	fair.
S. S. Neckar, N. 45° 59′, W. 39° 20′	29.40	746.7				w.			9		6		w.	4 h'r	4 h'r	h'vy	w.	squally.
S. S. Ohio, N. 45° 55′, W. 38° 08′	29.31	744.5				wnw.			8		7		nw.	rain	rain	h'vy	w.	cloudy.
S. S. Rhein, N. 45° 59′, W. 45° 42′	29.54	750.3				w.			9		8		w.	3 h'r	3 h'r	high	w.	cloudy.
S. S. Strassburg, S. 31° 40′, W. 50° 20′	30.04	778.2	75	23.9	93	var.			5		8		var.	1 h'r	1 h'r	mod.	n to e	cloudy.
S. S. Werra, N. 50° 50′, W. 21° 25′*†	29.36	745.7	50.0	10.0		sse.			5		10		s.	3 h'r	3 h'r	mod.	sse.	cloudy.
S. S. Belgic, N. 42° 21′, W. 146° 24′†	29.56	750.8	63	17.2	72	s.			6		3		sw.	0	0	mod.	s.	clear.
S. S. Coptic, N. 34° 09′ E. 139° 43′	30.24	768.1	42.0	5.6	79	n.			5–6		10		n.	0	0	mod.	ne.	overcast.
S. S. Oceanic, Hong Kong, China*	30.14	765.5	56	13.3	63	nne.			5		4		ne.					fine.
S. S. Willamette, Seattle, Wash. Ter †	29.98	761.5	42	5.6	83	s.			1		10		s.	0.05	1.3	long	wnw.	foggy.
S. S. Columbia, N. 43° 53′, W. 124° 37′†	30.17	766.3	53	11.7	93	ssw.			5		10		sw.			r'gh	sw.	drizzling.
S. S. Oregon, Portland, Oregon†	30.15	765 8	55	12.8	80	calm			0		5?							cloudy?
S. S. Ancon, San Francisco, Cal†	30.25	768.3	53	11.7	80	n.			2		0							clear.
S. S. City of Chester, Hookton, Cal*†	30.14	765.5	54	12 2	100	calm			0		fg.							foggy.
S. S. Dakota, N. 41° 22′ W. 124° 40′†	30.18	766.6	57	13.9	69	sse.			7		10		sse.	8 h'r	8 h'r	r'gh	s.	
S. S. Orizaba, N. 33° 43′, W. 118° 10′*†	30.10	764.5	60	15.6	70	calm			0		0					sm. h	nw.	clear.
S. S. State of California, San Francisco, Cal*†	30.26	768.6	49	9.4		n.			2		0			0	0			clear.
S. S. Australia, N 5° 10′, W. 105° 10′	29.79	756.7	79	26.1	91	n.			5		1		nne.	1 h'r	1 h'r	long	nne.	drizzling.
S. S. City of New York, Sydney, N. S. W †	29.70	755.9	74	23.3	68	s.			3		0			0	0			clear.
S. S. City of Pekin, N. 37° 26′ E. 151° 01′ †	29.99	761.7	44	6.7	100	nnw.			6		5		nnw.	0	0	r'gh	nw.	fair.
S. S. City of Rio de Janeiro N. 8° 11′, W. 83° 49′†	29.89	759.2	80	26.7	82	w.			3		10		w.	0	0	light	sw.	clearing.
S. S. City of Tokei, N. 39° 03′, W. 165° 24′†	29.79	750.7	66	18.9		sw.			7		10?		sw.	light	light	light	w.	clear.?
S. S. Collma, San Jose, Guatamala †	29.93	760.2	78	25.6	86	nne.			3		4		ne.	0	0	mod.	sse.	clear.
S. S. Grenada, N. 24° 45′, W. 112° 22′ †	30.01	762.2	75	23.9	90	nw.			2		10		nw.	0	0	sm'h	nw.	cloudy.
S. S. Zealandia, S. 34° 23′, E. 164° 17′	29.81	757.2	70	21.1	85	ne.			6		10		ne.			mod	e.	cloudy.
S. S. Muriel, Antigua, W. I.	29.99	761.7	80	26.7		ene.			3		0			0	0	sm'h		clear.
S. S. Caracas, La Guayra, Venezuela †	29.93	760.2	77	25 0	82	e.			1		2		ene.	0	0	mod.	nne.	fine.
S. S. Claudius, Colon, Panama						ne.			3		8		ene.	0	0			fair.
S. S. Belgenland, N. 41° 35′, W. 62° 00′	29.64	752.8	52	11.1	79	sse.			9		10		w.	2 h'r	2 h'r	h'vy	var.	threatening
S. S. Nederland, N. 49° 51′, W. 5° 04′			48	8.9		ne.			4		10		ene.	6 h'r	6 h'r	sm'h	e.	cloudy.
S. S. Pennland, New York, N. Y.	29.88	758.9	32	0.0	90	s.			2		10							raining.
S. S. Rhynland, Antwerp, Belgium	29.81	757.2	40	4.4	100	se.			4		6		se.	0	0			gloomy.
S. S. Switzerland, N. 50° 42′, W. 30° 29′†	29.14	740.1				sw.			4		8		sw.	7 h'r	7 h'r	h'vy	wsw.	fair.
S. S. Waesland, Antwerp, Belgium	29.76	755.9	43	6.1	92	se.			4		10		s.	0	0			threatening.
S. S. Leerdam, N. 50° 04′ W. 35° 36′†	29.19	741.4	52	11.1	73	ssw.			6		6		sse.	6 h'r	6 h'r	cross	sw.	squally.
S. S. P. Caland, New York, N. Y	29.82	757.4	47.3	8.5	93	w.			5		3		nw.					fair.
S. S. Schiedam, N. 49° 19′ W. 15° 20′	29.09	754.1	50.5	10.3	81	sse.			5		7		ne	1 h'r	1 h'r	r'gh	s.	cloudy.
S. S. W. A. scholten, Rotterdam, Holland				37.3	2.9	98	sse.			2		7		ne.	0	0		
S. S. Zaandam, N. 40° 28′, W. 69° 00′	29.71	754.6	56.1	13.4	86	w.			6		5 ks		e.	6 h'r	6 h'r	5	w.	fine.
S. S. State of Georgia, N. 51° 01′, W. 38° 12′†	28.91	734.3	43	6.1		sse.			1		4		sw.	0	0	h'vy	sw.	fair.
S. S. Celtic, N. 42° 00′, W. 63° 25′†	29.41	747.0	48	8.9		wnw.			6		8		wsw.	0	0	mod.	w.	fair.
S. S. Lepanto, N. 49° 02′, W. 14° 05′			54	12.2		s.			8		4		sw.	12 h'r	12 h'r	h'vy	s.	heavy rain.
S. S. Salerno, Hull, Eng						calm			0					0	0			foggy.
S. S. Catherine Whiting, Barnegat, N. J†	29.92	760.0	74	23.3		wnw.			5		0			0	0		s.	
S. S. Saxon, N. 42° 13′, W. 70° 30′†	29.53	750.0	38	3.3		wsw.			5		0					sm'h		fine.
MISCELLANEOUS.																		
Bg. Alcira, N. 25° 21′, W. 74° 11′	30.08	764.0	80	26.7		s.			2		3?		se.	0	0	mod.	ene.	cloudy?
Bk. Alpha, N. 44° 30′ W. 13° 40′†	29.81	757.2	54	12.2		s.			4		5?		sw.	0	0	long	une.	cloudy.?
Schr. Annie Lewis, Tampico, Mexico †	30.15	765.8	69	20.6		wsw.			1		10		wsw.	0	0	long	ne.	foggy.
S. Annie M. Law, N. 16° 78′, E. 118° 58′ *†	29.83	757.7	70	21.1		nne.			2		1		ne.	0	0	mod.	ne.	clear.
Bk. Anna Thormann, S. 27° 48′, E. 45° 07′*	30.03	762.8	75.9	24.4	85	ne.			0	3 ck	0	nw.		2 h'r	2 h'r	cross	n.e.	clear.
S. S. Antonio Lopez, N. 27° 34′, W. 49° 13′*	30.17	766.3	74	23.3	74	calm			0		2			0	0	long	n	clear.
Bk. Aquidneck, S. 24° 04′, W. 41° 33′ *†	30.00	762.0	84	28.9		nne.			4					0	0	h'vy	nne.	clear.
Bgt. Arthur, N. 32° 09′, W. 31° 21′ *†	30.24	768.1				w.			5				nnw.			high	nw.	
Schr. Anna Holton, N. 33° 22′, W. 73° 18′†	30.01	762.2	68	20.0		nw.			5		8		nw.	1 h'r	1 h'r	cross	var.	fair.
Bg. Belle of the Bay, N. 25° 49′, W. 77° 00′ *†	30.03	762.7				wsw.			2		1		sw.	0	0	sm'h	n.	clear.
Bk. Champion, N. 21° 24′, W. 63° 03′			77.0	25.0		e.			4		2		ese.	¼h'r	¼h'r	mod.	ese.	fair.
Schr. Chas. F. Heyer, N. 38° 34′, W. 74° 43′	29.89	759.2	40	4.4	56	nw.			3	5 cs	0	sw.		0.30	7.6	mod.	nw.	fair.
Br. Clara M. Goodrich, Key Francis, W. I*†	30.00	762.0				ene.			1		5?		ene.	0	0			clear.?
Bkt. David Preston, Pensacola, Fla			64.0	17.8		ne.								0	0			foggy.
Schr. Edith R. Seward, Baltimore, Md*†	29.90	759.4	30	2.2		w.			1		1			0	0			clear.
S. E. J. Spicer, N. 47° 40′, W. 20° 50′*	29.37	746.0	57	13.9		sw.			5		10		sw.	20 h'r	20 h'r	long	sw.	overcast.
Bk. Eliza Barss, N. 39° 40′, W. 72° 30′†	29.79	756.7				wnw.			6		5?		nw.	0	0	mod.	nw.	clear?
S. Enoch Train, N. 40° 00′, W. 73° 40′ *†	29.92	760.0				w.			7		3		wnw.	4 h'r	4 h'r	light	se.	clear.
Bk. Essex, N. 19° 37′, E. 60° 00′*†	30.04	763.0	76	24.4		e.			4		1		sw.	0	0	2		fine.
Schr. F. E. McDonald, Rockland, Maine †	29.12	739.6	26	—3.3		nw.			5		0			0	0			fine.
S. S. Foscolia, New York, N. Y						wnw.			6		2			0	0			fine.
Bk. Freya, N. 20° 02′, W. 78° 50′			83	28.3		n.			2		1		nne.	0	0	sm'h		fine.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
S. J. W. Gildemeister, N. 48° 03′, W. 22° 20′ *	29.37	746.0	52.7	11.5	53	sw.			3–4		10 sn			4 h'r	4 h'r	6	ssw.	overcast.
Bg. George, N. 32° 25′, W. 58° 30′ *†	30.22	767.6				sw.			4		8		sw.	0	0	mod.	ne.	threatening.
Bk. Gronsvaer, Wellington, New Zealand †	30.00	762.1	72.0	22.2	90	n.			2		0			0	0			fine.
Bk. Godeffroy, S. 55° 49′, W. 63° 16′ †	29.63	752.6	37.9	3.3	83	sw.			3		7		w.	rain	rain	mod	s.	cloudy.
Bk. Great Surge n, S. 21° 31′, E. 77° 30′ *†	30.00	763.5	79	26.1		se.			4		6		se.	3 h'r	3 h'r	h'y	ssw.	fair.
Bk. Grey Eagle, S. 4° 06′, W. 31° 35′ *†	29.85	758.2				se.			4		0			0	0			fair.
Bk. Hattie G. McFarland, New York, N. Y †	29.91	759.7	36	2.2		n.			1		4		nw.	8 h'r	8 h'r			clearing.
Schr. Hattie Weston, N. 38° 10′, W. 75° 00′ *†	29.87	758.7	38	3.3		wnw.			3		0			0	0	sm'h	sse.	clear.
Schr. Isabel Alberto, N. 32° 14′, W. 77° 34′ †	30.09	764.3				n.			2		2		ne.	light	light	cross	var.	fair.
Schr. Jennie N. Huddell, N. 34° 20′, W. 76° 30′ †	30.01	762.2	54	12.2		n.			1		10			0	0	sm'h		fair.
Bk. Joseph A. Ropes, S. 2° 33′, E. 50° 54′ *†	29.92	760.0	86	30.0	76	w.			1		2			0	0	mod.	n.	fair.
Bkt. Josephine, N. 28° 03′, W. 38° 12′ †	30.19	766.8	75	23.9	47	ssw.			3		0			0	0	long	nne.	clear.
Bk. Julia H, N. 45° 05′, W. 31° 47′	29.46	748.3	52.0	11.1	73	wsw.			8		6			2 h'r	2 h'r	7	w.	d. clouds.
S. S. J. W. Wilson, Cedar Keys, Fla †	29.98	761.5	62	16.7		nnw.			2		fg.			1 h'r	1 h'r	sm'h		foggy.
Light House Tender, Laurel, N. 29° 54′, W. 84° 07′ †	30.00	762.0	60	15.6		calm			0		10			0	0	sm'h		foggy.
Bk. Louise Adelaide, Body Island, N. C. *†	30.02	762.5	46	7.8		wnw.			2		1		w.	0	0	long	se.	clear.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe *†	30.04	763.0				ene.			5		1		ene.	1 h'r	1 h'r	sm'h	e.	light rain.
S. S. Madrid, N. 38° 24′, W. 51° 51′ *†	30.14	765.5	59	15.0		var.			1–2		7		sse.	0	0	mod.	n.	gloomy.
S. S. Malabar, Marseilles, France						ne.			9		10		ne.	0	0			cloudy.
Bk. Matilda C. Smith, N. 34° 02′, W. 73° 35′ *†	30.07	763.8				nw.			5		3		nw.	2 h'r	2 h'r	con.	nw.	fine.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.08	764.0	72	22.2		n.			1		0							clear.
S. Minnie N. Gerow, N. 31° 18′, W. 45° 53′ *†	30.11	764.8				n.			2		7		ne.			sm'h	nw.	threatening.
S. M. P. Grace, S. 27° 15′, W. 129° 50′ *†	30.20	767.1	78	25.6		ene.			4		3		ene.	0	0	long	sw.	fair.
Bg. Myrtle, Clements Port, Nova Scotia *†	29.23	742.4				s.			9		10		sw.	snow	snow			cloudy.
Bg. O. C. Clary, N. 11° 30′, W. 60° 12′ *†	30.00	762.0	82	27.8	91	ene.			4		1		ene.	0	0			clear.
S. Orealia, N. 20° 31′, E. 89° 20′ *	29.87	758.7				nw.			2							sm'h		fine.
Bk. Ottawa, N. 36° 05′, W. 51° 48′ *	30.01	762.2	63	17.2		w'sw.			2		8		ssw.	2 h'r	2 h'r	long	nnw.	cloudy.
S. Paramita, San Francisco, Cal			51	10.6		calm			0		fg.			0	0			foggy.
Bk. Pilgrim, N. 18° 27′, W. 55° 56′ *†	30.10	764.5				ne.			5		2		ne.	1 h'r	1 h'r	long	ne.	fair.
S. S. Radnorshire, N. 15° 37′, E. 110° 26′ *†	29.89	759.2				n.			5		0			1 h'r	1 h'r	long	n.	clear.
S. S. Raleigh, Rondout, N. Y *†	29.66	753.4	30	— 1.1							1			0	0			
Bk. Rebus, N. 43° 59′, W. 33° 14′ *	29.29	744.0				w.			9		8		w.	h'y	h'y	h'vy	w.	squally.
S. St. Francis, N. 34° 00′, W. 133° 30′ †	30.51	774.9	60	15.6		ese.			3		8		se.	1 h'r	1 h'r	long	nw.	raining.
Schr. S. B. Hubbard, New London, Conn †	29.69	754.1	42	5.6		nw.			5		5		nw.	0	0			fine.
Bk. Scud, N. 27° 51′, W. 67° 47′ *†	30.11	764.8				ssw.			4		5		ssw.	0	0	mod.	se.	
Bk. Southern Belle, off Start Point, Eng *†	29.60	751.8	52	11.1		ne.			6		10							hazy.
S. S. Sunbeam, N. 24° 22′, W. 86° 17′	30.05	763.3	77	25.0	82	calm			0		3		n.	0	0	1	n.	d. clouds.
S. S. Strathleven, N. 6° 01′, E. 97° 30′	29.79	756.7	81.4	27.4	93	e.			2		3			0	0			d. clouds.
Schr. T. S. McLellan, N. 28° 09′, W. 70° 30′			68	20.0		ene.							sw.				nne.	
U. S. F. C. S. S. Fish Hawk, Washington, D. C †	30.02	762.5	39	3.9	82	calm			0		1		calm	0.03	0.8			clear.
Bk. Vincenzo Accame, N. 36° 10′, W. 49° 45′ †	30.09	764.3	64.4	18.0		wnw.			4		6		nw.	0	0		n.	
Schr. Walter L. Plummer, N. 40° 20′, W. 72° 30′ *†	29.70	754.4				wnw.			6		8		nw.	3 h'r	3 h'r	r'gh	wnw.	clearing.
Bk. Wandering Jew, Montevideo, Uruguay †	29.75	755.6	69	20.6		ne.			2		7		ne.	0	0			fair.
Bk. Warden Law, Tocapilla, Peru, S. A *	30.07	763.8				s.			1		1		s.			sm'h	s.	fair.
S. Wm. Woodbury, N. 47° 01′, W. 164° 05′ *	29.68	753.9	53	11.7		s.			7		4		sw.			cross	sw.	cloudy.?

International Chart I. December 14, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 15, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
ALGERIAN.																			
Nemours	.....	.....	30.02	762.5	58.3	14.6	56	e.	.....	.....	3	.....	0	.....	.....	0.472	12.0	clear	Malaterre.
Algiers	.....	.....	29.68	753.9	52.9	11.6	98	w.	.....	.....	8	.....	10	.....	.....	0	0	covered	Thève.
La Calle	.....	.....	29.65	753.2	62.2	16.8	92	w.	.....	.....	2	.....	2	.....	.....	0.728	18.5	fair	Foufréde.
Tunis	.....	.....	29.66	753.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.96	761.0	47.8	8 8	98	w.	.....	.....	2	.....	5	.....	.....	0.315	8.0	cloudy	Pérès.
Tebessa	.....	.....	29.83	757.8	49.3	9.6	84	sw.	.....	.....	1	.....	2	.....	.....	0.039	1.0	fair	Dognon.
Geriville	.....	.....	.....	.....	38.1	3.4	13	nw.	.....	.....	8	.....	5	.....	.....	0.354	9.0	cloudy	Lonchamp.
Laghouat	.....	.....	29.83	757.6	50.0	10.0	48	nnw.	.....	.....	5	.....	4	.....	.....	0	0	cloudy	Abraham.
Biskra	.....	.....	29.84	757.8	54.7	12.6	63	nw.	.....	.....	3	.....	9	.....	.....	0.189	4.8	covered	Malau.
AUSTRALIAN.																			
Melbourne, Victoria	29.76	755.9	29.85	758.2	56.0	13.3	70	wsw.	9	4.0	.....	.....	2	.....	.....	0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN.																			
Agram	29.50	749.3	30.05	763.3	55.0	12.8	73	sw.	.....	.....	2	.....	6	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.31	744.4	30.11	764.7	33.3	0.7	83	wnw.	0	0	.....	.....	9	.....	.....	0.079	2.0	.....	Dr. Wierzbiski.
Eperies	29.20	741.6	30.10	764.4	43.9	6.6	88	s.	.....	.....	2	.....	9 ks	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.81	731.7	30.10	764.6	36.7	2.6	88	sw.	.....	.....	2	.....	3	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.70	729.0	30.17	766.3	42.6	5.9	84	se.	.....	.....	1	.....	8	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.70	729.0	30.12	765.0	29.1	— 1.6	97	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy	The Staff.
Lemberg	29.11	739.3	30.13	765.3	38.7	3.7	92	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.97	761.1	30.08	764.0	54.5	12.5	90	e.	.....	.....	1	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.67	753.7	30.14	765.6	45.7	7.6	85	e.	.....	.....	1	.....	10	.....	.....	0.020	0.5	.....	Joseph Midlinszay, S. J.
Szegedin	29.82	757.4	30.11	764.7	48.9	9.4	80	s.	.....	.....	1	.....	6	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.03	762.8	30.13	765.4	53.2	11.8	96	calm	.....	.....	0	.....	10	.....	.....	0.098	2.5	foggy	Royal Academy.
Vienna	29.38	746.2	30.11	764.9	40.6	4.8	97	calm	.....	.....	0	.....	10	.....	.....	0.012	0.3	.....	I. R. Central Met. Obs'y.
BRITISH.																			
Aberdeen	29.84	757.9	29.94	760.5	15.6	— 9.1	91	wnw.	10	4.5	.....	.....	2	.....	.....	0.340	8.6	misty	W. Boswell
Armagh, Observatory	29.50	749.3	29.74	755.4	34.2	1.2	76	ese.	7	3.1	.....	.....	.....	.....	.....	.....	.....	.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.81	757.2	35.0	1.7	98	ese.	18	8.0	.....	.....	10	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	29.30	744.2	29.85	758.2	37.0	2.8	93	see.	3	1.3	.....	.....	10	.....	.....	.....	.....	foggy	Thomas Mackereth.
Bradford, Yorkshire	29.47	748.5	29.86	758.4	36.4	2.4	96	ne.	.....	.....	1	.....	10	.....	.....	0.03	0.8	overcast	McLandsborough&Preston
Bridgetown, Barbadoes	29.91	759.7	29.94	760.5	81.0	27.2	74	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	38.0	3.3	100	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E.	29.74	755.4	29.87	758.7	38.1	3.4	97	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.56	750.8	29.79	756.7	48.2	9.0	74	sse.	.....	.....	4	.....	8	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.63	701.8	29.84	757.9	55.2	12.9	91	e.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	87.0	30.6	88	w.	.....	.....	2	.....	2	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.04	763.0	30.09	764.3	56.0	13 3	93	nw.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.67	753.6	29.88	758.9	25.6	— 3.6	97	ene.	.....	.....	2	.....	.....	.....	.....	.....	.....	foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.70	754.4	29.87	758.7	38.2	3.4	99	calm	.....	.....	0	.....	10	.....	.....	.....	.....	rain & fog	The Staff.
Guernsey	29.58	751.3	29.88	758.9	48	8.9	85	s.	.....	.....	1	.....	10	.....	.....	.....	.....	drizzling	A. Coltenette, F. M. S
Kew, Observatory	29.84	757.9	29.88	758.9	38.2	3.4	98	n.	1	0.4	.....	.....	.....	.....	.....	.....	.....	foggy	The Staff.
Leicester, Museum	29.61	752.1	29.88	758.9	37.0	2.8	100	se.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.74	755.4	29.82	757.4	65.2	18.4	97	se.	.....	.....	3	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.93	760.2	29.98	761.5	74.0	23.3	90	sw.	.....	.....	1	.....	5	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	29.31	744.5	29.83	757.7	34.5	1.4	96	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.64	752.8	29.87	758.7	37.1	2.8	98	nnw.	.....	.....	1	.....	10	.....	.....	.....	.....	gloomy	The Staff.
Plymouth	29.72	754.9	29.80	756.9	46.8	8.2	90	se.	.....	.....	1	.....	7	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	29.79	756.7	29.90	759.4	29.2	— 1.6	100	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	d. clouds	Rev. C. Clouston, L.L.D.
Scutari Cemetery, Turkey	30.11	764.8	30.18	766.6	52.0	11.1	74	ne.	.....	.....	2	.....	9	.....	.....	.....	.....	gloomy	W. H. Lyne.
Sheffield	29.60	751.8	29.89	759.2	30.9	2.7	95	calm	.....	.....	0	.....	10	.....	.....	0.06	1.5	foggy	W. F. Cooper.
Silloth Rectory	29.79	756.7	29.82	757.4	35.5	1.9	94	e.	.....	.....	2	.....	10	.....	.....	0.025	0.6	gloomy	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.87	758.7	37.2	2.9	88	e.	6	2.7	.....	.....	10	.....	.....	.....	.....	gloomy	I. New.
Stratfield Turgiss	29.66	753.4	29.88	758.9	37.5	3.1	96	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.74	755.4	29.78	756.4	49	9.4	85	se.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.49	749.0	29.51	749.5	48.6	9.2	95	sse.	17	7.6	.....	.....	5	.....	.....	.....	.....	d. clouds	The Met'g'l Office.
CANADIAN.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.25	742.9	29.30	744.2	23	— 5.0	81	sw.	12	5.4	.....	5 cs	2 s	calm	calm	0.675	17.2	fair	H. J. Cundall, C. E
Chatham, N. B*	29.18	741.2	29.25	742.9	18	— 7.8	87	sw.	6	2.7	.....	2 k	8 ks	sw.	sw.	0.30	9.1	cloudy	G. A. Blair.
Father Point, Quebec*	29.18	741.2	29.20	741.7	26	— 3.3	88	w.	22	9.8	.....	.....	10 n	.....	.....	0.08	2.0	heavy snow	J. McWilliams.
Fort Garry, Manitoba*	29.75	755.6	30.76	781.3	—33	—36.1	100	n.	10	4.5	.....	0	0	.....	.....	0	0	clear	James Stewart.
Halifax, N. S*	29.27	743.4	29.40	746.7	21	— 6.1	96	w.	2	0.9	.....	5 k	0	w.	.....	0.450	11.4	fair	A. Allison.
Kingston, Ontario*	29.40	746.7	29.76	755.9	6	—14.4	83	nw.	6	2 7	.....	0	5 s	.....	calm	0	0	fair	A. P. Knight, M. A
Montreal, Quebec*	29.47	748.5	29.69	754.1	3	—16.1	87	w.	30	13.4	.....	0	0	.....	.....	0.01	0 3	clear	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.10	739.1	29.88	758.9	— 2	—18.9	71	w.	8	3.6	.....	10 n	.....	.....	w.	0.02	0.5	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.15	740.4	29.90	759.4	17	— 8.3	100	w.	9	4.0	.....	10 n	.....	.....	.....	0.08	2.0	threatening	H. Morgan.
Port Stanley, Ontario	29.24	742.7	29.93	760.2	17	— 8.3	87	w.	16	7.2	.....	10 n	.....	.....	nw.	0.02	0.5	cloudy	M. Payne.
Quebec, Quebec*	29.09	738.9	29.43	747.5	12	—11.1	100	nw.	.....	.....	7	.....	1c n	.....	nw.	1.00	25.4	threatening	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.24	742.7	29.75	755.6	2	—16.7	91	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.08	738.6	29.84	757.9	16	— 8.9	91	ne.	30	13.4	.....	.....	10 s	.....	.....	0.33	8.4	cloudy	
St. Andrews, N. B	29.33	745.0	29.38	746.2	18	— 7.8	91	nw.	7	3.1	.....	0	0	.....	.....	0	0	clear	
Sydney, C. B*	29.25	742 9	29.36	745 7	21	— 6.1	91	sw.	5	2.2	.....	0	0	.....	.....	0.40	10.2	clear	T. C. Hill, C. E
Toronto, Ontario*	29.45	748.0	29.87	758.7	12	—11.1	83	w.	8	3.6	.....	0	2 s	.....	.....	0.03	0.8	clear	Magnetic Observatory.
Yarmouth, N. S*	29.34	745.2	29.41	747.0	29	— 1.7	84	nw.	9	4.0	.....	.....	8 k	.....	nw.	0.16	4.1	fair	Lt. F. E. Wilmot, R N.
Sub-aerties.																			
Mount Forest	28.37	720.6	29.90	759.4	8.0	—13.3	100	nw.	.....	.....	2	.....	10 s	.....	nw.	0.159	4.1	overcast	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Delany.
CAPE COLONY.																			
Cape St. Francis Lt. House	29.97	761.2	30.00	762.0	68.0	20.0	88	e.	20	8.9	.....	0	2 k	.....	.....	0	0	clear	John Duthie.
Cape Town, C G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction Upper	Clouds. Direction Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.85	631.3	.....	.....	5.9	—14.5	.....	ene.	.....	.....	1	.....	1 k	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.60	777.3	30.71	780.1	18.0	— 7.8	89	ne.	17.0	7.6	.....	.....	10	.....	sw.	0	0	covered	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.26	768.6	30.28	769.2	46.6	8.1	94	n.	9.4	4.2	.....	.....	10 n	.....	.....	0.004	0.1	covered	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.84	758.0	29.89	759.2	36.0	2.2	94	ese.	9	4	.....	.....	10	.....	.....	.....	.....	foggy	Oversergent Fischer.
Fanoe	29.88	759.0	29.90	759.5	29.8	— 1.2	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy	Overloerer Lauridsen.
Godthaab, Greenland	30.05	763.3	30.10	764.4	14.9	— 9.5	74	ene.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	30.00	762.0	30.02	762.5	23.7	— 4.6	.....	calm	.....	.....	0	.....	7	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	30.22	767.6	30.27	768.8	6 1	—14.4	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	30.15	765.9	30.20	767.0	21.9	— 5.6	85	e.	.....	.....	7	.....	0	.....	.....	.....	.....	.....	A. O. Thoriacius.
Thorshavn	29.95	760.6	29.98	761.5	41.0	5.0	80	ne.	27	12	.....	.....	7	.....	.....	.....	.....	raining	Overloerer Bergh.
Vestervig	29.82	757.3	29.91	759.7	32.2	0.1	96	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy	Loearer Oesterbol.
Upernavik, Greenland	30.42	772.6	30.47	773.8	2.8	—16.2	.....	e.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.34	745.1	30.00	762.1	43.5	6.4	83	calm	.....	.....	0	.....	fg	.....	.....	0	0	dense fog	M. Labroue, Director.
Alençon, Normal School	29.40	746.8	29.95	760.8	46.0	7.8	97	s.	.....	.....	1	.....	kn	nw.	n.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.56	750.8	29.82	757.4	46.9	8.3	91	ssw.	.....	.....	1	.....	kn	.....	nw.	0.114	2.9	.....	M. Fénéon, Command't.
Avignon, Normal School	29.85	758.1	29.93	760.1	53.6	12	76	n.	.....	.....	1	.....	5	.....	ese.	0.417	10.6	cloudy	M. Girard, Director.
Bar-sur-Seine	29.45	748.1	30.02	762.6	44.8	7.1	85	s.	.....	.....	1	.....	5	.....	sw.	0	c	cloudy	M. Saillard, Director.
Beauvais, Normal School	29.67	753.5	29.94	760.4	48.7	9.3	86	se.	.....	.....	1	.....	5	.....	sw.	0.126	3.2	cloudy	M. Frère Eugène Marie.
Besançon, Normal School	29.09	738.9	29.99	761.8	50.4	10.2	82	nne.	.....	.....	1	.....	cn	.....	ne.	0	0	.....	M. Goblin, Director.
Bordeaux, Observatory	29.69	754.1	29.95	760.8	50.0	10.0	69	ene.	.....	.....	1	.....	0	.....	.....	0.465	11.8	clear	M. Rayet, Director.
Bourges, Normal School	29.42	747.3	29.98	761.4	51.4	10.8	86	s.	.....	.....	1	.....	1	.....	s.	0	0	clear	M. Malet, Director.
Brest, Naval Observatory	29.63	752.7	29.88	758.9	48.2	9.0	83	s.	.....	.....	2	.....	8	.....	s.	0.031	0.8	.....	M. de Kermarec, Dir.
Caen, Normal School	29.81	757.1	29.88	759.0	49.6	9.8	74	sw.	.....	.....	1	.....	8	.....	sw.	0.098	2.5	very cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch't	29.62	752.3	29.95	760.6	45.0	7.2	95	e.	.....	.....	2	.....	8	.....	se.	0.157	4.0	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.45	748.0	29.97	761.1	45.0	7.2	85	s.	.....	.....	1	.....	fg	.....	.....	0.51	13.	foggy	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.65	727.6	30.02	762.6	46.8	8.2	80	w.	.....	.....	1	.....	10	.....	.....	0.008	0.2	covered	M. Allnard, Director.
Cluny, Normal School	29.13	740.0	30.00	762.1	49.6	9.8	96	nw.	.....	.....	1	.....	8	.....	nw.	0.150	3.8	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.17	740.8	30.06	763.4	43.7	6.5	92	sw.	.....	.....	1	.....	kn	sw.	sw.	0	0	.....	Dr. Coulet, Director.
Gap, Normal School	27.38	695.4	29.94	760.5	47.5	8.6	59	n.	.....	.....	1	.....	7	.....	w.	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.79	731.2	29.91	759.8	54.1	12.3	74	ne.	.....	.....	1	.....	10	.....	se.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.23	742.5	30.03	762 8	37.4	3	97	ese.	.....	.....	1	.....	sn	.....	.....	0	0	.....	M. Ablard, Director.
Guéret	28.44	722.4	30.03	762.7	46.4	8	74	ne.	.....	.....	1	.....	k	.....	sw.	.....	.....	.....	M. Delorme, Dir.
Lamballe, Normal School	29.61	752.1	29.88	759.0	44.6	7	88	s.	.....	.....	2	.....	1	.....	s.	0	0	clear	M. Ollitrault, Director.
Lescar, Normal School	29.36	745.8	29.93	760.1	54.0	12.2	72	e.	.....	.....	1	.....	0	.....	.....	0.008	0.2	clear	M. Chanvin, Director.
Lorient, Naval Observatory	29.82	757.3	29.92	759.9	50.7	10.4	65	s.	.....	.....	1	.....	8	.....	s.	0.020	0.5	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.95	735.2	30.02	762.4	44.6	7.0	100	ne.	.....	.....	1	.....	fg	.....	.....	0.071	1.8	dense fog	M. André, Director.
Mans, Normal School	29.05	753.2	29.97	761.2	44.6	7	97	ssw.	.....	.....	1	.....	2	.....	ssw.	0.268	6.8	slightly cl'dy	M. Piboën, Director.
Marseille, Observatory	29.00	751.7	29.86	758.5	60.3	15.7	59	ene.	.....	.....	1.2	.....	10	.....	se.	0.059	1.5	.....	M. Stephan, Director.
Mt. Louis	24.66	626.4	29.50	749.4	35.6	2.0	100	nw.	5.6	2.5	.....	.....	10	.....	.....	0.154	3.9	.....	M. Carè for Dr. Fines.
Montpellier, Normal School	29.77	756.1	29.95	760.7	55.4	13	71	ne.	.....	.....	2	.....	10	.....	.....	0.720	18.3	covered	M. Gaizin, Director.
Nancy, Normal School	29.19	741.3	29.97	761.3	46.4	8.0	86	sw.	.....	.....	1	.....	fg	.....	.....	0.102	2.6	foggy	M. Hasse, Director.
Nantes, Observatory	29.82	757.3	29.98	761.4	48.2	9	84	sse.	.....	.....	0–1	0	9k;kn;n	.....	ssw.	0.272	6.9	.....	M. Latrocque, Director.
Perpignan, Observatory	29.81	757.2	29.92	760.0	49.5	9.7	86	nw.	7.4	3.3	.....	.....	10	.....	ne.	0.472	12.0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.05	534.7	.....	.....	32.0	0.0	.....	sw.	.....	.....	1	.....	5	.....	sw.	0	0	cloudy	M. Vaussenat.
Privas, Normal School	28.91	734.2	29.98	761.5	51.8	11	73	s.	.....	.....	1	.....	10	.....	.....	0.551	14.0	covered	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.06	636.5	.....	.....	34.0	1.1	100	se.	.....	.....	3	.....	8	.....	.....	0.063	1.6	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.93	760.1	29.96	760 9	48.9	9.4	92	calm	.....	.....	0	.....	0	.....	.....	0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.67	753.5	29.88	759.0	47.7	8.7	97	sse.	.....	.....	1	.....	0	.....	.....	0.059	1.5	clear	M. Brotier, Director.
Rodez, Normal School	27 77	705.3	29.98	761.6	43.2	6.2	91	se.	.....	.....	3	.....	fg	.....	.....	0	0	foggy	M. Seger, Director.
Rouen, Normal School	29.88	759.0	29.93	760.2	50.0	10	86	s.	.....	.....	1	.....	8	se.	.....	0.154	3.9	very cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	47.3	8.5	72	sw.	.....	.....	1	1	1	w.	sw.	0.008	0.2	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.82	757.4	29.98	761.6	45.0	7.2	93	s.	.....	.....	1	.....	10	.....	sw	0.020	0.5	.....	M. Renou, Director.
Toulouse, Observatory	29.28	743.6	30.00	762 0	46.9	8.3	98	e.	.....	.....	1	.....	10	nw.	.....	0	0	covered	M. Baillaud, Director.
Tours	29.81	757.1	29.98	761.6	47.1	8.4	89	ssw.	.....	.....	1	.....	hz	.....	sw.	0.012	0.3	hazy	M. de Tastes.
Versailles, Observatory	29.48	748.7	29.97	761 2	46.8	8.2	92	sw.	.....	.....	2	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.80	757.0	29.95	760.8	51.8	11.0	70	e.	7.8	3.5	.....	1 c	0	.....	.....	0.004	0.1	.....	M. Cartier, Director.
GERMAN.																			
Ansbach	28.60	726.3	30.10	764.6	35.6	2.0	77	calm	.....	.....	0	.....	1	.....	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.18	741.1	30.02	762.5	37.9	3.3	73	calm	.....	.....	0	.....	6	.....	.....	0	0	hazy	Prof. Dr. Hoh.
Berlin	29.76	755.8	29 94	760.4	41.0	5.0	81	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.51	749.5	30.04	763.0	39.4	4.1	82	se.	.....	.....	2	.....	6	wsw.	.....	0	0	foggy	Royal University Obs'y.
Carlsruhe	29.59	751.6	30.04	762.9	46.4	8.0	84	ese.	.....	.....	1	.....	7	sw.	.....	0	0	hazy	Albert Senz.
Cassel	29.23	742.5	29.95	760.6	38.1	3.4	92	s.	.....	.....	2	.....	8	s.	.....	0	0	.....	Dr. H. Mohl.
Frankfort-on-the-Main	29.67	753.7	30.05	763.3	38.1	3.4	87	sse.	.....	.....	1	.....	10	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.59	726.2	30.08	764.1	35.2	1.8	100	n.	.....	.....	1	.....	10	.....	.....	0	0	dense fog	Wilhelm, Chief Tel.
Hamburg	29.84	757.8	29.93	760.1	39.3	2.4	96	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	rain & fog	E. Preller.
Kiel	29.87	758.8	29.89	759.2	36.7	2.6	96	sw.	.....	.....	2	.....	10	.....	.....	0.094	2.4	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.60	751.7	30.03	762.8	37.8	3.2	90	ssw.	.....	.....	1	.....	7	w.	.....	0.142	3.6	.....	B. Leppig, Asst.
Magdeburg	29.77	756.2	29.97	761.2	38.8	3.8	83	s.	.....	.....	1	.....	10 ks	.....	.....	0.063	1.6	.....	Weather Observatory.
Memel	30.00	762.1	30.05	763.3	34.3	1.3	94	sse.	.....	.....	4	.....	10	.....	.....	.....	.....	foggy	Issermann.
Munich	28.19	716.1	30.06	763.4	27.1	— 2.7	83	n.	.....	.....	1	.....	4	e.	.....	0	0	.....	Central Station.
Neufahrwasser	30.00	762.0	30.02	762.4	34.0	1.1	94	s.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	A. Lothes.
Neustadt, Palatinate	29.49	749.1	30.02	762.5	41.2	5.1	94	calm	.....	.....	0	.....	10	.....	.....	0	0	dense fog	Dicknether.
Stuttgart	29.08	738.6	30.00	761.9	41.9	5.5	89	n.	.....	.....	1	.....	5	w.	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	29.91	759.6	29.93	760.2	35.1	1.7	96	sse.	.....	.....	1	.....	10	.....	.....	0	0	foggy	Profs. Brandes & Reimer.
GREEK.																			
Athens	29.78	756.4	30.13	765.2	59.0	15.0	.....	n.	.....	.....	1.0	0	8 k	.....	.....	0	0	.....	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	29.95	760.7	30.00	762.0	74.9	23.8	56	wsw.	8.0	3.6	.....	.....	6	sw.	.....	0	0	d. clouds	
Deesa	29.45	748.1	29.93	760.2	78.1	25.6	27	nw.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.88	758.9	29.92	759.9	76.3	24.6	73	nnw.	19.0	8.5	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.02	711.8	29.85	758.2	84.5	29.2	21	wsw.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.04	752.8	29.92	760.0	77.9	25.5	58	nne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Belgaum	27.34	694.4	29.85	758.2	81.6	27.6	27	ene.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.19	741.4	29.96	760.8	66.6	19.2	57	nw.	2.0	0.9	.....	.....	3	.....	.....	0	0	d. clouds	
Roorkee	28.99	736.3	29.91	759.7	68.2	20.1	57	calm	0.8	0.4	.....	.....	6	n.	.....	0	0	.....	
Agra	29.35	745.5	29.92	760.0	75.2	24.0	45	nw.	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.88	733.4	29.92	760.0	78.5	25.8	41	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.57	725.6	29.95	760.8	77.4	21.9	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.53	750.1	29.91	759.8	74.2	23.4	57	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.60	751.8	29.92	759.9	69.8	21.0	69	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.77	756.1	29.96	761.0	70.9	21.6	61	w.	2.6	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.91	708.8	29.97	761.2	67.6	19.8	57	nw.	5.8	2.6	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.86	758.5	29.95	760.6	74.0	23.3	63	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.92	760.1	29.95	760.6	68.1	20.1	72	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.82	757.5	29.95	760.6	69.4	20.8	75	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.86	758.5	29.96	760.9	71.6	22.0	76	w.	1.2	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.63	752.6	29.98	761.5	64.9	18.3	95	ne.	2.0	0.9	.....	.....	10	w.	w.	0.12	3.0	gloomy	
Jeypore	28.47	723.2	29.94	760.4	72.2	22.3	47	wnw.	1.6	0.7	.....	.....	0	.....	.....	0	0	blue sky	
ITALIAN.																			
Udine	29.73	755.1	30.15	765.7	50.7	10.4	87	n.	0.7	0.3	.....	.....	9	.....	.....	0	0	.....	Prof. Giovanni Clodig.

STATIONS.	BAROMETER. Corrected for instrumental error and for temperature		BAROMETER. Reduced to sea-level.		Temperature of the air.		Relative humidity.	WIND. Direction.	WIND. Velocity.		WIND. Force.	CLOUDS. Amount and kind. Upper.	CLOUDS. Amount and kind. Lower.	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Milan	29.62	752.3	30.15	765.9	43.3	6.3	92	sw.	1.3	0.6	.....	.....	10	.....	.....	0.177	4.5	.....	Prof. Schiapparelli.
Padua	30.00	762.1	30.12	765.0	50.9	10.5	81	nne.	4.3	1.9	.....	.....	10	e.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.21	742.0	30.15	765.9	39.9	4.4	97	ne.	2.5	1.1	.....	.....	10	.....	.....	0.776	19.7	.....	Prof. F. F. Denza.
Genoa	29.81	757.2	30.01	762.2	51.3	10.7	66	ne.	15.0	6.7	.....	.....	10	s.	.....	0.177	4.5	.....	Prof. G. M. Garibaldi.
Mondovi	28.18	715.7	30.16	766.0	41.2	5.1	90	sw.	.....	.....	2	.....	10	.....	.....	1.122	28.5	.....	Prof. D. O. Bruno.
Pesaro	30.04	763.1	30.10	764.4	46.0	7.8	91	n.	4.9	2.2	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.75	755.6	30.05	763.2	54.0	12.2	65	ne.	.....	.....	2	.....	10	sse.	.....	0	0	.....	Prof. Costantino Pittei.
Leghorn	29.85	758.2	29.94	760.4	53.8	12.1	72	ne.	7.4	3.3	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.79	756.6	29.97	761.1	56.7	13.7	66	ne.	4.3	1.9	.....	.....	10	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	29.88	758.9	30.13	765.4	59.0	15.0	76	se.	18.6	8.3	.....	.....	9	.....	.....	0	0	.....	Prof. O. de Giorgi.
Cosenza	29.18	741.2	30.09	764.2	53.2	11.8	76	ssw.	1.8	0.8	.....	.....	9	sw.	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.45	748.1	29.65	753.0	62.6	17.0	80	se.	.....	.....	6	.....	6	e.	.....	3.071	78.0	.....	Prof. A. Pacinotti.
Palermo	29.60	751.9	29.85	758.3	65.8	18.8	49	sse.	11.2	5.0	.....	.....	9	.....	.....	0	0	.....	Prof. G. Caccintore
Syracuse	29.92	760.0	29.97	761.1	62.2	16.8	67	ese.	16.1	7.2	.....	.....	10	se.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.47	748.4	29.99	761.7	57.6	14.2	67	n.	0.7	0.3	.....	.....	10	se.	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.15	562.7	.....	.....	24.3	— 4.3	98	s.	.....	.....	2	.....	8	.....	.....	0	0	covered	Prof. P. F. Denza.
Valdobbia	22.17	563.0	.....	.....	28.4	— 2.0	70	e.	.....	.....	2	.....	10	.....	.....	1.102	28.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.31	769.8	30.34	770.6	31.4	— 0.3	100	calm	.....	.....	0	.....	10 ck	.....	nw.	0	0	cloudy	Hattori.
Awomori	30.27	768.8	30.30	769.6	32.9	0.5	80	wsw.	1.0	0.4	.....	.....	10s;ks	.....	.....	0	0	covered	K. Ogawa.
Hakodate	30.28	769.0	30.29	769.3	32.0	0.0	72	nw.	3.0	1.3	.....	.....	10	.....	.....	0	0	.....	
Hamamatsu	30.36	771.1	30.39	771.8	41.4	5.2	86	calm	.....	.....	0	0	0	.....	.....	0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y	.....	.....	.....	.....	44.9	7.2	70	nne.	3.5	1.5	.....	.....	10 ck	.....	.....	0.113	2.9	covered	
Kanazawa	30.19	766.8	30.30	769.6	38.3	3.5	76	ese.	4.0	1.8	.....	.....	10	.....	.....	0	0	cloudy	S. Endo.
Kioto	30.16	766.6	30.36	771.1	33.3	0.7	84	n.	1.5	0.6	.....	0	0	.....	.....	0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.06	763.6	30.27	768.9	51.1	10.6	85	ne.	0.0	0.3	.....	5 c;cs	4 s	.....	.....	0.140	3.6	cloudy	S. Takehayashi.
Niigata	30.27	768.8	30.31	769.9	30.8	— 0.7	94	se.	2.4	1.1	.....	.....	10ck;s	.....	.....	0.080	2.0	covered	M. Morita.
Nobiru	30.33	770.3	30.34	770.7	29.6	— 1.3	90	nw.	3.3	1.5	.....	.....	9 s	.....	.....	0	0	cloudy	H. Midzushina.
Numazu	30.32	770.2	30.36	771.1	42.0	5.6	86	ene.	.....	.....	2	0	2 ks	.....	.....	0	0	clear	R. Kaneda.
Osaka	30.35	770 8	30.36	771.2	36.1	2.3	87	ne.	4.5	2.0	.....	0	0	.....	.....	0	0	clear	H. Omura.
Supporo	.....	.....	.....	.....	27.5	— 2.5	97	s.	4.2	1.9	.....	0	7	.....	.....	0	0	cloudy	
Tokei Obs'y, Yeddo	30.28	769.0	30.36	771.1	34.4	1.3	77	n.	3.3	1.4	.....	.....	10 cs	.....	.....	0	0	cloudy	The Staff.
Wakayama	30.30	769.7	30.36	771.2	39.5	4.2	78	ene.	5.4	2.4	.....	0	0	.....	.....	0	0	clear	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.80	756.9	29.98	761.5	79.5	26.4	59	e.	17.5	7.8	.....	0	4 k;ks	.....	ese.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.66	601.1	29.88	759.1	53.8	12.1	83	calm	0	0	.....	8 c	2 k	sw.	sw.	0	0	very cloudy	Prof. Vicente Fernandez.
Leon	24.32	617.7	30.12	765.0	48.9	9.4	82	wnw.	.....	.....	1	8 c	0	w.	.....	0	0	cloudy	Prof. M. Leal.
Mazatlan	29.08	753.8	29.94	760.4	68.5	20.3	100	e.	1.6	0.8	.....	.....	fg.	.....	.....	0	0	dense fog	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586 8	30.27	768.7	45.1	7.3	64	calm	0	0	.....	0	0	.....	.....	0	0	very fine	The Staff.
Morelia	24.14	613.2	30.00	762.0	43.2	6.2	79	se.	.....	.....	1	1 c	1 c	s.	se.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascallentes	23.94	608.0	30.03	762.8	46.6	8.1	75	calm	0	0	.....	2 cs	0	sw.	.....	0	0	clear	M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.3	30.53?	765.4?	54.5	12.5	44	calm	0	0	.....	0	2	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.54	572.4	30.22	767.6	50.0	10.0	57	nw.	10.7	4.7	.....	0	1	.....	.....	0	0	blue sky	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.91	759.6	29.91	759.6	43.0	6.1	.....	ssw.	.....	.....	2	.....	.....	.....	.....	0.079	2.0	.....	
Groningen	29.83	757.7	29.89	759.1	38.7	3.7	.....	sw.	.....	.....	1	.....	.....	.....	.....	0.039	1.0	.....	
Helder	29.89	759.2	29.89	759.2	39.2	4.0	.....	sse.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	29.89	759.3	29.89	759.3	42.3	5.7	99	ssw.	.....	.....	1	.....	.....	.....	.....	0.028	0.7	.....	
Utrecht	29.88	758.9	29.93	760.1	42.1	5.6	98	s.	.....	.....	2	.....	hz.	.....	.....	0.024	0.6	hazy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.86	758.4	29.92	760.0	36.7	2.6	89	sse.	5	2	.....	.....	6	.....	.....	0.362	9.2	.....	
Brono	29.97	761.2	30.01	762.2	26.2	— 3.2	91	ne.	9	4	.....	.....	3	.....	.....	0	0	.....	
Christiania	29.79	755.8	29.91	759.7	31.5	— 0.3	92	ene.	5	2	.....	.....	10	.....	.....	0.008	0.2	snowing	
Gjæsvær	29.88	759.0	29.91	759.6	18.3	— 7.0	.....	nw.	.....	.....	7	.....	10	.....	.....	.....	.....	.....	
Lodingen	30.05	763.3	30.10	764.5	19.2	— 7.1	73	nne.	.....	.....	4	.....	1	.....	.....	0.004	0.1	.....	
PORTUGUESE.																			
Angra, Azores	29.81	757.1	29.97	761.1	62.4	16.9	78	nw.	11.2	5.0	.....	.....	4	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.04	737.7	30.08	764.1	41.9	5 5	94	s.	1.8	0.8	.....	.....	10	.....	.....	0.020	0.5	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.05	763.2	30.13	765.4	66.7	19.3	74	wsw.	15.4	6.9	.....	.....	0	.....	.....	0.252	6.4	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.65	753.0	30.01	762.3	53.0	12.0	100	s.	9.8	4.4	.....	.....	10	.....	.....	0.093	17.0	rain & fog	The Staff.
Ponta Delgada, Azores	29.93	760.2	30.00	762.0	63.3	17.4	76	w.	15.0	6.7	.....	.....	3	ne.	.....	0.047	1 2	.....	
Saint Paul de Loando	29.02	752 4	29.82	757.5	80.6	27.0	81	wsw.	1.8	0.8	.....	.....	8	.....	.....	0	0	.....	
Serra da Estrella	25.16	639.1	29.96	760.9	40.3	4.6	97	wsw.	10.5	4.7	.....	.....	10	.....	.....	0.354*	9.0*	foggy	
RUSSIAN.																			
Akmolinski	29.49	749 1	30.70	779.7	9.3	—12.6	100	wsw.	2	1	.....	.....	10 n	.....	.....	.....	.....	.....	Major K. Lasarew.
Archangel	30.09	764.2	30.11	764.7	7.9	—13.4	76	s.	13	6	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	30.40	773.7	30.38	771.7	32.7	0.4	70	ese.	11	5	.....	.....	10 s	.....	.....	blank	blank	.....	Capt. Wisganow.
Barnaul	30.39	771.9	30.99	787.2	—23.0	—30.9	77	e.	4	2	.....	.....	1	.....	.....	0	0	.....	Meteorological Obs'y.
Bieloserak	29 80	758.4	30.38	771.6	0.8	—14.0	82	sse.	11	5	.....	3 cs	0	.....	.....	0.024	0.6	light clouds	
Dorpat	29.87	758.7	30.13	765.3	26.0	— 3.2	100	s.	2	1	.....	.....	10 n	.....	.....	0.173	4.4	light snow	Observatory.
Ekaterinburg	29.09	754.1	30.75	781.1	14.5	— 9.7	94	calm	0	0	.....	0	1 s	.....	.....	0	0	foggy	Meteorological Obs'y.
Elissawetgrad	29.94	760.4	30.43	772.8	21.9	— 5.6	89	calm	0	0	.....	.....	10 n	.....	.....	blank	blank	.....	
Kasan	30.24	768.1	30.54	775.6	15.6	— 9.1	53	e.	16	7	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kem	29.84	758.0	.....	.....	22.8	— 5.1	88	sw.	13	6	.....	.....	10 ks	.....	.....	0.110	2.8	heavy cld's	
Kertch	30.24	768.0	30.26	768.5	31.5	— 0.3	94	ene.	4	2	.....	.....	10 n	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	29.03	752 0	30.31	769.9	25.0	— 3.9	89	sse.	7	3	.....	cs	toks;n	.....	.....	.....	.....	.....	Observatory.
Libau	29 98	761.4	30.00	762.0	34.9	1.6	93	sse.	2	1	.....	.....	10	.....	.....	0	0	.....	E. Quaas.
Lugan	30.17	766.2	30.39	771.9	15.1	— 9.4	75	ese.	9	4	.....	.....	7	.....	.....	0	0	.....	Meteorological Obs'y.
Moscow	29.93	760.3	30.48	774.3	— 0.1	—17.8	89	calm	0	0	.....	0	8 s	.....	.....	0	0	.....	
Nikolaiev	30.31	769.8	30.38	771.7	25.7	— 3.5	91	ene.	4	2	.....	.....	10 n	.....	.....	0	0	.....	Capt. Kurdiakow.
Pekin, China	30.00	777.1	30.70	781.2	10.5	— 8.6	31	nw.	20	9	.....	0	3 k	.....	.....	.....	.....	.....	Physical Observatory.
Petrozavodsk	29.94	760.5	30.10	766.0	12.7	—10.7	83	ssw.	11	5	.....	.....	10	.....	.....	0.217	5.5	.....	Dr. Bergmann.
Pinsk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
St. Petersburg	30.14	765 5	30.15	765.9	16.5	— 8.6	85	sse.	13	6	.....	.....	10 n	.....	.....	0.024	0.6	light clouds	Central Physical Obs'y.
Sevastopol	30.00	762.1	30.17	766.3	44.1	6.7	87	ssw.	10	7	.....	.....	10 n	.....	.....	0.343	8.7	.....	
Semipalatinsk	30.19	766.7	30.90	780.4	—11.6	—24.2	73	e.	13	6	.....	.....	0	.....	.....	0	0	.....	Major Lasarew.
Staroi Bykhov	29.65	758 2	30.35	770.8	22.6	— 5.2	85	se.	9	4	.....	.....	10	.....	.....	.....	.....	.....	
Tashkend, Laboratory	28.84	732.4	30.51	774.9	32.4	0.2	81	calm	0	0	.....	.....	0	.....	.....	0	0	light clouds	Teich, A. M.
Tiflis	28.84	732 4	30.29	769.4	47.3	8.5	63	sse.	4	2	.....	0	5 ks	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.62	777.7	30.95	780.1	—14.4	—25.8	79	s.	2	1	.....	1 c	0	.....	.....	.....	.....	.....	
Vladivostock	.....	.....	.....	.....	18.0	— 7.8	60	ne.	11	5	.....	.....	10 k	.....	.....	0	0	.....	
Warsaw	29.65	753.0	30.09	764.2	33.4	0.8	96	s.	7	3	.....	.....	10	.....	.....	.....	.....	heavy clouds	Astronomical Obs'y.
Wilna	29.73	755.2	30.17	766.4	30.6	— 0.8	100	se.	7	3	.....	.....	10	.....	.....	.....	.....	heavy clouds	Berg, Assistant.
Yeniseisk	30.70	781.3	31.11	790.2	—31.4	—35.2	81	e.	2	1	.....	.....	1	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.80	756.9	40	4.4	91	se.	.....	.....	4	.....	10	.....	.....	0.2	5.	overcast	J. Youngclause.
North Unst	.....	.....	29.92	760.0	.....	.....	.....	w.	.....	.....	6	3	5	s.	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.72	754.9	29.83	757.6	57.2	14.0	75	e.	6.0	2.7	.....	.....	10	.....	.....	0.043	1.1	covered	Antonio Rieve, Director.
Bilbao, Met. Obs'y	29.72?	755.0?	29.78?	756.5?	53.2	11.8	56	se.	2.0	0.9	.....	2	0	ne.	.....	0	0	almost clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.03	686.6	30.10	764.4	31.1	— 0.5	97	s.	4.9	2.2	.....	.....	10	.....	.....	0	0	foggy	Domingo Martin.
Madrid, Royal Obs'y	27.80	706.1	30.14	765.5	33.8	1.0	100	calm	0.4	0.2	.....	.....	10	.....	.....	0	0	misty	The Staff.

* Total for 2 days.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From	Clouds. Direction. Lower. From	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
SPANISH.																			
Murcia, Met. Obs'y	29.78	756.4	29.91	759.7	55.0	12.8	65	nnw.	8.3	3.7	.....	1	2	s.	.....	0	0	clouds	Olayo Diaz, Director.
Oviedo	29.06	738.2	29.94	760.5	34.7	1.5	93	e.	3.8	1.7	.....	.....	10 k	.....	w.	0	0	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.93	734.8	29.84	758.0	40.0	7.8	95	calm	0	0	.....	10	.....	.....	.....	0.063	1.6	misty	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.89	759.3	29.95	760.7	79.0	26.1	76	n.	1.1	0.5	.....	0	7 ks	.....	ne.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.05	763.2	30.15	765.8	55.2	12.9	67	calm	0	0	.....	.....	10	.....	n.	0.011	0.3	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.91	759.8	30.00	762.1	74.5	23.6	98	calm	0	0	.....	4 s	5 k	sw.	sw.	0.020	0.5	d. clouds	Manuel Maese.
Tuguegarao, Philippine Id's	29.89	759.3	30.02	762.6	72.8	22.7	92	nw.	1.8	0.8	.....	.....	9 ks	.....	ne.	inap.	inap.	covered	José L. Yrastorza.
SWEDISH.																			
Hapsranda	30.00	761.9	30.04	762.9	15.8	— 9.0	94	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	29.92	760.0	29.97	761.3	21.2	— 6.0	95	n.	.....	.....	2	.....	10	.....	.....	0.047	1.2	.....	
Hernosand	29.87	758.8	29.93	760.1	23.7	— 4.6	95	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	
Stockholm	29.77	756.1	29.95	760.6	34.9	1.6	96	ssw.	.....	.....	2	.....	10	.....	.....	0.059	1.5	foggy	
Wisby	29.90	759.4	29.96	760.9	36.0	2.2	96	sse.	.....	.....	2	.....	10	.....	.....	0.067	1.7	.....	
Sub-series.																			
Upsala	29.83	757.6	29.91	759.8	33.8	1.0	100	ssw.	6.5	2.9	.....	.....	10	.....	.....	0.075	1.9	.....	S. G. Fineman.
SWISS.																			
Geneva	28.61	726.6	30.09	764.3	34.9	1.6	100	ssw.	.....	.....	1	.....	10	.....	.....	0.039	1.0	foggy	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.25	768.4	52.2	11.2	72	ne.	10	4.5	.....	.....	10	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.00	761.9	56.8	13.8	.....	w.	.....	.....	1	.....	2	.....	.....	0	0	slightly cl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.07	763.7	63.0	17.2	74	calm	0	0	.....	.....	3 n	.....	n.	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.62	752.3	29.71	754.6	27.6	— 2.4	72	nw.	5	2.2	.....	.....	10 n	.....	nw.	0.04	1.0	light snow	J. O. Barnes.
Alpena, Michigan	29.25	742.9	29.96	761.0	10	—12.2	80	nw.	14	6.3	.....	.....	10 s	.....	.....	0.06	1.5	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.16	639.1	30.24	768.1	31	— 0.6	65	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	27.47	697.7	30.50	774.7	5	—15.0	54	sw.	10	4.5	.....	0	0	.....	.....	inap.	inap.	clear	B. O. Lenoir.
Atlanta, Georgia	28.76	730 5	29.99	761.7	39.0	3.9	68	w.	8	3.6	.....	4 cs	0	sw.	.....	0.03	0.8	fair	H. C. Smith.
Atlantic City, New Jersey	29.85	758 2	29.86	758.4	26	— 3.3	76	nw.	9	4 0	.....	4 k	0	.....	.....	0	0	fair	Jas. M. Watson.
Augusta, Georgia	29.73	755.1	29.93	760.2	46	7.8	93	calm	0	0	.....	0	2 s	.....	.....	0	0	clear	John Healy.
Baltimore, Maryland	29.88	758.9	29.93	760.2	29	— 1.7	56	nw.	12	5.4	.....	2 k	0	nw.	.....	0	0	clear	Geo W Felger.
Barnegat, New Jersey	29.82	757.4	29 84	757.9	28.5	— 1.9	82	w.	17	7.6	.....	4 k	0	sw.	.....	0	0	fair	G. A. Hill.
Behring Id., Behring Sea	29.70	754.4	29.72	754.9	30.2	— 1.0	.....	n.	26	11.6	.....	.....	10 n	.....	.....	0	0	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	29.06	738.1	30.82	782.8	— 9	—22.8	78	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.52	699.0	30.52	775.2	8	—13.3	58	calm	0	0	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.74	730.0	30.76	781.3	—20	—28.9	100	calm	0	0	.....	c	0	.....	.....	0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	29.65	753.1	29.98	753.9	28	— 2.2	88	nw.	15	6.7	.....	0	2 ks	.....	nw.	0	0	clear	J. T. Elker.
Boise City, Idaho	27.54	699.5	30.52	775.2	28.5	— 1.9	92	nw.	4	1.8	.....	0	5 s	.....	.....	0	0	fair	B. E. Light.
Boston, Massachusetts	29.46	748.3	29.62	752.3	28.0	— 2.2	77	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	O. B. Cole.
Brownsville, Texas	29.77	756.1	29.82	757.4	71.0	21.7	90	s.	10	4.5	.....	.....	10 s	.....	s.	0	0	cloudy	M. McCarty.
Buffalo, New York	29.07	738.4	29.87	758.7	18	— 7.8	85	sw.	20	8.9	.....	3 k	3 s	w.	w.	inap.	inap.	fair	W. Finn.
Buford, Fort, Dakota	28.48	723.4	30.72	780.3	—19	—28.3	100	e.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	F. A. Mellen.
Burlington, Vermont	29.34	745.2	29.65	753.1	14.9	— 9.5	73	w.	11	4.9	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	G. C. Schaeffer.
Cairo, Illinois	29.92	760.0	30.34	770.6	25.0	— 3.9	73	n.	19	8.5	.....	.....	10 s	.....	w.	0	0	cloudy	W. H. Ray.
Cape Henry, Virginia	29.96	761.0	29.98	761.5	35	1.7	69	nw.	36	16.1	.....	.....	10 s	.....	w.	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	29.86	758.4	29.89	759.2	32.0	0.0	80	nw.	40	17.9	.....	0	7 s	.....	nw.	0	0	cloudy	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	29.91	759.7	29.93	760.2	62	16.7	100	w.	4	1.8	.....	.....	10 k	.....	w.	0.72	18.3	fair	F. W. Mixer.
Champaign, Illinois	29.44	747.8	30.31	769.9	8.0	—13.3	66	nw.	16	7.2	.....	0	0	.....	.....	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	29.83	757.7	29.89	759.2	50	10.0	100	w.	5	2.2	.....	.....	fg.	.....	.....	0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.05	737.9	29.94	760.5	40.6	4.8	57	ne.	6	2.7	.....	.....	10 s	.....	ne.	0	0	dense fog	B. L. Goulding.
Chattanooga, Tennessee	29.24	742.7	30.10	764.5	32.0	0.0	68	nw.	13	5.8	.....	4 k	ck	0	nw.	0	0	cloudy	D. O'Donoghue.
Cheyenne, Wyoming	24 29	617.0	30.57	776.5	30.2	— 1.0	80	nw.	6	2.7	.....	.....	10 n	.....	.....	inap.	inap.	light snow	E. McGovern.
Chicago, Illinois	29.48	748.8	30.24	768.1	8.0	—13.3	73	w.	12	5.4	.....	0	0	.....	.....	inap.	inap.	fair	J. Mitchell.
Chincoteague, Virginia	29.86	758.4	29.88	758.9	31	— 0.6	57	nw.	32	14.3	.....	0	8 s	.....	w.	0	0	clear	C. F. Dickens.
Cincinnati, Ohio	29.52	749.8	30.22	767.6	22	— 5.6	73	nw.	6	2.7	.....	5 k	0	w.	.....	0	0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.26	743.2	30.05	763.3	21	— 6.1	84	nw.	18	8.0	.....	.....	10 k	.....	nw.	0	0	fair	J. B. Newlin.
Coleman City, Texas	28.33	719.6	30.23	767.8	32	0.0	81	n.	32	14.3	.....	0	0	.....	.....	0.03	0.8	cloudy	L. Dorman.
Columbus, Ohio	29.23	742.4	30.14	765.5	20	— 6.7	70	w.	14	6.3	.....	.....	10 s	.....	w.	0	0	clear	D. Cuthbertson.
Concho, Fort, Texas	28.22	716.8	30.24	768.1	32.0	0.0	71	n.	14	6.3	.....	0	0	.....	.....	0.01	0.3	cloudy	J. McGlone.
Custer, Fort, Montana	27.16	689.9	30.56	776.2	4	—15.6	76	sw.	3	1.3	.....	.....	10 s	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.72	754.9	30.43	772.9	5	—15.0	76	nw.	11	4.9	.....	hz.	0	.....	.....	0.48	12.2	cloudy	R. R. Martin.
Davis, Fort, Texas	25.25	641.3	30.19	766.8	35	1.7	72	calm	0	0	.....	0	6 ks	.....	n.	inap.	inap.	clear	R. Moore.
Dayton, Washington T'y	28.61	726.7	30.44	773.2	39.2	4.0	95	sw.	8	3.6	.....	0	0	.....	.....	0	0	fair	F. Willson.
Deadwood, Dakota	25.62	650.7	30.61	777.5	15	— 9.4	100	calm	0	0	.....	0	0	.....	.....	0	0	clear	T. S. Townsend.
Delaware Breakwater, Del	29.87	758.7	29.89	759.2	30	— 1.1	68	nw.	22	9.8	.....	0	6 s	.....	nw.	0.16	4.1	fair	J. W. Byram.
Denison, Texas	29.40	746 7	30.26	768.6	36.0	2.2	69	n.	18	8.0	.....	.....	10 s	.....	.....	0	0	cloudy	F. M. Neal.
Denver, Colorado	25.04	636.0	30.56	776.2	32.0	0.0	74	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. W. Conrad.
Des Moines, Iowa	29.62	752.3	30.60	777.2	— 2	—18.9	65	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	C. F. R. Wappenhans.
Detroit, Michigan	29.28	743.7	30.04	763.0	20.0	— 6.7	76	w.	11	4.9	.....	2 ck	3 k	nw.	w.	inap.	inap.	clear	V. P. Temple.
Dodge City, Kansas	27.85	707.4	30.65	778.5	15	— 9.4	67	n.	20	8.9	.....	.....	10 s	.....	.....	0.03	0.8	fair	J. Harvey Smith.
Dubuque, Iowa	29.63	752 6	30.40	772.1	1.2	—17.1	68	nw.	5	2.2	.....	0	0	.....	.....	0	0	cloudy	N. B. Couger.
Duluth, Minnesota	29.66	753.4	30.48	774.2	—11	—23.9	74	sw.	9	4.0	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Pass, Texas	29.16	740.7	30.00	762.0	49.1	9.5	50	nw.	7	3.1	.....	0	4 ks	.....	sw.	0	0	fair	J. M. Clifford.
Eagle Rock, Idaho	25.64	651.2	30.56	776.2	30	— 1.1	80	n.	3	1.3	.....	4 cs	0	.....	.....	0	0	clear	D. U. Murphy.
Eastport, Maine	29.33	745.0	29.40	746.7	19.0	— 7.2	76	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
Elliott, Fort, Texas	27 52	699.0	30.48	774.2	17	— 8.3	56	n.	24	10.7	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
El Paso, Texas	26.33	668.8	30.19	766.8	40.0	4.4	50	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	Peter Wood.
Erie, Pennsylvania	29.16	740.7	29.94	760.5	22	— 5.6	73	nw.	24	10.7	.....	.....	10 s	.....	.....	0.20	5.1	cloudy	George Henthcote.
Escanaba, Michigan	29.39	746.5	30.11	764.8	9.0	—12.8	76	nw.	18	8.0	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Fredericksburg, Texas	28.36	720 3	30.18	766.6	41	5.0	96	n.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy	E. O'C. Machnernsy.
Galveston, Texas	29.82	757.4	29.87	758.7	64	17.8	100	s.	4	1.8	.....	.....	fg.	.....	.....	inap.	inap.	dense fog	J. E. Mueller.
Grand Haven, Michigan	29.38	746.2	30.09	764.3	21.0	— 6.1	84	w.	17	7.6	.....	.....	10 n	.....	.....	0.15	3.8	light snow	Robert O. Lord.
Grant, Fort, Arizona	25.38	644.6	30.26	768.6	43	6.1	58	e.	2	0.9	.....	0	0	.....	.....	0	0	clear	R. M. Crawford.
Hatteras, North Carolina	29.86	758.4	29.88	758.9	43	6.1	68	ne.	28	12.5	.....	3 cs	hz.	sw.	.....	0	0	clear	N. C. Smith.
Helena, Montana	26 11	663.2	30.49	774.4	40	4.4	82	calm	0	0	.....	.....	10 s	.....	calm	0.01	0.3	cloudy	J. P. Sherry.
Henrietta, Texas	29.39	746.5	30.47	773.9	29	— 1.7	77	n.	22	9.8	.....	.....	10 ks	.....	n.	0	0	cloudy	S. W. Glenn.
Huron, Dakota	29.25	742.9	30.79	782.1	—12	—24.4	67	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	O. Schutze.
Indianapolis, Indiana	29.38	746.2	30.23	767.8	12	—11.1	61	nw.	8	3.6	.....	0	0	.....	.....	inap	inap.	clear	I. A. Reed.
Indianola, Texas	29.82	757.4	29.85	758.2	64.0	17.8	100	n.	4	1.8	.....	.....	fg.	.....	.....	0	0	dense fog	D. J. Carr.
Jacksboro, Texas	29.08	738.6	30.32	770.1	36	2.2	69	n.	17	7.6	.....	.....	10 s	.....	n.	inap.	inap.	cloudy	J. W. Smith.
Jacksonville, Florida	29.88	758.9	29.93	760.2	62	16.7	87	w.	1	0.4	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	A. Schneider.
Keogh, Fort, Montana	27.87	707.9	30.57	776.5	5	—15.0	76	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	F. Z. Gosewisch.
Keokuk, Iowa	29.77	756.1	30.48	774.2	5.5	—14.7	76	nw.	10	4.5	.....	0	0	.....	.....	0.02	0.5	cloudy	R. H. Paxton.
Key West, Florida	29.93	760.2	29.95	760.7	71.0	21.7	94	n.	3	1.3	.....	6 c	0	w.	.....	0	0	clear	H. Mc P. Baldwin.
Kittyhawk, North Carolina	29.89	759.2	29.91	759.7	39	3.9	54	ne.	34	15.2	.....	2 cs	2 k	nw.	ne.	0	0	fair	J. A. Cody.
Knoxville, Tennessee	29.04	737.6	30.12	765.0	28	— 2.2	64	n.	5	2.2	.....	3 cs	0	.....	.....	0	0	clear	S. C. Emery.
La Crosse, Wisconsin	29.55	750.6	30.40	772.1	— 6	—21.1	61	nw.	7	3.1	.....	0	0	.....	.....	0	0	clear	A. W. Browne.
Leavenworth, Kansas	29.65	753.1	30.61	777.5	10	—12.2	80	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	W. Bell.
Lewiston, Idaho	29.61	752.1	30.49	774.4	38.0	3.3	89	e.	1	0.4	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	W. U. Simons.
Little Rock, Arkansas	29.93	760.2	30.26	768.6	38	3.3	73	n.	16	7.2	.....	.....	10 n	.....	.....	inap.	inap.	light snow	T. S. Collins.
Los Angeles, California	29.71	754.6	30.11	764.8	43	6.1	60	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	L. M Dey.
Louisville, Kentucky	29.69	751.8	30.20	767.1	24	— 4.4	73	nw.	8	3.6	.....	10 cs	0	.....	.....	0	0	cloudy	

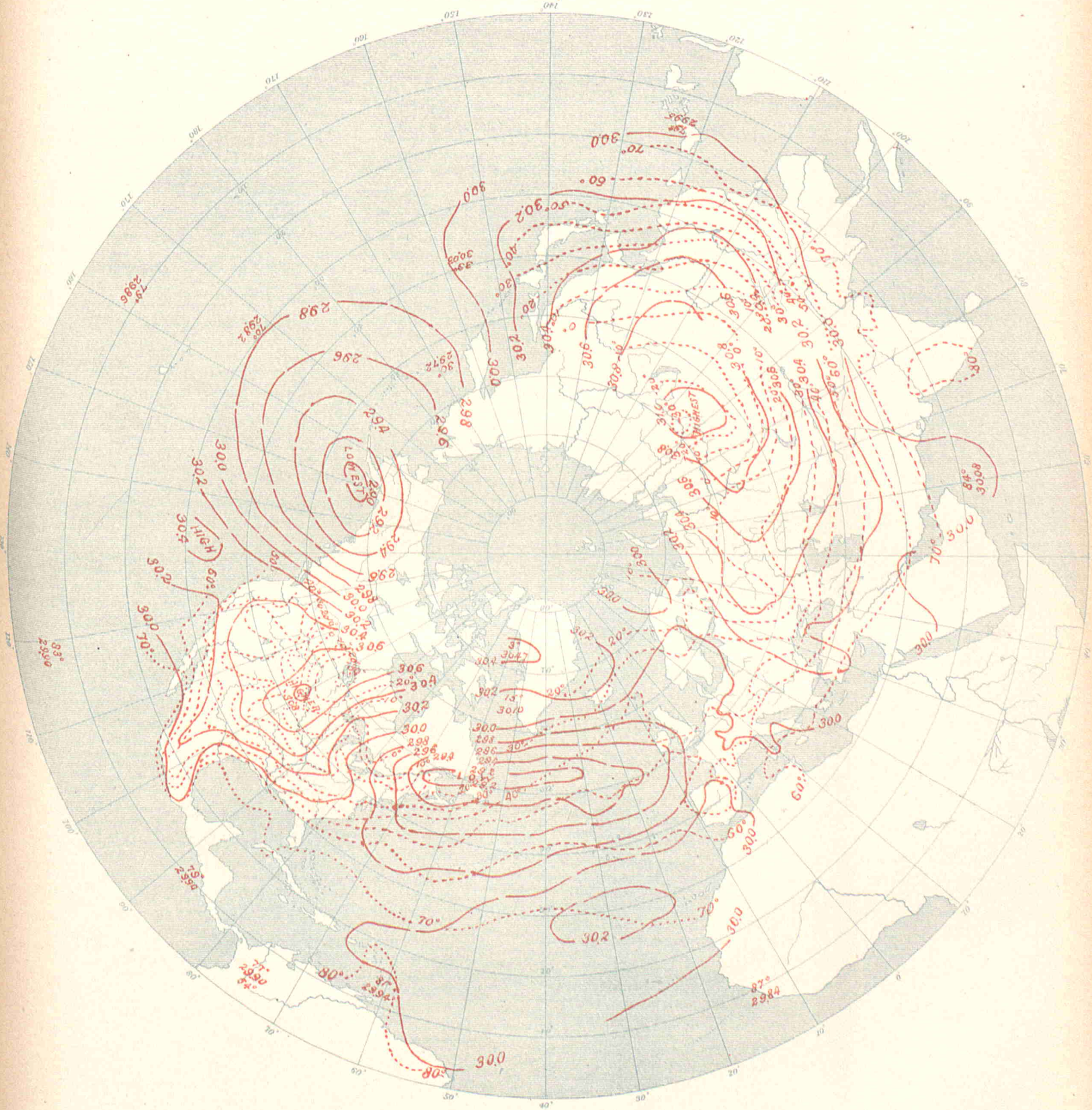
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.25	742.9	29.98	761.5	33	0.6	50	nw.	4	1.8		2 c	3 s	nw.		0	0	fair	Lewis Duane.
Mackinaw City, Michigan	29.34	745.2	30.04	763.0	13.0	—10.6	70	nw.	20	8.9			10 s		nw.	0.01	0.3	cloudy	F. R. Day.
Macon, Fort, North Carolina	29.89	759.2	29.90	759.4	41	5.0	73	n.	12	5.4		8 ok	0	nw.		0	0	cloudy	C. A. Shaw.
Madison, Wisconsin	29.22	742.2	30.32	770.1	0	—17.8	68	nw.	16	7.2		0	0			0	0	clear	F. P. Chaffee.
Maginnis, Fort, Montana					28	— 2.2	59	sw.	6	2.7		6 c	0 s			0.03	0.8	fair	F. Burke.
McKavett, Fort, Texas	28.05	712.5	30.43	772.9	32	0.0	74	n.	18	8.0			10 s			0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.31	744.5	30.09	764.3	11	—11.7	80	nw.	18	8.0			10 n			0.05	1.3	light snow	J. Gilligan.
Memphis, Tennessee	29.89	759.2	30.25	768.3	32	0.0	68	nw.	17	7.6			10 s			0	0	cloudy	D. T. Flannery
Milwaukee, Wisconsin	29.43	747.5	30.24	768.1	2	—16.7	72	nw.	12	5.4		0	1 s		nw.	0	0	clear	W. Line
Missoula, Fort, Montana	27.08	687.8	30.54	775.7	32	0.0	81	n.	1	0.4			8 s			0.04	1.0	cloudy	J. H. Young.
Mobile, Alabama	29.86	758.4	29.90	759.4	57	13.9	93	ne.	7	3.1			10 s		ne.	0.03	0.8	cloudy	C. A. Read.
Montgomery, Alabama	29.73	755.1	29.97	761.2	49	9.4	93	nw.	4	1.8		hz.	8 k		nw.	0	0	cloudy	J. B. McLaughlin.
Moorhead, Minnesota	29.66	753.4	30.77	781.5	—26	—32.2	100	n.	7	3.1		0	0			0	0	clear	H. Bessant.
Morgantown, W. Virginia	29.04	737.6	30.11	764.8	22.9	— 5.1	73	nw.	14	6.3			10 s		w.	0.01	0.3	cloudy	J. C. Sprigg, jr.
Mt. Washington, N. H.	22.90	581.6	29.53	750.0	—10.0	—23.3	100	nw.	62	27.8			fg.		nw.	0.08	2.0	dense fog	B. S. Pague.
Nashville, Tennessee	29.58	751.3	30.19	766.8	28.0	— 2.2	77	n.	9	4.0		8 cs	0	w.		0	0	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	29.60	751.8	29.72	754.9	24.5	— 4.2	47	w.	7	3.1		0	1 s			0	0	clear	J. H. Sherman.
New London, Connecticut	29.68	753.9	29.74	755.4	25	— 3.9	64	w.	7	3.1		0	0			0	0	clear	J. G. Lynch.
New Orleans, Louisiana	29.79	756.7	29.85	758.2	63.0	17.2	93	ne.	6	2.7			10 s			0.04	1.0	thund'r st'm	L. Dunne.
Newport, Rhode Island	29.61	752.1	29.66	753.4	27.0	— 2.8	77	w.	19	8.5		1 k	0	w.		0	0	clear	W. McGillivray.
New York, New York	29.61	752.1	29.80	756.9	26	— 3.3	88	w.	11	4.9		1 cs	2 k	w.	w.	0	0	clear	J. B. Merrill.
Norfolk, Virginia	29.91	759.7	29.94	760.5	35	1.7	63	n.	10	4.5		0	hz.			0	0	clear	Wm. Davis.
North Platte, Nebraska	27.52	699.0	30.68	779.3	16.6	— 8.6	78	calm	0	0			10 s			0.35	8.9	cloudy	E. F. Brady.
Olympia, Washington T'y	30.24	768.1	30.28	769.1	47.0	8.3	93	n.	1	0.4			10 s			0	0	cloudy	J. Dascomb.
Omaha, Nebraska	29.42	747.3	30.71	780.0	— 3.5	—19.7	60	n.	16	7.2		0	0			trap.	trap.	clear	A. Pollak.
Oswego, New York	29.40	746.7	29.75	755.6	20.0	— 6.7	80	nw.	21	9.4			10 s		nw.	0.65	16.5	cloudy	J. G. Linsley.
Palestine, Texas	29.49	749.0	30.07	763.8	51.0	10.6	59	ne.	23	10.3		0	8 k		ne.	0	0	cloudy	L. M. Pindell.
Pensacola, Florida	29.87	758.7	29.90	759.4	59.3	15.2	95	ne.	9	4.0			10 s		ne.	0.01	0.3	cloudy	M. McGauran.
Philadelphia, Pa	29.77	756.1	29.88	758.9	30	— 1.1	56	w.	13	5.8		0	2 ks		w.	0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.84	453.1	30.50	774.7	1	—17.2	100	ne.				7	0			0.07	1.8	clear	H. Hall.
Pioche, Nevada	24.34	618.2	30.50	774.7	35.7	2.1	65	n.	3	1.3		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.18	741 2	30.04	763.0	22.0	— 5.6	80	sw.	12	5.4			10 s		sw.	0.04	1.0	cloudy	W. A. Reid.
Poplar River, Montana	28.19	716.0	30.55	776.0				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	29.87	758.7	29.88	758.9	66.0	18.9	100	sw.	6	2.7			fg.			0	0	dense fog	H. B. Boyer.
Port Huron, Michigan	29.25	742.9	29.98	761.5	17.0	— 8.3	91	w.	7	3.1		10 cs	0			0.03	0.8	cloudy	W. O. Bailey.
Portland, Maine	29.46	748.3	29.51	749 5	25	— 3.9	73	w.	9	4.0		0	0			0	0	clear	W. W. Elchelberger.
Portland, Oregon	30.22	767.6	30.29	769.4	49.2	9.6	93	s.	3	1.3			10 s			0	0	cloudy	M. L. Hearne.
Portsmouth, N. C.					42	5.6	74	no.			4	2 cs	hz.	ne.		0	0	clear	F. S. Coburn.
Prescott, Arizona	24.96	634.0	30.33	770.4	25.6	— 3.0	70	sw.	1	0.4		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	29.58	751.3	29.01	752.1	26.5	— 3.1	54	w.	16	7.2		0	2 s		nw.	0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	29.94	760.5	29.95	760.7	66.5	19.2	93	s.	4	1.8			fg.			0	0	dense fog	W. J. Evans.
Red Bluff, California	29.88	758.9	30.25	768.3	47	8.3	93	e.	3	1.3		0	0			0	0	clear	J. R. Williams.
Rochester, New York	29.09	738.9	29.80	756.9	18	— 7.8	100	w.	22	9.8			10 s			0.15	3.8	cloudy	E. W. McCann
Roseburg, Oregon	29.76	755.9	30.33	770.4	47	8.3	93	e.	2	0.9		0	7 s		w.	0	0	fair	J. J. Nanry.
Sacramento, California	30.19	766.8	30.27	768 8	45.2	7.3	93	se.	4	1.8		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.76	755.9	30.42	772.7	16.4	— 8.7	93	nw.	14	6.3			98;sk			0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.42	747.3	29.46	748.3	— 5	—20.6	100	ne.	13	5.8		0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.58	751.3	30.54	775.7	— 4.0	—20.0	83	nw.	12	5.4		0	0			0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.78	756.4	30.77	781.5	26	— 3.3	100	nw.	4	1.8		0	0			0	0	clear	C. B Dilley.
Salt Lake City, Utah	26.01	660.6	30.55	776.0	37	2.8	56	calm	0	0		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.23	742.4	29.95	760.7	52.0	11.1	59	n.	14	6.3		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.00	762.0	30.07	763.8	47.0	8.3	63	n	2	0.9		0	0			0	0	clear	A. G. Dobbins.
Sandusky, Ohio	29.35	745.5	30.08	764.0	20	— 6.7	84	nw.	20	8.9		0	7 ks		w.	0.01	0.3	fair	M. H. Perry.
Sandy Hook, New Jersey	29.78	759.4	29.80	756.9	27.0	— 2.8	77	sw.	9	4.0		3 k	0	sw.		0	0	clear	B. A. Blundon.
San Francisco, California	30.16	766.1	30.23	767.8	51.5	10.8	93	n.	2	0.9		0	fg.			0	0	clear	N. Gerom.
Santa Fé, New Mexico	23.36	593.3	30.35	770.9	30	— 1.1	54	n.	10	4.5		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	29.82	757.4	29.92	760.0	56	13.3	83	w.	4	1.8			10 s		w.	0	0	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.63	676.4	30.46	773.7	39	3.9	57	sw.	16	7.2			10 k			0	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	29.80	756.9	30.05	763.3	50	10.0	44	ne.	12	5.4			10 s		ne.	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	29.06	738.1	30.39	771.9	26.5	— 3.1	70	n.	32	14.3		0	4 s		n.	0	0	fair	W. M. Mattingly.
Silver City, New Mexico	24.40	619.7	30.24	768.1	45.0	7.2	36	nw.	2	0.9		1 c	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.14	740.1	30.21	767.3	45.2	7 3	83	se.	32	14.3			10 n		se.	2.18	55.4	light rain	F. W. Fickett.
Smith, Fort, Arkansas	29.83	757.7	30.33	770.4	34.5	1.4	62	n.	14	6.3			10 s			0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	29.86	758.4	29.90	759.4	45	7.2	60	ne.	11	4.9		7 c	0	w.		0	0	fair	O. Parker.
Spokane Falls, Wash. Ter.	28.36	720.3	30.49	774.4	35	1.7	72	n.	4	1.8			10 s			0.03	0.8	cloudy	H. Clifford.
Springfield, Illinois	29.66	753.4	30.39	771.9	12	—11.1	75	nw.	10	4.5		0	0			trap.	trap.	clear	T. B. Jennings.
Springfield, Massachusetts	29.55	750.6	29.09	754.1	25.0	— 3.9	80	nw.			1	0	0 n		w.	0	0	fair	Charles Mayr.
Springfield, Mo	28.89	733.8	30.42	772.7	20	— 6.7	84	n.	16	7.2		0	7 s		n.	0.01	0.3	fair	J. B. Marbury.
Starkville, Miss	29.59	751.6	30.09	764.3	40	4.4	65	n.	15	6.7		3 c	3 s		n.	0	0	fair	C. Dill.
Stevenson, Fort, Dakota	28.68	728.5	30.74	780.8	—23	—30.6	100	nw.	3	1.3		0	0			0	0	clear	W. Burrows.
Stockton, Fort, Texas	27.21	691.1	30.35	770.9	34	1.1	82	n.	16	7.2		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.54	750.3	29.60	751.8	26.5	— 3.1	70	w.	17	7.6		2 k	0	w.		0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.35	694.7	30.17	766.3	33	0.6	81	calm				0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.33	745.0	30.07	763.8	21	— 6.1	70	nw.	15	6.7			9 s		w.	0.02	0.5	cloudy	A. Buell.
Tucson, Arizona	27.67	702.8	30.17	766.3	39	3.9	65	se.	4	1.8		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	30.03	762.7	30.42	772.7	42	5.6	88	se.	5	2.2		5 cs	hz.			0	0	fair	J. Daly.
Verde, Fort, Arizona					32.2	0.1	81	n.			1	0	2 s		nw.	0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.76	755.9	30.03	762.7	48.7	9.3	70	ne.	13	5.8			10 s		ne.	trap.	trap.	cloudy	James Kenealy.
Visalia, California	29.88	758.9	30.20	768.6	35.0	1.7	92	calm	0	0		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.76	628.9	30.53	775.4	24.9	— 3.9	74	w.	7	3.1		0	0			0	0	clear	T. M. Ambler.
Washington, D. C.	29.83	757.7	29.95	760.7	28.5	— 1.9	66	nw.	5	2.2		0	3 s		nw.	0	0	clear	B. M. Purssell.
West Las Animas, Colorado	26.42	671.1	30.58	776.7	20	— 6.7	73	s.	1	0.4		0	7 s		n.	0	0	fair	F. H. Brandenburg.
Williamsport, Pa	29.22	742 2	29.85	758.2	24	— 4.4	80	nw.	8	3.6		0	6 k		nw.	0	0	fair	B. F. Hough.
Wilmington, N. Carolina	29.86	758.4	29.92	760.0	45	7.2	68	ne.	7	3.1		8 cs	0	sw.		0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.99	660.1	30.52	775.2	24.5	— 4.2	82	ne.	8	3.6		0	0			0	0	clear	J. Grover.
Yankton, Dakota	29.32	744.7	30.76	781.3	—10	—23.3	50	nw.	3	1.3		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.92	760.0	30.07	763.8	52.5	11.4	41	e.	3	1.3		0	0			0	0	clear	W. S. Delano.
Sub-stations.																			
Bogota, U. S. Columbia	22.00	558.8			54.0	12.2	82	s.	1	0.4		2 c	1 ks	w.	sw.	0	0	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.86	758.4	29.93	760.2	66.6	19.2	95	calm	0	0		6c;ck	2 ks	w.	e.	0	0	cloudy	Benito Vines, S. J.
Kingston, Jamaica, W. I.	29.95	760.7	29.96	761.0	72	22.2	83	n.	1	0.4		10c;cs	0	w.		0	0	cloudy	Robert Johnston.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	77	25.0	91	e.				2	8 ks	e.		0.150	3.8	cloudy	Dr. O. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.90	759.4	77	25.0	94	calm				0	10 ks		calm	0	0	foggy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75.5	24.2	94	ne.				3	0			0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	28.82	732.0	28.88	733.5	23	— 5.0	88	n.				3		4 k		0.61	15.5	clear	W. J. Fisher.
St. Thomas, W. I.	29.91	759.7	30.03	762.7	78	25.6	82	e.					1 k	3 k	e.	e.	0	0	fair	Aug. Walloe.
York Factory, B. A.	30.53	775.4	30.60	777.2	—21.0	—29.4		w.	10	4.5		1 c	0	w.		0	0	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill	Character.	Direction from	
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.16	766.1	58.2	14.6	75	ssw.	.....	.....	6	.....	4	sw.	.....	.....	.....	5	ssw.	squally.
H. M. S. Antelope, N. 33° 19′, E. 24° 17′	30.11	764.8	64	17.8	.....	calm	.....	.....	0	.....	8	calm	.....	.....	.....	sm'h	.....	d clouds.
H. M. S. Audacious, N. 1° 21′, E. 103° 15′	29.76	755.9	78	25.6	90	n.	.....	.....	1	.....	10	ne.	.....	.....	.....	.....	.....	overcast
H. M. S. Beacon, Lake Timsah, Egypt	.....	.....	68	20.0	79	ene.	.....	.....	1	.....	0	.....	.....	.....	.....	1	ene.	blue sky.
H. M. S. Boadicea, Saldanha Bay, Cape Colony	29.79	756.7	.....	.....	.....	sse.	.....	.....	1-2	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.12	765.0	70	21.1	79	nnw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.25	768.3	47	8.3	92	n.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Comus, San Francisco, Cal	30.22	767.6	49	9.4	93	n.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Curacoa, Yokohama, Japan	30.10	764.5	45.5	7.5	84	calm	.....	.....	0	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.36	745.7	66	20.0	69	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. Dock Yard, Bermuda, W. I.	29.78	756.4	62	16.7	88	wsw.	.....	.....	1	.....	9	wsw.	.....	.....	.....	.....	.....	raining.
H. M. S. Eclipse, N. 15° 37′ E. 73° 02′	29.77	756.1	80	26.7	.....	nnw.	.....	.....	2	.....	2	.....	.....	.....	.....	1	.....	d. clouds.
H. M. S. Fawn, S. 29° 53′, E. 31° 04′	29.94	760.5	63.5	17.5	97	ssw.	.....	.....	1-2	.....	10	.....	.....	.....	.....	3	se.	raining.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.88	758.9	58.5	14.7	84	n.	.....	.....	5	.....	9	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Heroine, N. 38° 41′, W. 13° 29′	29.98	761.5	60	15.6	82	w.	.....	.....	1-2	.....	4	calm	.....	.....	.....	3	wsw.	d. clouds.
H. M. S. Iron Duke, N. 2° 40′, E. 105° 01′	29.90	759.4	80	26.7	82	n.	.....	.....	1	.....	2	n.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	29.80	756.9	66.3	19.1	87	nne.	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Liffey, S. 29° 56′, W. 71° 20.	29.87	758.7	60	15.6	.....	n.	.....	.....	3	.....	.....	.....	.....	.....	.....	3	n.	d. clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.27	768.8	52.5	11.4	86	calm	.....	.....	0	.....	2	sw.	.....	.....	.....	.....	.....	misty.
H. M. S. Monarch, N. 35° 28′, E. 19° 12′	.....	.....	65	18.3	.....	ese.	.....	.....	4	.....	6	ese.	.....	.....	.....	2	ese.	d. clouds.
H. M. S. Rambler, S. 33° 55′, W. 56° 12′	29.91	759 7	57	13.9	93	ssw.	.....	.....	6	.....	2	s.	.....	.....	.....	6	s.	squally.
H. M. S. Rocket, S. 20° 30′, W. 70° 28′	29.94	760.5	67	19.4	94	calm	.....	.....	0	.....	2	.....	.....	.....	.....	2-3	sw.	d clouds.
H. M. S. Serapis, N. 39° 00′, W. 9° 32′	29.91	759.7	60	15.6	100	ssw.	.....	.....	3	.....	10	.....	.....	.....	.....	2	ssw.	dense mist.
H. M. S. Superb N. 34° 30′, E. 28° 17′*	30.18	766.6	68	20.0	?	ene.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Swiftsure, Callao Bay, Peru	29.96	761.0	65	18.3	100	calm	.....	.....	0	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Sylvia, Sandy Point, Patagonia	29.82	757.4	54	12.2	?	wsw.	.....	.....	4	.....	8	wsw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Tourmaline, N. 17° 55′ E. 68° 56′	29.95	760.7	.....	.....	.....	nne.	.....	.....	2	.....	1	nw.	.....	.....	.....	.....	.....	blue sky.
H. M. S. Woodlark, off Bassorah, Asiatic Turkey	29.88	758.9	57.5	14.2	87	ese.	.....	.....	4	.....	8	sw.	.....	.....	.....	.....	.....	showery.
H. M. S. Zephyr, Chee-foo, China	30.43	772.9	24.5	— 4.2	.....	n.	.....	.....	5-6	.....	4	n.	.....	.....	.....	4	ne.	d. clouds.
Portuguese Naval.																		
Tamega, Macao, China	30.10	764.4	69.8	21.0	82	ne.	.....	.....	1	.....	8	.....	ne.	.....	.....	.....	.....	d clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla	29.80	756.9	68	20.0	64	ne.	8	3.6	.....	.....	10	.....	ne.	0	0	.....	.....	foggy.
Navy Yard, Portsmouth, N. H	29.55	750.6	21	— 6.1	?	w.	17	7.6	.....	.....	0	.....	.....	0	0	.....	.....	clear.
Naval Hospital, Yokohama, Japan*	30.24	768.1	39	3.9	76	calm	.....	.....	0	.....	10	.....	sw.	0	0	.....	.....	cloudy.
Adams, Sitka, Alaska *†	29.22	742.2	45	7.2	92	sse.	.....	.....	7	.....	10	.....	.....	.....	.....	.....	.....	light rain.
Alaska, N. 38° 04′, W. 125° 22′	30.23	767.8	59	15.0	76	nnw.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	se.	clear.
Alliance, Norfolk, Va	29.93	760 2	36	2.2	80	n.	.....	.....	1-2	.....	8	.....	.....	light	light	.....	.....	clear.
Ashuelot, Nagasaki, Japan	30.29	769.4	55	12.8	93	nne.	.....	.....	1	.....	8	.....	n.	.....	.....	.....	.....	cloudy.
Brooklyn, Keel Point, Patagonia	29.92	760.0	58	14.4	87	nnw.	12	5.4	.....	.....	0	.....	.....	0	0	sm'h	.....	clear.
Colorado, New York, N. Y	29.88	758.9	27	— 2.8	100	sw.	2	0.9	.....	.....	2	.....	w.	0.01	0.3	.....	.....	clear.
Enterprise, Norfolk, Va	29.99	761.7	37	2.8	90	n.	.....	.....	3	.....	5	.....	nw.	.....	.....	.....	.....	fair.
Essex, Callao, Peru	29.90	759.4	66	18.9	90	e.	.....	.....	1	.....	8	.....	nw.	.....	.....	sm'h	e.	cloudy.
Franklin, Norfolk, Va	29.92	760.0	35	1.7	?	nne.	14	6.3	.....	.....	8	.....	calm	0	0	.....	.....	fair.
Galena, Montevideo, Uruguay	30.00	762.0	58	14.4	81	s.	.....	.....	6	.....	5	.....	s.	.....	.....	r'gh	.....	stormy.
Hartford, Swallow Bay, Patagonia *	29.80	756.9	53	11.7	79	nw.	.....	.....	4-6	.....	10	.....	n;w.	light	light	sm'h	.....	cloudy.
Independence, Mare Island, Cal	30.24	768.1	45	7.2	?	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear.
Iroquois, Callao, Peru	29.95	760.7	66	18.9	90	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	overcast.
Jamestown, Boston, Mass	29.62	752.3	27	— 2.8	77	wnw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	misty.
Juniata, Fayal, Azores Islands *..	29.98	761.5	64	17.8	89	wsw.	.....	.....	6	.....	10	.....	w.	slight	slight	mod.	wnw.	raining.
Kearsarge, Hampton Roads, Va	29.85	758.2	37	2.8	80	n.	.....	.....	5	.....	8	.....	n.	.....	.....	mod	.....	fair.
Lackawanna, S. 11° 19′, W. 79° 36′*	29.89	759.2	69	20.6	90	se.	.....	.....	1-2	.....	8	.....	s.	.....	.....	sm'h	sw.	cloudy.
Lancaster, Leghorn, Italy*	29.89	759 2	58	14.4	76	ene.	.....	.....	4	.....	10	.....	e.	.....	.....	sm'h	.....	cloudy.
Michigan, Erie, Pennsylvania	29.81	757.2	21	— 6.1	?	w	.....	.....	6	.....	10	.....	w.	.....	.....	.....	.....	snowing.
Minnesota, New York, N. Y	29.85	758.2	26	— 3.3	88	nw.	10	4.5	.....	.....	2	.....	nw.	.....	.....	.....	.....	clear.
Monocacy, N. 33° 46′, E. 132° 21′	30.31	769 9	58	14.4	87	calm	.....	.....	0	.....	8	.....	calm	.....	.....	sm'h	.....	fair.
New Hampshire, Newport, R. I	29.68	753.9	29	— 1.7	78	w.	.....	.....	4	.....	1	.....	calm	.....	.....	mod.	nw.	clear.
Nipsic, Lisbon, Portugal*	29.97	761.2	59	15.0	81	s.	.....	.....	3	.....	10	.....	.....	.....	.....	sm'h	.....	rainy.
Onward, Callao, Peru†	30.05	763.3	64	17.8	94	se.	.....	.....	1	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos, Tientsin, China*	30.59	777.0	17	— 8.3	100	nnw.	.....	.....	4	.....	10	.....	calm	.....	.....	.....	.....	cloudy.
Pensacola, S. 11° 05′, W. 78° 27′*	29.83	757.7	66	18.9	90	e.	.....	.....	3	.....	5	.....	.....	.....	.....	long	sw.	fair.
Powhatan, Boston, Mass	29.62	752.3	22	— 5.6	86	wsw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Quinnebaug, Villafranche, France*	29.90	759.4	63	17.2	57	nnw.	.....	.....	1	.....	10	.....	calm	.....	.....	sm'h	.....	cloudy.
Ranger, N. 15° 48′, W. 93° 39′	29.89	759.2	79	20.1	86	e.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	clear.
Richmond, Mitsuga Hirra, Japan *	30.26	768.6	49	9.4	77	calm	.....	.....	0	.....	.....	.....	.....	0	0	.....	.....	clear.
Saratoga, Newport, R. I	29.58	751.3	25	— 3.9	88	nw.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear.
St. Louis, League Island, Pa	30.09	764.3	27	— 2.8	100	nw.	.....	.....	3	.....	2	.....	.....	0	0	.....	.....	clear.
Swatara, Norfolk, Va*	29.77	756.1	42	5.6	65	n.	.....	.....	3	.....	10	.....	nw.	.....	.....	sm'h	.....	cloudy.
Tennessee, Fort Monroe, Va	29.96	761.0	38	3.3	71	n.	15	6.7	.....	.....	5	.....	.....	0	0	.....	.....	fair.
Vandalia, Norfolk, Va	.....	.....	40	4.4	63	nnw.	.....	.....	2-4	.....	5	.....	.....	.....	.....	.....	.....	fair.
Wabash, Boston, Mass	29.62	752.3	23	— 5.0	86	w.	5	2.2	.....	.....	2	.....	w.	0	0	.....	.....	clear.
Wachusetts, Mare Island, Cal*	30.08	764.0	47	8.3	100	var.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear.
Wyandotte, Washington, D. C	30.18	766.6	33	0.6	89	nw.	.....	.....	3	.....	10	.....	nw.	0	0	.....	.....	cloudy.
Yantic, Hampton Roads, Va	29.97	761.2	36	2.2	70	n.	.....	.....	5	.....	8	.....	.....	.....	.....	.....	.....	cloudy.
Merchant Marine.																		
S. S. Grecian, N. 27° 38′ W. 180 55′*	30.22	767.6	67	19.4	64	nne.	.....	.....	1	.....	3	.....	nne.	0	0	long	nnw.	clear.
S. S. Nova Scotian, N. 53° 05′ W. 33° 17′	29.17	740.9	44	6.7	.....	w.	.....	.....	2	.....	5	.....	wnw.	.....	.....	hv'y	nne.	fair.
S. S. Polynesian, N. 44° 10′, W. 51° 42′ *	29.47	748 5	53	11.7	.....	w.	.....	.....	6	.....	3	.....	nw.	6 h'r	6 h'r	r'gh	w.	fair.
S. S. Scandinavian, Boston, Mass	29.68	753.9	22	— 5.6	.....	wsw.	.....	.....	4	.....	3	.....	.....	0	0	.....	.....	d. clouds.
S. S. Indiana, N. 45° 19′, W. 55° 23′	29.49	749 0	36	2.2	70	wnw.	.....	.....	5	.....	10	.....	w.	snow	snow	r'gh	w.	squally.
S. S. Lord Clive, N. 46° 35′, W. 48° 00′	.....	.....	.....	.....	.....	sse.	.....	.....	5	.....	10	.....	.....	8 h'r	8 h'r	high	ne.	misty.
S. S. Ohio, N. 48° 45′, W. 37° 07′†	29.31	744.5	49	9.4	93	nw.	.....	.....	3	.....	6	.....	nw.	.....	.....	mod.	wnw.	squally.
S. S. Pennsylvania, Philadelphia, Pa †	29.80	756.9	26	— 3.3	.....	sw.	.....	.....	2	.....	2	.....	sw.	.....	.....	.....	.....	clear.
S. S. Castor, N. 40° 20′, W. 60° 15′*	29.50	749 2	44.6	7	.....	nnw.	.....	.....	4	.....	10	.....	wnw.	.....	.....	6	n.	squally.
S. S. Jason, N. 49° 52′, W. 9° 21′	29.43	747.5	53.6	12.0	.....	nnw.	.....	.....	5	.....	8 n	.....	.....	.....	.....	5	nnw.	gloomy.
S. S. Anchoria, N. 48° 28′, W. 43° 46′†	29.52	749.8	.....	.....	.....	sw.	.....	.....	2	.....	1	.....	w.	sh's	sh's	h'vy	w.	clear.
S. S. Bolivia, Greenock, Scotland *†	29.98	701.5	23	— 5.0	100	wsw.	.....	.....	1	.....	fg	.....	.....	0	0	.....	.....	
S. S. Elysia, N. 46° 11′, W. 39° 26′*†	29.65	753.1	53	11.7	.....	wsw.	.....	.....	4	.....	10	.....	w.	0	0	light	w.	cloudy.
S. S. Ethiopia, N. 54° 13′ W. 20° 37′	.....	.....	48	8.9	.....	ese.	.....	.....	6	.....	7	.....	s.	10 h'r	10 h'r	high	ese.	cloudy.
S. S. Galatia, Suez Canal, Egypt†	30.23	767.8	66	18.9	74	n.	.....	.....	4	.....	2	.....	n.	0	0	.....	.....	fair.
S. S. Ailsa, N. 16° 15′, W. 76° 15†....	30.04	763.0	82	27.8	?	ene.	.....	.....	4	.....	8	.....	ene.	0	0	mod.	ene.	cloudy.
S. S. Alvo, N. 18° 20′, W. 75° 00′	29.95	760.7	78	25.6	.....	nne.	.....	.....	4	.....	5 k	.....	e.	0	0	long	nne.	fair.
S. S. Antillas, N. 39° 40′, W. 74° —	.....	.....	34	1.1	.....	nw.	.....	.....	4	.....	4?	.....	n.	0	0	sm'h	n.	cloudy.?
S. S. Ambrose, N. 38° 19′ W. 69° 57′†	29.72	754.9	46	7.8	.....	wnw.	.....	.....	5	.....	5	.....	wnw.	0	0	.....	.....	fine.
S. S. Carroll, Charlottetown, P. E. Island *†	29.38	746.2	28	— 2.2	.....	wsw.	.....	.....	6	.....	4	.....	wsw.	snow	snow	.....	.....	clear.
S. S. City of Agra, S. 42° 40′, E. 155° 00′	29.56	750 8	55.2	12.9	80	w.	.....	.....	5	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Commewyne, N. 15° 42′, W. 59° 39′	29.99	761.7	80.7	27.1	71	e.	.....	.....	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Gordon Castle, N. 5° 24′, E. 97° 06′	29.91	759.7	79.5	26.4	82	nne.	.....	.....	2-3	.....	7	.....	.....	.....	.....	.....	.....	showery.
Inchkeith, S. 27° 59′, E. 86° 14′	30.11	764.8	67.5	19.7	70	se.	.....	.....	5	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.
Mertola, N. 47° 53′ W. 11° 24′	29.57	751.1	54.0	12.2	100	sw.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	.....	d. clouds.
Ptolmey, N. 45° 40′, W. 38° 40′	29.57	751.1	51.2	10.7	.....	w.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	.....	gloomy.
S. S. Mexico, N 27° 11′ W. 110° 45†	30.00	762.0	75	23.9	58	nw.	.....	.....	4	.....	8	.....	nw.	.....	.....	mod.	nw.	fair.
S. S. Bothnia, N. 47° 52′, W. 43° 18′	29.39	746.5	49	9.4	100	w.	.....	.....	4	.....	4	.....	.....	12 h'r	12 h'r	mod.	w.	misty.
S. S. Marathon, N. 36° 54′, E. 5° 07′	.....	.....	70	21.1	.....	nw.	.....	.....	6	.....	5	.....	nw.	hail	hail	r'gh	nw.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Pavonia, N. 48° 31′ W. 29° 50′*	29.25	742.9	53	11.7	80	n.			4		3		wnw.	3 h'r	3 h'r	long	wnw.	fine.
S. S. Colina, N. 48° 28′, W. 44° 18 †	29.30	744.2				s.			2		4		ssw.	0	0	long	n.	clear.
S. S. Abyssinia, S. 43° 42′, W. 54° 22′*	29.52	749.8	49	9.4	78	wsw.			5		4		wsw.	4 h'r	4 h'r	mod.	w.	d. clouds.
S. S. Bohemia, New York, N. Y †	29.70	754.4				nw.			2–3		5		nw.	0	0			foggy.
S. S. Cimbria, N. 48° 18′, W. 42° 13′	29.34	745.2	43.2	6.2		sw.			3		0		nnw.	1 h'r	1 h'r	r'gh	w.	cloudy.
S. S. Gellert, N. 54° 00′, E. 8° 19′	29.90	759.4	41	5.0		s.			1		10					su'h		foggy
S. S. Silesia, N. 51° 27′, E. 2° 14′†	29.90	759.4	45.5	7.5	?	sw.			4		10		sw.	½ h'r	½ h'r			overcast.
S. S. Vandalia, N. 44° 40′, W. 48° 40′	29.53	750.0	40.6	4.8	93	wnw.			6		10		hw.	0	0	r'gh	nw.	cloudy.
S. S. Wieland, N. 50° 47′, W. 22° 44′	29.29	744.0				e.			2		5		e.	0	0	cross	sw.	fine.
S. S. Mentmore, N. 52° 06′, W. 6° 21′*	29.64	752.8				ese.			6		8		se.			mod.	se.	drizzling.
S. S. Hevelius, N. 51° 15′ E. 4° 24′ *†	29.85	758.2	49	9.4		ssw.			3		10		s.	6 h'r	6 h'r			light rain.
S. S. Sirius, S. 12° 30′, W. 37° 40′ *	29.90	759.4				ene.			2		0			0	0	sm'h	e.	clear.
S. S. Bulgarian, N. 51° 28′, W. 14° 37′ *	29.53	750.0				sw.			4		8		w.	5 h'r	5 h'r	mod.	w.	cloudy.
S. S. Colorado, New York, N. Y†	29.80	756.9	38	3.3		w.			4		2		w.	0	0			clear.
S. S. Rio Grande, N. 37° 30′, W. 74° 18′†	29.83	757.7	38	3.3		n.			5		3		n.	0	0	short	n	hazy.
S. S. San Marcos, N. 34° 50′, W. 75° 00′	30.02	762.5	45	7.2		nnw.			6		1		nnw.			h'vy	n.	clear.
S. S. Archimede, New York, N. Y†.	29.65	753.1	44	6.7	76	wnw.			4		4		w.	0	0			clear.
S. S. John Hopkins, N. 40° 07′, W. 73° 43′ *†	29.92	760.0	30	—1.1		wnw.			7		8		nw.	0	0	r'gh		cloudy.
S. S. Glenapp, N. 15° 00′, W. 24° 30′ †	29.86	758.4				ene.			4		7		ene.	2 h'r	2 h'r	high	ne.	cloudy.
S. S. Glenfyne, Bahia, Brazil *†	29.62	752.3				var.			1		2		e.	0	0			clear.
S. S. Chalmette, N. 27° 11′, W. 86° 38′†	29.93	760.2	74	23.3		sw.			6		3		w.	0	0			clear.
S. S. Lone Star, N. 34° 15′, W. 75° 45′†	29.78	756.4	50	13.3		n.			5		0			0	0	mod.	w;n.	clear.
S. S Denmark, Thames river, Eng†	29.86	758.4	43	6.1		calm			0		10			0	0			foggy.
S. S. England, off Queenstown, Ireland	29.56	750.8				se.			5		10		se.	4 h'r	4 h'r	mod.	se.	raining.
S. S. Erin, New York, N. Y			34	1.1		wnw.			5		4		nw.	0	0			fine.
S. S. Helvetia, Liverpool, Eng			44	6.7		sse.			1		8		se.	0	0			cloudy.
S.S. Holland, N. 43° 52′, W. 41° 28′			58	14.4		sse.			7		10			4 h'r	4 h'r	brk'n	nw.	threatening.
S. S. City of Merida, N. 19° 29′, W. 94° 06′*†	29.90	759.4	77	25.0		e.			3		5		e.	0	0	light	e.	cloudy.
S. S. Amsterdam, N. 44° 50′, W. 53° 58′ *	29.53	750.0	44	6.7		wsw.			4–5							5	wsw.	clear.
S. S. Alene, N. 14° 19′, W. 76° 43′ †	29.85	758.2	79	26.1		ne.			4								ne.	clear.
S. S. Olbers, N 33° 20′ W. 69° 30′ *†	29.05	753.1	69	20.6		wsw.			5–6								sw.	raining.
S. S. America, N. 47° 16′, W. 33° 59′*	29.48	748.8	53.0	11.7	90	nw.			5		2		w.	0	0	long	nw.	fair.
S. S. Braunschweig, N. 34° 52′, W. 16° 30′	30.03	762.7	65.0	18.3	94	wsw.			3		10		wsw.	6 h'r	6 h'r	light	wsw.	rainy.
S. S. Elbe, N 49° 40′, W. 26° 23′	29.22	742.2	47.3	8.5		sw.			2		4		ne.;w	0	0	long	sw.	cloudy.
S. S. Gen. Werder, N. 42° 02′, W. 60° 29′	29.53	750.0	45.5	7.5		wsw.			6		10		w.	6 h'r	6 h'r	r'gh	w.	cloudy.
S. S. Hohenstaufen, S. 9° 59′, W. 34° 27′	29.91	759.7	84.2	29.0		ese.			4		3		ese.	0	0	light	ese.	fair.
S. S. Neckar, N. 47° 35′, W. 31° 14′	29.37	746.0	50.0	10.0	86	wnw.			5		7		nw.	rain	rain	cross	nw.	fair.
S. S. Ohio, N. 47° 06′, W. 32° 16′	29.40	746.7				wnw.			7		3		nw.	rain	rain	r'gh	w.	fair.
S. S. Rhein, N 44° 30′ W. 49° 20′	29.53	750.0				w.			6		2		w.	0	0	cross	w.	clear.
S. S. Strassburg, S. 33° 50′ W. 52° 55′	29.82	757.4	65.0	18.3	94	s.			3–6		10		s.	5 h'r	5 h'r	long	s..	cloudy.
S. S. Werra, N. 50° 12′, W. 30° 25′*†	29.39	746.5	50.0	10.0		n.			2–3		5		n.	0	0	sm'h	nnw.	fine.
S. S. Belgic, N. 41° 39′, W. 140° 07′ †	29.82	757.4	65	18.3	73	s.			4		1		sw.	0	0	mod.	s.	clear.
S. S. Oceanic, Hong Kong, China *	30.02	762.5	67	19.4	69	e.			4		1		e.					clear.
S. S. Mississippi, N. 38° 40′, W. 123° 38′ †*..	30.25	768.3	54	12.2	93	n.			4		2		nw			light	wnw.	fair.
S. S. Willamette, N. 46° 50′, W. 124° 46′†	30.28	769.1	48	8.9	85	s.			4		9		s.	0.10	2.5	long	wsw.	cloudy.
S. S. Columbia, N. 38° 52′, W. 123° 54′†	30.23	767.8	53.5	11.9	97	nw.			2		0					sm'h	nw.	clear.
S. S. Oregon, Portland, Oregon†	30.27	768 8	50	10.0	93	calm			0		10							light rain.
S. S. Ancon, San Francisco, Cal†	30.16	766.1	52	11.1	86	n.			1		0							clear.
S. S. City of Chester, Eureka, Cal. *†	30.14	765.5	50	10.0	86	calm			0		fg.							foggy.
S. S. Orizaba, N. 34° 20′, W. 120° 20′*†	30.00	762.0	58	14.4	70	calm			0		0					sm'h	nw.	clear.
S. S. State of California, San Francisco, Cal. *†	30.20	767.1	50	10.0		n.			2		0			0	0			clear.
S. S. Australia, N. 9° 58′, W. 163° 21′	29.86	758.4	79	26.1	91	ne.			6		5?		ne.	2 h'r	2 h'r	long	ne.	clear ?
S. S. City of New York, Sydney, N. S. W †	29.75	755.6	70	21.1	75	calm			0		0			0	0			clear.
S. S. City of Pekin, N. 39° 32′, E. 156° 35′ †	30.03	762 7	39	3.9	100	nnw.			6		5		nnw.	0	0	r'gh	nw.	fair.
S. S. City of Rio de Janeiro, N. 11° 10′, W. 87° 09′ †	29.90	759.4	79	26.1	82	ene.			4		0			0	0	mod.	ene.	clear.
S. S. City of Tokei, N. 30° 01′, W. 168° 30′ †	29.82	757.4	70	21.1		sw.			7					light	light	h'vy	nw.	squally.
S. S. Colima, La Libertad, San Salvador†	29.91	759.7	77	25.0	86	calm			0		3		ene.	0	0	sm'h	sse.	clear.
S. S. Grenada, N. 27° 58′, W. 115° 30′†	30.03	762.7	64	17.8	94	nw.			2		2		w.	0	0	sm'h	nw.	clear.
S. S. Muriel, N. 18° 40′, W. 63° 30′	29.99	761.7	81	27.2		ene.			2		0			0	0	mod.	e.	clear.
S. S. Caracas, Puerto Cabello, Venezuela, W. I.†	29.93	760.2	78	25.6	84	calm			0		2		calm	0	0	mod.	ne.	fine.
S. S. Claudius, Colon, Panama						wnw.			3		5		ne.	1 h'r	1 h'r	short	nw.	fair.
S. S. Belgenland, N. 40° 38′, W. 66° 20′	29.64	752.8	43	6.1	100	w.			8		8		w.	2 h'r	2 h'r	h'vy	w.	cloudy.
S. S. Nederland, N. 50° 45′, E. 0° 42′ †	30.04	763.0	48	8.9		e.			1		fg.					sm'h		foggy.
S. S. Pennland, New York, N. Y	29.83	757.7	27.5	— 2.5	77	sw.			2		5?		sw.	0	0			clear.?
S. S. Rhynland, Antwerp, Belgium	29.97	761.2	57	13.9	75	s.			4		8		s.	0	0			cloudy.
S. S. Switzerland, N. 49° 51′ W. 36° 42′ †	29.36	745 7				w.			2		5		w.	0	0	long	wsw.	fair.
S. S. Waesland, Antwerp, Belgium	29.93	760.2	49	9.4	93	sse.			3		10		sse.	0.08	2.0			foggy.
S. S. Leerdam, N. 50° 08′, W. 30° 01′ †	29.41	747.0	53	11.7	69	nne.			3		4		s.	0	0	long	nw.	fair.
S. S. P. Oaland, New York, N. Y	29.83	757.7	30.7	—0.7	95	wnw.			4		2		nw.					clear.
S. S. Schiedam, N. 50° 00′, W. 9° 48′	29.54	750.3	60.6	15.9	81	ssw.			4		2		s.	4 h'r	4 h'r	r'gh	s.	hazy.
S. S. W. A. Scholten, Rotterdam, Holland	30.03	762.7	43.2	6.2	99	sw.			2		10		sw.	6 h'r	6 h'r			rainy.
S. S. Zaandam, N. 40° 53′, W. 64° 16′	29.57	751.1	55.4	13.0	81	w.			5		3 ks		w.	0	0	4	w.	
S. S. State of Florida, N. 40° 38′, W. 68° 30′	29.57	751.1	44	6.7		nw.			5		9		nw.	snow	snow	mod.	nw.	cloudy.
S. S. State of Georgia, N. 48° 45′, W. 43° 35′†	29.38	746.2	43	6.1		w.			1		5		sw.	4 h'r	4 h'r	freg.		hazy.
S. S. Baltic, Queenstown, Ireland	29.65	753.1	46	7.8	92	sse.			6		10			2 h'r	2 h'r	sm'h		raining.
S. S. Celtic, N. 40° 46′, W. 69° 30′†	29.61	752.1	38	3.3		nw.			6		0			1 h'r	1 h'r	mod.	wnw.	fine.
S. S. Lepanto, N. 48° 40′, W. 19° 13′*	29.41	747.0	52	11.1		ssw.			6		8		s.	6 h'r	6 h'r		sw;w	cloudy.
S. S. Marengo, N. 40° 00′, W. 67° 00′	29.67	753.6				wnw.			6		8		wnw.	0	0	mod.	wnw.	cloudy.
S. S. Salerno, Hull, Eng						calm			0					0	0			foggy.
S. S. Catherine Whiting, Providence, R. I †	29.78	756.4	78	25.6		nw.			1		0							
S. S. Saxon, Boston, Mass †	29.55	750.6	39	3.9		w.			4		0							fine.
MISCELLANEOUS																		
Bg. Alcira, N. 27° 18′, W. 74° 04′	29.98	761.5	77	25.0		w.			4		8		wnw.	1 h'r	1 h'r	mod.	ene.	cloudy.
Bk. Alpha, N. 43° 50′, W. 13° 50′ †	29.67	753.6	58	14.4		ssw.			7		9		sw.	2 h'r	2 h'r	r'gh	nw.	cloudy.
Schr. Annie Lewis, N. 23° 10′, W. 96° 55′ †	29.98	791.5	77	25.0		sse.			3		8		s.	0	0	long	se.	cloudy.
S. Annie M. Law, N. 15° 38′ E. 118° 58′*†	29.92	760.0	70	21.1		nw.			1		0			0	0	mod.	ne.	clear.
Bk Anna Thormann, S. 27° 53′, E. 43° 20′*	29.89	759.1	77.0	25.0	85	nne.			2		7 k		n.	sh'rs	sh'rs	mod	ne.	fair.
S. S. Antonio Lopez, N. 29° 38′, W. 44° 03′*	30.15	705.8	72	22.2	80	ssw.			3		3			0	0	long	nw.	fair.
Bk. Aquidneck, S. 24° 20′ W. 39° 06′*†	30.00	762.0	84	28.9		nne.			4					0	0	hv'y	nne.	clear.
Bgt. Arthur, N. 30° 35′, W. 28° 39′*†	30.30	769.6				w.			4				w.	0	0	high	nw.	
Schr. Anna A. Holton, N. 32° 34′, W. 72° 51′†	29.91	759.7	71	21.7		wnw.			6		5?		w.	0	0	cross	w.	clear?
Bg. Belle of the Bay, N. 25° 49′, W. 77° 00 *†	30.02	762.5				wsw.			2		6?		wsw.	0	0	sm'h	sw.	clear.?
Bk. Champion, N. 21° 27′, W. 65° 00′			77.0	25.0		e.			4		2		ese.	0	0	mod.	ese.	fair.
Schr. Chas. F. Heyer, N. 39° 14′, W. 74° 39′	29.87	758.7	30	—1.1	70	wnw.			3	0	4 k		nw.	0	0	mod.	nw.	fair.
Bg. Clara M. Goodrich, Key Francis, W. I *†	29.09	738 9				nnw.			4		10		w.	0	0			threatening.
Schr. C. R. Flint, Cedar Keys, Fla			03	17.2		nw.			2		10		nw.	2 h'r	2 h'r			raining.
Bkt. David Preston, Pensacola, Fla			50.0	10.0		n.					0			0	0			
Bk. E. L. Pettingill, N. 7° 38′, W. 118° 53′ *†	30.00	762.0	83	28.3		s.			1		2		ssw.	sh'rs	sh'rs	mod.		lig't squalls
Schr. Edith R. Seward, Baltimore, Md *†	29.93	760.2	29	— 1.7		nw.			2		2			0	0			clear.
S. E. J. Spicer, N. 48° 58′, W. 18° 08′*†	29.34	745.2	53	11.7		sw.			5		10		wsw.	18 h'r	18 h'r	mod.	wnw.	overcast.
Bk. Eliza Barss, N. 40° 35′, W. 72° 15′ *†	29.79	756.7				nw.			6		5?		nw.	0	0	short	nw.	clear.?
Bk. Essex, N. 17° 37′, E. 59° 58′*†	30.08	764.0	84	28.9		ene.			6		3		ene.	0	0			fine.
Schr. F. E. McDonald, Rockland, Maine †	29.53	750.0	13	—10.6		wnw.			5		0			0	0			fine.
S. S. Foscolia, New York, N. Y						w.			6		0			0	0			fine.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind:		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Freya, N. 20° 06′, W. 80° 00′ ..	.....	.....	83	28.3	.....	ene.	.....	.....	3	.....	5	.....	n.	o	o	sm'h	.....	fair.
S. J. W. Gildemeister, N. 48° 50′, W. 17° 35′ *	29.40	746.7	50.9	10.5	51	s.	.....	.....	3	.....	5 ks	.....	sw.	1 h'r	1 h'r	6–7	wsw.	d. clouds.
Bg. George, N. 32° 05′, W. 58° 25′ *†	30.02	762.5	.....	.....	.....	sw.	.....	.....	4	.....	8	.....	sw.	h'vy	h'vy	r'gh	wsw.	threatening.
Bk. Gronsvaer, Wellington, New Zealand†	29.91	759.7	76.0	24.4	93	nw.	.....	.....	9	.....	5	.....	nw.	.....	.....	.....	.....	stormy.
Bk. Godeffroy, S. 57° 15′, W. 64° 07′†	29.37	746.0	41.4	5.2	95	wsw.	.....	.....	6	.....	10	.....	wsw.	4 h'r	4 h'r	r'gh	w.	hazy.
Bk. Great Surgeon, S. 22° 17′, E. 74° 30′ *†	30.10	764.5	79	26.1	.....	ese.	.....	.....	5	.....	9	.....	se.	o	o	long	ssw.	cloudy.
Bk. Grey Eagle, S. 7° 17′, W. 33° 20′*†	29.85	758.2	.....	.....	.....	se.	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	
Bk Hattie G. McFarland, New York, N. Y.†	29.96	761.0	22	— 5.6	.....	nw.	.....	.....	1	.....	3	.....	nw.	o	o	.....	.....	
Schr Hattie Weston, Delaware Breakwater, Del*†	29.75	755.6	25	— 3.9	.....	nw.	.....	.....	5	.....	10	.....	nw.	o	o	sm'h	nw.	cloudy.
Schr. Isabel Alberto, N. 33° 37′, W. 75° 36′†	29.86	758.4	.....	.....	.....	n.	.....	.....	6	.....	2	.....	n.	o	o	cross	w.	fair.
Bk. Joseph A. Ropes, S. 3° 36′, E. 50° 54′ *†	29.86	758.4	85	29.4	79	nw.	.....	.....	4	.....	4	.....	wnw.	o	o	mod.	n.	fair.
Bkt. Josephine, N. 27° 44′, W. 37° 28′†	30.22	767.6	75	23.9	46	s.	.....	.....	2	.....	o	.....	.....	o	o	long	nw.	clear.
S. S. J. W. Wilson, Cedar Keys, Fla.†	29.88	758.9	64	17.8	.....	nw.	.....	.....	2	.....	10	.....	wsw.	light	light	.....	.....	threatening.
Light House Tender, Laurel, N. 29° 35′, W. 85° 08′†	29.88	758.9	64	17.8	.....	calm	.....	.....	0	.....	10	.....	.....	4 h'r	4 h'r	sm'h	.....	foggy.
Bk. Louise Adelaide, N. 33° 45′, W. 75° 10′ *†	30.01	762.2	.58	14.4	.....	nnw.	.....	.....	5	.....	5	.....	nw.	o	o	cross	w.	fine.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.02	762.5	.....	.....	.....	calm	.....	.....	0	.....	o	.....	.....	o	o	sm'h	.....	clear.
S. S. Madrid, N. 38° 47′, W. 48° 02′*†	29.86	758.4	60	15.6	.....	w.	.....	.....	5	.....	4	.....	w.	4 h'r	4 h'r	r'gh	var.	fair
S. S. Malabar, Marseilles, France†	29.87	758.7	.....	.....	.....	se.	.....	.....	4	.....	10	.....	se.	16 h'r	16 h'r	.....	.....	heavy rain.
Bk. Matilda C. Smith, N. 36° 01′, W. 73° 13′ *†	29.90	759.4	.....	.....	.....	n.	.....	.....	8	.....	5	.....	n.	4 h'r	4 h'r	mod.	n.	fine.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	29.93	760.2	58	14.4	.....	w.	.....	.....	1	.....	.....	.....	w.	.....	.....	.....	.....	cloudy.
S. Minnie N. Gerow, N. 32° 08′, W. 47° 09′ *†	30.04	763.0	.....	.....	.....	sw.	.....	.....	6	.....	5	.....	sw.	.....	.....	r'gh	nw.	threatening.
S. M. P. Grace. S. 29° 12′, W. 128° 34′ *†	30.22	767.6	79	26.1	.....	nne.	.....	.....	3	.....	3	.....	n.	light	light	sm'h	sw.	fair.
Bg. Myrtle, Clements Port, Nova Scotia*†	29.30	744.2	.....	.....	.....	nw.	.....	.....	4	.....	8	.....	nw.	o	o	.....	.....	fair.
Bg. O. C. Clary, N. 13° 40′, W. 60° 50′*†	30.00	762.0	82	27.8	91	one	.....	.....	4	.....	1	.....	ene.	o	o	.....	.....	clear.
S. Orealia, N. 21° 00′, E. 88° 55′*	29.87	758.7	.....	.....	.....	nw.	.....	.....	2	.....	.....	.....	.....	.....	.....	sm'h	.....	fine.
Bk. Ottawa, N. 37° 17′, W. 47° 56′*	29.75	755.6	66	18.9	.....	w.	.....	.....	6	.....	7	.....	wnw.	2 h'r	2 h'r	long	sw; w	cloudy.
S Paramita, San Francisco, Cal	.....	.....	51	10.6	.....	n.	.....	.....	1	.....	o	.....	.....	o	o	.....	.....	
Bk. Pilgrim, N. 20° 05′, W. 57° 50′*†	30.07	763.8	.....	.....	.....	e.	.....	.....	4	.....	1	.....	e.	o	o	long	ene.	fine.
S. S. Radnorshire, N. 18° 32′, E. 111° 38′ *†	29.92	730.0	.....	.....	.....	ne.	.....	.....	5	.....	2	.....	ne.	o	o	long	ene.	cloudy.
S. S. Raleigh, Rondout, N. Y *†	29.62	752.3	26	— 3.3	.....	.....	.....	.....	.....	.....	4	.....	.....	o	o	.....	.....	
Bk. Rebus, N. 45° 16′, W. 28° 38′ *	29.29	744.0	54	12.2	.....	w.	.....	.....	9	.....	6	.....	w.	h'vy	h'v'y	h'vy	w.	squally.
S. St. Francis. N. 34° 44′, W. 132° 35′†	30.55	776.0	57	13.9	.....	calm	.....	.....	0	.....	6	.....	e.	.....	.....	long	nw.	misty.
Schr. S. B. Hubbard, New London, Conn †	29.73	755.1	40	4.4	.....	nw.	.....	.....	5	.....	2	.....	nw.	o	o	.....	.....	fine
Bk. Scud, N. 30° 10′, W. 69° 00′*†	29.97	761.2	.....	.....	.....	wsw.	.....	.....	5	.....	6	.....	wsw.	o	o	mod.	nnw.	
Bk. Southern Belle, off Scilly Islands, Eng*†	29.60	751.8	50	10.0	.....	s.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	.....	raining.
S. S. Sunbeam, N. 28° 00′, W. 88° 28′	29.90	759.4	76	24.4	77	w.	.....	.....	3	.....	6	.....	nw.	o	o	.....	.....	d. clouds.
Schr. T. S. McLellan, N. 28° 00′, W. 69° 00′....	.....	.....	70	21.1	.....	ene.	.....	.....	.....	.....	.....	.....	sw.	.....	.....	.....	nne.	
U. S. F. C. S. S. FishHawk, Washington, D. C†..	30.04	763.0	33	0.6	.....	nw.	.....	.....	3	.....	5	.....	nw.	o	o	.....	.....	fair.
Bk. Vincenzo Accame, N. 36° 33′, W. 50° 20′†	29.85	758.3	69.8	21.0	.....	nw.	.....	.....	4	.....	o	.....	.....	3¼ h'r	3¼ h r	.....	sw.	
Schr. Walter L. Plummer, Dutch Island, Mass *†	29.70	754.4	.....	.....	.....	w.	.....	.....	4	.....	5	.....	w.	o	o	.....	.....	fine.
Bk. Wandering Jew, Montevideo, Uruguay †	30.05	763.3	61	16.1	.....	ssw.	.....	.....	7	.....	4	.....	sw.	rain	rain	short	se.	clear.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.07	763.8	.....	.....	.....	s.	.....	.....	1	.....	o	.....	.....	.....	.....	sm'h	s.	fair.
S. Wm. Woodbury, N. 48° 02′, W. 13° 23′*	29.57	751.1	57	13.9	.....	sw.	.....	.....	6	.....	4?	.....	sw.	.....	.....	long	sw.	cloudy.?

International Chart I. December 15, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B.Hazen, Chief Signal Officer.

076303

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 16, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.11	764.7	60.4	15.8	78	e.	.....	.....	1	.....	3	.....	.....	0	0	pretty fair..	Malaterre.
Algiers	.....	.....	29.87	758.7	56.5	13.6	75	wnw.	.....	.....	7	.....	10	.....	.....	1.248	31.7	covered	Thève.
La Calle	.....	.....	29.72	755.0	56.8	13.8	80	w.	.....	.....	4	.....	4	.....	.....	0	0	cloudy..	Fonfréde.
Tunis	.....	.....	29.72	755.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	Jacques.
Saida	.....	.....	30.06	763.5	54.7	12.6	46	s.	.....	.....	3	.....	2	.....	.....	0.059	1.5	pretty fair..	Pérès.
Tebessa	.....	.....	29.87	758.7	49.6	9.8	82	w.	.....	.....	4	.....	4	.....	.....	0.118	3.0	cloudy	Dognon.
Geriville	.....	.....	.....	.....	43.5	6.4	83	wnw.	.....	.....	4	.....	4	.....	.....	0	0	cloudy	Lonchamp.
Laghouat	.....	.....	30.02	762.6	54.3	12.4	42	nw.	.....	.....	3	.....	4	.....	.....	0	0	pretty fair..	Abraham.
Biskra	.....	.....	29.89	759.3	58.3	14.6	53	nnw.	.....	.....	8	.....	8	.....	.....	0.016	0.4	very cloudy	Malau.
Australian.																			
Melbourne, Victoria	29.71	754.6	29.80	756.9	56.0	13.3	70	sw.	12	5.4	.....	.....	3	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.53	750.0	30.09	764.2	48.9	9.4	82	e.	.....	.....	2	.....	6	.....	.....	0	0	.....	Prof. Ivan Stezir.
Cracow, I. R Observatory	29.36	745.8	30.16	766.0	39.6	4.2	90	nnw.	0	0	.....	.....	0	.....	.....	0.008	0.2	.....	Dr. Wierzbicki.
Eperies	29.24	742.7	30.14	765.6	44.2	6.8	91	calm	.....	.....	0	.....	10 ks	.....	.....	0	0	.....	Julius Mikolik.
Grats	28.85	732.8	30.16	766.0	35.6	2.0	88	e.	.....	.....	2	.....	10	.....	.....	0.055	1.4	.....	Andreas Rospini.
Hermannstadt	28.71	729.1	30.17	766.4	46.2	7.9	75	se.	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.71	729.3	30.12	765.1	32.0	0.0	95	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy.....	The Staff.
Lemberg	29.13	740.0	30.16	766.0	39.0	3.9	92	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.95	760.8	30.07	763.7	56.8	13.8	78	e.	.....	.....	1	.....	7	.....	.....	0.079	2.0	.....	I. R.Hydrographic Office.
Szathmar	29.67	753.6	30.14	765.5	45.5	7.5	79	se.	.....	.....	1	.....	8	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.83	757.7	30.12	765.0	46.0	7.8	83	calm	.....	.....	0	.....	4	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.99	761.8	30.10	764.4	57.2	14.0	71	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Royal Academy.
Vienna	29.40	746.8	30.14	765.6	39.6	4.2	97	calm	.....	.....	0	.....	10	.....	.....	0.020	0.5	foggy.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.88	758 9	29.98	761.5	42.3	5.7	91	se.	30	13.4	.....	.....	10	.....	.....	0.800	20.3	squally.....	W. Boswell
Armagh, Observatory	29.40	746.7	29.64	752.8	43.5	6.4	96	ese.	14	6.3	.....	.....	10	.....	.....	.....	.....	raining	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.78	756.4	39.7	4.3	93	ese.	25	11.2	.....	.....	10	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	29.29	744.0	29.83	757.7	39.3	4.1	90	ese.	3	1.3	.....	.....	10	.....	.....	.....	.....	overcast.....	Thomas Mackereth.
Bradford, Yorkshire	29.48	748.8	29.87	758.7	35.6	2.0	94	se.	.....	.....	1	.....	10	.....	.....	0.28	7.1	foggy.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.93	760.2	29.96	761.0	81.0	27.2	74	ne.	.....	.....	3	.....	6	.....	.....	.....	.....	gloomy..	Corpl.J.Surgenor, A. H C.
Cardington	.....	.....	.....	.....	42.0	5.6	93	se.	.....	.....	0.4	.....	10	.....	.....	.....	.....	overcast.....	John McLaren.
Chatham, School M. E.	29.78	756.4	29.91	759.7	41.5	5.3	95	s.	.....	.....	2	.....	10	.....	.....	.....	.....	misty.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.40	746.7	29.63	752.6	50.1	10.1	91	sse.	.....	.....	3	.....	9	.....	.....	.....	.....	d. clouds....	The Staff.
Fort Napier, Natal	27.63	701.8	29.84	757.9	74.0	23.3	55	e.	.....	.....	1	.....	7?	.....	.....	.....	.....	overcast?....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.68	753.9	29.91	759.7	82.0	27.8	91	ne.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky.....	Sergt. John Robinson.
Gibraltar, Mediterranean	30.00	762.0	30.05	763.3	58.2	14.6	95	w.	.....	.....	2	.....	9	.....	.....	.....	.....	gloomy.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.63	752.6	29.83	757.7	39.1	3.9	90	ene.	.....	.....	4	.....	10	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.71	754.6	29.89	759.2	41.2	5.1	98	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Guernsey	29.46	748.3	29.77	756.1	46.0	7.8	92	s.	.....	.....	1	.....	10	.....	.....	.....	.....	gloomy.....	A. Collenette, F. M. S
Kew, Observatory	29.85	758.2	29.89	759.2	42.3	5.7	93	se.	12	5.4	.....	.....	10	.....	.....	.....	.....	misty.....	The Staff.
Leicester, Museum	29.59	751.6	29.86	758.4	40.6	4.8	95	se.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	.....	.....	.....	.....	63.2	17.3	97	se.	.....	.....	3	.....	7	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	29.80	756.9	29.84	757.9	76.0	24.4	83	sw.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	29.30	744.2	29.83	757.7	38.7	3.7	98	ese.	.....	.....	3	.....	10	.....	.....	.....	.....	foggy.....	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.62	752.3	29.85	758.2	43.0	6.1	94	se.	.....	.....	4	.....	10	.....	.....	.....	.....	gloomy.....	The Staff.
Plymouth	29.60	751.8	29.67	753.6	49.0	9.4	96	s.	.....	.....	4	.....	10	.....	.....	.....	.....	showery.....	John Merrifield.
Sandwick Manse, Orkneys	29.90	759.4	30.00	762.0	38	3.3	95	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	raining.....	Rev. C. Clouston, L.L.D.
Scutari Cemetery, Turkey	30.10	764 5	30.17	766.3	50.4	10.2	75	ne.	.....	.....	2	.....	9	.....	.....	.....	.....	d. clouds....	W. H. Lyne.
Sheffield	29.60	751.8	29.89	759.2	37.6	3.1	99	calm	.....	.....	0	.....	10	.....	.....	0.18	4.6	overcast.....	W. F. Cooper.
Silloth Rectory	29.78	756.4	29.81	757 2	41.7	5.4	81	e.	.....	.....	2	.....	6	.....	.....	0.070	1.8	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.85	758.2	38.9	3.8	86	ene.	7	3.1	.....	.....	10	.....	.....	.....	.....	gloomy.....	I. New.
Stratfield Turgiss	29.63	752.6	29.85	758.2	42.8	6.0	97	se.	.....	.....	2	.....	10	.....	.....	.....	.....	gloomy.....	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.58	751 3	29.62	752.3	53	11.7	86	se.	.....	.....	6	.....	8	.....	.....	.....	.....	gloomy.....	W. Newcombe.
Valencia, Observatory	29.32	744.7	29.34	745.2	47.6	8.7	92	ssw.	21	9.4	.....	.....	10	.....	.....	.....	.....	raining.....	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.50	749.3	29.54	750.3	17	— 8.3	90	w.	4	1.8	.....	0	2 s	.....	calm	0	0	fair.....	H. J. Cundall, C. E
Chatham, N. B*	29.45	748.0	29.52	749.8	9	—12.8	91	sw.	2	0.9	.....	2 ck	2 ks	sw.	.....	0	0	fair.....	G. A. Blair.
Father Point, Quebec*	29.53	750.0	29.55	750.6	19	— 7.2	96	vnw.	30	13.4	.....	.....	10 s	.....	w.	0.07	1.8	cloudy.....	J. McWilliams.
Fort Garry, Manitoba*	29.04	737.6	29.95	760.7	1	—17.2	72	s.	26	11.6	.....	.....	10 s	.....	.....	0	0	cloudy.....	James Stewart.
Halifax, N. S*	29.50	749.3	29.64	752.8	22	— 5.6	84	w.	7	3.1	.....	2 k	0	w.	.....	0	0	fair	A. Allison.
Kingston, Ontario*	29.46	748.3	29.84	757.9	— 1	—18.3	100	nw.	3	1.3	.....	5 ck	2 s	w.	calm	inap.	inap.	light snow ..	A. P. Knight, M. A
Montreal, Quebec*	29.52	749 8	29.75	755.6	1	—17.2	83	sw.	20	8.9	.....	.....	10 n	.....	.....	0	0	hazy..	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.17	740 9	29.94	760.5	2	—16.7	76	w.	5	2.2	.....	.....	10 n	.....	w.	0.05	1.3	cloudy.....	Rev. R. Mosley.
Port Dover, Ontario	29.17	740.9	29.92	760.0	14	—10.0	100	w.	10	4.5	.....	.....	10 n	.....	w.	0.16	4.1	threatening.	H. Morgan.
Port Stanley, Ontario	29.25	742.9	29.93	760.7	14	—10.0	87	w.	20	8.9	.....	.....	10 n	.....	w.	0.04	1.0	cloudy.....	M. Payne.
Quebec, Quebec*	29.35	745.5	29.71	754.6	4	—15.6	100	w.	.....	.....	5	.....	10 n	.....	w.	0.25	6.3	light snow..	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.35	745.5	29.85	758.2	5	—15.0	87	nw.	6	2.7	.. ..	.....	10 n	.....	.....	0.02	0.5	light snow..	W. H. McIntyre.
Saugeen, Ontario*	29.17	740.9	29.93	760.2	16	— 8.9	96	n.	19	8.5	.....	.....	10 s	.....	.....	0.40	10.2	cloudy.....	
St. Andrews, N. B	29.60	751.8	29.65	753.1	12	—11.1	80	nw.	3	1.3	.....	.....	10 n	.....	.....	0	0	cloudy	
Sydney, C. B*	29.47	748.5	29.53	750.0	26	— 3.3	88	sw.	15	6.7	.....	.....	10 n	.....	.....	0	0	cloudy.....	T. C. Hill, C. E
Toronto, Ontario*	29.49	749.0	29.91	759.7	7	—13.9	91	nw.	7	3.1	.....	.....	10 n	.....	.....	0.03	0.8	light snow.	Magnetic Observatory.
Yarmouth, N. S*	29.55	750.6	29.62	752.3	28	— 2.2	84	nw.	7	3.1	.....	.....	10 k	.....	nw.	0.02	0.5	cloudy.....	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.40	721.3	29.93	760.2	8.0	—13.3	100	nw.	.....	.....	3	.....	10 s	....	nw.	0.152	3.9	overcast.....	Wm. Wylie
St. Johns, Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.93	760.2	29.96	761.0	71.0	21.7	88	e.	18.2	8.1	.....	0	3 k	... .	.....	0	0	light haze....	John Duthie.
Cape Town, C G.H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.97	634.1	.....	.....	8.6	—13.0	.....	ne.	.....	.....	1	.....	fg	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.66	778.8	30.77	781.6	17.4	— 8.1	48	calm	6.3	2.8	.....	.....	10	.....	.....	0	0	covered	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.53	775.4	30.55	776.0	37.4	3.0	76	n.	10.0	4.5	.....	.....	10 n	.....	.....	0.236	6.0	snowing	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	30.15	765.9	30.20	767.1	35.8	2.1	71	ese.	16	7	.....	.....	10	.....	.....	.....	.....	.....	Oversergeant Fischer.
Fanoe	30.17	766.3	30.19	766.8	31.6	— 0.2	98	e.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.84	757.9	29.88	759.0	20.3	— 6.5	76	nne.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.76	755.8	29.78	756.3	25.0	— 3.9	.....	calm	.....	.....	0	.....	7	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	30.00	762.0	30.05	763.2	7.9	—13.4	.....	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	30.03	762.8	30.08	763.9	25.2	— 3.8	91	e.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	30.07	763.8	30.11	764.7	43.3	6.3	81	e.	22	10	.....	.....	10	.....	.....	.....	.....	raining	Overloerer Bergh.
Vestervig	30.14	765.6	30.24	768.0	30.4	— 0.9	92	ene.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Loearer Oesterboi.
Upernavik, Greenland	30.29	769.4	30.34	770.6	— 7.1	—21.7	.....	e.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.34	745.3	30.01	762.3	43.5	6.4	100	calm	.....	.....	0	.....	fg	.....	.....	0	0	dense fog	M. Labroue, Director.
Alençon, Normal School	29.36	745 8	29.91	759.8	44.6	7	97	s.	.....	.....	1	.....	k	n.	n.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.66	753.3	29.92	760.0	39.7	4.3	97	sse.	.....	.....	1	.....	10 n	.....	.....	0	0	covered	M. Fénéon, Command't.
Avignon, Normal School	29.90	759.4	29.98	761.4	50.0	10	84	n.	.....	.....	1	.....	10	.....	ese.	0.059	1.5	covered	M. Giraud, Director.
Bar-sur-Seine	29.42	747.3	29.99	761.7	44.8	7.1	82	se.	.....	.....	1	0	8 ku	.....	wsw.	0	0	very cloudy	M. Sallard, Director.
Beauvais, Normal School	29.70	754.4	29.98	761.4	41.9	5.5	94	ese.	.....	.....	1	.....	10	.....	.....	0.008	0.2	foggy	M. Frère Eugène Marie.
Besançon, Normal School	29.04	737.6	29.93	760.3	52.9	11.6	85	ene.	.....	.....	1	.....	k	.....	nw.	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.66	753.4	29.93	760.2	42.1	5.6	93	sse.	.....	.....	1	.....	fg	.....	.....	0.008	0.2	dense fog	M. Rayet, Director.
Bourges, Normal School	29.38	746.3	29.94	760.5	47.8	8.8	89	ne.	.....	.....	1	.....	kn	.....	ne.	0.004	0.1	.....	M. Malet, Director.
Brest, Naval Observatory	29.51	749.6	29.70	755.8	52.9	11.6	93	sw.	.....	.....	3	.....	8	.....	sw.	0.020	0.5	cloudy	M. de Kermaidé, Dir.
Caen, Normal School	29.69	754.1	29.76	756.0	43.0	6.1	88	se.	.....	.....	1	.....	5	.....	se.	0	0	.....	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.64	752.9	29.97	761.2	41.0	5.0	90	n.	.....	.....	2	.....	10	.....	.....	0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.54	750 2	30.07	763 7	38.1	3.4	97	e.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.58	725.9	29.94	760.5	51.1	10.6	73	w.	.....	.....	1	.....	10	.....	.....	0.004	0.1	covered	M. Allnard, Director.
Cluny, Normal School	29.14	740.2	30.01	762.3	41.2	5.1	97	w.	.....	.....	1	.....	10	.....	w.	0	0	light fog	M. de Villemontée, Dir.
Commercy, Normal School	29.17	740.9	30.06	763.6	34.9	1.6	98	e.	.....	.....	1	.....	n	e.	e.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	27.43	696.8	30.01	762.3	44.2	6.8	82	ne.	.....	.....	1	.....	9	.....	.....	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28 83	732.2	29.95	760.6	56.3	13.5	64	e.	.....	.....	1	.....	10	.....	se.	0	0	.....	M. Klun, Director.
Grenoble, Normal School	29.23	742.5	30.03	762.8	39.6	4.2	87	ese.	.....	.....	1	.....	ck	o	.....	0	0	.....	M. Abbard, Director.
Guéret	28.36	720 4	29.95	760.7	46.4	8	74	ne.	.....	.....	1	.....	.....	cn	ne.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.49	749.0	29.76	755.9	48.2	9	86	se.	.....	.....	1	.....	.....	10	se.	0	0	covered	M. Ollitrault, Director.
Lesear, Normal School	29.36	745.7	29.94	760.4	44.1	6.7	90	ne.	.....	.....	1	2 ck	0	.....	.....	0	0	slightly cl'dy	M. Chanvin, Director.
Lorient, Naval Observatory	29.72	755.0	29.82	757.5	52.5	11.4	86	s.	.....	.....	3	.....	8	.....	s.	0.098	2.5	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.94	735.0	30.02	762.4	45.0	7.3	92	ese.	.....	.....	1	5 c; cs	8	.....	.....	0	0	cloudy	M. André, Director.
Mans, Normal School	29.61	752.0	29.92	759.9	45.0	7.2	94	sse.	.....	.....	3	.....	8	.....	ssw.	0.012	0.3	very cloudy	M. Piboën, Director.
Marseille, Observatory	29.64	752.8	29.91	759.6	57.9	14.4	67	wnw.	.....	.....	1	.....	10	.....	ene.	0.024	0.6	light rain	M. Stephan, Director.
Mt. Louis	24.73	628.1	29.57	751.1	40.6	4.8	94	e.	5.6	2.5	.....	.....	8	.....	.....	0	0	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29.81	757.1	29.99	761.8	58.1	14.5	76	n.	.....	.....	2	.....	5	n.	.....	0.08	2.	cloudy	M. Galzin, Director.
Nancy, Normal School	29.13	740.0	29.95	760.8	35.6	2.0	96	nnw.	.....	.....	1	.....	fg	.....	.....	0	0	dense fog	M. Hasse, Director.
Nantes, Observatory	29.75	755.6	29.91	759.7	46.6	8.1	91	sse.	.....	.....	1–2	2 c	9 kn; n	.....	.....	0	0	.....	M. Larocque, Director.
Perpignan, Observatory	29.86	758.4	29.97	761.3	53.2	11.8	96	nw.	3.8	1.7	.....	.....	10	.....	se.	0.248	0.3	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.09	535.8	.....	.....	30.7	— 0.7	.....	sw.	.....	.....	1	.....	5	.....	sw.	0	0	cloudy	M. Vaussenat.
Privas, Normal School	28.91	734.4	29.99	761.8	48.9	9.4	79	s.	.....	.....	1	.....	10	.....	.....	0	0	foggy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.06	636.6	.....	.....	40.5	4.7	90	s.	.....	.....	1	.....	5	.....	s.	0.008	0.2	½ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.93	760.3	29.96	761.1	41.0	5.0	97	s.	.....	.....	1	.....	hz	.....	.....	0.08	2.	hazy	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.63	752.6	29.85	758.2	39.2	4	100	se.	.....	.....	1	.....	10	.....	.....	0	0	foggy	M. Brotier, Director.
Rodez, Normal School	27.87	707.8	30.02	762.5	50.4	10.2	76	se.	.....	.....	3	.....	5	.....	nw.	0	0	cloudy	M. Seger, Director.
Rouen, Normal School	29.88	759.0	29.93	760.2	45.5	7.6	85	se.	.....	.....	1	.....	8	se.	.....	0.154	3.9	very cloudy	M. Moullot.
Saint Lô	.....	.....	.....	.....	47.3	8.5	72	sw.	.....	.....	1	1	1	nw.	w.	0.004	0.1	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.80	757.0	29.97	761.2	42.4	5.8	93	se.	.....	.....	1	.....	10	.....	s.	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.23	742.5	29.96	760.9	55.4	13.0	81	sse.	.....	.....	3	.....	8	sse.	.....	0	0	very cloudy	M. Baillaud, Director.
Tours	29.77	756.2	29.95	760.7	49.3	9.6	84	ene.	.....	.....	1	.....	5	wsw.	sw.	0.004	0.1	cloudy	M. de Tastes.
Versailles, Observatory	29.45	748.0	29.94	760.5	41.4	5.2	94	s.	.....	.....	1	.....	10	.....	.....	0.020	0.5	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.79	756.6	29.94	760.4	49.5	9.7	79	e.	4.0	1.8	.....	c	3 k	.....	sw.	0	0	.....	M. Cartier, Director.
GERMAN.																			
Ansbach	28.62	726.9	30.14	765.5	31.6	— 0.2	86	se.	.....	.....	2	.....	1	se.	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.24	742.8	30.09	764.3	31.1	— 0.5	90	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Prof. Dr. Hob.
Berlin	29.93	760.1	30.11	764 8	38.7	3.7	92	sw.	.....	.....	2	.....	10	.....	.....	0.012	0.3	.....	Prof. Dr. Arndt.
Breslau	29.64	752.9	30.18	766.5	37.2	2.9	88	nw.	.....	.....	1	.....	5	wnw.	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.63	752.5	30.09	764.2	33.4	0.8	88	ne.	.....	.....	1	.....	10	.....	.....	0	0	foggy	Albert Senz.
Cassel	29.34	745.3	30.06	763.4	33.3	0.7	98	n.	.....	.....	1	.....	10	nw.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.73	755.2	30.12	765 0	35.8	2.1	96	s.	.....	.....	1	.....	10	.....	.....	0.012	0.3	.....	Physical Society.
Friedrichshafen	28.60	726.4	30.10	764.6	32.2	0.1	94	ne.	.....	.....	2	.....	5	w.	.....	0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.06	763.6	30.15	765.9	36.1	2.3	96	e.	.....	.....	2	.....	10	.....	.....	0.063	1.6	dense fog	E. Preller.
Kiel	30.15	765.7	30.16	766.1	34.9	1.6	98	e.	.....	.....	2	.....	10	.....	.....	0.016	0.4	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.73	755 2	30.17	766.4	33.4	0.8	96	s.	.....	.....	2	.....	10	.....	.....	0	0	foggy	H. Leppig, Asst.
Magdeburg	29.95	760.8	30.15	765.9	35.2	1.8	93	se	.....	.....	1	.....	10	.....	.....	0.004	0.1	foggy	Weather Observatory.
Memel	30.05	763.2	30.10	764.4	36.3	2.4	89	nnw.	.....	.....	3	.....	10 ks	.....	.....	.....	.....	.....	Issermann.
Munich	28.22	716 8	30.09	764.2	22.5	— 5.3	97	n.	.....	.....	1	.....	10	.....	.....	0	0	dense fog	Central Station.
Neufahrwasser	30.13	765.3	30.15	765.7	37.4	3.0	91	nw.	.....	.....	1	.....	10	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.53	750.1	30.06	763.5	34.9	1.6	100	calm	.....	.....	0	.....	10	.....	.....	0	0	dense fog	Dicknether.
Stuttgart	29.09	738.9	30.02	762.5	35.6	2.0	85	n.	.....	.....	1	.....	3	w.	.....	0	0	foggy	Prof. Dr. Schoder.
Wustrow	30.20	767.0	30.22	767.6	35.1	1.7	96	ene.	.....	.....	1	.....	10	.....	.....	0	0	.....	Profs. Brandes & Reimer.
GREEK.																			
Athens	29.75	755 6	30.14	765.5	57.4	14.1	.....	n.	.....	.....	0.5	.....	9	.....	.....	0	0	covered	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	30.06	763.6	30.12	764.9	75.8	24.3	49	ene.	32.0	14.3	.....	.....	9	.....	.....	0	0	gloomy	
Deesa	29.52	749.8	30.00	762.0	78.7	25.9	31	wnw.	.....	.....	.....	.....	4	e.	.....	0	0	d. clouds	
Bombay	29.91	759.7	29.95	760.7	77.5	25.3	76	nw.	12.0	5.4	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yurrowda	28.08	713.3	29.92	760.0	84.5	29.2	19	ene.	4.0	1.8	.....	.....	2	ese.	.....	0	0	d. clouds	
Trichinopoly	29.70	754.2	29.98	761.5	77.2	25.1	73	ne.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.39	695.7	29.92	760.0	78.8	26.0	29	ene.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.32	744.6	30.09	764.4	64.6	18.1	58	calm	0	0	.....	.....	10	.....	.....	0	0	overcast	
Roorkee	29.10	739.1	30.02	762.6	68.8	20.4	54	w.	0.3	0.1	.....	.....	6	w.	.....	0	0	.....	
Agra	29.48	748.7	30.05	763 3	74.9	23.8	38	w.	2.0	0.9	.....	.....	4	.....	w.	0	0	d. clouds	
Nagpur	28.95	735 2	30.00	762.0	77.9	25.5	46	calm	0	0	.....	.....	2	e.	.....	0	0	d. clouds	
Jubbulpore	28.66	727.8	30.04	763.0	73.2	22.9	46	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.63	752.5	30.01	762.3	76.7	24.8	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.68	753.8	30.00	762.0	68.4	20.2	74	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.82	757.3	30.01	762.1	71.7	22.1	67	w.	2.6	1.2	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.96	710 2	30.02	762.6	66.6	19.2	61	nw.	4.2	1.9	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.92	759.9	30.00	762.0	74.2	23.4	66	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.98	761.5	30.00	762.1	71.3	21.8	69	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.87	758.7	29.99	761.8	69.4	20.8	74	calm	1.1	0.5	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.91	759 7	30.00	762.1	69.8	21.0	74	calm	1.3	0.6	.....	.....	2	.....	.....	0	0	d. clouds	
Sibsagar	29.68	754.0	30.03	762.8	64.0	17.8	94	ne.	1.0	0.4	.....	.....	10	w.	w.	0.03	0.8	d. clouds	
Jeypore	28.59	726.2	30.06	763.5	72.7	22.6	45	ne.	2.7	1.2	.....	.....	8	.....	ne.	0	0	d. clouds	
ITALIAN.																			
Udine	29.70	754.4	30.12	765.0	51.8	11.0	90	ne.	1.8	0.8	.....	.....	10	.....	.....	0.512	13.0	.....	Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	WEATHER.	OBSERVERS.
ITALIAN.—Continued.																			
Milan	29.59	751.6	30.13	765.2	46.8	8.2	97	n.	2.5	1.1	.....	.....	10	.....	.....	0.114	2.9	.....	Prof. Schiapparelli.
Padua	30.00	761.9	30.11	764.8	49.8	9.9	99	nne.	5.6	2.5	.....	.....	10	nne.	.....	0.035	0.9	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.19	741.4	30.13	765.3	44.4	6.9	99	nnw.	3.1	1.4	.....	.....	10	.....	.....	0.217	5.5	.....	Prof. F. F. Denza.
Genoa	29.81	757.2	30.01	762.2	52.3	11.3	66	ne.	12.5	5.6	.....	.....	10	s.	.....	0.189	4.8	.....	Prof. G. M. Garibaldi.
Mondovi	28.17	715.5	30.15	765.8	42.1	5.6	95	sw.	.....	.....	2	.....	10	.....	.....	0.673	17.1	.....	Prof. D. C. Bruno.
Pesaro	30.05	763.3	30.10	764.6	46.8	8.2	97	w.	1.3	0.6	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.73	755.1	29.99	761.7	53.6	12.0	85	e.	.....	.....	2	.....	10	.....	.....	0.020	0.5	.....	Prof. Costantino Pittei.
Leghorn	29.83	757.6	29.91	759.8	56.8	13.8	73	ene.	12.5	5.6	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.73	755.2	29.91	759.7	57.0	13.9	74	nne.	4.3	1.9	.....	.....	10	.....	.....	0.024	0.6	.....	Prof. P. Tachini.
Lecce	29.82	757.3	30.07	763.8	57.9	14.4	75	sse.	20.6	9.2	.....	.....	10	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.11	739.3	30.01	762.3	52.7	11.5	74	sw.	2.5	1.1	.....	.....	10	s	.....	1.666	40.8	.....	Prof. D. Conti.
Cagliari	29.52	749.8	29.71	754.7	63.9	17.7	64	se.	.....	.....	6	.....	9	e.	.....	0.157	4.0	.....	Prof. A. Pacinotti.
Palermo	29.59	751.5	29.84	757.9	59.4	15.2	61	se.	7.4	3.3	.....	.....	10	.....	.....	0.823	20.9	.....	Prof. G. Caccintore
Syracuse	29.80	756.9	29.84	758.0	59.9	15.5	77	sse.	0.9	3.1	.....	.....	10	sse.	.....	0.850	21.6	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.40	746.7	29.91	759.8	59.0	15.0	66	nne.	1.3	0.6	.....	.....	10	sse.	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.16	562.9	.....	.....	25.0	— 3.9	91	ssw.	.....	.....	2	.....	8	.....	.....	0	0	misty	Prof. P. F. Denza.
Valdobbia	22.16	562.9	.....	.....	28.6	— 1.9	70	se.	.....	.....	2	.....	10	.....	.....	0	0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.07	763.9	30.10	764.7	37.1	2.8	68	nw.	.....	.....	2	.....	10 ck	.....	w.	0.896	22.7	cloudy	Hattori.
Awomori	29.98	761.5	30.01	762.2	34.0	1.1	62	w.	25.3	11.3	.....	0	6ck;ks	.....	w.	0.205	5.2	overcast	K. Ogawa.
Hakodate	29.93	760.3	29.94	760.6	32.5	0.3	92	w.	27.0	12.1	.....	.....	10	.....	.....	0.290	7.4	covered	
Hamamatsu	30.03	762.7	30.00	763.4	50.3	10.2	88	calm	.....	.....	2	2 ck	0	sw.	.....	0	0	fair	Y. Miwa.
Hiroshima, I. M. Obs'y	.....	.....	.....	.....	49.9	9.9	70	n.	11.8	5.3	.....	.....	10s;ck	.....	.....	0	0	cloudy	
Kanazawa	30.10	764.6	30.21	767.3	36.6	2.7	94	ese.	6.8	3.0	.....	.....	10	.....	.....	0.879	22.3	raining	S. Endo.
Kioto	29.89	759.2	30.07	763.8	51.0	10.6	88	wnw.	5.4	2.4	.....	.....	10 n	.....	.....	0.051	1.3	light rain	M. Tojima.
Nagasaki, I. M. Obs'y	30.01	762.1	30.21	767.4	49.9	9.9	86	nne.	7.5	3.3	.....	.....	10 s	.....	n.	0.410	10.4	overcast	S. Takehayashi.
Niigata	30.14	765.5	30.17	766.3	37.9	3.3	92	nw.	4.7	2.1	.....	.....	10 n	.....	.....	0.910	23.1	light rain	M. Morita.
Nobiru	29.98	761.4	29.99	761.8	40.6	4.8	77	nw.	31.3	14.0	.....	.....	9 s;ks	.....	nw.	0	0	cloudy	H. Midzushima.
Numazu	29.94	760.5	29.98	761.4	61.2	16.2	76	ssw.	.....	.....	7	3 cs	0	w.	.....	0	0	fair	R. Kaneda.
Osaka	30.07	763.7	30.08	764.1	54.1	12.3	82	w.	6.1	2.7	.....	.....	10 s	.....	.....	0.065	1.6	cloudy	H. Omura.
Supporo	.....	.....	.....	.....	27.5	— 2.5	62	nw.	9.6	4.3	.....	2	0	.....	.....	0.005	0.1	clear	
Tokei Obs'y, Yeddo	29.87	758.7	29.94	760.6	59.8	15.4	72	sw.	8.2	3.7	.....	2 ck	6 ck;s	w.	w.	0	0	cloudy	The Staff.
Wakayama	30.03	762.7	30.09	764.2	55.6	13.1	76	nw.	7.8	3.5	.....	7 ck	3 ck	wsw.	w.	0	0	cloudy	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.77	756.1	29.96	761.0	79.7	26.5	66	ne.	13.0	5.8	.....	0	8 k;ks	.....	ne.	0	0	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.68	601.5	29.90	759.5	47.1	8.4	95	ene.	5.8	2.7	.....	1 c	0	ne.	.....	0	0	light fog	Prof. Vicente Fernandez.
Leon	24.36	618.7	30.12	765.0	50.0	10.0	80	calm	.....	.....	0	3 c	2 ck	.....	w.	0	0	½ cloudy	Prof. M. Leal.
Mazatlan	29.63	752.6	29.89	759.2	70.5	21.4	92	ese.	0.9	0.4	.....	9 cs	0	sw.	.....	0	0	very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.13	587.4	30.27	768.9	47.7	8.7	77	calm	0	0	.....	0	9 km	.....	.....	0	0	cloudy	The Staff.
Morelia	24.20	614.7	30.01	762.3	41.4	5.2	67	se.	.....	.....	2	2 c	4 k	se.	s.	Imap.	Imap.	½ cloudy	M. Tena, M. D.
Pabellon, Aguascallentes	24.03	610.3	30.15	765.7	49.8	9.9	53	nne.	.....	.....	3	2 c	1 s	sw.	nne.	0	0	clear	M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.39	593.7	30.50?	764.6?	54.5	12.5	44	calm	0	0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.55	572.8	30.30	769.7	41.89	5.0?	78	nne.	14.8	6.6	.....	0	3 s	.....	ne.	0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.00	762.1	30.00	762.1	37.8	3.2	.....	ese.	.....	.....	3	.....	.....	.....	.....	0.012	0.3	.....	
Groningen	30.02	762.5	30.08	763.9	40.5	4.7	.....	se.	.....	.....	1	.....	.....	.....	.....	0.097	1.7	.....	
Helder	30.06	763.4	30.06	763.4	38.3	3.5	.....	se.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.02	762.6	30.02	762.6	30.0	2.2	98	e.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	30.01	762.3	30.06	763.5	41.2	5.1	94	s.	.....	.....	2	.....	5	.....	.....	0	0	cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	30.18	766.5	30.24	768.1	30.6	— 0.8	77	sse.	5	2	.....	.....	7	.....	.....	0	0	.....	
Brono	30.30	769.6	30.34	770.6	19.8	— 6.8	68	calm	0	0	.....	.....	2	.....	.....	0	0	.....	
Christiania	30.22	767.7	30.38	771.7	20.7	— 6.3	87	e.	5	2	.....	.....	2	.....	.....	0.004	0.1	.....	
Gjæsvær	30.04	762.9	30.06	763.5	19.8	— 6.8	.....	nnw.	.....	.....	6	.....	8	.....	.....	.....	.....	.....	
Lodingen	30.22	767.7	30.27	768.9	23.5	— 4.7	81	wsw.	.....	.....	2	.....	9	.....	.....	0.047	1.2	.....	
PORTUGUESE.																			
Angra, Azores	29.85	758.1	30.00	762.1	63.0	17.2	86	wnw.	6.3	2.8	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.04	737.5	30.06	763.6	47.8	8.8	100	sse.	0.7	0.3	.....	.....	10	.....	.....	0.354	9.0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.00	763.0	30.15	765.8	68.0	20.0	72	sw.	1.8	0.8	.....	.....	2	.....	.....	0.039	1.0	.....	Capt. D. A. de Ounha.
Lisbon, Observatory	29.69	754.2	30.00	763.6	49.8	9.9	100	ese.	2.5	1.1	.....	.....	10	.....	.....	0.303	7.7	foggy	The Staff.
Ponta Delgada, Azores	29.93	760.2	30.00	762.0	66.9	19.4	79	nw.	4.3	1.9	.....	.....	3	.....	.....	0.071	1.8	.....	
Saint Paul de Loando	29.01	752.2	29.81	757.2	83.1	28.4	73	wsw.	2.5	1.1	.....	.....	3	se.	.....	0	0	.....	
Serra da Estrella	25.17	639.4	29.98	761.5	39.2	4.0	100	w.	15.4	6.9	.....	.....	10	.....	.....	0.528	13.4	foggy	
RUSSIAN.																			
Akmolinski	29.60	751.9	30.81	782.6	10.2	—12.1	100	calm	0	0	.....	.....	10 n	.....	.....	.....	.....	.....	Major K. Lasarew.
Archangel	29.94	760 4	29.96	760.9	9.0	—12.8	88	se.	2	1	.....	.....	10	.....	.....	0	0	.....	Capt. Sselwerstow.
Astrakhan	30.40	773.7	30.38	771.7	30.5	— 2.5	70	ese.	2	1	.....	.....	9 s	.....	.....	0	0	light clouds	Capt. Wisganow.
Barnaul	30.51	775.0	31.10	789.8	— 9.4	—23.0	66	calm	0	0	.....	.....	8	.....	.....	0	0	light clouds	Meteorological Obs'y.
Bielosersk	29.58	751.2	30.08	764.1	10.4	—12.0	90	sse.	2	1	.....	.....	10 n	.....	.....	0.280	7.1	snowing	
Dorpat	29.65	753.2	29.91	759.6	30.9	— 0.6	100	w.	2	1	.....	.....	10 n	.....	.....	0.150	3.8		Observatory.
Ekaterinburg	29.50	750.7	30.02	777.7	10.6	—11.9	90	ssw.	4	2	.....	.....	10	.....	.....	0	0	foggy	Metecrological Obs'y.
Elisawetgrad	29.92	759.9	30.41	772.3	22.5	— 5.3	87	se.	0	0	.....	.....	10 s	.....	.....	c	0		
Kasan	30.26	768.7	30.56	776.3	9.7	—12.4	76	sw.	7	3	.....	.....	10	.....	.....	.....	.....	lightsnow	Observatory.
Kem	29.99	761.8	.....	.....	1.8	—16.8	90	nw.	22	10	.....	0	7 ks	.....	.....	0	0	light clouds	
Kertch	30.20	767.0	30.22	767.5	34.7	— 1.5	93	ne.	4	2	.....	0	8 n	.....	.....	0	0		Lagorio & Sastyres.
Kieff	29.61	752.0	30.29	769.3	25.5	— 3.6	98	se.	7	3	.....	.....	10 n	.....	.....	.....	.....	light snow	Observatory.
Libau	30.04	763.1	30.07	763 7	35.6	2.0	84	nw.	.....	.....	1	.....	10	.....	.....	0.028	0.7	.....	E. Quaas.
Lugan	30.15	765.9	30.37	771.5	19.9	— 6.7	81	ene.	9	4	.....	.....	10	.....	.....	0.063	1.6	.....	Meteorological Obs'y.
Moscow	29.70	756.0	30.30	769.5	12.9	—10.6	93	sse	7.8	3.5	.....	0	9 ks	.....	.....	0	0	.....	
Nikolaiev	30.31	769.9	30.39	771.8	21.9	— 5.6	93	ene.	4	2	.....	.....	10 n	.....	.....	0	0	.....	Capt. Kurdakow.
Pekin, China	30.04	778.2	30.78	781.8	17.6	— 8.0	28	nw.	7	3	.....	1 cs	0	.....	.....	.....	.....	.....	Physical Obse; vatory.
Petrozavodsk	29.70	756.0	29.98	761.5	16.2	— 8.8	85	sse.	7	3	.....	.....	10	.....	.....	0.098	2.5	.....	Dr. Bergmann.
Pinsk	29.62	752.3	.....	.....	33.8	1.0	94	s.	13	6	.....	.....	10 s	.....	.....	0.020	0.5	.....	
St. Petersburg	29.87	758.8	29.89	759.2	24.4	— 4.2	89	se.	4	2	.....	.....	10 n	.....	.....	0.161	4.1	.....	Central Physical Obs'y.
Sevastopol	30.00	702.1	30.17	760.3	48.6	9.2	70	ne.	16	7	.....	0	5 n	.....	.....	0	0	.....	
Semipalatinsk	30.35	770.9	31.12	790.5	— 9.0	—22.8	68	e.	16	7	.....	.....	0	.....	.....	0	0	.....	Major Lasarew.
Staroi Bykhov	29.73	755.2	30.22	767.6	27.0	— 2.8	100	se.	9	4	.....	.....	10	.....	.....	0.055	1.4	light fog	
Tashkend, Laboratory	28.84	732 4	30.50	774.6	34.5	1.4	66	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.78	731.1	30.24	768.1	46.6	8.1	64	e.	2	1	.....	9 ck	0	.....	.....	0	0	.....	Physical Observatory.
Tomsk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vladivostock	30.24	768.1	30.31	769.8	— 2.0	—18.9	58	n.	7	3	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.70	754 3	30.13	765.4	35.2	1.8	98	wnw.	9	4	.....	.....	10	.....	.....	.....	.....	hv'y clouds	Astronomical Obs'y.
Wilna	29.61	752.0	30.04	763.1	35.1	1.7	96	sse.	2	1	.....	.....	10	.....	.....	.....	.....	hv'y clouds	Berg, Assistant.
Yeniseisk	30.75	781.1	31.10	789.9	—20.0	—28.9	87	calm	0	0	.....	.....	1	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.73	755.1	45	7.2	92	se.	.....	.....	6	.....	10	.....	.....	0.2	5.	overcast	J. Youngclause.
North Unst	.....	.....	30.15	765.8	.....	.....	.....	e.	.....	.....	6	3	5	se.	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.82	757.4	29.93	760.1	57.2	14.0	79	e.	4.0	1.7	.....	.....	10	.....	.....	0.031	0.8	covered	Antonio Reve, Director.
Bilbao, Met. Obs'y	29.71?	754.5?	29.70?	756.0?	59.5	15.3	42	se.	2.0	0.9	.....	.....	0	.....	.....	0	0	clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.02	686.3	30.08	764.1	39.2	4.0	85	w.	4.7	2.1	.....	.....	10	.....	.....	0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.81	706.3	30.12	765.1	39.2	4.0	94	n.	3.1	1.4	.....	.....	10	.....	.....	0.024	0.6	covered	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	29.82	757.4	29.96	761.0	59.4	15.2	74	n.	4.0	1.8	.....	5	4	se.	.....	0	0	almost cov'd	Olayo Diaz, Director.
Oviedo	29.01	736.8	29.89	759.1	45.5	7.5	87	e.	5.1	2.3	.....	.....	10 k	.....	w	0	0	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.92	734.6	29.82	757.5	52.9	11.6	86	sw.	7.4	3.3	.....	.....	6	.....	.....	0.528	13.4	cloudy	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.88	759.0	29.94	760.4	78.4	25.8	76	n.	1.1	0.5	.....	0	5 ks	.....	ne.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.98	761.5	30.08	764.0	58.3	14.6	93	calm	0	0	.....	.....	10	.....	wnw.	1.198	30.4	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.89	759.3	29.98	761.6	76.6	24.8	87	calm	0	0	.....	2 s	8 kn	n.	se.	0	0	overcast	Manuel Muese.
Tuguegarao, Philippine Id's	29.91	759.6	30.04	763.0	72.7	22.6	94	nw.	6.3	2.8	.....	0	4 ks	.....	ne.	0	0	partly cld'y	José L. Yrastorza.
SWEDISH.																			
Haparanda	30.30	769.6	30.34	770.6	—13.7	—25.4	100	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....
Umea	30.28	769.2	30.34	770.5	— 2.9	—19.4	87	nnw.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....
Hernosand	30.32	770.0	30.37	771.3	10.0	—12.2	77	calm	.....	.....	0	.....	0	.....	.....	0.165	4.2	.....	.....
Stockholm	30.05	763.3	30.23	767.8	23.7	— 4.6	72	nnw.	.....	.....	7	.....	8	.....	.....	0.154	3.9	.....	.....
Wisby	30.06	763.6	30.12	765.1	32.0	0.0	78	nne.	.....	.....	7	.....	7	.....	.....	0.008	0.2	.....	.....
Sub-series.																			
Upsala	30.18	766.5	30.26	768.7	18.3	— 7.6	96	nnw.	14.5	6.5	.....	.....	8	.....	nne.	0.004	0.1	....	S. G. Fineman.
SWISS.																			
Geneva	28.61	726.7	30.10	764.4	35.8	2.1	100	se.	.....	.....	1	.. ..	10	.....	.....	0.035	0.9	foggy	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.24	768.2	49.5	9.7	73	n.	11	5.0	.....	.....	9	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.08	764.1	56.7	13.7	.....	ne.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.08	764.0	66.9	19.4	60	w.	.....	.....	1	.....	1 ks	.....	sw.	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.70	754.4	29.79	756.7	23	— 5.0	61	nw.	3	1.3	.....	.....	10 s	.....	nw.	0.06	1.5	cloudy	J. O. Barnes.
Alpena, Michigan	29.30	744.2	30.01	762.2	16	— 8.9	83	nw.	11	4.9	.....	.....	10 n	.....	.....	0.02	0.5	light snow	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.22	640.6	30.30	769.6	28	— 2.2	61	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	27.10	688.3	30.13	765.3	39	3.9	73	sw.	22	9.8	.....	0	3 s	.....	sw.	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	28.93	734.8	30.10	766.1	16.5	— 8.6	67	nw.	14	6.3	.....	3 cs	0	.....	.....	0	0	clear	H. C. Smith.
Atlantic City, New Jersey	29.80	758.4	29.87	758.7	19	— 7.2	70	nw.	7	3.1	.....	0	4 s	.....	.....	0	0	fair	Jas. M. Watson.
Augusta, Georgia	29.91	759.7	30.11	764.8	32	0.0	50	n.	8	3.6	.....	4 k	0	nw.	.....	0.08	2.0	fair	John Healy.
Baltimore, Maryland	29.90	759.4	29.95	760.7	23	— 5.0	61	nw.	7	3.1	.....	0	hz.	.....	.....	0	0	clear	Geo W Felger.
Barnegat, New Jersey	29.83	757.7	29.85	758.2	20.5	— 6.4	70	nw.	16	8.0	.....	0	7 s	.....	sw.	0	0	fair	G. A. Hill.
Behring Id., Behring Sea	29.87	758.7	29.89	759.2	28.0	— 2.2	.....	n.	24	10.7	.....	.....	10 n	.....	.....	0	0	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.45	722.0	30.21	767.3	16	— 8.9	76	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	A. Pritchard.
Benton, Fort, Montana	27.18	690.4	30.18	765.6	42	5.6	67	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.05	712.5	30.06	763.5	15	— 9.4	83	se.	5	2.2	.....	hz.	0	.....	.....	0	0	dense haze	Cyrus Cramor.
Block Island, Rhode Island	29.73	755.1	29.76	755.9	22	— 5.6	88	nw.	12	5.4	.....	0	9 ks	.....	w.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.36	694.9	30.34	770.6	25	— 3.9	88	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	B. E. Light.
Boston, Massachusetts	29.54	750 3	29.70	754.4	20.0	— 6.7	70	w.	10	4.5	.....	0	3 s	.....	sw.	0	0	clear	O. B. Cole.
Brownsville, Texas	30.40	772.1	30.45	773.4	39.0	3.9	66	n.	10	4.5	.....	0	0	.....	.....	0.03	0.8	clear	M. McCarty.
Buffalo, New York	29.08	738.6	29.88	758.9	13.2	—10.4	85	w.	13	5.8	.....	.....	10 n	.....	w.	0.04	1.0	light snow	W. Finn.
Buford, Fort, Dakota	27.85	707.4	30.09	764.3	23	— 5.0	73	w.	9	4.0	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.47	748.5	29.78	750.4	8.9	—12.8	80	e.	3	1.3	.....	.....	10 s	.....	se.	Inap.	Inap.	cloudy	G. O. Schneffer.
Cairo, Illinois	29.98	761.5	30.40	772.1	14.0	—10.0	80	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	W. H. Ray.
Cape Henry, Virginia	29.95	760.7	29.97	761.2	28	— 2.2	64	nw.	32	14.3	.....	4 ck	5 ks	s.	n.	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	29.87	758.7	29.90	759.4	24.0	— 4.4	76	nw.	31	13.9	.....	0	0	.....	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	29.98	761.5	30.00	762.0	41	5.0	65	n.	20	8.9	.....	.....	10 s	.....	.....	0.45	11.4	cloudy	F. W. Mixer.
Champaign, Illinois	29.42	747.3	30.29	769.4	0.0	—17.8	68	nw.	11	4.9	.....	0	0	.....	.....	0	0	clear	L. A. Welsh.
Charleston, S. Carolina	29.90	759.4	29.96	761.0	35	1.7	64	n.	15	6.7	.....	0	8 s	.....	n.	0	0	cloudy	J. H. Smith.
Charlotte, N. Carolina	29.14	740.1	30.02	762.5	21.0	— 6.1	70	n.	5	2.2	.....	0	fg.	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.38	746.2	30.24	768.1	16.0	— 8.9	67	nw.	12	5.4	.....	1 k	0	nw.	.....	0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	24.10	612.1	30.38	771.6	31.8	— 0.1	60	nw.	8	3.6	.....	0	0	.....	.....	0.01	0.3	clear	E. McGovern.
Chicago, Illinois	29.49	749.0	30.25	768.3	2.1	—16.6	76	w.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. Mitchell.
Chincoteague, Virginia	29.90	759.4	29.92	760.0	25	— 3.9	64	nw.	17	7.6	.....	0	7 ks	.....	w.	0	0	fair	O. F. Dickens.
Cincinnati, Ohio	29.54	750.3	30.24	768.1	12	—11.1	61	nw.	4	1.8	.....	4 k	2 s	w.	w.	0	0	fair	R. B. Watkins.
Cleveland, Ohio	29.25	742.9	30.04	763.0	11.8	—11.2	100	w.	12	5.4	.....	.....	10 n	.....	.....	0.05	1.3	light snow	J. B. Newlin.
Coleman City, Texas	28.57	725.7	30.47	773.9	22	— 5.6	88	calm	0	0	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.22	742.2	30.13	765.3	14	—10.0	63	w.	10	4.5	.....	.....	10 s	.....	w.	Inap.	Inap.	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.43	722.1	30.45	773.4	20.0	— 6.7	73	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.89	683.0	30.29	769.4	35	1.7	72	w.	8	3.6	.....	0	2 s	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.67	753.6	30.38	771.6	2	—16.7	72	nw.	9	4.0	.....	0	hz.	.....	.....	0	0	clear	R. R. Martin.
Davis, Fort, Texas	25.42	645.7	30.36	771.1	21	— 6.1	61	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.40	721.3	30.23	767.8	35.2	1.8	99	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	D. Moore.
Deadwood, Dakota	25.34	643.6	30.34	770.6	38	3.3	66	ne.	4	1.8	.....	0	hz.	.....	.....	0	0	clear	F. Willson.
Delaware Breakwater, Del.	29.89	759.2	29.91	759.7	24	— 4.4	88	nw.	22	9.8	.....	.....	10 ks	.....	s.	0	0	cloudy	T. S. Townsend.
Denison, Texas	29.62	752.3	30.47	773.9	20.0	— 6.7	84	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24.85	631.2	30.37	771.4	38.0	3.3	46	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.44	747.8	30.42	772.7	3	—16.1	47	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. W. Conrad.
Detroit, Michigan	29.29	744.0	30.05	763.3	20.0	— 6.7	84	w.	10	4.5	.....	.....	10 k	.....	w.	Inap.	Inap.	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.59	700.8	30.39	771.9	18	— 7.8	70	s.	1	0.4	.....	0	fg.	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.60	751.8	30.37	771.4	— 3.2	—19.6	23	nw.	5	2.2	.....	0	2 s	.....	n.	0	0	clear	J. Harvey Smith.
Duluth, Minnesota	29.44	747.8	30.24	768.1	—10	—23.3	70	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	N. B. Conger.
Eagle Pass, Texas	29.69	754.1	30.53	775.4	31.2	— 0.4	68	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.53	648.5	30.45	773.4	25	— 3.9	88	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	29.58	751.3	29.65	753.1	11.5	—11.4	70	w.	9	4.0	.....	0	4 s	.....	nw.	0	0	fair	D. C. Murphy.
Elliott, Fort, Texas	27.43	696.7	30.39	771.9	17	— 8.3	53	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.52	673.6	30.38	771.6	29.0	— 1.7	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.15	740.4	29.92	760.0	21	— 6.1	84	nw.	24	10.7	.....	.....	10 n	.....	.....	0.05	1.3	light snow	Peter Wood.
Escanaba, Michigan	29.42	747.3	30.14	765.5	12.0	—11.1	80	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	George Heathcote.
Fredericksburg, Texas	28.47	723.1	30.29	769.4	30	— 1.1	80	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	30.35	770.9	30.40	772.1	38	3.3	62	ne.	27	12.1	.....	2 cs	0	nw.	.....	0	0	clear	E. O'C. Macinernay.
Grand Haven, Michigan	29.40	746.7	30.11	764.8	22.0	— 5.6	88	w.	16	7.2	.....	.....	10 n	.....	w.	0.10	2.5	light snow	J. E. Mueller.
Grant, Fort, Arizona	25.40	645.1	30.28	769.1	32	0.0	81	n.	2	0.9	.....	1 cs	0	.....	.....	0	0	clear	Robert C. Lord.
Hatteras, North Carolina	29.88	758.9	29.90	759.4	32	0.0	78	n.	32	14.3	.....	9 k	0	e.	.....	0.03	0.8	threatening	R. M. Crawford.
Helena, Montana	25.82	655.8	30.20	767.1	33	0.6	74	sw.	6	2.7	.....	3 ck	0	calm	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	29.41	747.0	30.49	774.4	19	— 7.2	70	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. P. Sherry.
Huron, Dakota	28.70	729.0	30.24	768 1	9.8	—12.3	69	se.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.39	746.5	30.24	768.1	6	—14.4	76	nw.	6	2.7	.....	.....	10 s	.....	nw.	0	0	cloudy	O. Schutze.
Indianola, Texas	30.43	772.9	30.46	773.7	35.1	1.7	59	n.	26	11.6	.....	0	0	.....	.....	0	0	clear	I. A. Reed.
Jacksboro, Texas	29.19	741.4	30.43	772.9	17	— 8.3	67	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	29.95	760.7	30.00	762.0	39	3.9	65	nw.	8	3.6	.....	.....	10 s	.....	.....	0.50	12.7	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.46	697.5	30.16	766.1	21	— 6.1	73	sw.	3	1.3	.....	0	2 s	.....	.....	0	0	clear	A. Schneider.
Keokuk, Iowa	29.70	754.4	30.41	772.4	3.0	—16.1	72	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. Z. Gosewisch.
Key West, Florida	29.82	757.4	29.84	757.9	74.0	23.3	90	nw.	21	9.4	.....	.....	10 n	.....	nw	0.17	4.3	light rain	R. H. Paxton.
Kittyhawk, North Carolina	29.92	760.0	29.94	760.5	27.5	— 2.5	82	nw.	30	13.4	.....	0	8 s; ks	.....	n.	0.28	7.1	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.12	739.6	30.20	767.1	15.5	— 9.2	74	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.47	748.5	30.32	770.1	— 8	—22.2	100	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	S. C. Emery.
Leavenworth, Kansas	29.50	749.3	30.46	773.7	13	—10.6	80	n.	1	0.4	.....	2 cs	0	.....	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.40	746.7	30.28	769.1	38.0	3.3	82	s.	2	0.9	.....	0	2 s	.....	.....	0	0	clear	W. Bell.
Little Rock, Arkansas	30.10	764.5	30.43	772 9	23	— 5.0	46	nw.	5	2.2	.....	0	0	.....	.....	0.06	1.5	clear	W. U. Simons.
Los Angeles, California	29.68	753.9	30.08	764.0	60	15.6	34	ne.	10	4.5	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.66	753.4	30.26	768.6	13	—10.6	61	nw.	12	5.4	.....	0	1 k	.....	nw.	0	0	clear	L. M Dey.

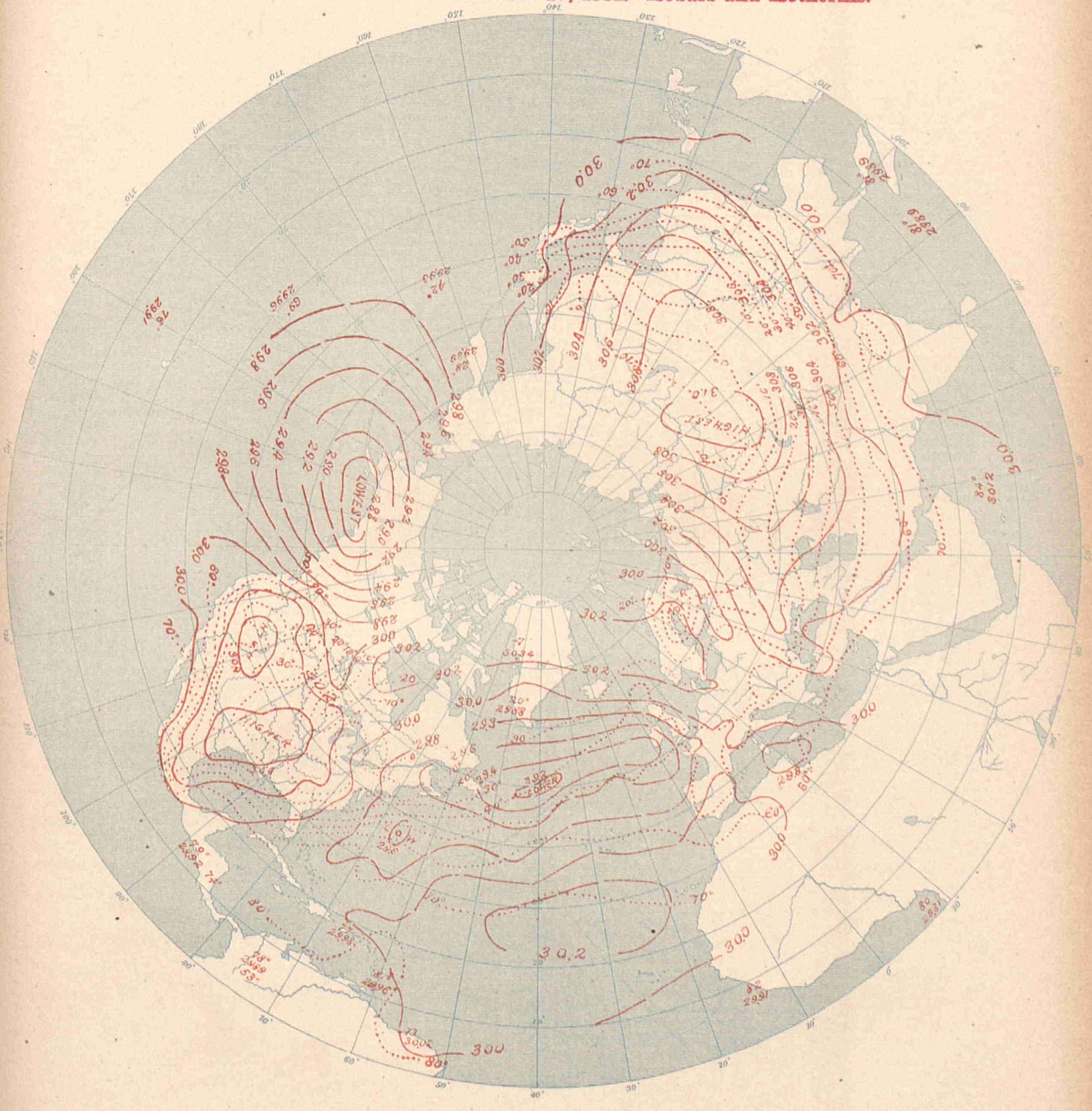
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.28	743.7	30.01	762.2	22	— 5.6	73	nw.	1	0.4		0	3 s		nw.	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.38	746.2	30.08	764.0	18.0	— 7.8	83	nw.	12	5.4			10 s		nw.	0.05	1.3	cloudy	F. R. Day.
Macon, Fort, North Carolina	29.90	759.4	29.92	760.0	30	— 1.1	56	nw.	22	9.8			10 k		nw.	inap.	inap.	cloudy	C. A. Shaw.
Madison, Wisconsin	29.19	741.4	30.29	769.4	2	—16.7	72	nw.	12	5.4			10 s		nw.	0	0	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.48	647.2	30.02	762.5	43	6.1	60	sw.	16	7.2			10 k		sw.	0	0	cloudy	F. Burke.
McKavett, Fort, Texas	28.09	713.5	30.47	773.9	26	— 3.3	67	sw.	3	1.3		0	0			0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.36	745.7	30.14	765.5	15	— 9.4	67	nw.	14	6.3			10 n			0.08	2.0	light snow	J. Gilligan.
Memphis, Tennessee	30.03	762.7	30.39	771.9	19	— 7.2	84	w.	12	5.4		0	0			0	0	clear	D. T. Flannery
Milwaukee, Wisconsin	29.42	747.3	30.23	767.8	3	—16.1	72	w.	10	4.5		0	0			0	0	clear	W. Line
Missoula, Fort, Montana	26.90	683.2	30.36	771.1	33	0.6	81	ne.	2	0.9			9 s			0	0	cloudy	I. H. Young.
Mobile, Alabama	30.22	767.6	30.26	768.6	27	— 2.8	64	n.	14	6.3		0	0			0.52	13.2	clear	C. A. Read.
Montgomery, Alabama	30.00	762.0	30.24	768.1	23	— 5.0	61	nw.	10	4.5		0	0			0	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	29.05	737.9	30.16	766.1	— 2	—18.9	100	s.	20	8.9			10 s		s.	0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.00	736.6	30.06	763.5	20.0	— 6.7	84	w.	15	6.7			10 n		w.	0.07	1.8	light snow	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.12	587.2	29.75	755.6	5.0	—15.0	79	n.	10	4.5		0	4 ks		n.	0	0	fair	B. S. Pague.
Nashville, Tennessee	29.70	754.4	30.31	769.9	16.5	— 8.6	83	nw.	9	4.0		0	0			0	0	clear	L. N. Jesunofsky.
New Haven, Connecticut	29.65	753.1	29.77	756.1	15	— 9.4	83	w.	7	3.1		0	2 s			0	0	clear	J. H. Sherman.
New London, Connecticut	29.74	755.4	29.80	756.9	18	— 7.8	83	w.	4	1.8		7 ck	0	w.		0	0	fair	J. G. Lynch.
New Orleans, Louisiana	30.25	768.3	30.31	769.9	33.5	0.8	46	n.	15	6.7		0	0			0.87	22.1	clear	L. Dunne.
Newport, Rhode Island	29.69	754.1	29.74	755.4	22.3	— 5.4	77	w.	14	6.3			10 s		w.	0	0	cloudy	W. McGillivray.
New York, New York	29.64	752.8	29.83	757.7	19	— 7.2	84	w.	10	4.5		1 cs	0			0	0	clear	J. B. Merrill.
Norfolk, Virginia	29.94	760.5	29.97	761.2	28	— 2.2	64	n.	7	3.1		3 ck	hz.	sw.		0	0	clear	Wm. Davis.
North Platte, Nebraska	27.18	690.4	30.34	770.6	11.6	—11.3	84	calm	0	0		0	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y.	29.82	757.4	29.86	758.4	52.0	11.1	93	s.	5	2.2			10 n			0.02	0.5	light rain	J. Dascomb.
Omaha, Nebraska	29.12	739.6	30.41	772.4	11.0	—11.7	76	s.	5	2.2		0	0			0	0	clear	A. Pollak.
Oswego, New York	29.46	748.3	29.81	757.2	16.0	— 8.9	83	nw.	8	3.6			10 n			0.13	3.3	light snow	J. G. Linsley.
Palestine, Texas	29.88	758.9	30.46	773.7	24.5	— 4.2	64	n.	8	3.6		0	0			0	0	clear	L. M. Pindell.
Pensacola, Florida	30.19	766.8	30.22	767.6	28.5	— 1.9	33	n.	15	6.7		0	0			0.58	14.7	clear	M. McGauran.
Philadelphia, Pa.	29.78	756.4	29.89	759.2	23	— 5.0	61	w.	6	2.7		0	0			0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.79	451.9	30.45	773.4	8	—13.3	83	ne.			7	0	6 s			0	0	fair	H. Hall.
Ploche, Nevada	24.24	615.7	30.41	772.4	33.5	0.8	62	nw.	2	0.9		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.17	740.9	30.03	762.7	14.0	—10.0	89	nw.	9	4.0		10 k	0	w.		0.11	2.8	cloudy	W. A. Reid.
Poplar River, Montana	27.70	703.6	30.06	763.5				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Ends, Louisiana	30.22	767.6	30.22	767.6	38.4	3.6	73	n.	39	17.4			10 s			0.47	11.9	cloudy	H. B. Boyer.
Port Huron, Michigan	29.25	742.9	29.98	761.5	15.1	— 9.4	87	nw.	13	5.8			10 s			0.14	3.6	cloudy	W. O. Bailey.
Portland, Maine	29.62	752.3	29.67	753.0	12.0	—11.1	61	nw.	3	1.3		0	2s;hz			0	0	dense haze	W. W. Elchelberger.
Portland, Oregon	30.02	762.5	30.09	764.3	49.8	9.9	94	s	3	1.3			10 s			0.02	0.5	cloudy	M. L. Hearne.
Portsmouth, N. C.					31	— 0.6	78	n.			7		10 s		n.	0.01	0.3	cloudy	F. S. Coburn.
Prescott, Arizona	24 94	633.5	30.31	769 9	23.6	— 4.7	76	sw.	2	0.9		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	29.68	753 9	29.71	754.6	20	— 6.7	70	w.	13	5.8		0	8 s		sw.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	29.82	757.4	29.82	757.4	62	16.7	93	ne.	6	2.7			10 n		ne.	0.35	8.9	light rain	W. J. Evans.
Red Bluff, California	29.81	757.2	30.18	766.6	41	5.0	100	nw.	7	3.1		0	0			0	0	clear	J. R. Williams.
Rochester, New York	29.12	739.6	29.83	757.7	11	—11.7	100	nw.	12	5.4			10 n			0.17	4.3	light snow	E. W. McGann
Roseburg, Oregon	29.59	751.6	30.16	766.1	43.4	6.3	93	e.	6	2.7			fg.			0	0	dense fog	J. J. Nanry.
Sacramento, California	30.11	764.8	30.19	766.8	40.4	4.7	89	calm	0	0		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.78	756.4	30.42	772.7	6.8	—14.0	85	nw.	11	4.9		0	sk			0	0	clear	J. H. Weber.
St. Michael, Fort, Alaska	29.16	740.7	29.20	741.7	—12	—24.4	100	calm	0	0		0	5 s			0	0	fair	A. P. Leavitt.
St. Paul, Minnesota	29.36	745.7	30.32	770.1	—11.0	—23.9	74	calm	0	0		3 cs	0			0	0	clear	P. F. Lyons.
St. Vincent, Minnesota	29.01	736.8	30.00	762.0	1.5	—16.9	85	s.	20	8.9			10 s			0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.97	659.6	30.51	774.9	37	2.8	56	calm	0	0		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.74	755.4	30.40	773.7	30.5	— 0.8	68	n	3	1.3		0	0			0	0	clear	T. J. Kenan.
San Diego, California	29.96	761.0	30.03	762.7	57.6	14.2	32	ne.	6	2.7		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.34	745 2	30.07	763.8	14.4	— 9.8	80	w.	12	5.4			10 s			0.03	0.8	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.79	756.7	29.82	757.4	21.0	— 6.1	70	w.	9	4.0		1 k	0	w.		0	0	clear	B. A. Blundon.
San Francisco, California	30.10	764.5	30.17	766.3	51	10.6	90	nw.	4	1.8		0	1s;fg		nw.	0	0	clear	N. Gorom.
Santa Fé, New Mexico	23.36	593.3	30.35	770.9	26	— 3.3	64	n.	7	3.1		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	29.94	760.5	30.04	763.0	37	2.8	61	n.	12	5.4			10 ks		n.	0.05	1.3	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.35	669.3	30.18	766.6	47	8.3	58	sw.	29	13.0		0	2 s			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	30.17	766.3	30.42	772.7	27	— 2.8	64	n.	8	3.6		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.16	740.7	30.49	774.4	17.5	— 8.1	66	calm	0	0		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24 51	622.5	30.35	770.9	24.5	— 4.2	82	se.	2	0.9		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	28.70	729.0	28.77	730.7	42.2	5.7	74	se.	29	13.0			10 ks		se.	1.28	32.5	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.96	761.0	30.40	773.7	16.0	— 8.9	83	calm	0	0		0	0			inap.	inap.	clear	J. B. Campbell.
Smithville, North Carolina	29.92	760.5	29.96	761.0	30	— 1.1	77	n.	12	5.4			9 s		w.	0	0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.16	715.3	30.29	769.4	36	2.2	92	calm	0	0			10 s			0.01	0.3	cloudy	H. Clifford.
Springfield, Illinois	29.64	752.8	30.37	771.4	8	—13.3	71	nw.	10	4.5		0	0			0	0	clear	T. B. Jennings.
Springfield, Massachusetts	29.62	752.3	29.70	755.9	12.0	—11.1	83	s.			1	0	fg.			0	0	clear	Charles Mayr.
Springfield, Mo.	28.91	734.3	30.44	773.2	10	—12.2	80	nw.	6	2.7		0	0			0	0	clear	J. B. Marbury.
Starkville, Miss.	29.84	757.9	30.34	770.6	20	— 6.7	91	nw.	9	4.0		0	0			inap	inap.	clear	C. Dill.
Stevenson, Fort, Dakota																			W. Burrows.
Stockton, Fort, Texas	27.27	692.6	30.41	772.4	21	— 6.1	87	sw.	6	2.7		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	29.62	752.3	29.68	753.9	15.3	— 9.3	67	nw.	16	7.2		3 c	0	w.		0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.47	697.7	30.29	769.4	35.5	1.9	73	e.			1	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.33	745.0	30.07	763.8	17	— 8.3	83	sw.	12	5.4			10 n			0.01	0.3	light snow	A. Buell.
Tucson, Arizona	27.09	703.3	30.19	766.8	52	11.1	43	se.	8	3.6		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.84	757.9	30.23	767.8	41	5.0	92	e.	1	0.4			10 s			0	0	cloudy	J. Daly.
Verde, Fort, Arizona					29.4	— 1.4	67	nw.			2	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	30.12	765.0	30.39	771.9	26.7	— 2.9	70	n.	10	4.5		0	0			inap.	inap.	clear	James Kenealy.
Visalia, California	29.80	756.9	30.18	766.6	37.0	2.8	92	ne.	1	0.4		0	0			0	0	clear	O. D. Stewart
Washakie, Fort, Wyoming	24.55	623 6	30.32	770.1	28.4	— 2.0	76	n.	2	0.9		0	1 k			0	0	clear	T. M. Ambler.
Washington, D. C.	29.86	758.4	29.98	761.5	20.2	— 6.6	81	nw.	2	0.9		0	0			0	0	clear	B. M. Pursell.
West Las Animas, Colorado	26.21	665.7	30.37	771.4	15	— 9.4	74	w.	3	1.3		0	2 s			0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.22	742.2	29.85	758.2	19	— 7.2	70	w.	14	6.3		10 c	0			inap.	inap.	cloudy	B. F. Hough.
Wilmington, N. Carolina	29.91	759.7	29.97	761.2	32	0.0	60	n.	13	5.8			10 s			0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.86	656.8	30.39	771.9	25	— 3.9	82	ne.	8	3.6		0	0			0	0	clear	J. Grover.
Yankton, Dakota	28.87	733.3	30.30	769.6	9	—12.8	55	se.	4	1.8		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.92	760.0	30.07	763.8	53.7	12.1	48	ne.	6	2.7		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.01	559.0			53.0	11.7	82	e.	1	0.4		4 c	3 ks	nw.	w.	0	0	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.77	756.1	29.83	757.7	67.7	19.8	94	s.	2	0.9		4cs;ck	k		w.	0	0	fair	Benito Vines, S. J.
Kingston, Jamaica, W. I.	29.92	760.0	29.93	760.2	78	25.6	79	e.	5	2.2		1 cs	3 s		e.	0	0	fair	Robert Johnston.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	77	25.0	91	se.			2		mist			0.040	1.0	misty	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.33	745.0	29.89	759.2	78	25.6	89	calm			0		10 ks		n.	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					74	23.3	95	e.			1	0	0			0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	28.57	725.7	28.63	727.2	27	— 2.8	77	n.			4		10 n					snowing	W. J. Fisher.
St. Thomas, W. I.	29.90	759.4	30.02	762.5	79	26.1	74	se.				2 c	5 k		se.	0	0	cloudy	Aug. Walloe.
York Factory, B. A	30.25	768.3	30.32	770.1	—22.0	—30.0		sw.	9	4.0			10 s		sw.	0	0	threatening	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower From.	Inch.	Mill	Character.	Direction from	
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.29	769.4	61.5	16.4	70	sw.			1		2	sw.						d. clouds.
H. M. S. Antelope, N. 34° 11′, E. 21° 01′	30.03	762.7	63	17.2		sse.			2		7	sse.				1	se.	d. clouds.
H. M. S. Audacious, N. 1° 21′, E. 103° 15′	29.79	756.7	79	26.1	90	ne.			1		2	nw.						d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			68	20.0	60	ene.			1		0					1	ene.	blue sky.
H. M. S. Boadicea, Saldanha Bay, Cape Colony	29.84	757.9				calm			0		3							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.08	764.0	69	20.6	70	calm			0		0							blue sky.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.50	774.7	38	3.3														
H. M. S. Comus, San Francisco, Cal	30.16	766.1	48.5	9.2	96	n.			3		4							foggy.
H. M. S. Curacoa, Yokohama, Japan	29.84	757.9	61.5	15.4	69	sw.			3-4		9							misty.
H. M. S. Diamond, Sydney, N. S. W*†	29.45	748.0	63	17.2	67	s			4-5		1							blue sky.
H. M. Dock-Yard, Bermuda, W. I	29.73	755.1	69	20.6	92	ssw.			2-3		4	ssw.						d. clouds.
H. M. S. Eclipse, N. 13° 15′, E. 73° 47′	29.81	757.2	83	28.3		calm			0		2							d. clouds.
H. M. S. Fawn, S. 29° 53′ E. 31° 04′	29.94	760.5	69.5	20.8	84	ese.			1		3					3	ese.	d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.97	761.2	62	16.7	83	calm			0		10							misty.
H. M. S. Heroine, N. 36° 30′, W. 14° 25′	30.00	762.0	63	17.2	83	wsw.			3		4	wsw.				4	wsw.	d. clouds.
H. M. S. Iron Duke, N. 1° 17′ E. 103° 51′	29.87	758.7	78	25.6	90	ne.			1		9	ne.						d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	29.70	754.4	69.3	20.7	82	s.			2		7					1	s.	squally.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.92	760.0	63	17.2		calm			0									d clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.21	767.3	51.5	10 8	86	n.			2		10	wsw.						d. clouds.
H. M. S. Monarch, N. 35° 00′, E. 21° 43′			65	18.3		ese.			3		10	ese.				2	ese.	overcast.
H. M. S. Rambler, S. 36° 15′, W. 55° 33′	30.09	764.3	56	13.3	93	ssw.			4		2	s.				3	s.	d. clouds.
H. M. S. Rocket, S. 22° 40′, W. 70° 51′	29.99	761.7	69	20.6	84	s.			2		2					2-3	sw.	d. clouds.
H. M. S. Serapis, N. 36° 30′, W. 1° 25′	30.01	762.2	60.5	15.8	85	ene.			2		10							overcast.
H. M. S. Starling, N. 2° 36′, E. 8° 00′	29.87	758.7	79.7	26.5	94	sse.			3-4		10					1	ssw.	raining.
H. M. S. Superb, N. 34° 32′ E. 30° 43′*	30.14	765 5	69	20.6	65	wsw.			2		3	wsw.						d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	30.02	762.5	65	18.3	100	calm			0		2							misty.
H. M. S. Sylvia, Fortescue Bay, Patagonia	29.57	751.1	52	11.1	79	wnw.			3		4	wnw.						d. clouds.
H. M. S. Tourmaline, N. 18° 40′ E. 71° 45′	29.96	761 0				nne.			2		2	n.						d. clouds.
H. M. S. Woodlark, Shat-el Arab river	30.09	764.3	55.5	13.1	80	wnw.			3-5		9	nw.						squally.
H. M. S. Zephyr, Chee-foo, China	30.62	777.7	24.5	— 4.2		nw.			3		2	nw.				2	nw.	d. clouds.
Portuguese Naval.																		
Tamega, Macao, China	30.12	765.1	70.7	21.5	89	nw.			1		4		nw.					d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.06	763.5	29	— 1.7	67	n.	9	4.0			5		n.	0.62	15.7			fair.
Navy Yard, Portsmouth, N. H	29.72	754.9	12	—11.1	?	nw.	11	4.9			0			0	0			clear.
Naval Hospital, Yokohama, Japan*	29.88	758.9	61	16.1	70	sw.			6		5		w.	0	0			clearing.
Adams, Sitka, Alaska *†	28 80	731.5	44	6.7	67	se.			7		10		se.					cloudy.
Alaska, San Francisco, Cal	30.07	763.8	51	10.6	100	nnw.			1		2			0	0			fair.
Alliance, Hampton Roads, Va	29.94	760.5	32	0.0	89	n.			2-3		5			0	0			fair.
Ashuelot, Nagasaki, Japan	30.22	767.6	51	10.6	93	n.			1		10		n.					cloudy.
Brooklyn, Keel Point, Patagonia	29.59	751.6	61	16.1	82	ssw.	14	6.3			2		calm	0	0	sm'h		fair.
Colorado, New York, N. Y	29.92	760.0	20	— 6.7	100	nw.	6	2.7			8		nw.	0	0			fair.
Enterprise, Norfolk, Va	29.99	761 7	31	— 0.6	48	n.			3		5		nw.					fair.
Essex, Callao, Peru	29.93	760.2	64	17.8	94	calm			0		2		se.			sm'h	s.	clear.
Franklin, Norfolk, Va	29.95	760.7	28	— 2.2	?	nnw.	10	4.5			8			0	0			fair.
Galena, Montevideo, Uruguay	30.12	765.0	62	16.7	83	ssw.			3		5		sw.			sm'h		fair.
Hartford, Swallow Bay, Patagonia*	29.72	754 9	50	10.0	78	w.			5-6		10		s;w	driz'l	driz'l	sm'h	wnw.	cloudy.
Independence, Mare Island, Cal	30.20	767.1	44	6.7	100	e.			1		0			0	0			foggy.
Iroquois, Callao, Peru	29.96	761.0	60	18.9	94	calm			0		10							overcast.
Jamestown, Boston, Mass	29.73	755.1	13	—10.6	81	se.			2		5		se.	0	0			hazy.
Juniata, Fayal, Azores Islands*	30.04	763.0	66	18.9	73	nnw.			3		5		nw.	sll't	sll't	sm'h		fair.
Kearsarge, Hampton Roads, Va	29.96	761.0	33	0.6	79	nnw.			3		5		sw.					fair.
Lackawanna, S. 11° 00′, W. 80° 50′*	29.89	759 2	70	21.1	84	s.			1		5		s.			sm'h	s.	fair.
Lancaster, Leghorn, Italy*	29.85	758.2	60	15.6	82	e.			4		10		e.			sm'h		cloudy.
Michigan, Erie, Pa	29.88	758.9	24	— 4.4	87	nnw.			4		10							snowing.
Minnesota, New York, N. Y	29.85	758.2	20	— 6.7	100	wnw.	3	1.3			2							fair.
Monocacy, Off Bokuren Island, Japan	30.19	766.8	48	8.9	100	n.			3		10		n.			sm'h		rainy.
New Hampshire, Newport, R. I	29.79	756.7	22	— 5.6	85	w.			4		5					mod.	nw.	fair.
Nipsic, Lisbon, Portugal*	30.01	762.2	58	14.4	81	calm			0		0					sm'h		foggy.
Onward, Callao, Peru†	30.07	763.8	64	17.8	94	calm			0		10					long	w.	foggy.
Palos, Tientsin, China*	30.65	778.5	18	— 7.8	100	n.			1		0							clear.
Pensacola, S. 9° 62′, W. 79° 17′*	29.87	758.7	69	20.6	84	se.			3		5		s.	0	0	long	s.	fair.
Powhatan, Boston, Mass	29.76	755.9	12	—11.1	80	w.			1		2							clear.
Quinnebaug, Villafranche, France*	29.90	759.4	63	17.2	57	ne.			1		10		calm			sm'h		cloudy.
Ranger, Salina Cruz, Mexico	29.96	761.0	79	26.1	65	nnw.			4		2		n.			sm'h		fair.
Richmond, Isaki Point, Japan*	30.17	766.3	50	10.0	78	nw.			1		10		n.					sprinkling.
Saratoga, Newport, R. I	29.70	754.4	22	— 5.6	72	wnw.			2-3		5		w.	0	0	sm'h		fair
St. Louis, League Island, Pa	30.12	765.0	20	— 6.7	85	nw.			1		2			0	0			clear.
Tennessee, Hampton Roads, Va	29.95	760.7	31	— 0.0	68	n.	12	5.4			5			0	0			fair.
Vandalia, Hampton Roads, Va*	29.93	760 2	28	— 2.2	88	n.			4		8							cloudy.
Wabash, Boston, Mass	29.73	755.1	13	—10.6	62	wnw.	5	2.2			2		w.	0	0			clear.
Wachusetts, Mare Island, Cal*	30.10	764.5	46	7.8	100	var.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.12	765.0	32	0.0	89	nw.			5		2		n.	0	0			fair.
Yantic, Hampton Roads, Va	30.00	762.0	31	— 0.6	79	nnw.			4		5							fair.
Merchant Marine.																		
S. S. Grecian, N. 31° 50′, W. 17° 25′*	30.17	766.3	67	19.4	84	nnw.			1		1		nnw.	½ h'r	½ h'r	long	nw.	clear
S. S. Nova Scotian, N. 54° 08′, W. 26° 43′	29.23	742.4	46	7.8		w.			2		10		sw.			mod.	ne.	cloudy.
S. S. Polynesian, N. 45° 53′, W. 45° 20′*	29.46	748.3	45	7.2		w.			5		6		w.	8 h'r	8 h'r	r'gh	wsw.	fair.
S. S. Scandinavian, Boston, Mass	29.76	755.9	13	—10.6		wsw.			3									blue sky.
S. S. Indiana, N. 43° 39′, W. 59° 42′			30	— 1.1	78	w.			5		10		w.	snow	snow	r'gh	w.	squally.
S. S. Lord Clive, N. 48° 43′, W. 41° 50′†*	29.30	744.2				wsw.			8		7		wsw.	10 h'r	10 h'r	cross	ene.	squally.
S. S. Lord Gough, Liverpool, Eng						se.			4		10		se.	0	0			foggy.
S. S. Ohio, N. 50° 25′, W. 29° 28′	29.51	749.5	49	9.4	93	w.			4		6		wnw.			mod.	wnw.	showery.
S. S. Pennsylvania, Philadelphia, Pa†	29.79	756.7	18	— 7.8		w.			2		2		w.					clear.
S. S. Castor, N. 41° 16′, W. 56° 00′	29.73	755.1	40.4	8		ene.			3		6		ene.			6	w.	fair.
S. S. Jason, N. 49° 52′, W. 14° 01′	29.54	756.3	51.8	11.0		wnw.			4		5 k?					3	nw.	clear. ?
S. S. Anchoria, N. 46° 16′, W. 48° 48′†	29.56	750.8				wsw.			6		1		wsw.	snow	snow	h'vy	w.	clear.
S. S. Bolivia, N. 55° 18′, W 6° 14′*†	29.78	756 4	46	7.8	92	s.			5		mist		se	0	0	r'gh		
S. S. Elysia, N. 47° 28′, W. 34° 34′ †	29.61	752.1	57	13.9		sw.			5		10		sw.	0	0	mod.	wsw.	squally.
S. S. Ethiopia, N. 54° 42′ W 13° 59′	29.29	744.0	47	8.3		ese.			4		10		ese.	20 h'r	20 h'r	sll't	se.	raining.
S. S. Galatia, Port Said, Egypt†	30.22	767.6	66	18.9	74	ene.			3		3			0	0			clear.
S. S. Alisa, N. 13° 35′, W. 75° 00′†	30.00	762 0	80	26.7	100	e.			5		5		e.	0	0	r'gh	e.	fair.
S. S. Alvo, Off Castle Island, Bahamas, W. I	29.90	759.4	70	24.4		wsw.			3-4		0			0	0	sll't	ssw.	cloudy.
S. S. Ambrose, N. 36° 28′, W. 66° 23′†	29.56	750.8	60	15.6		se.			6	7 ck	10		sse.	2 h'r	2 h'r	4	sse.	
S. S. Carroll, Charlottetown, P. E. Island*†	29.67	753.6	22	— 5.6		wnw.			6		8		wnw.	0	0			cloudy.
S. S. City of Agra, S. 44° 58′, E. 157° 10′	29.55	750.6	57	13.9	87	nw.			4		4							d. clouds.
S. S. Commewyne, N. 17° 5c′, W. 59° 07′	30.05	763.3	80.5	26.9	70	e.			4		3							d. clouds.
S. S. Gordon Castle, N. 6° 14′, E. 93° 07′	29.89	759 2	80.5	26.9	74	ne.			2-3		8							d. clouds.
Inchkeith, S. 25° 04′, E. 87° 59′	30.16	766.1	71	21.7	71	ese.			5		7							d. clouds.
Mertola, N. 49° 51′, W. 10° 14′	29.48	748 8	50.4	10.2	98	wsw.			4		5							d. clouds.
Ptolmey, N. 46° 30′. W. 33° 15′	29.67	753.6	55	12.8		wnw.			6		10							overcast.
S. S. Mexico, Guaymas, Mexico†	30.00	762.0	75	23.9	50	ne.			1		0							clear.
S. S. Bothnia, N. 44° 32′, W. 46° 55′	29.54	756.3	51	10.6	86	wnw.			6		5		w.	10 h'r	10 h'r	mod.	w.	
S. S. Marathon, Malaga, Spain	29.99	761.7	70	21.1		wnw.			2		4		wnw.	1 h'r	1 h'r	mod.	wnw.	fine.
S. S. Pavonia, N. 50° 02′, W. 22° 09′ *	29.54	750.3	52	11.1	?	n.			1		2		n.	light	light	sli't	n.	fine.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
									Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																	
S. S. Colina, N. 47° 30′, W. 49° 05′ †	29.26	743.2				wsw.			3	3		w.	snow	snow	long	n.	clear.
S. S. Labradore, Harve, France			51.8	11		se.			2	10		se.			sm'h		
S. S. Abyssinia, N. 45° 44′, W. 48° 13′ *	29.52	749.8	46	7.8	77	w.			6	4		w.	8 h'r	8 h'r	mod.	w.	d. clouds.
S. S. Wyoming, Liverpool, Eng	29.81	757.2	42	5.6		sse.			5	7		s.	0	0			foggy.
S. S. Bohemia, New York, N. Y†	29.78	756.4				wnw.			2–3	5		nw.	0	0			foggy.
S. S. Cimbria, N. 46° 12′, W. 47° 49′	29.47	748.5	35.6	2.0		w.			7	5?		w.	rain	rain	r'gh	w.	clear?
S. S. Gellert N. 53° 53′, E. 9° 15′	30.14	765.5	43	6.1		ese.			2	10							foggy.
S. S. Rugia, N 41° 51′, W. 61° 36′ *	29.74	755.4	43	6.1		nw.			6	8		nw.	snow	snow	7	nw.	
S. S. Silesia, Havre, France †	29.87	758.7	47.2	8.4	92	ene.			3	5		e.	0	0			d. clouds.
S. S. Vandalia, N 43° 33′, W. 54° 30′	29.75	755.6	41.9	5.5	88	w.			6	8		w.	0	0	cross	w.	cloudy.
S. S. Wieland, N. 50° 14′, W. 14° 40′	29.51	749.5				nnw.			4	2		n.	0	0	mod.	nnw.	fine.
S. S. City of Berlin, N. 44° —′, W. 57° —′	29.67	753.6	41	5.0	74	w.			6	7		w.	0	0	high	w.	cloudy.
S. S. Mentmore, Liverpool, Eng *.	29.75	755.6				se.			5	10		se.	0	0	sm'h		foggy.
S. S. Hevelius, N. 51° 15′, E. 4° 24′ *†	30.14	765.5	36	2.2		ese.			2	9			0	0			foggy.
S. S. Sirius, Bahia, Brazil *	29.91	759.7				n.			2	1		n.	0	0			clear.
S. S. Bulgarian, N. 51° 28′, W. 8° 21′*	29.54	750.3				ssw.			6	10		sw.	9 h'r	9 h'r	mod.	sw.	overcast.
S. S. Colorado, New York, N. Y †	29.92	760.0	18	— 7.8		wnw.			3	2		nw.	0	0			clear.
S. S. Rio Grande, Sandy Hook, N. J†	29.89	759.2	41	5.0		nnw.			3	5		nw.	0	0			hazy.
S. S. San Marcos, N. 36° 20′, W. 74° 40′			29	— 1.7		nw.			5	5		n.			mod.	n.	fine.
S. S. Archimede, New York, N. Y†	29.77	756.1	60	15.6	71	w.			3	2		w.					sleeting.
S. S. John Hopkins, Hampton Roads, Va			26	—3.3		n.			6	8			0	0			cloudy.
S. S. Glenapp, N. 16° 40, W. 23° 15′†	29.87	758.7				ene.			5	7		ene.	2 h'r	2 h'r	high	cross	cloudy.
S. S. Glenfyne, Bahia, Brazil *†	29.61	752.1				calm			0	1		e.	0	0			fair.
S. S. Chalmette, N. 29° 00′, W. 89° 06′ †	30.21	767.3	38	3.3		n.			1	1		n.	1 h'r	1 h'r			clear.
S. S. Lone Star, N. 37° 20′, W. 74° 45′ †	29.74	755.4	29	—1.7		n.			5	10		n.	6 h'r	6 h'r	rg'h	n.	cloudy.
S. S. Denmark, Dover, Eng†	29.88	758.9	45	7.2		sse.			5	10		sse.	3 h'r	3 h'r	sm'h		cloudy.
S. S. England, N. 51° 15′ W. 15° 12′	29.39	746.5				wnw.			5	8		wnw.	0	0	mod.	w.	cloudy.
S. S. Erin, New York, N. Y			33	0.6		nw.			3	6		nw.	0	0			fine
S. S. Helvetia, Liverpool, Eng	29.73	755.1	42	5.6		ssw.			5	10		sw.	0	0			hazy.
S. S. Holland, N. 45° 22′, W. 35° 59′	29.09	754.1	52	11.1		sw.			6	8		sw.	5 h'r	5 h'r	brk'n	w.	raining.
S. S. City of Merida, N. 19° 45′, W. 90° 44′ *†	29.88	758.9	77	25.0		n.			4	10		n.	0	0	r'gh	n.	cloudy.
S. S. Amsterdam, N. 43° 45′, W. 57° 40′ *	29.72	754.9	39	3.9		w.			5						5	w.	snowing.
S. S. Alene, N. 18° 14′, W. 75° —†	29.89	759.2	79	26.1		ene.			3						sm'h		clear.
S. S. Olbers, N. 36° 12′, W. 7° 10′ 30′ *†	29.55	750.6	50	10.0		nnw.			6							wnw.	drizzling.
S. S. America, N. 48° 31′, W 26° 27′*	29.03	752.6	52.0	11.1	73	nw.			4	4		wnw.	0	0	mod.	nnw.	fair.
S. S. Braunschweig, N. 31° 38′, W. 18° 18′	30.17	766.3	68.0	20.0	84	wsw.			3	3		wsw.	1 h'r	1 h'r	light	w.	
S. S. Elbe, N. 49° 44′, W. 16° 57′	29.49	749.0	48.2	9.0		nw.			2	3		nw.	0	0	mod.	w.	cloudy.
S. S. Gen. Werder, N. 40° 51′, W. 65° 09′	29.74	755.4	41.0	5.0		w.			4	10			4 h'r	4 h'r	mod.	w.	cloudy.
S. S. Hohenstaufen, S. 13° 47′, W. 35° 58′	29.96	761.0	86.0	30.0		ne.			3	4		e.	0	0	light	ne.	fair.
S. S. Neckar, N. 48° 33′, W. 23° 21′	29.65	753.1	51.0	10.6	86	wnw.			3	2		nw.	rain	rain	mod.	nw.	fair.
S. S. Ohio, N. 48° 12′, W. 27° 01′	29.64	752.8				nw.			3	4		nw.	0	0	mod	nw.	fair.
S. S. Rhein, N. 43° 28′, W 55° 22′	29.63	752.6				wnw.			0	2		wnw.	0	0	cross	wnw.	clear.
S. S. Werra, N. 48° 53′, W. 39° 00′*†	29.25	742.9	46.4	8.0		wsw.			6	10		wsw.	h'vy	h'vy	high	w.	raining.
S. S. Belgic, N. 40° 32′, W. 133° 35′†	29.99	761.7	66	18.9	65	ssw.			4	2		w.	0	0	mod.	s.	clear.
S. S. Gaelic, N. 37° 49′, W. 122° 27′ *	29.99	761.7	54	12.2	100	nw.			5	4		w.			sm'h		d clouds.
S. S. Oceanic, Hong Kong, China *	30.04	763.0	65	18.3	68	var.			2	1							clear.
S. S. Mississippi, N. 42° 33′, W. 124° 04′*†	30.24	768.1	54	12.2	87	sw.			2	9		sw.			mod.	w.	light fog.
S. S. Willamette, N. 42° 37′, W. 124° 48′†	30.15	765.8	53	11.7	93	s.			3	6		s.	0	0	long	wsw.	foggy.
S. S. Oregon, Portland, Oregon†	30.15	765.8	51	10.6	93	calm			0	10							gloomy.
S. S. Ancon, N. 35° 19′ W. 121° 00′†	30.06	763.5	57	13.9	94	ese.			2	0					sm'h		clear.
S. S. City of Chester, off Point Arena, Cal *†	30.00	762.0	54	12.2	61	nw.			4	0					light	nw.	clear.
S. S. Orizaba, N. 37° 12′ W. 119° 40′ *†	30.12	765.0	63	17.2	67	nw.			3	0					sm'h	nw.	clear.
S. S. State of California, San Francisco, Cal. *†	30.14	765.5	50	10.0		n.			2	0							clear.
S. S Muriel, N. 22° 15′, W. 64° 44′	29.95	760.7	79	26.1		s.			4	10		ne.	0	0			clear.
S. S. Caracas, Curacon, W. I †	29.93	760.2	80	26.7	87	ese.			4	2		se.	2 h'r	2 h'r	mod.	e.	drizzling.
S. S. Claudius, N. 9° 45′, W. 81° —′									4	0		se.	0	0	sm'h		fine.
S. S. Belgenland, N. 40° 14′, W. 71° 11′	29.79	756.7	32	0.0		nnw.			2	6		nw.	light	light	long	ne.	fair.
S. S. Pennland, New York, N. Y	29.88	758.9	22	—5.0	86	w.			6	8		w.	0	0	mod.	w.	cloudy.
S. S. Rhynland, Antwerp, Belgium	29.90	759.4	42	5.6	100	wnw.			4	2		w.	0	0			clear.
S. S. Switzerland, N 49° 08′, W. 43° 10′†	29.17	740.9				se.			2	10			0	0			dense fog.
S. S. Waesland, Antwerp, Belgium	30.07	763.8	37	2.8	100	wsw.			0	10		wsw.	snow	snow	mod.	wsw.	cloudy.
S. S. Leerdam, N. 50° 00′, W. 23° 41′			58	14.4	72	ese.			4	10		se.	0	0			clearing.
S. S. P. Caland, New York, N. Y	29.83	757.7	28.8	—1.8	97	wsw.			4	10		se.	0	0			clearing.
S. S. Schiedam, N. 50° 00′, W. 4° 16′	29.64	752.8	55.0	12.8	90	nw.			5	5		w.	0	0	mod.	w.	fair.
S. S. W. A. Scholten, Rotterdam, Holland	30.09	764.3	38.0	3.3	100	s.			3	1		nw.					clear.
S. S. Zaandam, N. 42° 17′, W. 59° 00′	29.75	755.6	55.0	12.8	81	sw.			5	5?		sse.	5 h'r	5 h'r	long	s.	cloudy.
S. S. State of Florida, N. 41° 33′, W. 62° 30′	29.64	752.8	43	6.1		wnw.			3	10		sw.	0	0			foggy.
S. S. State of Georgia, N. 46° 13′, W. 48° 16′ †	29.47	748.5	34	1.1		nw.			4	5 n		w.	1 h'r	1 h'r	4	w.	squally.
S. S. State of Indiana. Larne, Ireland †	29.74	755.4				w.			4	8		n.	snow	snow	mod.	wnw.	cloudy.
S. S. Hekla, N. 58° 30′, E. 3° 00′ *	30.16	766.0	46.4	8.0		se.			8	3		w.	3 h'r	3 h'r	r'gh	w.	clear.
S. S. Baltic, N. 51° 29′ W. 14° 36′	29.38	746.2	47	8.3	92	s.			6	10		se.	16 h'r	16 h'r			raining.
S. S. Celtic, New York, N. Y †	29.73	755.1	32	0.0		nw.			4–6	2		ssw.	0	0	sm'h		fair.
S. S. Lepanto, N. 48° 18′, W. 23° 35′ *	29.68	753.9	50	10.0		nw.			5	5		nw.	0	0			fair.
S. S. Marengo, N 40° 06′, W. 62° 50′	29.65	753.1				wnw.			5	4		nw.	0	0	h'vy	sw; w	clear.
S. S. Salerno, Hull, Eng*	29.62	752.3				wnw.			4	10		var.	20 h'r	20 h'r	mod.	wnw.	rainy.
S. S. Aries, N. 40° 15′, W. 73° 25′ ††	29.70	754.4				0.			1	10			0	0			hazy.
S. S. Catherine Whiting, Providence, R. I†	29.74	755.4	20	— 6.7		wnw.			5	5		nnw.	0	0	short	wnw.	fair.
S. S. Saxon, Boston, Mass †	29.61	752.1	30	—1.1		nw.			1			e.	0	0			
MISCELLANEOUS.						vsw.			4	0							fine.
Bg. Abbie Clifford, N. 36° 18′, W. 74° 50′ †	29.84	757.9	33	0.6		nnw.			5–6	10		nnw.	snow	snow	sm'h		
Bg. Alcira, N. 28° 48′, W. 73° 30′	29.78	756.4	75	23.9		ssw.			6	6		sw.	2 h'r	2 h'r	mod.	ne.	cloudy.
Bk. Alpha, N. 43° 05′, W. 12° 55′ †	29.75	755.6	58	14.4		wsw.			4	10		sw.	4 h'r	4 h'r	r'gh	nw.	cloudy.
Schr. Annie Lewis, N. 23° 42′, W. 95° 15′†	30.36	771.1	66	18.9		nnw.			5	8		nnw.	10 h'r	10 h'r	h'vy	nnw.	cloudy.
S. Annie M. Law, N. 14° 14′, E. 119° 00′*†	29.90	759.4	72	22.2		ne.			1	0			0	0	sm'h		fine.
Bk. Anna Thormann, S. 28° 16′ E. 41° 41′*	29.74	755.3	76.6	24.8	87	w.			6	10 n		w.	sh'rs	sh'rs	cross	nnw.	rainy.
S. S. Antonio Lopez, N. 31° 19′, W. 38° 34′ *	30.29	769.4	72	22.2	85	wsw.			2	1			0	0	long	nw.	clear.
Bk. Aquidneck, S. 23° 56′, W. 36° 49′ *†	30.10	764.5	80	26.7		var.			4			sw.	2 h'r	2 h'r	h'vy	sw.	cloudy.
Bgt. Arthur, N. 28° 30′, W. 27° 14′ *†	30.38	771.6				wnw.						nw.	0	0	high	nw.	
Schr. Anna Holton, N. 31° 31′, W. 72° 41′†	29.77	756.1	72	22.2		sw.			6	8		sw.	2 h'r	2 h'r	h'vy	nw.	cloudy.
Bg. Belle of the Bay, N. 25° 49′, W. 77° 53′ *†	30.00	762.0				nnw.			5	10		wsw.	2 h'r	2 h'r	r'gh	nnw.	light rain.
Bk. Champion, N. 22° 05′, W. 67° 15′			79.0	26.1		ese.			4	2		se.	¼h'r	¼h'r	mod.	ese.	fair.
Schr. Chas. F. Heyer, New York, N. Y	29.92	760.0	21	—6.1	85	wnw.			0	2 8			0	0			clear.
Bg. Clara M. Goodrich, Key Francis, W. I.*†	29.08	738.5				wsw.			4	3?		w.	0	0			cloudy.?
Schr. C. R. Flint, Cedar Keys, Fla			42	5.6		n.			6	10			3 h'r	3 h'r			cloudy.
Bkt. David Preston, Pensacola, Fla			60.0	15.6		ne.				0			0	0			fine.
Bk. E. L. Pettingill, N. 7° 02′, W. 117° 14′*†	30.00	762.0	81	27.2		ssw.			1	5		ssw.	light	light	mod.	sse.	lt. showers.
Schr. Edith R. Seward, Baltimore, Md.*†	29.94	760.5	23	—5.0		nw.			1	1			0	0			clear.
S. E. J. Spicer, N. 49° 39′, W. 16° 10′ *	29.48	748.8	54	12.2		w.			3	5		n.			mod.	n.	fair.
Bk. Eliza Barss, N. 39° 45′, W 73° 15′ *†	29.67	753.6				nw.			6	10		nw.			short	nw.	light snow.
Bk. Essex, N. 15° 31′ E. 59° 27′ *†	30.02	762.5	84	28.9					6				0	0			fine.
Schr. F. E. McDonald, Rockland, Maine †	29.69	754.1	3	—16.1		wnw.			1	0			0	0			fine.
S. S. Foscolia, New York, N. Y						nw.			6	0			0	0			fine.
Bk. Freya, N. 20° 50′, W. 80° 50′			79	26.1		w.			3	5		wnw.	0	0	sm'h		fair.
S. J. W. Gildemeister, N. 48° 48′ W. 14° 32′ *	29.51	749.5	50.0	10	50	w.			3	c 3	w.	w.	shr's	shr's	5	w.	d. clouds.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bg. George, N. 31° 55′, W. 58° 05′ *†	30.10	764.5	.....	.....	.....	sw.	.....	.....	4	.....	2	.....	sw.	shr's	shr's	r'gh	wsw.	cloudy.
Bk. Hattie G. McFarland, New York, N. Y†	29.97	761.2	22	— 5.6	.....	nw.	.....	.....	1	.....	3	.....	nw.	o	o	.....	.....	
Schr. Hattie Weston, Reedy Island, Delaware Bay*†...	29.85	758.2	20	— 6.7	.....	nw.	.....	.....	5	.....	o	.....	.....	o	o	sm'h	nw.	clear.
Schr. Isabel Alberto, N. 34° 22′, W. 75° 38′ †	29.81	757.2	.....	.....	.....	n.	.....	.....	7	.....	10	....	n.	hv'y	h'vy	high	n.	stormy.
Bk. Joseph A. Ropes, S. 5° 09′, E. 50° 16′ *†	29.88	758.9	84	28.9	79	nnw.	.....	.....	3	.....	4	.....	nw.	o	o	mod.	sse.	fair.
Bkt. Josephine, N. 27° 41′, W. 36° 51′†.	30.31	769.9	76	24.4	52	ene.	.....	.....	1	.....	o	.....	.....	o	o	long	nw.	clear.
Bk. Julia H., N. 46° 41′, W. 25° 42′	29.72	754.9	53.3	11.8	86	w.	.....	.....	4	.....	6	.....	.....	2 h'r	2 h'r	6	nw.	showery.
S. S. J. W. Wilson, Cedar Keys, Fla †	29.87	758.7	42	• 5.6	.....	n.	.....	.....	6	.....	10	.....	.....	o	o	.....	.....	overcast
Light House Tender, Laurel, N. 30° 18′, W. 86° 30′†	30.12	765.0	34	1.1	.....	n.	.....	.....	5–6	.....	2	.....	n.	o	o	sm'h	.....	fair
Bk. Louise Adelaide, N. 31° 45′, W. 75° 00	.....	.....	61	16.1	.....	n.	.....	.....	7	.....	.....	....	n.	6 h'r	6 h'r	r'gh	n.	
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.02	762.5	.....	.....	.....	.....	.....	.....	1	.....	1	.....	ne.	o	o	sm'h	.....	clear.
S. S. Madrid, N. 39° 57′ W. 43° 50′ *†	29.88	758.9	62	16.7	.....	var.	.....	.....	6	.....	3	.....	wnw.	2 h'r	2 h'r	cross	var.	fine.
S. S. Malabar, Marseilles, France†	29.82	757.4	.....	.....	.....	se.	.....	.....	2	.....	2	... .	se.	o	o	.....	.....	clear.
Bk. Matilda C. Smith, N. 36° 18′ W. 74° 39′*†	29.85	758.2	.....	.....	.....	n.	.....	.....	8	.....	8	.....	n.	6 h'r	6 h'r	mod.	n.	squally.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.03	762.7	66	18.9	.....	nnw	.....	.....	5	.....	.....	.....	nnw.	.....	.....	.....	.....	
S. Minnie N. Gerow, N. 33° 00′, W. 48° 05′*†	30.11	764.8	.....	.....	.....	sw.	.....	.....	5	.....	7	.....	w.	.....	.....	short	w.	fair.
S. M. P. Grace, S. 31° 42′, W. 127° 07′ *†	30.12	765.0	72	22.2	.....	n to nw	.....	.....	4	.....	7	.....	w.	o	o	sm'h	nw.	fair.
Bg. Myrtle, Clements Port, Nova Scotia *†	29.55	750.6	.....	.....	.....	sw.	.....	.....	1	.....	10	.....	.....	o	o	.....	.....	cloudy.
Bg. O. C. Clary, N 16° 28′, W. 62° 40′*†	30.04	763.0	83	28.3	91	e.	.....	.....	3	.....	1	....	ene.	o	o	.....	.....	clear.
S. Orealla, Hoogly River, India*	29.91	759.7	.....	.....	.....	calm	.....	.....	0	.....	.....	....	.....	.....	.....	.....	.....	
Bk. Ottawa, N. 38° 22′, W. 45° 06′*	29.79	756.7	70	21.1	.....	wsw.	.....	.....	6	.....	2	.....	w	2 h'r	2 h'r	long	w.	clear.
S. Paramita, San Francisco, Cal†	30.05	763.3	48	8.9	.....	nw.	.....	.....	2	.....	fg.	.....	.....	o	o	.....	.....	foggy.
Bk. Pilgrim, N. 21° 28′, W. 59° 10′*†	30.09	764.3	.....	.....	.....	ese.	.....	.....	3	.....	o	.....	.....	o	o	.....	e.	fine.
S. S. Radnorshire, N. 21° 18′, E. 113° 44′*†	29.98	761.5	.....	.....	.....	ene.	.....	.....	5	.....	5	.....	ne.	o	o	h'vy	ene.	cloudy.
S. S. Raleigh, off New Bourgh, N. Y *†	29.66	753.4	23	— 5.0	.....	.....	.....	.....	.....	.....	3	.....	.....	o	o	.....	.....	
Bk. Rebus, N. 45° 46′, W. 25° 55′*	29.63	752.6	54	12.2	.....	nnw.	.....	.....	3	.....	2	.....	nw.	2 h'r	2 h'r	long	w.	fair.
S. St. Francis, N. 35° 11′, W. 131° 32′	.....	.....	55	12.8	.....	w.	.....	.....	4	.....	7	.....	sw.	2 h'r	2 h'r	long	w.	cloudy.
Schr. S. B. Hubbard, New London, Conn.†	29.79	756.7	18	— 7.8	.....	nnw.	.....	.....	4	.....	8	.....	n.	o	o	.....	.....	threatening.
Bk. Scud, N. 32° 23′, W. 70° 00′ *†	29.78	756.4	.....	.....	.....	sw.	.....	.....	6	.....	6	.....	nw.	o	o	cross	nnw.	
Bk. Southern Belle, N. 50° 18′, W. 9° —′*†	29.45	748.0	48	8.9	.....	wsw.	.....	.....	4	.....	2	.....	.....	2 h'r	2 h'r	.....	.....	clear.
S. S. Strathieven, N. 5° 10′, E. 100° 12′	29.88	758.9	81.0	27.2	99	w.	.....	.....	2	.....	8	.....	w.	o	o	.....	.....	d. clouds.
Bk. Sunbeam, N. 38° 26′, W. 72° 39′	29.73	755.1	32	0.0	90	nnw.	.....	.....	6	.....	10	....	nw.	snow	snow	mod.	nw.	light snow.
Schr. T. S. McLellan, N. 28° 09′, W. 68° 50′*†	29.90	759.4	69	20.6	.....	ene.	.....	.....	.....	.....	.....	....	ne.	.....	.....	.....	nne.	
U. S. F. C. S. S. Fish Hawk, Washington, D. C†	30.07	763.8	23	— 5.0	.....	wnw.	.....	.....	2	.....	2	.....	calm	o	o	.....	.....	clear.
Bk. Vincenzo Accame, N. 37° 05′, W. 50° 46′ †	29.97	761.3	69.8	21.0	.....	wnw.	.....	.....	3	.....	o	.....	.....	1½h'r	1½h'r	.....	var.	clear.
Schr. Walter L. Plummer, Providence, R. I.*†	29.80	756.9	.....	.....	.....	wnw.	.....	.....	4	.....	o	.....	.....	o	o	.....	.....	fine.
Bk. Wandering Jew, Montevideo, Uruguay †	30.19	766.8	63	17.2	.....	se.	.....	.....	3	.....	3	.....	se.	o	o	.....	.....	clear.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.04	763.0	.....	.....	.....	calm	.....	.....	0	.....	6	.....	sw.	.....	.....	sm'h	s.	fair.
S. Wm. Woodbury, N. 48° 41′, W. 9° 30′ *	29.57	751.1	54	12.2	.....	sw.	.....	.....	6	.....	4?	.....	sw.	.....	.....	long	w.	covered.†

International Chart I. December 16, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 17, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.06	763.5	64.0	17.8	76	n.	.....	.....	1	.....	3	.....	.....	0	0	pretty fair..	Malaterre.
Algiers	.....	.....	29.98	761.4	59.4	15.2	85	nw.	.....	.....	5	.....	10	.....	.....	0.551	14.0	covered.....	Thève.
La Calle	.....	.....	29.82	757.3	59.4	15.2	89	wsw.	.....	.....	2	.....	4	.....	.....	0.098	2.5	cloudy.....	Fonfréde.
Tunis	.....	.....	29.83	757.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.09	764.2	60.8	16.0	91	sse.	.....	.....	2	.....	2	.....	.....	inap.	inap.	fair.....	Pérès.
Tebessa	.....	.....	29.90	759.4	45.7	7.6	67	nw.	.....	.....	1	.....	4	.....	.....	0.236	6.0	cloudy.....	Dognon.
Geriville	.....	.....	.....	.....	50.0	10.0	79	nw.	.....	.....	1	.....	2	.....	.....	0.110	2.8	fair.....	Lonchamp.
Laghouat	.....	.....	30.05	763.2	57.6	14.2	49	nw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair...	Abraham.
Biskra	.....	.....	29.92	760.0	64.0	17.8	42	nnw.	.....	.....	1	.....	6	.....	.....	0	0	cloudy.....	Malau.
Australian.																			
Melbourne, Victoria	29.66	753.3	29.89	759.2	59.4	15.2	69	se.	2	0.9	.....	.....	9	.....	.....	0.05	1.3	dull	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.64	752.8	30.21	767.3	40.6	4.8	97	ne.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.48	748.8	30.28	769.1	37.4	3.0	93	nnw.	4.9	2.2	.....	.....	10	.....	.....	0.055	1.4	.....	Dr. Wierzbicki.
Eperies	29.30	744.3	30.20	767.1	46.8	8.2	85	calm	.....	.....	0	.....	10 8	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.91	734.2	30.20	767.1	41.7	5.4	82	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.72	729.6	30.19	766.9	47.1	8.4	71	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.77	730 7	30.17	766'4	34.0	1.1	96	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy.....	The Staff.
Lemberg	29.23	742.5	30.26	768.6	38.7	3.7	93	n.	.....	.....	1	.....	10	.....	.....	0.008	0.2	.....	Dr. T. Stanecki.
Pola	29.98	761.4	30.09	764.2	58.3	14.6	76	ene.	.....	.....	1	.....	5	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.71	754.6	30.18	766.5	43.9	6.6	91	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.85	758.2	30.14	765.5	45.5	7.5	76	se.	.....	.....	1	.....	0	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.02	762 6	30.13	765 2	56.5	13.6	85	calm	.....	.....	0	.....	7	.....	.....	0	0	.....	Royal Academy.
Vienna	29.48	748.9	30.23	767.8	40.6	4.8	94	ese.	.....	.....	1	.....	10	.....	.....	0.031	0.8	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.64	752.8	29.74	755.4	43.5	6.4	96	s.	8	3.6	.....	.....	10	.....	.....	0.300	7.6	misty.....	W. Boswell
Armagh, Observatory	29.44	747.8	29.68	753.9	43.4	6.3	90	s.	9	4.0	.....	.....	0	.....	.....	.....	.....	blue sky.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.76	755.9	43.9	6.6	90	se.	13	5.8	.....	.....	5	.....	.....	.....	.....	d. clouds.....	John Hartnup.
Bolton, Sharples	29.23	742.4	29.77	756.1	42.2	5.7	98	se.	9	4.0	.....	.....	10	.....	.....	.....	.....	gloomy.....	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.05	1.3	.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	81.0	27.2	70	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds.....	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	49.4	9.7	90	sw.	.....	.....	0.4	.....	10	.....	.....	.....	.....	overcast.....	John McLaren.
Chatham, School M. E	29.78	756.4	29.91	759 7	46.7	8.2	95	s.	.....	.....	2	.....	10	.....	.....	.....	.....	misty.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.50	749 3	29.73	755.1	48.0	8.9	94	sse.	.....	.....	3	.....	10	.....	.....	.....	.....	raining	The Staff.
Fort Napier, Natal	27.76	705.1	29.97	761.2	70.0	21.1	57	e.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.73	755.1	29.97	761.2	86.0	30.0	83	n.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky.....	Sergt. John Robinson.
Gibraltar, Mediterranean	29.96	761.0	30.01	762 2	59.0	15.0	95	sw.	.....	.....	.....	.....	10	.....	.....	.....	.....	raining.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.46	748.3	29.66	753.4	41.9	5.5	90	se.	.....	.....	4	.....	10	.....	.....	.....	.....	raining.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.72	754 9	29.90	759.4	49.3	9.6	79	s.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Guernsey	29.52	749.8	29.82	757 4	48.0	8.9	92	s.	.....	.....	1	.....	10	.....	.....	.....	.....	d. clouds.....	A. Collenette, F. M. S.
Kew, Observatory	29.85	758.2	29.89	759.2	49.1	9.5	89	s.	9	4.0	.....	.....	10	.....	.....	.....	.....	misty.....	The Staff.
Leicester, Museum	29.59	751 6	29.85	758.2	48.0	8.9	92	sw.	.....	.....	1	.....	6	.....	.....	.....	.....	d. clouds.....	J. C. Smith.
Malta, Mediterranean	29.68	753.9	29.74	755 4	63.0	17.2	94	se.	.....	.....	2	.....	6	.....	.....	.....	.....	d. clouds.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.00	762.0	30.05	763.3	65.0	18.3	64	n.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds.....	C. S. Duncombe
Oscott, St. Mary's College	29.29	744.0	29.81	757.2	45.0	7.2	98	s.	.....	.....	2	.....	10	.....	.....	.....	.....	threatening.	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.63	752.6	29.86	758.4	48.0	8.9	92	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Plymouth	29.68	753.9	29.75	755.6	50.0	10.0	97	s.	.....	.....	3	.....	10	.....	.....	.....	.....	raining.....	John Merrifield.
Sandwick Manse, Orkneys	29.59	751 6	29.69	754.1	42	5.6	100	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	raining.....	Rev. C. Clouston, L.L.D.
Scutari Cemetery, Turkey	30.08	764.0	30.15	765 8	50.6	10.3	75	ne.	.....	.....	1	.....	9	.....	.....	.....	.....	gloomy.....	W. H. Lyne.
Sheffield	29.54	750.3	29.82	757.4	44.2	6.8	94	calm	.....	.....	0	.....	10	.....	.....	0.06	1.5	overcast.....	W. F. Cooper.
Silloth Rectory	29.08	753.9	29.70	754.4	45.4	7.4	87	calm	.....	.....	0	.....	8	.....	.....	0.020	0.5	d. clouds.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.70	756.7	45.0	7.2	90	s'	10	4.5	.....	.....	10	.....	.....	.....	.....	gloomy.....	I. New.
Stratfield Turgiss	29.66	753.4	29.88	758 9	48.2	9.0	92	s.	.....	.....	1	.....	10	.....	.....	.....	.....	gloomy.....	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.64	752.8	29.68	753.9	49	9.4	93	se.	.....	.....	4	.....	10	.....	.....	.....	.....	raining.....	W. Newcombe.
Valencia, Observatory	29.54	750 3	29.57	751.1	46.9	8.3	90	se.	20	8.9	.....	.....	7	.....	.....	.....	.....	d. clouds.....	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.36	745.7	29.40	746.7	23	— 5.0	96	s.	6	2.7	.....	.....	10 8	.....	calm	0	0	cloudy	H. J. Cundall, C. E
Chatham, N. B*	29.29	744.0	29.36	745.7	18	— 7.8	96	s.	2	0.9	.....	.....	10 n	.....	s.	0	0	cloudy	G. A. Blair.
Father Point, Quebec*	29.38	746.2	29.40	746.7	29	— 1.7	80	ne.	18	8.0	.....	.....	10 n	.....	ne.	inap.	inap.	cloudy.....	J. McWilliams.
Fort Garry, Manitoba*	28.91	734.3	29.80	756.9	8	—13.3	100	s.	7	3.1	.....	.....	10 8	.....	s.	0	0	cloudy	James Stewart.
Halifax, N. S*	29.32	744.7	29.46	748.3	16	— 8.9	100	sw.	2	0.9	0	0	.....	.....	.....	0.200	5.1	clear.....	A. Allison.
Kingston, Ontario*	29 54	750 3	29.91	759.7	7	—13.9	83	ne.	2	0.9	0	0	.....	.....	.....	0.04	1.0	clear.....	A. P. Knight, M. A.
Montreal, Quebec*	29.49	749.0	29.71	754.6	14	—10.0	87	w.	28	12.5	.....	.....	10 ks	.....	.....	inap.	inap.	cloudy..	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.21	741.9	29.68	761.5	2	—16.7	71	calm	0	0	.....	2 k	2 ks	w.	w.	0.03	0.8	fair.....	Rev. R. Mosley.
Port Dover, Ontario	29.26	743.2	30.00	762.0	19	— 7.2	100	w.	10	4.5	.....	.....	10 cs	.....	s.	0.15	3.8	cloudy.....	H. Morgan.
Port Stanley, Ontario	29.33	745.0	30.03	762.7	14	—10.0	91	w.	12	5.4	.....	0	2 k	.....	w.	0.15	3.8	clear.....	M. Payne.
Quebec, Quebec*	29.21	741 9	29.56	750.8	10	—12.2	80	nw.	.....	.....	3	.....	10 k	.....	nw.	0.07	1.8	cloudy.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.41	747.0	29.91	759.7	8	—13.3	80	w.	5	2.2	.....	.....	10 8	.....	nw.	0	0	cloudy.....	W. H. McIntyre.
Saugeen, Ontario*	29.18	741.2	29.94	760.5	18	— 7.8	100	se.	3	1.3	.....	.....	10 8	.....	.....	0	0	cloudy	
St. Andrews, N. B	29.38	746.2	29.43	747.5	16	— 8.9	97	wsw.	3	1.3	.....	.....	10 n	.....	.....	inap.	inap.	light snow..	
Sydney, C. B*	29.35	745.5	29 41	747.0	26	— 3.3	96	calm	0	0	.....	.....	10 n	.....	.....	0.05	1.3	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.54	750.3	29.95	760 7	17	— 8.3	91	nw.	8	3.6	.....	.....	10 k8	.....	.....	0.01	0.3	cloudy.....	Magnetic Observatory.
Yarmouth, N. S*	29.38	746.2	29.45	748.0	27	— 2.8	77	w.	8	3.6	.....	.....	10	.....	.....	0.35	8.9	cloudy.....	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.47	723.1	29.95	760.7	20.0	— 6.7	100	nw.	.....	.....	3	.....	10 8	.....	nw.	0.125	2.9	overcast.....	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	32	0.0	100	nw.	1	0.4	.....	.....	5	.....	.....	0	0	fair.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.10	764.5	30.13	765.3	70.0	21.1	83	ene.	20.2	9.0	.....	8 ck	0	.....	.....	0.050	1.3	clear.....	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.96	633.9	.....	.....	10.9	—11.7	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.54	775.8	30.65	778.6	18.0	— 7.8	81	sw.	11.2	5.0	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.03	777.9	30.65	778.5	29.3	— 1.5	79	wnw.	20.6	9.2	.....	.....	10	.....	.....	0.087	2.2	covered	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	30.41	772.4	30.46	773.6	32.0	0.0	81	e.	29	13	.....	.....	10	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanoe	30.21	767.4	30.23	767.9	33.6	0.9	87	ese.	.....	.....	7	.....	9	.....	.....	.....	.....	.....	Overlœrer Lauridsen.
Godthaab, Greenland	29.83	757.7	29.87	758.8	15.4	— 9.2	88	ene.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.74	755.5	29.76	756.0	36.3	2.4	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.78	756 3	29.82	757.5	2.3	—16.5	.....	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.71	754.7	29.76	755.8	33.4	0.8	92	se.	.....	.....	2	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.80	756.9	29.84	757.8	42.1	5.6	89	se.	25.7	11.5	.....	.....	10	.....	.....	.....	.....	raining	Overlœrer Bergh.
Vestervig	30.23	767.8	30.32	770.2	30.0	— 1.1	94	ene.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	Lœarer Oesterbol.
Upernavik, Greenland	29.88	759.0	29.93	760.2	— 7.1	—21.7	.....	e.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.33	744.9	30.00	761.9	44.2	6.8	100	calm	.....	.....	0	.....	fg	.....	.....	0	0	dense fog	M. Labroue, Director.
Alençon, Normal School	29.39	746.6	29.95	760.6	49.6	9.8	97	s.	.....	.....	1	.....	n	n.	n.	0.31	8.	.....	M. Nicot, Director.
Arras, Engineer School	29.68	753.8	29.94	760.5	43.7	6.5	97	ese.	.....	.....	3	.....	10	.....	.....	0	0	foggy	M. Fénéon, Command't.
Avignon, Normal School	29.94	760.5	30.02	762.5	52.5	11.4	69	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.46	748.2	30.03	762.7	45.3	7.4	82	s.	.....	.....	1	.....	8	.....	.....	0	0	very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.72	754.8	29.99	761.7	44.2	6.8	88	e.	.....	.....	1	.....	10	.....	.....	0.004	0.1	covered	M. Frère Eugène Marie.
Besançon, Normal School	29.10	739.1	30.02	762.4	44.2	6.8	82	ene.	.....	.....	1	c	0	nw.	.....	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.63	752.6	29.89	759.3	50.7	10.4	74	sse.	.....	.....	1	.....	5	.....	.....	0.008	0.2	cloudy	M. Rayet, Director.
Bourges, Normal School	29.39	746.4	29.95	760 8	42.8	6	85	sw.	.....	.....	1	.....	1	.....	sw.	0	0	clear	M. Malet, Director.
Brest, Naval Observatory	29.50	749.3	29.74	755.4	52.5	11.4	93	sse.	.....	.....	3	.....	10	.....	sse.	0.512	13.0	.....	M. de Kermarec, Dir.
Caen, Normal School	29.76	755.9	29.84	757.8	44.2	6.8	80	se.	.....	.....	.....	.....	10	.....	se.	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.69	754.1	30.01	762.3	47.3	8.5	80	sse.	.....	.....	2	.....	0	.....	.....	0.012	0.3	clear	M. Judot, Director.
Charleville, Normal School	29.51	749.6	30.04	763.1	37.4	3	79	s.	.....	.....	1	.....	8	.....	.....	0	0	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.63	727.1	29.98	761.6	53.2	11.8	82	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.16	740.7	30.03	762.8	41.7	5.4	97	w.	.....	.....	1	.....	10	.....	w.	0	0	light fog	M. de Villemontée, Dir.
Commercy, Normal School	29.19	741.5	30.09	764.3	34.0	1.1	98	e.	.....	.....	1	.....	n	e.	e.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	27.51	698.7	30.08	764.0	47.5	8.6	61	w.	.....	.....	1	.....	1	.....	w.	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28 89	733.8	30.00	762.1	61.7	16 5	52	s.	.....	.....	2	.....	3	.....	s.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.28	743.8	30.08	764.1	39.2	4	90	ese.	.....	.....	1	2 c	0	.....	.....	0	0	slightly cl'dy	M. Ablard, Director.
Guéret	28.37	720.7	29.96	761.0	52.9	11.6	73	s.	.....	.....	1	.....	n	.....	ne.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.41	747.0	29.68	753.9	48.2	9	78	se.	.....	.....	3	.....	5	.....	se.	0.059	1.5	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.32	744.7	29.89	759.1	51.8	11.0	75	se.	.....	.....	1	1 ck	0	.....	.....	0	0	clear	M. Chanvin, Director.
Lorient, Naval Observatory	29.71	754.6	29.81	757.2	52.2	11.2	80	se.	.....	.....	3	.....	10	s.	se.	0.709	18.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.97	735.9	30.07	763.7	38.8	3.8	97	ese.	.....	.....	1	.....	0	.....	.....	0	0	foggy	M. André, Director.
Mans, Normal School	29.63	752.7	29.95	760.7	44.8	7.1	93	e.	.....	.....	1	.....	5	.....	e.	0	0	cloudy	M. Piboën, Director.
Marseille, Observatory	29.70	754.4	29.97	761.2	64.9	18.3	71	w.	.....	.....	0.1	.....	1	.....	s.	0	0	.....	M. Stephan, Director.
Montlouis	24.78	629.3	29.62	752.3	38.3	3.5	97	sw.	9.4	4.2	.....	.....	4	sw.	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.87	758.6	30.06	763.4	59.0	15	75	calm	.....	.....	0	.....	0	.....	.....	0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.20	741.7	30.02	762.5	33.4	0.8	96	nnw.	.....	.....	1	.....	fg	.....	.....	0	0	dense fog	M. Basse, Director.
Nantes, Observatory	29.74	755.4	29.90	759.5	48.2	9	83	ese.	.....	.....	0-1	.....	9	.....	.....	0	0	.....	M. Larocque, Director.
Perpignan, Observatory	29.90	759.4	30.01	762.3	56.7	13.7	78	se.	7.4	3.3	.....	.....	1	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.11	536.1	.....	.....	30.2	— 1.0	.....	sw.	.....	.....	1	.....	5	.....	sw.	0	0	cloudy	M. Vaussenat.
Privas, Normal School	28.99	736.4	30.07	763.8	51.8	11	59	n.	.....	.....	1	.....	1	n.	n.	0	0	clear	M. Taffien.
Puy de Dôme Obs'y, Summit	25.10	637.5	.....	.....	39.0	3.9	88	sse.	.....	.....	3	1 c	0	.....	.....	0	0	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	29.94	760.5	29.97	761.3	45.3	7.4	94	se.	.....	.....	1	.....	10	.....	s.	0.28	7.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.63	752.6	29.85	758.2	42.8	6	91	se.	.....	.....	1	.....	10	.....	.....	0.016	0.4	covered	M. Brotier, Director.
Rodez, Normal School	27 78	705.6	29.93	760.3	51.8	11	63	s.	.....	.....	1	.....	5	.....	s.	0	0	cloudy	M. Seger, Director.
Rouen, Normal School	29.92	760.0	29.97	761.2	44.6	7	85	se.	.....	.....	1	.....	10	se.	.....	0	0	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	49.5	9.7	84	s.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.82	757.3	29.98	761.5	48.2	9.0	90	calm	.....	.....	0	.....	1	ssw.	.....	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.28	743.8	30.01	762.2	45.1	7.3	93	se.	.....	.....	1	.....	2	.....	.....	0	0	slightly cl'dy	M. Baillaud, Director.
Tours	29.76	756.0	29.94	760.4	46.8	8.2	83	s.	.....	.....	1	.....	hz	.....	sw.	0	0	hazy	M. de Tastes.
Versailles, Observatory	29.47	748.5	29.96	761.0	45.0	7.2	94	s.	.....	.....	2	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.75	755.9	29.91	759.7	52.9	11.6	59	ne.	4.0	1.8	.....	7 ck	0	w.	.....	0	0	.....	M. Cartier, Director.
GERMAN.																			
Ansbach	28.67	728.3	30.19	766.9	34.2	1.2	96	se.	.....	.....	2	.....	10	se.	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.29	743.9	30.12	765.3	36.0	2.2	84	calm	.....	.....	0	.....	9	.....	.....	0	0	.....	Prof. Dr. Hob.
Berlin	30.09	764.2	30.27	768.9	35.6	2.0	96	ne.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.78	756.4	30.32	770.0	35.4	1.9	95	ene.	.....	.....	2	.....	10	.....	.....	0	0	dense fog	Royal University Obs'y.
Carlsruhe	29.68	753.9	30.14	765.6	36.1	2.3	61	ne.	.....	.....	1	.....	1	ne.	.....	0	0	.....	Albert Senz.
Cassel	29.40	746.7	30.11	764.8	34.5	1.4	88	se.	.....	.....	1	.....	10	.....	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.81	757.1	30.16	766.0	36.3	2.4	85	ene.	.....	.....	1	.....	10	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.67	728.2	30.19	766.8	28.0	— 2.2	96	n.	.....	.....	2	.....	10	n.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	30.14	765.5	29.23	767.8	34.9	1.6	94	e.	.....	.....	6	.....	10	.....	.....	0	0	light fog	E. Preller.
Kiel	30.27	768.9	30.29	769 3	35.4	1.9	85	ese.	.....	.....	2	.....	10	.....	.....	0.016	0.4	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.82	757.4	30.26	768.6	34.3	1.3	94	e.	.....	.....	1	.....	10	.....	.....	0	0	foggy	H. Leppig, Asst.
Magdeburg	30.05	763.2	30.24	768.2	36.5	2.5	91	e.	.....	.....	1	.....	10 ks	.....	.....	0	0	foggy	Weather Observatory.
Memel	30.44	773.1	30.48	774.3	24.3	— 4.3	73	ene.	.....	.....	3	0	9s	.....	.....	.....	.....	.....	Iessermann.
Munich	28.28	718 2	30.15	765.7	31.5	— 0.3	97	e.	.....	.....	2	.....	10	.....	.....	0	0	dense fog	Central Station.
Neufahrwasser	30.47	773.8	30.48	774.2	30.4	— 0.9	71	ne.	.....	.....	2	.....	10	.....	.....	0.008	0.2	.....	A. Lothes.
Neustadt, Palatinate	29.61	752.0	30.14	765.5	34.7	1.5	93	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Dicknether.
Stuttgart	29.15	740.5	30.09	764.3	33.8	1.0	81	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	30.37	771.4	30.39	772.0	33.3	0.7	85	ese.	.....	.....	3	.....	10s	.....	.....	0	0	.....	Profs. Brandes & Reimer.
GREEK.																			
Athens	29.76	756.0	30.15	765.9	54.5	12.5	.....	n.	.....	.....	1.5	.....	9	.....	.....	0	0	covered	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	30.09	764.3	30.14	765.6	74.7	23.7	60	wsw.	11.0	4.9	.....	.....	6	sw.	.....	0	0	d. clouds	
Deesa	29.55	750.5	30.02	762.6	80.0	26.7	28	nnw.	.....	.....	.....	.....	1	wsw.	.....	0	0	d. clouds	
Bombay	29.94	760.5	29.98	761.4	80.2	26.7	70	wnw.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.12	714.2	29.96	761.1	83.6	28.7	22	e.	6.0	2.7	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.70	754.4	29.98	761.6	80.9	27.2	59	ne.	2.0	0.9	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.44	696.9	29.97	761.3	78.5	25.8	29	ene.	10.0	4.5	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.28	743.8	30.06	763 5	63.1	17.3	60	calm	0	0	.....	.....	8	.....	.....	0	0	d. clouds	
Roorkee	29.11	739.4	30.04	763.0	65.2	18.4	52	w.	.....	.....	.....	.....	9	w.	.....	0	0	overcast	
Agra	29.49	749.0	30.07	763.8	68.2	20.1	48	w.	2.0	0.9	.....	.....	5	.....	w.	0	0	d. clouds	
Nagpur	28.96	735.6	30.01	762.3	79.7	26.5	42	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.69	728.7	30.08	764.0	70.8	21.6	56	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.57	751.0	29.96	760.9	68.3	20.2	63	n.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.72	754.8	30.04	763.1	65.0	18.3	67	calm	0	0	.....	.....	3	.....	.....	0	0	d. clouds	
Patna	29.85	758.3	30.06	763.4	69.7	20.9	57	w.	3.5	1.6	.....	.....	2	w.	w.	0	0	.....	
Hazaribagh	27.98	710.7	30.05	763 3	65.2	18.4	63	nw.	4 2	1.9	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.94	760.5	30.02	762.6	75.0	23.9	62	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	30.00	762.1	30.03	762.6	71.4	21.9	69	nne.	0.5	0.2	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.89	759.3	30.02	762.4	70.4	21.3	75	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.93	760.2	30.02	762.6	71.6	22.0	75	calm	1.6	0.7	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.71	754.6	30.06	763.5	63.5	17.5	88	ne.	2.0	0.9	.....	.....	6	w.	w.	0	0	d. clouds	
Jeypore	28.60	726.6	30.09	764.3	68.2	20.1	53	w.	0.9	0.4	.....	.....	5	.....	w.	0	0	d. clouds	
ITALIAN.																			
Udine	29.72	754.9	30.14	765.5	54.1	12.3	76	.....	.....	.....	.....	.....	9	.....	.....	0	0	.....	Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ITALIAN,—Continued.																			
Milan	29.62	752.3	30.15	765.9	51.8	11.0	77	nnw.	0.7	0.3	.....	.....	9	wsw.	.....	0.047	1.2	.....	Prof. Schiapparelli.
Padua	30.00	762.0	30.11	764.9	51.4	10.8	85	nnw.	1.3	0.6	.....	.....	10	W.	.....	0.087	2.2	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.21	742.0	30.15	765.9	45.7	7.6	97	nne.	2.5	1.1	.....	.....	10	.....	.....	0.102	2.6	.....	Prof. F. F. Denza.
Genoa	29.85	758.3	30.05	763.3	56.8	13.8	59	ne.	10.5	4.7	.....	.....	2	s.	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.20	716.2	30.18	766.5	44.4	6.9	91	se.	...	.....	2	.....	10	.....	.....	0.415	10.5	.....	Prof. D. C. Bruno.
Pesaro	30.11	764.7	30.16	766.0	47.8	8.8	100	n.	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.80	756.8	30.06	763.4	57.6	14.2	65	ne.	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. Costantino Pittei.
Leghorn	29.88	759.0	29.97	761.2	57.4	14.1	70	ene.	8.7	3.9	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.82	757.4	30.00	761.9	58.1	14.5	72	ne.	4.3	1.9	.....	.....	10	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	29.84	757.8	30.09	764.3	56.8	13.8	83	s.	9.4	4.2	.....	.....	10	s.	.....	0.230	6.0	.....	Prof. C. de Giorgi.
Cosenza	29.14	740.1	30.04	763.1	52.9	11.6	70	wsw.	1.8	0.8	.....	.....	9	sw.	.....	0.559	14.2	.....	Prof. D. Conti.
Cagliari	29.64	752.9	29.84	757.8	59.7	15.4	78	.....	.....	.....	.....	.....	9	.....	.....	0.157	4.0	.....	Prof. A. Pacinotti.
Palermo	29.66	753.3	29.91	759.7	61.5	16.4	59	ese.	1.8	0.8	.....	.....	9	.....	.....	0.079	2.0	.....	Prof. G. Cacciatore
Syracuse	29.88	758.9	29.92	760.0	59.2	15.1	70	ssw.	4.3	1.9	.....	.....	10	sse.	.....	0.118	3.0	.....	Sig. Vincenzo Giuliano.
Sub-stations.																			
Naples, S. R	29.45	748.1	29.98	761.4	60.1	15.6	69	nne.	0	0	.....	.....	3	sw.	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.17	563.1	.....	.....	24.6	— 4.1	86	ssw.	.....	.....	2	.....	0	.....	.....	0	0	clear	Prof. P. F. Denza.
Valdobbia	22.20	564.0	.....	.....	27.7	— 2.4	70	e.	.....	.....	2	.....	5	.....	.....	0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.08	764.1	30.11	764.9	28.4	— 2.0	79	calm	.....	.....	0	0	7 n	.....	sw.	0.024	0.6	snowing	Hattori.
Awomori	30.05	763.3	30.09	764.3	26.0	— 3.3	90	ssw.	8.5	3.8	.....	.....	10 n	.....	.....	0.319	8.1	snowing	K. Ogawa.
Hakodate	30.02	762.5	30.03	762.8	27.0	— 2.8	87	w.	18.0	8.0	.....	0	6	.....	w.	0	0	fair	
Hamamatsu	29.93	760.2	29.96	760.9	49.0	9.4	63	wsw.	.....	.....	4	5 ck	0	sw.	.....	0	0	cloudy	Y. Miwa.
Hiroshima, I. M. Obs'y	.....	.....	.....	.....	46.1	7.8	77	n.	7.3	3.2	.....	.....	9 ck	.....	w.	0.004	0.1	cloudy	
Kanazawa	30.01	762.3	30.12	765.0	40.1	4.5	80	sw.	6.8	3.0	.....	.....	10	.....	.....	0.341	8.7	cloudy	S. Endo.
Kioto	29.93	760.2	30.11	764.8	42.7	5.9	73	nw.	6.9	3.0	.....	.....	10 s	.....	.....	0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	30.05	763.3	30.26	768.6	41.4	5.2	66	ne.	11.4	5.1	.....	.....	10 cs	.....	.....	0	0	overcast	S. Takehayashi.
Niigata	30.00	762.0	30.04	763.0	34.7	1.5	85	se.	3.3	1.4	.....	.....	10 ck	.....	.....	0.100?	2.1?	covered	M. Morita.
Nobiru	30.05	763.2	30.06	763.6	32.6	0.3	63	n.	6.6	2.9	.....	8ck;cs	1 s	w.	.....	0	0	cloudy	H. Midzushima.
Numazu	29.95	760.7	29.99	761.6	49.0	9.4	70	ese.	.....	.....	4	.....	10 ks	.....	.....	0	0	cloudy	R. Kaneda.
Osaka	30.11	764.7	30.12	765.1	43.1	6.2	76	ne.	3.7	1.6	.....	5 ck	5 s;ck	w.	.....	0	0	cloudy	H. Omura.
Sapporo	.....	.....	.....	.....	15.5	— 9.2	81	calm	0	0	.....	0	3	.....	.....	0	0	clear	
Tokei Obs'y, Yeddo	29.96	760.9	30.04	762.9	39.9	4.4	97	nnw.	10.7	4.7	.....	.....	10 n	.....	n.	0.07?	1.8	light rain	The Staff.
Wakayama	30.05	763.3	30.11	764.8	45.7	7.6	97	ne.	6.0	2.7	.....	.....	10ck;ks	.....	n.	0	0	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.79	756 7	29.97	761.2	79.6	26.4	69	n.	10.0	4.5	.....	1 c	4 k;n	.....	wnw.	0.80	20.3	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.66	600.9	29.88	758.9	51.8	11.0	85	ese.	inap.	inap.	.....	5 c	0	.....	.....	0	0	fair	Prof. Vicente Fernandez.
Leon	24.29	617.0	30.16	766.1	43.5	6.4	84	nw.	.....	.....	1	2 c	4 ck	sw.	sw.	c	c	cloudy	Prof. M. Leal.
Mazatlan	29.69	754.0	29.95	760.7	72.5	22.5	92	ne.	0	0	.....	.....	10 n	.....	sw.	inap.	inap.	hazy	F. Quijano, C. E.
Mexico, Central Obs'y	23.13	587.6	30.31	770.0	43.7	6.5	81	calm	0	0	.....	0	0	.....	.....	0	0	foggy	The Staff.
Morelia	24.19	614.5	30.00	762.1	41.5	5.3	71	se.	.....	.....	3	2 ck	0	s.	.....	inap.	inap.	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.90	607.0	29.98	761.5	45 3	7.4	81	calm	0	0	.....	2 cs	1 s	sw.	sw.	0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.2	30.587	766.87	50.9	10.5	47	calm	0	0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.52	571.9	30.22	767.5	44.0	6.8	87	sse.	12.2	5.4	.....	2 cs	8 kn	se.	se.	0	0	covered	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.00	762.0	30.00	762.0	43.2	6.2	.....	s.	.....	.....	3	.....	.....	.....	.....	0.028	0.7	.....	
Groningen	30.03	762.7	30.08	764.1	38.3	3.5	.....	se.	.....	.....	3	.....	.....	.....	.....	0.004	0.1	.....	
Helder	30.01	762.3	30.01	762.3	37.4	3.0	.....	se.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.01	762.2	30.01	762.2	42.3	5.7	91	se.	.....	.....	1	.....	.....	.....	.....	0.008	0.2	.....	
Utrecht	30.00	762 0	30.05	763.2	41.4	5.2	89	se.	.....	.....	2	.....	2	.....	.....	0.031	0.8	lightly cl'dy	H. van der Brink.
NORWEGIAN.																			
Bergen	30.19	766.8	30.25	768.4	27.0	— 2.8	67	sw.	2	1	.....	.....	9	.....	.....	0	0	.....	
Brono	30.39	771.9	30.43	772.9	24.4	— 4.2	67	se.	9	4	.....	.....	3	.....	.....	0	0	.....	
Christiania	30.48	774.3	30.05	778.5	8.1	—13.3	84	e.	7	3	.....	.....	7	.....	.....	0	0	.....	
Gjæsvær	30.28	769.2	30.31	769.8	23.5	— 4.7	.....	sw.	.....	.....	7	.....	10	.....	.....	.....	.....	.....	
Lodingen	30.47	773.8	30.51	775 0	26.1	— 3.3	63	se.	.....	.....	4	.....	9	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	29.96	761.0	30.12	765.0	62.6	17.0	70	nw.	13.6	6.1	.....	.....	5	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	28.97	735.7	29.98	761.5	51.8	11.0	95	ene.	6.3	2.8	.....	.....	10	.....	.....	0.020	0.5	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.11	764.8	30.20	767.0	68.2	20.1	72	w.	1.3	0.6	.....	.....	5	n.	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.63	752.6	30.00	761.9	55.0	12.8	91	ese.	6.9	3.1	.....	.....	10	.....	.....	0.878	22.3	.....	The Staff.
Ponta Delgada, Azores	30.10	764.6	30.17	766.4	65.1	18.4	94	nw.	5.6	2.5	.....	.....	10	.....	.....	0.079	2.0	.....	
Saint Paul de Loando	29.09	754.1	29.89	759.2	73.4	23.0	91	e.	1.8	0.8	.....	.....	10	.....	.....	0.055	1.4	raining	
Serra da Estrella	25.15	638.7	29.99	761.8	35.6	2.0	100	se.	4.9	2.2	.....	.....	10	.....	.....	0.795	20.2	rain & fog	
RUSSIAN.																			
Akmolinski	29.45	748.0	30.68	779.2	— 1.3	—18.5	94	ene.	7	3	.....	0	0	.....	.....	.....	.....	.....	Major K. Lasarew.
Archangel	30.15	765.7	30.17	766.2	— 2.6	—19.2	92	nw.	4	2	.....	0	8 ks	.....	.....	0	0	.....	Capt. Sseliwerstow.
Astrakhan	30.38	771.7	30.30	769.7	33.3	0.7	76	e.	4	2	.....	.....	10 s	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	30.37	771.4	30.95	780.1	— 5.8	—21.0	60	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Bielosersk	29.02	752.4	30.13	765.3	12.9	—10.6	94	nw.	9	4	.....	.....	10 n	.....	.....	0.031	0.8	snowing	
Dorpat	30.20	768.6	30.53	775.4	10.4	—12.0	96	nw.	4	2	.....	0	0	.....	.....	0	0	.....	Observatory.
Ekaterinburg	29.48	748.9	30.55	776.0	9.1	—12.7	60	calm	0	0	.....	.....	10	.....	.....	0	0	light clouds	Meteorological Obs'y.
Elissawetgrad	29.85	758.2	30.34	770.5	24.8	— 4.0	91	calm	0	0	.....	.....	10 n	.....	.....	0.012	0.3	.....	
Kasan	30.02	762.4	30.32	770.0	6.8	—14.0	77	sse.	7	3	.....	.....	3	.....	.....	.....	.....	.....	Observatory.
Kem	30.30	769.5	.....	.....	7.7	—13.5	88	nw.	22	10	.....	0	3 ks	.....	.....	0	0	.....	
Kertch	30.19	766 9	30.21	767.4	35.8	2.1	94	ne.	7	3	.....	0	8 n	.....	.....	0	0	.....	Lagorio & Sustyrez.
Kieff	29.53	750.1	30.20	767.1	32.4	0.2	100	nw.	4	2	.....	.....	10 n	.....	.....	.....	.....	foggy	Observatory.
Libau	30.53	775.4	30.55	776.0	23.0	— 5.0	71	ene.	.....	.....	1	.....	0	.....	.....	0.012	0.3	.....	E. Quass.
Lugan	30.07	763.8	30.28	769.2	27.9	— 2.3	71	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Moscow	29.50	750.9	30.08	763.9	23.0	— 5.0	92	w.	6.7	3.0	.....	.....	10 n	.....	.....	0.059	1.5	light snow	
Nikolaiev	30.29	769.4	30.37	771.3	28.4	— 2.0	92	calm	0	0	.....	.....	10 n	.....	.....	0	0	.....	Capt. Kurdakow.
Pekin, China	30.53	775 4	30.66	779.0	19.4	— 7.0	30	nw.	27	12	.....	0	5 k	.....	.....	.....	.....	.....	Physical Observatory.
Petrozavodsk	30.08	764.0	30.30	769.7	1.4	—17.0	79	nnw.	22	10	.....	1 cs	0	.....	.....	0	0	.....	Dr. Bergmann.
Pinsk	29.81	757.2	.....	.....	33.1	0.6	87	n.	2	1	.....	0	8 s	.....	.....	0	0	.....	
St. Petersburg	30.41	772.5	30.43	772.9	— 3.1	—19.5	81	wnw.	7	3	.....	.....	9	.....	.....	0.165	4.2	light clouds	Central Physical Obs'y.
Sevastopol	30.00	762.1	30.17	769.3	38.8	3.8	93	se.	4	2	.....	.....	10 n	.....	.....	0	0	.....	
Semipalatinsk	30.14	765.6	30.91	785 0	— 8.7	—22.6	69	e.	16	7	.....	.....	0	.....	.....	0	0	.....	Major Lasarew.
Staroi Bykhov	29.82	757.4	30.31	769.8	28.0	— 2.2	85	e.	4	2	.....	.....	10	.....	.....	0.100	2.7	.....	
Tashkend, Laboratory	28.61	726.8	30.26	768.5	36.7	2.6	75	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.74	729.9	30.18	766.6	48.7	9.3	49	n.	7	3	.....	0	8 ks	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.03	778.1	30.95	780.1	5.2	—14.9	85	s.	2	1	.....	.....	10	.....	.....	.....	.....	snowing	
Vladivostock	30.17	766.3	30.24	768.0	2.1	—16.6	27	ne.	4	2	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.93	760 2	30.38	771.0	32.7	0.4	90	ne.	7	3	.....	.....	10	.....	.....	.....	.....	heavy cl'ds.	Astronomical Obs'y.
Wilna	29.98	761.5	30.43	773.0	25.9	— 3.4	85	n.	4	2	.....	.....	10	.....	.....	.....	.....	heavy cl'ds.	Berg, Assistant.
Yenisseisk	30.89	784.5	31.24	793.4	—28.8	—33.8	82	calm	0	0	.....	.....	1	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.59	751.6	45	7.2	92	sse.	.....	.....	4	5	5	se.	.....	0.3	8.	d. clouds	J. Youngclause
North Unst	.....	.....	29.95	760.7	.....	.....	.....	se.	.....	.....	8	.....	10	.....	.....	blank	blank	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.89	759 2	30.00	761.9	57.9	14.4	71	se.	0.9	0.4	.....	0	0	.....	.....	0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.70?	754.4?	29.70?	755.9?	59.0	15.0	61	se.	4.0	1.8	.....	2	7	W.	.....	0	0	almost cov.	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.00	685.9	30.03	762.7	47.1	8.4	77	s.	6.0	2.7	.....	.....	10	.....	.....	0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.81	706.4	30.13	765.2	38.8	3.8	92	calm	0.4	0.2	.....	.....	10	.....	.....	0	0	covered	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	29.90	759.4	30.05	763.2	51.1	10.6	81	ssw.	2.5	1.1	.....	3	6	e.	.....	0	0	almost cov'd	Olayo Diaz, Director.
Oviedo	29.01	736.8	29.84	758.0	57.2	14.0	58	e.	13.9	6.2	.....	1 8	0	e.	.....	0.142	3.6	.....	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.89	733.8	29.79	756.6	54.3	12.4	91	s.	9.8	4.4	.....	.....	10	.....	.....	0.366	9.3	raining	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.95	760.8	30.01	762.2	78.3	25.7	78	nne.	9.9	4.4	.....	0	4 ks	.....	ne.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.93	760.1	30.02	762.6	58.8	14.9	89	w.	8.2	3.7	.....	.....	10	.....	s.	0.235	6.0	light rain	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.91	759.6	30.00	761.9	76.3	24.6	90	calm	0	0	.....	6 cs	3 k	n.	se.	0	0	d. clouds	Manuel Maese.
Tuguegarao, Philippine Id's	29.97	761.2	30.10	764.6	72.8	22.7	88	nw.	9.5	4.2	.....	.....	6 ks	.....	ne.	0	0	cloudy	José L. Yrastorza.
SWEDISH.																			
Haparanda	30.51	774.9	30.55	775.9	—15.5	—26.4	100	calm	.....	.....	0	.....	0	.....	.....	0	0	....	
Umea	30.62	777.7	30.67	779.0	— 2.2	—19.0	52	nw.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Hernosand	30.63	778.0	30.68	779.3	— 5.1	—20.6	86	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	
Stockholm	30.50	774.6	30.67	779.1	17.1	— 8.3	85	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Wisby	30.50	774.8	30.56	776.3	27.0	— 2.8	70	e.	.....	.....	4	.....	5	.....	.....	0	0	.....	
Sub-series.																			
Upsala	30.59	776.9	30.67	779.1	9.1	—12.7	96	nw.	2.7	1.2	.....	.....	1	.....	ene.	0	0	.....	S. G. Fineman.
SWISS.																			
Geneva	28 67	728.1	30.15	765.9	34.2	1.2	100	sw.	.....	.....	1	.....	10	.....	.....	0	0	foggy	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.19	766.8	50.2	10.1	73	n.	9	4.0	.....	.....	10	.....	ene.	0	0	.....	The Observatory.
Valona	.....	.....	30.09	764.3	57.7	14.3	.....	se.	.....	.....	1	.....	10	.....	.....	0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.11	764.9	68.5	20.3	61	w.	.....	.....	1	.....	1 k	.....	sw.	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.79	756.7	29.88	758.9	23.5	— 4.7	67	nw.	5	2.2	.....	.....	10 8	.....	.....	0.06	1.5	cloudy	J. O. Barnes.
Alpena, Michigan	29.26	743.2	29.97	761.2	18	— 7.8	84	w.	7	3.1	.....	.....	10 8	.....	.....	inap.	inap.	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24 98	634.5	30.06	763.5	24	— 4.4	56	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. G. Barnes.
Assinnaboine, Ft., Montana	26.67	677.4	29.70	754.4	41	5.0	67	sw.	24	10.7	.....	0	4 8	.....	sw.	0	0	fair	B. O. Lenoir.
Atlanta, Georgia	28.94	735.1	30.17	766.3	17.2	— 8.2	74	w.	5	2.2	.....	5 cs	0	w.	.....	0	0	fair	H. C. Smith.
Atlantic City, New Jersey	29.96	761.0	29.96	761.0	22	— 5.6	73	w.	10	4.5	.....	0	0	.....	.....	0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.04	763.0	30.24	768.1	22	— 5.6	73	calm	0	0	.....	0	0 8	.....	.....	0	0	cloudy	John Henly.
Baltimore, Maryland	30.02	762.5	30.06	763.5	25	— 3.9	64	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	Geo W Felger.
Barnegat, New Jersey	29.92	760 0	29.94	760.5	23.0	— 5.0	80	w.	14	6.3	.....	0	0	.....	.....	0	0	clear	G. A. Hill.
Behring Id., Behring Sea	29.84	757.9	29.86	758.4	23.3	— 4.8	.....	ne.	10	4.5	.....	.....	10 n	.....	.....	0.02	0.5	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.07	713.0	29.83	757.7	28	— 2.2	77	calm	0	0	.....	0	1 8	.....	.....	0	0	clear	A. Pritchard.
Benton, Fort, Montana	26.76	679.7	29.76	755.9	45	7.2	62	sw.	28	12.5	.....	0	1 8	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	27.81	706.4	29.82	757.4	27	— 2.8	76	e.	8	3.6	.....	0	0	.....	.....	0	0	clear	Cyrus Cramor.
Block Island, Rhode Island	29.77	756.1	29.80	756.9	22	— 5.6	73	nw.	23	10.3	.....	0	1 8	.....	nw.	0	0	clear	J. T. Elker.
Boise City, Idaho	27.09	688.1	30.07	763.8	24	— 4.4	92	w.	2	0.9	.....	.....	10 8	.....	.....	0	0	cloudy	B. E. Light.
Boston, Massachusetts	29.54	750.3	29.70	754.4	19.0	— 7.2	53	w.	15	6.7	.....	0	8 8	.....	nw.	0	0	cloudy	O. B. Cole.
Brownsville, Texas	30.05	763.3	30.10	764.5	43.0	6.4	94	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.17	740.9	29.97	761.2	23.2	— 4.9	85	w.	20	8.9	.....	.....	10 8	.....	w.	0.04	1.0	cloudy	W. Finn.
Buford, Fort, Dakota	27.54	699.5	29.78	756.4	24	— 4.4	88	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.49	749.0	29.80	756.9	12.3	—10.9	89	s.	9	4.0	.....	.....	10 n	.....	s.	0.03	0.8	light snow	G. C. Schaeffer.
Cairo, Illinois	29.51	749 5	29.93	760.2	29.0	— 1.7	82	s.	16	7.2	.....	.....	10 8	.....	s.	0	0	cloudy	W. H. Ray.
Cape Henry, Virginia	30.10	764.5	30.12	765.0	22	— 5.6	44	w.	10	4.5	.....	0	0	.....	.....	0	0	clear	A. K. Alderson.
Cape May, New Jersey	29.99	761.7	30.02	762 5	26.0	— 3.3	76	w.	30	13.4	.....	0	0	.....	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	30.21	767.3	30.23	767.8	30	— 1.1	67	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. W. Mixer.
Champaign, Illinois	28 97	735.8	29.84	757.9	18.5	— 7.5	67	sw.	13	5.8	.....	.....	10 n	.....	sw.	0.09	2.3	light snow	L. A. Welsh.
Charleston, S. Carolina	30.10	764 5	30.16	766.1	27	— 2.8	80	ne.	10	4.5	.....	4 cs	4 8	.....	ne.	0	0	cloudy	J. H. Smith.
Charlotte, N. Carolina	29.25	742.9	30.14	765.5	16.0	— 8.9	83	n.	1	0.4	.....	4 c	fg.	w.	.....	0	0	fair	D. O'Donoghue.
Chattanooga, Tennessee	29.31	744.5	30.17	766.3	19.0	— 7.2	76	calm	0	0	.....	8 cs	sk.	w.	.....	0	0	cloudy	B. L. Goulding.
Cheyenne, Wyoming	23.74	603.0	30.02	762.5	42.1	5.6	28	nw.	8	3.6	.....	0	1 8	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.13	739.9	29.89	759.2	19.0	— 7.2	70	se.	6	2.7	.....	.....	10 n	.....	.....	0.12	3.0	light snow	J. Mitchell.
Chincoteague, Virginia	30.04	763.0	30.06	763.5	23	— 5.0	88	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	C. F. Dickens.
Cincinnati, Ohio	29.37	746.0	30.07	763 8	21	— 6.1	84	se.	7	3.1	.....	0	0	.....	.....	inap.	inap.	clear	R. B. Watkins.
Cleveland, Ohio	29.31	744.5	30.10	764.5	8.3	—13.2	92	s.	6	2.7	.....	2 c	0	w.	.....	0.03	0.8	clear	J. B. Newlin.
Coleman City, Texas	28.13	714.5	30.03	762.7	31	— 0.6	81	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.16	740.7	30.08	764.0	18	— 7.8	53	s.	8	3.6	.....	.....	10 8	.....	.....	inap.	inap.	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.01	711.4	30.03	762.7	32.0	0.0	71	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.44	671.6	29.84	757.9	26	— 3.3	56	e.	8	3.6	.....	0	2 8	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.10	739.1	29.81	757.2	25	— 3.9	73	se.	4	1.8	.....	.....	10 8	.....	.....	0.19	4.8	cloudy	R. R. Martin.
Davis, Fort, Texas	25.10	637.5	30.04	763.0	36	2.2	72	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28 12	714.2	29.95	760.7	39.8	4.3	71	s.	4	1.8	.....	.....	10 8	.....	.....	inap.	inap.	cloudy	D. Moore.
Deadwood, Dakota	25.01	635.2	30.00	762.0	33.5	0.8	92	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. Willson.
Delaware Breakwater, Del.	30.01	762.2	30.03	762.7	23	— 5.0	53	w.	22	9.8	.....	0	0	.....	.....	0	0	clear	T. S. Townsend.
Denison, Texas	29.12	739.6	29.97	761.2	33.0	0.6	68	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24.48	621.8	30.00	762.0	41.0	5.0	40	se.	11	4.9	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	28.78	731.0	29.76	755.9	31	— 0.6	78	w.	5	2.2	.....	.....	10 8	.....	w.	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.30	744.2	30.06	763.5	18.0	— 7.8	83	sw.	5	2.2	.....	0	0	.....	.....	inap.	inap.	clear	C. F. R. Wappenhans.
Dodge City, Kansas	27.13	689.1	29.93	760.2	29	— 1.7	59	w.	9	4.0	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.04	737.6	29.81	757.2	20.2	— 6.6	84	se.	2	0.9	.....	.....	10 8	.....	.....	0.15	3.8	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.09	738.9	29.90	759.4	10	—12.2	80	s.	3	1.3	.....	0	4 ks	.....	.....	0.04	1.0	fair	N. B. Conger.
Eagle Pass, Texas	29.27	743.4	30.11	764.8	29.4	— 1.4	67	calm	0	0	.....	0	3 8	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.20	640.1	30.12	765.0	29	— 1.7	80	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	29.30	746.5	29.46	748.3	16.0	— 8.9	83	sw.	7	3.1	.....	.....	10 n	.....	.....	0.01	0.3	light snow	D. C. Murphy.
Elliott, Fort, Texas	27.02	686.3	29.98	761.5	34	1.1	81	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.19	665.2	30.05	763.3	24.0	— 4.4	76	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.28	743.7	30.04	763.0	18	— 7.8	84	sw.	12	5.4	.....	.....	10 8	.....	.....	0.16	4.1	cloudy	Peter Wood.
Escanaba, Michigan	29.24	742.7	29.96	761.0	12.5	—10.8	89	n.	4	1.8	.....	0	8 8	.....	n.	0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.37	720.6	30.19	766.8	36	2.2	100	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	30.10	764.5	30.14	765.5	52	11.1	59	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear	E. O'C. MacInernay.
Grand Haven, Michigan	29.24	742.7	29.95	760.7	13.0	—10.6	70	se.	7	3.1	.....	0	8 8	.....	.....	0.02	0.5	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.11	637.8	29.99	761 7	36	2.2	72	e.	4	1.8	.....	0	0	.....	.....	0	0	clear	Robert O. Lord.
Hatteras, North Carolina	30.12	765.0	30.14	765.5	26	— 3.3	76	nw.	12	5.4	.....	hz.	3 ks	.....	.....	0	0	clear	R. M. Crawford.
Helena, Montana	25.50	647.7	29.88	758.9	41	5.0	86	sw.	12	5.4	.....	0	5 8	.....	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	28.91	734.3	29.99	761.7	32	0.0	78	calm	0	0	.....	0	0	.....	.....	0	0	fair	J. P. Sherry.
Huron, Dakota	28.28	718.3	29.82	757.4	23.8	— 4.6	56	nw.	5	2.2	.....	.....	10 8	.....	.....	0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.10	739.1	29.94	760.5	17	— 8.3	91	se.	8	3.6	.....	.....	10 n	.....	se.	0.05	1.3	cloudy	O. Schutze.
Indianola, Texas	30.09	764.3	30.13	765.3	46.5	8.1	57	s.	4	1.8	.....	0	0	.....	.....	0	0	light snow	I. A. Reed.
Jacksboro, Texas	28.83	732.3	30.07	763.8	40	4.4	65	se.	3	1.3	.....	0	3 8	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.18	766.6	30.23	767.8	28	— 2.2	77	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.06	687.3	29.76	755.9	26	— 3.3	76	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Schneider.
Keokuk, Iowa	29.05	737.9	29.76	755.9	26.0	— 3.3	88	s	5	2.2	.....	.....	10 8	.....	s.	0.08	2.0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.09	764.3	30.11	764.8	53.0	11.7	61	n.	25	11.2	.....	0	0	.....	.....	0.39	9.9	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.12	765.0	30.14	765.5	22.5	— 5.3	66	nw.	10	4.5	.....	hz.	0	.....	.....	0	0	dense haze	H. Mc P. Baldwin.
Knoxville, Tennessee	29.08	738.6	30.16	766.1	13.3	—10.4	96	ne.	1	0.4	.....	.....	10 8	.....	.....	0	0	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.02	737.1	29.87	758.7	16	— 8.9	83	e.	4	1.8	.....	.....	10 8	.....	.....	0.18	4.6	cloudy	S. C. Emery.
Leavenworth, Kansas	28.87	733.3	29.83	757.7	33	0.6	78	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.02	737.1	29.90	759.4	40.5	4.7	69	e.	4	1.8	.....	0	4 8	.....	.....	0.04	1.0	fair	W. Bell.
Little Rock, Arkansas	29.04	752.8	29.97	761.2	32	0.0	50	s w.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. U. Simons.
Los Angeles, California	29.47	748.5	29.87	758.7	50	10.0	44	ne.	9	4.0	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.38	746.2	29.98	761.5	23	— 5.0	73	sw.	12	5.4	.....	.....	10 n	.....	.....	0.02	0.5	light snow	L. M Dey.

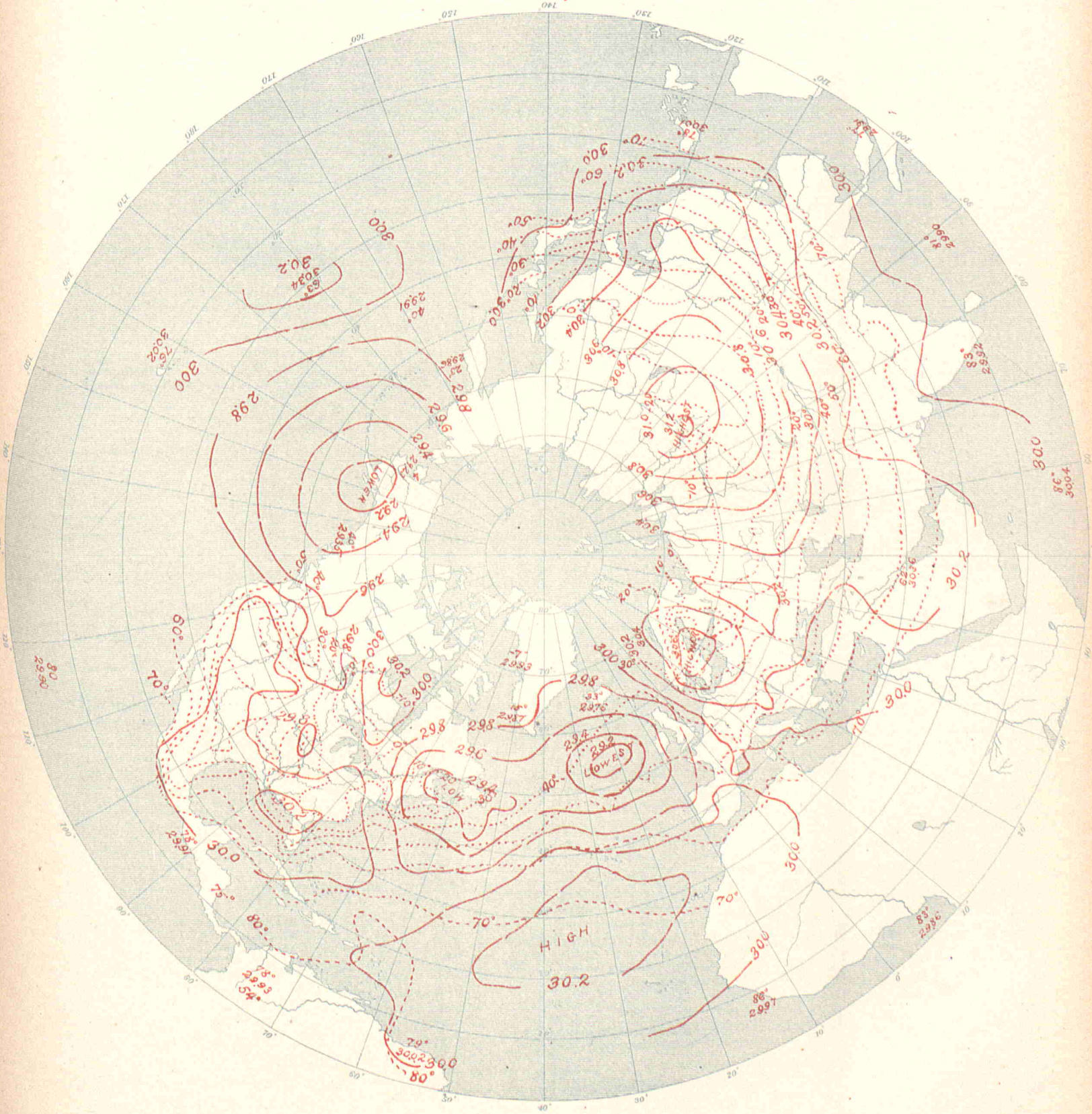
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	WEATHER.	OBSERVERS
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.40	746.7	30.13	765.3	10	— 7.2	61	calm	0	0		0	0			0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.28	743.7	29.98	761.5	22.0	— 5.6	87	s.	4	1.8			10 s			0.03	0.8	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.14	765.5	30.15	765.8	21	— 6.1	58	nw.	7	3.1		2 cs	0			0	0	clear	C. A. Shaw.
Madison, Wisconsin	28.76	730.5	29.86	758.4	13	—10.6	83	se.	6	2.7		0	0			0.20	5.1	clear	F. P. Chaffee.
Maginnis, Fort, Montana	25.16	639.1	29.70	754.4	41	5.0	59	w.	20	8.9			10 k		w.	0	0	cloudy	F. Burke.
McKavett, Fort, Texas																			J. E. Thatcher.
Marquette, Michigan	29.15	740.4	29.93	760.2	15	— 9.4	67	sw.	4	1.8		0	0			inap.	inap.	clear	J. Gilligan.
Memphis, Tennessee	29.66	753.4	30.02	762.5	32	0.0	68	s.	8	3.6		10 cs	0	sw.		0	0	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.09	738.9	29.90	759.4	19	— 7.2	84	s.	3	1.3			10 n			0.06	1.5	light snow	W. Line.
Missoula, Fort, Montana	26.48	672.6	29.94	760.5	42	5.6	76	n.	5	2.2		0	5 s		w.	c	0	fair	I. H. Young.
Mobile, Alabama	30.19	766.8	30.23	767.8	26	— 3.3	88	calm	0	0		0	0			0	0	clear	C. A. Read.
Montgomery, Alabama	29.97	761.2	30.21	767.3	22.2	— 5.4	69	calm	0	0		0	0			0	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	28.74	730.0	29.85	758.2	12	—11.1	80	ne.	6	2.7			10 s			0.12	3.0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.06	738.1	30.14	765.5	22.5	— 5.3	80	sw.	13	5.8			10 s			0.07	1.8	cloudy	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.02	584.7	29.65	753.1	0.0	—17.8	100	nw.	75	33.5			10m;fg		nw.	0.04	1.0	light snow	B. S. Pague.
Nashville, Tennessee	29.45	748.0	30.06	763.5	22.0	— 5.6	88	se.	10	4.5		10 cs	0			0	0	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	29.74	755.4	29.86	758.4	15.5	— 9.2	81	nw.	2	0.9		0	0 sk.			0	0	clear	J. H. Sherman.
New London, Connecticut	29.81	757.2	29.86	758.4	22	— 5.6	44	nw.	6	2.7		0	0			0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.15	765.8	30.21	767.3	37.0	2.8	49	se.	3	1.3		0	0			0	0	clear	L. Dunne.
Newport, Rhode Island	29.70	754.4	29.75	755.6	20.7	— 6.3	68	w.	23	10.3		2 k	0	ne.		inap.	inap.	clear	W. McGillivray.
New York, New York	29.73	755.1	29.92	760.0	23	— 5.0	73	sw.	5	2.2		0	0			0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.10	764.5	30.13	765.3	23	— 5.0	61	w.	3	1.3		0	0			0	0	clear	Wm. Davis.
North Platte, Nebraska	26.78	680.2	29.94	760.5	19.6	— 6.9	82	w.	4	1.8		0	2 s			0	0	clear	E. F. Brady.
Olympia, Washington T'y	29.70	754.4	29.74	755.4	45.0	7.2	93	s.	7	3.1			10 n			0.87	22.1	light rain	J. Dascomb.
Omaha, Nebraska	28.53	721.6	29.82	757.4	30.0	— 1.1	84	n.	1	0.4		0	0			0	0	clear	A. Pollak.
Oswego, New York	29.54	750 3	29.89	759.2	24.0	— 4.4	73	nw.	11	4.9			10 s		nw.	0.13	3.3	cloudy	J. G. Linsley.
Palestine, Texas	29.52	749.8	30.10	764.5	35.5	1.9	51	s.	10	4.5		0	0			0	0	clear	L. M. Pindell.
Pensacola, Florida	30.20	767.1	30.23	767.8	25.8	— 3.4	56	n.	4	1.8		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	29.85	758.2	29.90	761.0	28	— 2.2	64	sw.	4	1.8		0	0			0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.65	448.3	30.31	769.9	17	— 8.3	76	ne.			4	0	1 s			0	0	clear	H. Hall.
Pioche, Nevada	23.90	607.0	30.07	763.8	37	2.8	46	w.	2	0.9		0	5 ks		w.	0	0	fair	C. N. Kitchel.
Pittsburg, Pennsylvania	29.24	742.7	30.10	764.5	20.0	— 5.6	84	w	4	1.8			10 s		w.	0.10	2.5	cloudy	W. A. Reid.
Poplar River, Montana	27.51	698.7	29.87	758.7				nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.20	767.1	30.21	767.3	38.4	3.6	57	nw.	8	3.6			0			0	0	clear	H. B. Boyer.
Port Huron, Michigan	29.30	744.2	30.04	763.0	7.8	—13.4	89	sw.	10	4.5		3 cs	0			0.05	1.3	clear	W. O. Bailey.
Portland, Maine	29.56	750.8	29.60	751.8	20.5	— 6.4	76	w.	5	2.2			10 n			inap.	inap.	light snow	W. W. Eichelberger.
Portland, Oregon	29.76	755.9	29.83	757.7	47.0	8.3	86	se.	7	3.1			10 s		s.	0.42	10.7	cloudy	M. L. Hearne.
Portsmouth, N. C.					27	— 2.8	77	n.			4	0	hz.			0	0	clear	F. S. Coburn.
Prescott, Arizona	24.65	626.1	30.02	762.5	23.7	— 4.6	07	sw.	3	1.3		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	29.63	752.6	29.66	753.4	19	— 7.2	70	w.	18	8 0		2 k	2 s	w.		0	0	fair	P. T. Jenkins.
Punta Rassa, Florida	30.16	766.1	30.17	766.3	36	2.2	61	n.	12	5.4		0	0			inap.	inap.	clear	W. J. Evans.
Red Bluff, California	29.61	752.1	29.98	761.5	44	6.7	83	n.	3	1.3		0	0			0	0	clear	J. R. Williams.
Rochester, New York	29.23	742.4	29.94	760.5	18	— 7.8	75	w.	10	4.5			10 k		nw.	0.04	1.0	cloudy	E. W. McGann
Roseburg, Oregon	29.43	747.5	30.00	762.0	43.4	6.3	93	se.	3	1.3			10 s		s.	0 19	4.8	threatening	J. J. Nanry.
Sacramento, California	29.90	759.4	29.98	761.5	43.4	6.3	96	sw.	4	1.8			fg.			0.01	0.3	dense fog	J. A. Barwick.
St. Louis, Missouri	29.18	741.2	29.82	757.4	28.6	— 1.9	93	s.	10	4.5			10 s			0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.20	741 7	29.23	742.4	4	—15.6	100	n.	4	1.8		0	8 s		ne.	0	0	cloudy	A. P. Leavitt.
St. Paul, Minnesota	28.89	733.8	29.85	758.2	13	—10.6	80	e.	5	2.2			10 s			0.22	5.6	cloudy	P. F. Lyons.
St. Vincent, Minnesota	28.87	733.3	29.86	758.4	11	—11.7	91	se.	5	2.2			10 s			0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.52	648.2	30.06	763.5	35	1.7	66	se.	2	0.9			10 s			0	0	cloudy	J. Craig.
San Antonio, Texas	29.38	746.2	30.10	764.5	30.0	— 1.1	68	e.	3	1.3		0	0			0	0	clear	T. J. Kenan.
San Diego, California	29.79	756.7	29.86	758.4	50.1	10.1	41	n.	4	1.8		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.33	745.0	30.06	763.5	14	—10.0	80	sw.	10	4.5			10 s			0.01	0.3	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.89	759 2	29.92	760.0	23.0	— 5.0	73	w.	8	3.6		0	0			0	0	clear	B. A. Blundon.
San Francisco, California	29.92	760.0	29.98	761.5	52	11.1	96	w.	3	1.3			fg.			0	0	dense fog	N. Gorom.
Santa Fé, New Mexico	23.06	585.7	30.05	763.3	23	— 5.0	66	ne.	11	4.9		0	0			0	0	clear	H. U. Jones.
Savannah, Georgia	30.12	765.0	30.22	767.6	29	— 1.7	67	nw.	6	2.7		1 c	0			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	25.96	659.4	29.79	756.7	42	5.6	38	sw.	20	8.9		0	0			0	0	clear	A. L. Matthews.
Shreveport, Louisiana	29.82	757.4	30.07	763.8	31	— 0.6	57	nw.	6	2.7		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	28.61	726.7	29.94	760.5	27	— 2.8	74	sw.	4	1.8		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.17	613.9	30.01	762.2	25.0	— 3.9	73	calm	0	0		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.28	743.7	29.35	745.5	39.6	4.2	73	se.	19	8.5			10 n		se.	0.40	10.2	light sleet	F. W. Fickett.
Smith, Fort, Arkansas	29.41	747.0	29.91	759.7	24.5	— 4.2	88	e.	4	1.8		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.15	765.8	30.19	766.8	18	— 7.8	83	nw.	3	1.3		1 c	1 s			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	27.78	705.6	29.91	759.7	37	2.8	85	s.	12	5.4			10 s			0.05	1.3	cloudy	H. Clifford.
Springfield, Illinois	29.08	738.6	29.81	757.2	23	— 5.0	80	s.	14	6.3			10 n			0.48	12.2	light snow	T. B. Jennings.
Springfield, Massachusetts	29.70	754.4	29.84	757.9	19	— 7.2	73	w.			1	0	1 n		w.	inap.	inap.	clear	Charles Mayr.
Springfield, Mo	28.31	719.1	29.84	757.9	35	1.7	85	w.	16	7.2			4 s		w.	0	0	fair	J. B. Marbury.
Starkville, Miss	29.64	752.8	30.14	765.5	24	— 4.4	88	s.	13	5.8		3 c	1 s			0	0	fair	C. Dill.
Stevenson, Fort, Dakota																			W. Burrows.
Stockton, Fort, Texas	26.88	682.7	30.02	762.5	28	— 2.2	77	sw.	6	2.7		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.66	753.4	29.72	754.9	16.8	— 8.4	58	nw.	16	7.2		0	0			0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.18	690.4	30.00	762.0	28.5	— 1.9	78	calm			0	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.28	743.7	30.02	762.5	15	— 9.4	83	s.	9	4.0			9 s			inap.	inap.	cloudy	A. Buell.
Tucson, Arizona	27.44	697.0	29.94	760.5	40	4.4	59	s.	2	0.9		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.54	750.3	29.92	760.0	45	7.2	68	w.	6	2.7			10 s		w.	inap.	inap.	cloudy	J. Daly.
Verde, Fort, Arizona					28.2	— 2.1	77	nw.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.89	759.2	30.16	766.1	27.0	— 2.8	72	se.	10	4.5		0	0			0	0	clear	James Kenealy.
Visalia, California	29.56	750.8	29.94	760.5	39.4	4.1	89	nw.	1	0.4		0	0			inap.	inap.	clear	O. D. Stewart.
Washakie, Fort, Wyoming	24.18	614.2	29.95	760.7	29.9	— 1.2	81	sw.	2	0.9		0	3 k			0	0	clear	T. M. Ambler.
Washington, D. C.	29.96	761.0	30.08	764.0	22.3	— 5.4	75	nw.	7	3.1		0	0			0	0	clear	B. M. Purssell.
West Las Animas, Colorado	25.78	654.8	29.94	760.5	21.5	— 5.8	67	w.	6	2.7		0	1 s			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.35	745.5	29.98	761.5	26	— 3.3	64	nw.	10	4.5			10 ks		nw.	inap.	inap.	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.12	765.0	30.18	766.6	23	— 5.0	73	n.	1	0.4		3 c	2 k		nw.	0	0	fair	Samuel A. Haney.
Winnemucca, Nevada	25.51	647.9	30.04	763.0	34	1.1	72	sw.	8	3.6		0	0 s		sw.	0	0	fair	J. Grover.
Yankton, Dakota	28.40	721.3	29.83	757.7	28	— 2.2	77	nw.	12	5.4		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.66	753.4	29.81	757.2	48.4	9.1	42	ne.	4	1.8		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3			54.0	12.2	82	n.	2	0.9			9 s;ks		w.	0.06	1.5	cloudy	Joaquin Gomez.
Havana, Cuba, W. I.	29.99	761.7	30.05	763.3	61.3	16.3	59	n.	14	6.3			9 k		n.	0.67	17.0	cloudy	Benito Vines, S. J.
Kingston, Jamaica, W. I.	29.95	760.7	29.96	761.0	72	22.2	90	calm	0	0		2 cs	0			0	0	fine	Robert Johnston.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	79	26.1	82	se.			2	3 c	0			0.050	1.3	clear	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.93	760.2	78	25.6	89	calm			0		10 ks		calm	0.95	24.1	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75	23.9	94	ne.			2	0	0			0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.02	737.1	29.08	738.6	20	— 6.7	50	calm			0		4 c			0	0	clear	W. J. Fisher.
St. Thomas, W. I.	29.94	760.5	30.06	763.5	80	26.7	82	se.				3 ck	3 k	n.	se.	0.08	2.0	cloudy	Aug. Walloe.
York Factory, B. A	30.16	766.1	30.23	767.8	—13.0	—25.5	100	s.	9	4.0			10 n		s.	0.25	6.3	snowing	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay †	30.25	768.3	65.5	18.6	70	nw.			2		0							blue sky.
H. M. S. Antelope, N. 35° 00′, E. 17° 55′	29.93	760.2	63	17.2		s.			2-3		9	sse.				3	ssw.	d. clouds.
H. M. S. Audacious, N. 1° 21′ E. 103° 15′	29.84	757.9	81	27.2	95	var.			2-3		2	ne.						d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			68	20.0	60	nne.			1		0					1	nne.	blue sky.
H. M. S. Boadecia, Saldanha Bay, Cape Colony	29.90	759.4				wsw.			1-2		4							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.07	763.8	72	22.2	71	calm			0		0							blue sky.
H. M. S. Champion, N. 20° 17′, E. 114° 21′	30.22	767.6	69	20.6	90	ne.			6		10					6	ne.	squally.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.61	777.5	32	0.0	84	wnw.			3		9							d. clouds.
H. M. S. Comus, N. 39° 00′ W. 124° 07′	30.01	762.2	48	8.9	85	nnw.			2-4		10							misty.
H. M. S. Curacoa, Yokohama, Japan	29.90	759.4	48.5	9.2	77	nnw.			2-3		8	n.						d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.68	753.9	65	18.3	63	calm			0		1							blue sky.
H. M. Dock-Yard, Bermuda, W. I.	29.82	757.4	62	16.7	71	wwn.			4-5		8	wnw.						d. clouds
H. M. M. Eclipse, N. 11° 15′ E. 74° 48′	29.82	757.4	83	28.3		e.			1		3					1		d. clouds.
H. M. S. Fawn, S. 29° 53′, E. 31° 04′	30.06	763.5	73.5	23.1	76	ene.			2		8					3	ese.	d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	30.02	762.5	60	15.6	88	calm			0		10							gloomy.
H. M. S. Heroine, N. 34° 24′ W. 14° 03′	30.08	764.0	62	16.7	88	wnw.			3		8	wnw				3	wsw.	d. clouds.
H. M. S. Iron Duke, N. 1° 17′, E. 103° 51′	29.91	759.7	77	25.0	90	nw.			1		5	nw.						d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	29.88	758.9	63.3	17.3	76	s.			2		2					1	s.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.95	760.7	62	16.7		calm			0									d. clouds.
H. M. S. Magpie, N. 32° 44′ E. 129° 51′	30.25	768.3	44.1	6.7	69	n.			3-6		8							squally.
H. M. S. Monarch N. 34° 38′ E. 24° 16′			65	18.3		e.			3-4		10	ese.				3	ese.	raining.
H. M. S. Rambler, S. 38° 00, W. 56° 52′	30.01	762.2	61	16.1	82	nw.			4		0					3	nw.	blue sky.
H. M. S. Rocket, S. 24° 13′, W. 70° 48′	30.01	762.2	68	20.0	94	s.			3		2					2-3	sw.	d. clouds.
H. M. S. Serapis, N. 37° 04′ E. 4° 22′	29.85	758.2	62	16.7	77	sw.			1		6							d. clouds.
H. M. S. Starling, N. 2° 15′, E. 6° 10′	29.86	758.4	82.7	28.2	82	sw.			3		3	wsw.				1	ssw.	d. clouds.
H. M. S. Superb, N. 34° 32′, E. 32° 59′*	30.14	765.5	68	20.0	74	n.			1		0							blue sky.
H. M. S. Swiftsure, Callao Bay, Peru	30.01	762.2	65	18.3	100	calm			0		10							foggy.
H. M. S. Sylvia, Swallow Bay, Patagonia	29.73	755.1	48.5	9.2	67	sw.			4-6		9							d. clouds.
H. M. S. Tourmaline, Bombay, India	29.94	760.5				calm			0		0							blue sky.
H. M. S. Woodlark, Shat-el Arab river	30.26	768.6	61.5	16.4	66	se.			1		0							blue sky.
H. M. S. Zephyr, Chee-foo, China	30.51	774.9	23.5	— 4.7		w.			3		0					2	nw.	blue sky.
Portuguese Naval																		
Tamega, Macao, China	30.41	772.4	53.6	12.0	65	n.			6		10		n.			3	n.	overcast.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.09	764.3	29	— 1.7	67	n.	4	1.8			0			0	0			clear.
Navy Yard, Portsmouth, N. H.	29.64	752.8	19	— 7.2	?	nw.	11	4.9			10		nw.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	29.89	759.2	42	5.6	91	n.			3		10		n.	sli't	sli't			drizzling.
Adams, Sitka, Alaska*†	29.31	744.5	39	3.9	81	se.			3		8		ese.					sprinkling.
Alaska, San Francisco, Cal.	29.93	760.2	52	11.1	93	calm			0		5			0	0			fair.
Alliance, N. 35° 50′, W. 74° 18′	30.05	763.3	38	3.3	80	nw.			3		8			0	0	sm'h		cloudy.
Ashuelot, Nagasaki, Japan	30.27	768.8	45	7.2	84	nnw.			2		8		nnw.					cloudy.
Brooklyn, S. 48° 48′, W. 65° 48′	29.89	759.2	52	11.1	86	e.	9	4.0			0			0	0	sm'h		clear.
Colorado, New York, N. Y.	29.97	761.2	24	— 4.4	100	wnw.	6	2.7			0			0	0			clear.
Enterprise, Norfolk, Va	29.97	761.2	31	— 0.6	68	n.			2		10		sw.					cloudy.
Essex, Callao, Peru	29.99	761.7	66	18.9	90	ne.			0-1		10					sm'h		foggy.
Franklin, Norfolk, Va.	30.10	764.5	22	— 5.6	?	w.	4	1.8			0			0	0			clear.
Galena, Montevideo, Uruguay	30.16	764.5	57	13.9	87	nnw.			2		0					sm'h		clear.
Hartford, S. 52° 29′ W. 75° 17′*	29.61	752.1	48	8.9	85	nnw.			6		10		wnw.	light	light	r'gh	n;w.	cloudy.
Independence, Mare Island, Cal.	30.02	762.5	50	10.0	100	calm			0		10			0	0			cloudy.
Iroquois, Callao, Peru	29.97	761.2	65	18.3	94	calm			0		10							foggy.
Jamestown, Boston, Mass.	29.67	753.6	15	— 9.4	100	w.			3		8		calm	0	0			cloudy.
Juniata, Fayal Azores Islands*	30.20	767.1	65	18.3	78	nnw.			4		2		n.	sli't	sli't	sm'h		cloudy.
Kearsarge, N. 35° 51′, W. 74° 23′	30.06	763.5	39	3.9	91	nw.			4		10		nw.			mod.		cloudy.
Lackawanna, S. 10° 32′ W. 82° 10′*	29.94	760.5	71	21.7	80	sse.			2		5		e.			sm'h	se.	fair.
Lancaster, Leghorn, Italy*	29.92	760.0	59	15.0	81	ene.			4		10		e.			sm'h		cloudy.
Michigan, Erie, Pa.	29.99	761.7	24	— 4.4	74	ssw.			2		2		nw.					fair.
Minnesota, New York, N. Y.	29.92	760.0	23	— 5.0	100	nw.	2	0.9			5							fair.
Monocacy, N. 33° 09′, E. 129° 19′	30.26	768.6	47	8.3	85	nne.			5		10		n.			sm'h		cloudy.
New Hampshire, Newport, R. I.	29.79	756.7	21	— 6.1	100	wnw.			6		2		calm			mod.	wnw.	fair.
Nipsic, Lisbon, Portugal*	29.91	759.7	59	15.0	81	ese.			2		10					sm'h		misty
Onward, Callao, Peru†	30.06	763.5	64	17.8	94	calm			0		10					long	w.	foggy.
Palos, Tientsin, China*	30.55	776.0	19	— 7.2	100	nnw.			3		0							clear.
Pensacola, S. 9° 03′, W. 80° 03′*	29.89	759.2	68	20.0	94	se.			2		2		se.	0	0	mod.	se.	clear.
Powhatan, Boston, Mass.	29.69	754.1	17	— 8.3	83	wsw.			1		5							fair.
Quinnebaug, Villefranche, France*	29.98	761.5	67	19.4	54	se.			1		2		se.					clear.
Ranger, N. 15° 37′, W. 96° 52′	29.95	760.7	78	25.6	86	nne.			2		2		calm			sm'h		clear.
Richmond, Yobako Harbor, Japan*	30.23	767.8	44	6.7	60	nne.			2		10		nw.	Bl'k	Bl'k			cloudy.
Saratoga, Newport, R. I.	29.65	753.1	19	— 7.2	84	wnw.			2		2		wnw.	0	0	sm'h		clear.
St. Louis, League Island, Pa.	30.13	765.3	26	— 3.3	100	wsw.			2		2			0	0			clear.
Tennessee, N. 35° 50′ W. 74° 20′	30.06	763.5	39	3.9	81	nw.	15	6.7			10			0	0	mod.	n.	cloudy.
Wabash, Boston, Mass.	29.66	753.4	16	— 8.9	66	w.	7	3.1			8		w.	0	0			fair.
Wachusetts, Mare Island, Cal*	29.96	761.0	49	9.4	93	sw.			1		10		calm	0	0	sm'h		foggy.
Wyandotte, Washington, D. C	30.24	768.1	41	5.0	56	calm			1		10		w.	0	0			cloudy.
Yantic, N. 36° 00′, W. 74° 30′	30.17	766.3	40	4.4	73	nw.			4		8					mod.	nw.	cloudy
Merchant Marine.																		
S. S. Grecian, N. 34° 42′, W. 15° 50′*	30.13	765.3	63	17.2	72	n.			3		5?		n.	0	0	long	nw.	cloudy.?
S. S. Nova Scotian, N. 55° 02′ W. 20° 07′	29.04	737.6	48	8.9		sse.			3		10		se.			sli't	s.	cloudy.
S. S. Polynesian, N. 47° 39′, W., 38° 17′ *	29.64	752.8	50	10.0		wsw.			5		10		wnw.	0	0	r'gh	w.	overcast.
S. S. Scandinavian, N. 42° 30′, W. 67° 05	29.54	750.3	27	— 2.8		wsw.			5		9		w.	snow	snow	high	w.	rain & snow
S. S. Indiana, N. 41° 49′, W. 64° 54′			37	2.8	71	wnw.			4		2		nw.			sm'h	w.	fine.
S. S. Lord Clive, N. 50° 10′, W. 34° 40′*†	29.47	748.5				w.			9		9		w.	sq'lls	sq'lls	high	w.	squally.
S. S. Lord Gough, Liverpool, Eng.	29.71	754.6				sse.			4					0	0			foggy.
S. S. Ohio, N. 51° 09′ W. 20° 03′†	29.13	739.9	49	9.4	93	w.			5		8		nw.			mod.	w.	fair.
S. S. Pennsylvania, Bombay Hook, Del†	29.91	759.7	24	— 4.4		w.			3		0							clear.
S. S. Castor, N. 42° 24′ W. 52° 00′*	29.35	745.4	48.2	9		nw.			3		9		nw.			5	nne.	sprinkling.
S. S. Jason, N. 50° 08′, W. 18° 53′	29.52	749 8	51.8	11.0		nnw.					5 k?					0	nw.	cloudy.?
S. S. Anchoria, N. 44° 42′ W. 54° 19′†	29.48	748.8				ne.			2		10		nw.	snow	snow	sm'h		overcast.
S. S. Bolivia, N. 55° 54′, W. 11° 35′*†	29.52	749.8	50	10.0	86	wsw.			4		5		wsw.	0	0	mod.	w.	fair.
S. S. Dorian, N. 55° 20′, W. 5° 07′*†	29.58	751.3	49	9.4		sse.			6		10		s.	shr's	sh'rs	mod.	ssw.	hazy.
S. S. Elysia, N. 49° 19′, W. 29° 52′ †	29.55	750.6	50	10.0		w.			6		7		w.	rain	rain	hv'y	w.	cloudy.
S. S. Ethiopia, N. 55° 36′ W. 7° 00′	29.60	751.8	47	8.3		sw.			3		5?		sw.	5 h'r	5 h'r	sm'h		cloudy.?
S. S. Galatia, N. 31° 54′, E. 30° 33′†	30.17	766.3	71.3	21.8	85	w.			1		0			0	0	sm'h	sse.	clear.
S. S. Ailsa, N. 11° 15′, W. 74° 17′†	30.04	763.0	80	26.7	91	e.			3		8		e.	0	0	mod.	e.	cloudy
S. S. Alvo, N 26° 00′ W. 74° 22′	30.00	762 0	67	19.4		n.			6		kn		nnw.	4 h'r	4 h'r	long	n.	cloudy.
S. S. Ambrose, N. 34° 28′, W. 62° 54′†	29.88	758.9	62	16.7		wnw.			5		10		wnw.	6 h'r	6 h'r	8	nw.	cloudy
S. S. Carroll, N. 44° 43′, W. 62° 05′*†	29.59	749.3	30	— 1.1		wnw.			4		6		wnw.	snow	snow	short	w.	snowy.
S. S. City of Agra, S. 46° 10′, E. 159° 10′	29.66	753.4	55	12.8	94	ese.			1		10							overcast.
Bk. Commewyne, N. 20° 03′ W. 57° 49′	30.07	763 8	79.9	26.6	78	ese.			4		5							d. clouds.
S. S. Gordon Castle, N. 6° 18′, E. 89° 02′	29.99	759.4	81.0	27.2	78	ne.			3		6							d. clouds.
S. S. Inchkeith, S. 21° 19′, E. 89° 20′	30.06	763.5	73	22.8	85	e.			6		5							d. clouds.
Mertola, N. 50° 46′, W. 8° 54′	29.59	751 6	49.5	9.7	97	se.			4		6							d. clouds.
Ptolmey, N. 47° 04′, W. 27° 35′	29.61	752.1	51.7	10.9		w.			7		6							d. clouds.
S. S. Mexico, N. 27° 39′, W. 110° 52′ †	29.88	758.9	66	18.9	94	s.			2		2		nw.			mod	nw.	fair.
S. S. Bothnia, N. 43° 24′, W. 53° 30′	29.39	746.5	44	6.7	92	w.			6		10			6 h'r	6 h'r	cf'd		heavy rain.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE —Continued.																		
S. S. Marathon, Malaga, Spain	30.00	762.0	63	17.2		wnw.			2		5		wnw.	0	0	sm'h	wnw.	fine.
S. S. Pavonia, N. 51° 17′, W. 13° 54′*	29.35	745.5	50	10.0	f	s.			7		10		s.	1 h'r	1 h'r	sli't	s.	threatening.
S. S. Colina, N. 47° 22′, W. 52° 21′†	29.40	746.7				n.			2		10		nw.	snow	snow	long	n.	snowing.
S. S. Labradore, N. 49° 47′, W. 7° 01′			50.0	10.0		sse.			3		5		s.					clear.
S. S. Abyssinia, N. 47° 39′, W. 41° 41′ *	29.57	751.1	47	8.3	77	sse.			5		10		s.	6 h'r	6 h'r	r'gh	w.	gloomy.
S. S. Wyoming, N. 51° 32′, W. 8° 57′	29.70	754.4	50	10.0		s.			4		4		ssw.			long	sw.	showery.
S. S. Cimbria, N. 44° 30′, W. 53° 19′			38.3	3.5		sw.			6		10		nw.	rain	rain	r'gh	w.	covered.
S. S. Gellert, Hamburg, Germany	30.24	768.1	39	3.9		se.			3		8		se.					covered.
S. S. Rugia, N. 43° 05′, W. 55° 34′ *	29.34	745.2	46	7.8		ene.			6		3		e.	3 h'r	3 h'r	7	nw.	rainy.
S. S. Silesia, N. 49° 49′, W. 3° 06′†	29.80	756.9	50.5	10.3	96	sw.			5		9		sw.	½h'r	½h'r	3-4	w.	overcast.
S. S. Vandalia, N. 42° 50′, W. 59° 00′	29.52	749.8	45.5	7.5	97	nnw.			4		5		nnw.	0	0	mod.	nnw.	fair.
S. S. Wieland, N. 49° 46′, W. 6° 54′	29.67	753.6				e.			5		10		w.	2 h'r	2 h'r	long	w.	misty.
S. S. City of Berlin, N 42° 15′, W. 61° 30′	29.55	750.6	39	3.9	82	w.			5		7		w.	sh'rs	sh'rs	mod.	wnw.	fair.
S. S. Hevelius, N. 51° 26′, E. 3° 30′*†	29.97	761.2	43	6.1		wsw.			2		9		wsw.	0	0			overcast.
S. S. Sirius, S. 14° 40′, W. 38° 30′ *	29.88	758.9				ssw.			6		10		s.	5 h'r	5 h'r	rg'h	s.	rainy.
S. S. Colorado, N. 37° 49′, W. 74° 23′†	30.05	763.3	27	—2.8		nw.			6		2		w.	0	0	mod.	nw.	clear.
S. S. Archimede, N. 39° 02′, W. 68° 47′ †	29.82	757.4			80	wnw.			6		6		wnw.	snow	snow	h'vy	wnw.	covered.
S. S. John Hopkins, Baltimore, Md *†	30.12	765 0	24	—4.4		nw.			4		0			0	0			clear.
S. S. Glenapp, N. 18° 20′, W. 22° 20′ †*	29.88	758.9				ene.			6		8		ene.	2 h'r	2 h'r	high	ne.	
S. S. Glenfyne, S. 12° 26′, W. 37° 30′ *†	29.63	752.6				ene.			3		1		ene.	0	0	sm'h	ene.	clear.
S. S. Chalmette, Algiers, La †	30.14	765.5	33	0.6		e.			1		0			0	0			clear.
S. S. Denmark, Start Point, Eng †	29.75	755.9	52	11.1		s.			5		10		sw.	shr's	sh'rs	sli't		overcast.
S. S. England, N. 50° 53′, W. 21° 43′	29.19	741.4				w.			7		8		w.	sqll's	sqll's	high	w.	squally.
S. S. Erin, New York, N. Y			30	—1.1		nw.			6		4		nw.	0	0			
S. S. Helvetia, Liverpool, Eng	29.60	751.8	40	7.8		s.			1		10		s.	5 h'r	5 h'r			dull.
S. S. Holland, N. 46° 27′, W. 29° 50′	29.61	752.1	56	13.3		wnw.			8		8		w.	5 h'r	5 h'r	h'vy	wnw.	clearing.
S. S. City of Merida, N. 19° 45′, W. 90° 44′*†	29.98	761.5	73.4	23.0		ne.			3		5		e.	1 h'r	1 h'r	cross	ne.	cloudy.
S. S. Amsterdam, N. 42° 20′, W. 62° 26′ *	29.66	753.4	38	3.3		wsw.			5							5	w.	snowy.
S. S. Olbers, N. 39° 00′, W. 73° 00′ *†	29.80	759.9	34	1.1		nw.			6–7								nw.	
S. S. Braunschweig, N. 27° 27′ W. 20° 17′	30.21	767.3	70.0	21.1	85	nne.			2		7		nne.	1 h'r	1 h'r	light	nne.	fair.
S. S. Elbe, N. 49° 44′, W. 7° 00′	29.66	753.4	51.8	11.0		se.			4		4		se.	0	0	mod.	se.	covered.
S. S. Gen. Werder, N. 39° 40′ W. 69° 36′	29.80	756.9	33.8	1.0		w.			6		9		wnw.	snow	snow	mod.	w.	cloudy.
S. S. Hohenstaufen, S. 17° 33′, W. 37° 19′	29.88	758.9	73.4	23.0		s.			6		10		s.	sh'rs	sh'rs	cross	ssw.	covered.
S. S. Neckar, N. 49° 10′, W. 15° 09′	29.38	746.2	50.0	10.0	93	ssw.			6		10		ssw.	2 h'r	2 h'r	cross	ssw.	stormy.
S. S. Ohio, N. 49° 08′, W. 20° 52′	29.40	746.7				wnw			6–7		3		nw.	4 h'r	4 h'r	mod.	nw.	fair.
S. S. Rhein, N. 42° 04′, W. 61° 00′	29.54	750.3				w.			6		5		w.	3 h'r	3 h'r	r'gh	w.	fair.
S. S. Werra, N. 47° 38′, W. 43° 58′	29.43	747.5	41.0	5.0		s.			3-4		9		ssw.	rain	rain	r'gh	ssw.	covered.
S. S. Belgic, N. 39° 11′, W. 127° 47 †	30.10	764.5	64	17.8	78	w.			2		3		w.	1 h'r	1 h'r	sm'n		clear.
S. S. Coptic, N. 33° 50′ E. 137° 06′	29.85	758.2	54.0	12.2	67	nne.			4		6		ne	0	0	mod.	nw.	fair.
S. S. Gaelic, N. 38° 08′, W. 124° 50′ *	30.03	762 7	55	12.8	87	wnw.			4		7		nw.				w.	d. clouds.
S. S. Oceanic, Hong Kong, China			66	18.9	74	var.			2		0							clear.
S. S. Mississippi, N. 46° 16′, W. 124° 13′*†	29.55	750.6	50	10.0	79	ssw.			6		6		w.			high	sw.	thnd'r&l'tng
S. S. Willamette, N. 38° 40′, W. 123° 46′†	30.04	763.0	52	11.1	93	nn w.			5		10		nw.	0	0	mod.	nnw.	foggy.
S. S. Oregon, N 43° 59′, W. 124° 32′†	29.87	758.7	52	11.1	86	s.			3		5		sw.			light	sw.	squally.
S. S. Ancon, N. 33° 47′, W. 118° 36′†	29.83	757.7	58	14.4	94	s.			1		0					sm'h		clear.
S. S. City of Chester, San Francisco, Cal *†	29.92	760 6	52	11.1	93	w.			1		fg.							foggy.
S. S. State of California, N. 40° 50′ W. 124° 30′ *†	29.98	761.5	52	11.1		wn w			3		10		wnw.	0	0	h'vy	wnw.	cloudy.
S. S. Australia, N. 18° 03′, W. 158° 58′	30.02	762 5	76	24.4	73	ne.			6		5?		ne.	0	0	r'gh	ne.	clear.?
S. S. City of New York, Sydney, N. S. W †	29.81	757.2	67	19.4	69	w.			1		0			0	0			clear.
S. S. City of Pekin, N. 42° 42′ E. 169° 05′ †	30.01	762.2	40	4.4	82	n.			1		10		nw.	0	0	light	n	cloudy.
S. S. City of Rio de Janeiro N. 14° 40′, W. 92° 27′†	29.91	759.7	78	25.6	86	calm			0		0			0	0	mod.	w.	fine.
S. S. City of Tokei, N. 29° 40′, W. 179° 45′†	30.44	773 2	63	17.2		ssw.			6		10		sw.	2 h'r	2 h'r	mod.	ssw.	threatening.
S. S. Collma, N. 9° 42′. W. 84° 46′†	29.89	759.2	78	25.6	86	ne.			3		6		ne.	0	0	sm'h	sse.	fair.
S. S. Grenada, N. 34° 27′, W. 120° 32′†	29.89	759.2	56	13.3	94	nw.			6		8?		nw.	0	0	large	nw.	clear.?
S. S. San Jose, N. 31° 30′ W. 118° 55′						wnw.			2		2 k		wnw.	0	0	mod	nw.	clear.
S. S. Zealandia. Sydney, N. S. W	29.58	751.3	69	20.6	80	se.			3		1		ne.			mod.	e.	fine.
S. S. Muriel, N. 25° 45′, W. 66° 08′	29.96	761.0	78	25.6		wsw.			3		2			sh'rs	sh'rs	mod.	sw.	fair.
S. S. Caracas, Curacon, W I †	29.93	760.2	81.5	27.5	89	ese.			4		5		ese.	0	0	sm'h	ese.	fair.
S. S. Claudius, N. 10° 40′, W. 83° 25′ †	30.02	762 5				w.			3		7		nnw.	sh'rs	sh'rs	long	une.	rainy.
S. S. Valencia, N. 37° 51′, W. 73° 06′ †	30.03	762.7	51.5	10.8	69	nw.			6		9		w.	0	0	mod	nw.	fine.
S. S. Belgenland, Jersey City, N. J	29.99	761.7	27	—2.8		w.			5		1		w.	snow	snow	sm'h		fair.
S. S. Pennland, N. 40° 46′, W. 68° 54′	29.84	757.9	32	0.0	100	w.			5		10			snow	snow	long	w.	overcast.
S. S. Rhyuland, Antwerp, Belgium	30.07	763.8	52	11.1	79	se.			2		3		se.	0	0			fair.
S. S. Switzerland, N. 48° 16′, W. 47° 28′†	29.49	749.0				e.			1		10		s.	sleet	sleet	r'gh	wsw.	sleeting.
S. S. Waesland, Scheldt River, Germany	30.01	762.2	43	6.1	92	se.			3		10		sse.	0	0	sm'h		light fog.
S. S. Leerdam, N. 49° 53′ W. 179° 07′ †	29.44	747.8	54.5	12.5	67	w.			5		10		ssw.	11 h'r	11 h'r	r'gh	w.	cloudy.
S. S. P. Caland, New York, N. Y	29.88	758.9	27.7	—2.4	95	wnw.			3		0							clear.
S. S. Schiedam, N 50° 52′ E. 3° 58′	29.95	760.7	49.8	9.9	76	s.			3		7		se.	4 h'r	4 h'r	mod.		hazy.
S. S. Zaandam, N. 43° 34′, W. 53° 27′	29.37	746.0	53.2	11.8	83	ne.			4		10 n		s.	24 h'r	24 h'r	4	sw.	
S. S. State of Florida, N. 43° 04′, W. 56° 52′	29.39	746.5	40	7.8		ene.			3		10		ene.	12 h'r	12 h'r	mod.	ene.	cloudy.
S. S. State of Georgia, N. 44° 39′, W 52° 51′†	29.29	744.0	38	3.3		nne.			6		10			0	0	irreg.		overcast.
S. S. State of Indiana, Irish Channel†	29.69	754.1				s.			2		2		se.	12 h'r	12 h'r			clear.
S. S. Hekla, N. 59° 38′, W. 2° 30′ *	29.85	758.1	49.1	9.5		sse.			6–8		10		sse.	driz.	driz.	h'vy	sse.	raining.
S. S. Plantyn N. 50° 04′, W. 6° 54′	29.80	756.9							3		3		sw.	3 h'r	3 h'r	sm'h	s.	fair.
S. S. Baltic, N. 51° 12′, W. 22° 34′	29.30	744.2	44	6.7	84	wnw.			6		5		w.	2 h'r	2 h'r	r'gh	w.	halling.
S. S. Celtic, New York, N. Y†	29.84	757.9	31	—0.6		wnw.			3		0			0	0			fine.
S. S. Germanic, N. 40° 21′, W. 67° 39′†	29.77	756.1	40	4.4		w.			5		8		w.	snow	snow	r'gh	w.	snowing.
S. S. Lepanto, N. 47° 21′, W. 26° 25′*	29.56	750.8	49	9.4		w.			9		10		w.	8 h'r	8 h'r	h'vy	w.	squally.
S. S. Marengo, N. 40° 17′, W. 60° 50′	29.01	752.1				nnw.			4		10		var.	9 h'r	9 h'r	r'gh	var.	rainy.
S. S. Salerno, Hull, Eng.*	29.53	750.0				se.			2		10			3 h'r	3 h'r			raining.
S. S. Catherine Whiting, Fire Island, N. Y †	30.02	762.5	82	27.8		wnw.			6		0			0	0	sli't	n.	
S. S. Saxon, N. 41° 15′, W. 71° 15′			28	—2.2		wnw.			6		1					sm'h		fine.
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 34° 18′, W. 74° 10′			44	6.7		nw.			4		8		nw.	0	0	small	n.;ne	
Bk. Adelaide, James river, Va *†	30.20	767.1	44	6.7		wnw.			4					0	0	sm'h		clear.
Bg. Alcira, N. 30° 01′, W. 72° 26′	30.02	762.5	68	20.0		nnw.			4		8		nnw.	0 h'r	6 h'r	r'gh	nnw.	cloudy.
Bk. Alpha, N. 41° 55′ W. 13° 40′†	29.91	759.7	58	14.4		wsw.			5		8		w.	2 h'r	2 h'r	long	nw.	cloudy.
Schr. Annie Lewis, N. 23° 20′ W. 94° 54′ †	30.25	768.3	64	17.8		nnw.			2		8		nnw.	0	0	long	nnw.	cloudy.
S. Annie M. Law, Manila Bay, Luzon*†	29.80	756.9	70	21.1		n.			3		0			0	0	sm'h		
Bk. Anna Thormann, S. 28° 53′, E. 40° 37′*	30.08	764.0	71.2	21.8	73	se.			5		4 k		se.	shr's	shr's	high	s.	fine.
S. S. Antonio Lopez, N. 33° 00′, W. 32° 55′*	30.36	771.1	70	21.1	90	nw.			2		1			0	0	long	nw.	hazy.
Bk. Aquidneck, S. 21° 10′, W. 34° 27′ *†	30.10	764.5	80	26.7		sw.			4				sw.	2 h'r	2 h'r	h'vy	sw.	cloudy.
Bgt. Arthur, N. 26° 46′, W. 27° 00′ *†	30.38	771.6				ne.							ne.	0	0	mod.	n.	
Schr. Anna Holton, N. 29° 59′, W. 73° 36′†	30.03	762.7	62	16.7		nw.			5		5?		nw.	1 h'r	1 h'r	cross	nw.	clear?
Bg. Belle of the Bay, N. 24° 48′, W. 78° 40′ *†	30.02	762.5				n.			5		5?		nnw.	light	light	sm'h	nnw.	clear.?
Bk. Champion, N. 23° 40′, W. 68° 09′			80.0	26.7		w.			3		2		wsw.	1 h'r	1 h'r	mod.	ese.	fair.
Schr. Chas. F. Heyer, New York, N. Y	29.89	759.2	31	—0.6	60	w.					0			0	0			clear.
Br. Clara M. Goodrich, Key Francis, W. I*†	30.00	762.0				nne.			5		5?		nne.	4 h'r	4 h'r			cloudy?
Schr. C. R. Flint, N. 26° 37′, W. 83° 27′			51	10.6		ne.			3		10		ne.	0	0	sm'h	nnw.	cloudy.
Bkt. David Preston, Pensacola, Fla			68.0	20.0		e.					10		sw.	0	0			
Bk. E. L. Pettingill, N. 5° 57′, W. 117° 05′*†	29.90	759.4	80	26.7		sw.			1		8		var.	18 h'r	18 h'r	mod.	sse.	heavy sh'rs.
Schr. Edith R. Seward, Baltimore, Md*†	30.00	703 5	25	—3.9		nw.			2		2			0	0			clear.
S. E. J. Spicer, N. 50° 30′, W. 12° 30′*	29.53	750.0	54	12.2		ssw.			6		10		sw.	sq'lls	sq'lls	mod.	nw.	overcast.
Bk. Eliza Barss, N. 40° 16′, W. 73° 15′†	29.94	760.5				nw.			6		2		nw.	snow	snow	short	nw.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																	
Bk. Essex, N. 13° 33′, E. 58° 23′*†	30.04	763.0	86	30.0		nne.			6			nne.	0	0	3		fine.
Schr. F. E. McDonald, Rockland, Maine†	29.59	751.6	10	—12.2		nw.			5				snow	snow			snowing.
S. S. Foscolia, New York. N. Y.						nw.			7				0	0			fine.
Bk. Freya, N. 20° 40′, W. 83° 33′			70	21.1		n.			5		8	nnw.	3 h'r	3 h'r	mod	n.	cloudy.
S. J. W. Gildemeister, N. 49° 12′, W. 11° 48′ *	29.65	753.1	51.3	10.7	51	sse.			4		8 k	sse.	0	0	3	sw.	overcast.
Bg. George. N. 31° 24′, W. 56° 57′ *†	30.09	704.3				ssw.			5		8	sw.	sh'rs	sh'rs	r'gh	ssw.	clearing.
Bk. Gronsvaer, S. 40° 40′, E. 177° 10′ †.	29.95	760.6	73.6	23.1	95	nnw.			3		0		0	0	sm'h		fair.
Bk. Godeffroy, S. 58° 16′, W. 65° 32′ †	29.34	745.2	41.0	5.0	89	w.			4		8	w.	12 h'r	12 h'r	long	w.	cloudy.
Bk. Great Surge n, S. 23° 27′, E. 70° 28′ *†	30.14	765.5	80	26.7		ne.			2		3	ne.	0	0	long	ssw.	clear.
Bk. Grey Eagle, S. 13° 11′, W. 34° 15′ *†	29.85	758.2				ne.			4		1	e.	0	0			fair.
Bk. Hattie G. McFarland, New York, N. Y †	30.01	762.2	30	— 1.1		wsw.			1		2	w.	0	0			clear.
Schr. Hattie Weston, Philadelphia, Pa *†	29.83	757.7	2	—16.7		nw.			5		2	nw.	0	0	sm'h		fair.
Schr. Isabel Alberto, N. 34° 56′, W. 74° 34′ †.	30.11	764.8				nnw.			4		10	n.	sli't	sli't	mod.	n.	cloudy.
Schr. Jennie N. Huddell, N. 30° 10′, W. 75° 00′†	30.11	764.8	50	10.0		n.			1		10		hv'y	hv'y	hv'y	n.	threatening.
Bk. Joseph A. Ropes, S. 5° 43′, E. 50° 22′ *†	29.95	760.7	86	30.0	72	nw.			1		1		0	0	mod.	se.	fair.
Bkt. Josephine, N. 26° 42′, W. 36° 40′ †	30.37	771.4	76	24.4	47	e.			3		0		0	0	mod.	ese.	clear.
Bk. Julia H, N. 47° 32′, W. 22° 16′	29.53	750.0	51.0	10.6	79	w.			9		3		0	0	7	nw.	d. clouds.
S. S. J. W. Wilson, Cedar Keys, Fla †			30	— 1.1		n.			4		0		0	0			clear.
Light House Tender, Laurel, Pensacola. Fla †	30.18	766.6	29	— 1.7		n.			1–2		2	n.	0	0	sm'h		fair.
Bk. Louise Adelaide, N. 29° 45′, W. 75° 55′ *†	30.02	762.5	63	17.2		nnw.			2		10	nw.			r'gh	n.	
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.04	763.0				calm			0		1	ne.	0	0	sm'h		clear.
S. S. Madrid, N. 41° 05′, W. 39° 22′*†	30.16	766.1	64	17.8		ssw.			5		2	ssw.	sh'rs	shr's	mod.	wnw.	fair.
S. S. Malabar, Marseilles, France†	29.97	761.2				nw.			2		0		0	0			clear.
Bk. Matilda C. Smith, N. 36° 40′, W. 73° 24′ *†	30.10	764.5				nw.			6		8	nw.	0	0	mod.	n.	fine.
Schr. Minnie A. Bonsall, Jacksonville. Fla †	30.22	767.6				nw.			1		sk.						smoky.
S. Minnie N. Gerow, N. 33° 38′, W. 50° 05′*†	30.11	764.8				sw.			5		3	s.			r'gh	wsw.	fine.
S. M. P. Grace, S. 34° 10′, W. 125° 42′ *†	29.98	761.5	66	18.9		var.			5		10	nw.	rain	rain	sm'h	nw.	raining.
Bg. Myrtle, Clements Port, Nova Scotia *†	29.30	744.2				sw.			2		10.	sw.	snow	snow			hazy.
Bg. O. C. Clary, N. 17° 58′, W. 63° 52′ *†	30.04	763.0	84	28.9	91	e.			3				0	0			clear.
S. Orealia, Hoogly River, India*.	29.94	760.5															
Bk. Ottawa, N. 39° 23′, W. 42° 05′*	30.01	762.2	70	21.1		wsw.			5		3	wsw.	0	0	mod.	wsw.	fair.
S. Paramita, San Francisco, Cal†	29.95	760.7	50	10.0		wsw.			3				0	0			
Bk. Pilgrim, N. 22° 40′, W. 60° 25′*†	30.10	764.5				se.			2		2	se.	½h'r	½h'r	small	se.	fine.
S. S. Radnorshire, N. 22° 17′, E. 114° 10′*†	30.05	763.3				nne.			4		0		0	0			
S. S. Raleigh, Hoboken, N. Y*†	29.71	754.6	22	— 5.6		nw.			2		0		0	0			
Bk. Rebus, N. 46° 36′, W. 21° 33′ *	29.46	748.3	50	10.0		w.			7		5	wnw.	hv'y	hv'y	cross	wnw.	squally.
Bk. Samuel B. Hale, N. 41° 15′, W. 62° 25′*†	29.70	754.4				w.					5	w.			mod.	w.	snow sq'lls.
S. St. Francis, N. 35° 50′, W. 129° 15′†	30.29	769.4	59	15.0		nw.			4		8	sw.	1 h'r	1 h'r	long	w.	cloudy.
Schr. S. B. Hubbard, New London, Conn†	29.87	758.7	22	— 5.6		wnw.			1		5	nw.	snow	snow			threatening.
Bk. Scud, N. 31° 59′, W. 70° 35′ *†	30.08	764.0				nw.			7		7	nw.	1 h'r	1 h'r	short	nnw.	clearing.
Bk. Southern Belle, N. 49° 55′, W. 10° —′*†	29.55	750.6	48	8.9		sse.			3		2		0	0	long	w.	clear.
S. S. Strathleven, N. 2° 12′, E. 102° 20′	29.93	760.2	81.0	27.2	100	nne.			3		8	nne.	0	0			d. clouds.
Bk. Sunbeam, N. 38° 36′, W. 69° 10′	29.83	757.7	40	4.4	91	wnw.			7		10	nw.	6 h'r	6 h'r	h'vy	wnw.	snowing.
Schr. T. S. McLellan, N. 27° 00′, W. 67° 10′			70	21.1		ene.						sw.				nne.	
U. S. F. C. S. S. Fish Hawk, Washington, D. C †	30.09	764.3	25	— 3.9		wnw.			2		1	calm	0	0.			clear.
Bk. Vincenzo Accame, N. 37° 00′. W. 52° 16′ †	29.89	759.3	73.4	23.0		ssw.			7		9	ssw.	0	0		ssw.	
Schr. Walter L. Plummer, Providence, R. I. *†	29.90	759.4				wnw.			4		0?		0	0			threatening?
Bk. Wandering Jew, Montevideo. Uruguay†	30.13	765.3	68	20.0		nw.			2		2	nw.	0	0			clear.
Bk. Warden Law, Tocapilla, Peru. S. A.*	30.06	763.5				calm			0		8	s.			sm'h	s.	cloudy.
S. Wm. Woodbury, N. 49° 19′, W. 7° 12′*	29.68	753.9	54	12.2		ese.			4		2	sw.			long	w.	clear.

International Chart I. December 17, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 18, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.98	761.5	61.5	16.4	83	n.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair...	Malaterre.
Algiers	.....	.....	29.93	760.3	60.8	16.0	73	wnw.	.....	.....	3	.....	6	.....	.....	0.547	13.9	cloudy.....	Thève.
La Calle	.....	.....	29.92	760.0	60.1	15.6	59	sse.	.....	.....	4	.....	4	.....	.....	0	0	cloudy.....	Foufréde.
Tunis	.....	.....	29.89	759.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.02	762.4	58.3	14.6	81	nw.	.....	.....	2	.....	1	.....	.....	0	0	very fair...	Pérès.
Tebessa	.....	.....	29.98	761.5	47.5	8.6	81	n.	.....	.....	1	.....	4	.....	.....	0	0	cloudy.....	Dognon.
Geriville	.....	.....	.....	.....	50.0	10.0	76	wnw.	.....	.....	4	.....	5	.....	.....	0.039	1.0	cloudy.....	Louchamp.
Laghouat	.....	.....	30.11	764.7	57.2	14.0	53	nw.	.....	.....	2	.....	4	.....	.....	0	0	cloudy	Abraham.
Biskra	.....	.....	29.98	761.4	61.2	16.2	38	nw.	.....	.....	1	.....	5	.....	.....	0	0	cloudy.....	Malau.
Australian.																			
Melbourne, Victoria	29 59	751.6	29.68	753.9	63.2	17.3	81	sw.	3	1.3	.....	.....	5	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.63	752.6	30.21	767.2	37.4	3.0	93	e.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.55	750.6	30.36	771.1	34.5	1.4	83	e.	24.8	11.1	.....	.....	10	.....	.....	0	0	.....	Dr. Wiersbieki.
Eperies	29.38	746.3	30.30	769.5	40.5	4.7	81	n.	.....	.....	2	.....	10 8	.....	.....	0.087	2.2	.....	Julius Mikolik.
Gratz	28.90	734.1	30.20	767.1	39.7	4.3	89	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.76	730.6	30.24	768.0	42.8	6.0	88	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.64	727.4	30.04	762.9	33.6	0.9	93	sw.	.....	.....	1	.....	10	.....	.....	0	0	.....	The Staff.
Lemberg	29.43	747.4	30.49	774.4	25.2	— 3.8	75	e.	.....	.....	3	.....	10	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.95	760.6	30.06	763.5	54.3	12.4	89	sw.	.....	.....	1	.....	8	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	29.76	755.9	30.22	767.7	43.7	6.5	88	w.	.....	.....	1	.....	1	.....	.....	0	0	.....	Joseph Midlinszay, S. J.
Szegedin	29.95	760.7	30.24	768.1	41.2	5.1	95	calm	.....	.....	0	.....	8	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.99	761.8	30.10	764.4	51.6	10.9	70	e.	.....	.....	1	.....	0	.....	.....	0	0	.....	Royal Academy.
Vienna	29.45	747 9	30.19	766.8	39.2	4.0	90	se.	.....	.....	3	.....	10	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.69	754.1	29.79	756.7	44.9	7.2	90	se.	20	8.9	.....	.....	10	.....	.....	0.130	3.3	squally.....	W. Boswell
Armagh, Observatory	29.31	744.5	29.54	750.3	47.0	8.3	83	ese.	13	5.8	.....	.....	5	.....	.....	.....	.....	d. clouds.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.57	751.1	48.0	8.9	87	e.	19	8.5	.....	.....	10	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	29.18	741.2	29.71	754.6	45.3	7.4	91	e.	24	10.7	.....	.....	10	.....	.....	.....	.....	overcast.....	Thomas Mackereth.
Bradford, Yorkshire	29.24	742.7	29.64	752.8	42.3	5.7	96	se.	.....	.....	1	.....	10	.....	.....	0.01	0.3	foggy.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.94	760.5	29.98	761.5	80.0	26.7	74	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds.....	Corpl.J.Surgenor, A.H.C.
Cardington	.....	.....	.....	.....	47.0	8.3	93	s.	.....	.....	0.6	.....	10	.....	.....	.....	.....	overcast.....	John McLaren.
Chatham, School M. E.	29.55	750.6	29.68	753.9	49.6	9.8	80	s.	.....	.....	2	.....	0	.....	.....	.....	.....	d. clouds.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.24	742.7	29.46	748.3	48.6	9.2	87	s.	.....	.....	1	.....	9	.....	.....	.....	.....	d. clouds.....	The Staff.
Fort Napier, Natal	27.69	703.3	29.90	759.4	73.2	22.9	66	e.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.68	753.9	29.91	759.7	85.0	29 4	87	nw.	.....	.....	1	.....	2	.....	.....	.....	.....	blue sky.....	Sergt. John Robinson.
Gibraltar, Mediterranean	29.86	758.4	29.91	759.7	58.0	14.4	94	nw.	.....	.....	.....	.....	10	.....	.....	.....	.....	raining.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.46	748 3	29.66	753.4	43.2	6.2	84	nne.	.....	.....	3	.....	10	.....	.....	.....	.....	d. clouds.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.48	748.8	29.66	753.4	46.2	7.9	88	se.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Guernsey	29.23	742.4	29.52	749.8	49.0	9.4	93	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	A. Colvenette, F. M. S.
Kew, Observatory	29.62	752.3	29.66	753.4	47.0	8.3	85	ene.	18	8.0	.....	.....	10	.....	.....	.....	.....	threatening.	The Staff.
Leicester, Museum	29.43	747 5	29.63	752.6	47.0	8.3	92	se.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	29.80	756.9	29.86	758.4	62.8	17.1	94	e.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.09	764 3	30.14	765.5	66.5	19.2	70	n.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds.....	C. S. Duncombe
Oscott, St. Mary's College	29.05	737 9	29.58	751.3	46.7	8.2	88	e.	.....	.....	3	.....	10	.....	.....	.....	.....	drizzling.....	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.37	746.0	29.60	751.8	49.2	9.6	91	se.	.....	.....	4	.....	9	.....	.....	.....	.....	overcast.....	The Staff.
Plymouth	29.38	746.2	29.46	748.3	47.8	8.8	98	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	gloomy.....	John Merrifield.
Sandwick Manse, Orkneys	29.68	753.0	29.78	756.4	43.2	6.2	97	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	drizzling.....	Rev. C. Clouston, L.L.D.
Scutari Cemetery, Turkey	30.11	764.8	30.18	766.6	47.8	8.8	83	ne.	.....	.....	2	.....	9	.....	.....	.....	.....	misty.....	W. H. Lyne.
Sheffield	29.39	746.5	29.67	753.6	44.9	7.2	97	ese.	.....	.....	1	.....	10	.....	.....	0.08	2.0	raining.....	W. F. Cooper.
Silloth Rectory	29.61	752.1	29.64	752.8	45.0	7.2	91	se.	.....	.....	1	.....	8	.....	.....	0	0	d. clouds.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.65	753.1	44.8	7.1	88	e.	10	4.5	.....	.....	10	.....	.....	.....	.....	gloomy.....	I. New.
Strathfield Turgiss	29.38	746.2	29.60	751.8	48.9	9.4	93	se.	.....	.....	1	.....	9	.....	.....	.....	.....	d. clouds.....	Rev.G.H.Griffiths,F.M.S.
Truro, Royal Institution	29.43	747.5	29.48	748.8	48	8.9	85	s.	.....	.....	2	.....	8	.....	.....	.....	.....	gloomy.....	W. Newcombe.
Valencia, Observatory	29.28	743.7	29.30	744.2	45.9	7.7	88	se.	28	12.5	.....	.....	7	.....	.....	blank	blank	gloomy.....	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.78	756.4	29.82	757.4	27	— 2.8	83	w.	8	3.6	.....	0	8 8	....	nw.	0.025	0.6	cloudy.....	H. J. Cundall, C. E
Chatham, N. B*	29.85	758.2	29.92	760.0	13	—10.6	91	w.	2	0.9	.....	0	0	.....	.....	0.01	0.3	clear.....	G. A. Blair.
Father Point, Quebec*	29.98	761.5	30.00	762.0	20	— 6.7	87	ne.	8	3.6	.....	5 cs	5 ks	calm	calm	Inap.	Inap.	fair.....	J. McWilliams.
Fort Garry, Manitoba*	28.87	733 3	29.74	755.4	20	— 6.7	100	s.	31	13.9	.....	.....	10 n	....	.....	0	0	cloudy.....	James Stewart.
Halifax, N. S*	29.77	756.1	29.91	759.7	24	— 4.4	92	w.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	A. Allison.
Kingston, Ontario*	29.87	758.7	30.24	768.1	10	—12.2	96	w.	4	1.8	.....	5 c	5 k	n.	w.	0	0	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	29.95	760.7	30.18	765.6	16	— 8.9	83	w.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy.....	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.51	749.5	30.31	769.9	— 7	—21.7	58	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	Rev. R. Mosley.
Port Dover, Ontario	29.52	749.8	30.29	769.4	5	—15.0	100	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	H. Morgan.
Port Stanley, Ontario	29.57	751.1	30.29	769.4	5	—15.0	96	n.	5	2.2	.....	0	0	.....	.....	Inap.	Inap.	clear.....	M. Payne.
Quebec, Quebec*	29.76	755 9	30.10	764.5	18	— 7.8	91	nw.	.....	.....	1	.....	8 n	.....	nw.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.74	755.4	30.24	768.1	9	—12.8	87	calm	0	0	.....	0	fg	.....	.....	0	0	fair.....	W. H. McIntyre.
Saugeen, Ontario*	29.48	748.8	30.25	768.3	19	— 7.2	87	se.	5	2.2	.....	.....	10 8	.....	.....	0.20	5.1	cloudy.....	
St. Andrews, N. B	29.03	700 2	29.99	761.7	19	— 7.2	83	nw.	4	1.8	.....	0	0	.....	.....	0.01	0.3	clear.....	
Sydney, C. B*	29.66	753.4	29.72	754.9	26	— 3.3	84	w.	21	9.4	.....	0	2 k	.....	.....	0.02	0.5	clear.....	T. C. Hill, C. E
Toronto, Ontario*	29.84	757.9	30.20	768.6	17	— 8.3	80	nw.	8	3.6	.....	0	5 ks	.....	nw.	0	0	fair.....	Magnetic Observatory.
Yarmouth, N. S*	29.90	759.4	29.97	761.2	30	— 1.1	80	n.	2	0.9	.....	.....	10 8	.....	nw.	0.03	0.8	cloudy	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.76	730.5	30.27	768.8	17.0	— 8.3	83	nw	.....	.....	1	.....	10 8	.....	nw.	0	0	overcast.....	Wm. Wylie.
St. Johns, Newfoundland	29.30	744.2	29.56	750.8	30	— 1.1	100	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.93	760.2	29.96	761.0	71.0	21.7	88	e.	15.7	7.0	.....	0	1 k	.....	.....	0	0	light haze...	John Duthie.
Cape Town, C G.H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
Chinese (*Sub-series*).																			
Sung-shu-chwang	24.92	633.0	.....	.....	12.7	—10.7	.....	nne.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.47	773.8	30.56	776.6	17.2	— 8.2	70	calm	3.4	1.5	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.65	778.4	30.67	779.0	29.5	— 1.4	82	w.	10.1	4.5	.....	.....	0	.....	.....	0	0	clear	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	30.28	769.2	30.33	770.4	33.3	0.7	89	se.	31	14	.....	.....	10	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanoe	30.13	765.3	30.15	765.8	32.7	0.4	94	se.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.72	754.8	29.76	755.9	18.5	— 7.5	92	nne.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.60	751.8	29.62	752.3	32.5	0.3	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	30.00	761.9	30.04	763.1	13.6	—10.2	.....	s.	.....	.....	2	.....	8	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.68	753.9	29.72	755.0	33.8	1.0	90	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.84	758.0	29.88	758.9	45.3	7.4	90	se.	4	2	.....	.....	7	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	30.14	765.6	30.24	768.0	32.2	0.1	92	e.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Loerer Oesterbol.
Upernavik, Greenland	29.92	760.0	29.97	761.2	6.4	—14.2	.....	e.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	28.96	735.6	29.60	751.7	54.7	12.6	90	sse.	.....	.....	2	.....	.....	.....	.....	0	c	.....	M. Labroue, Director.
Alençon, Normal School	29.09	738.8	29.64	752.8	46.4	8	97	sse.	.....	.....	1	.....	ku	nw.	nw.	0.28	7.	.....	M. Nicot, Director.
Arras, Engineer School	29.57	751.1	29.84	757.8	43.7	6.5	96	se.	.....	.....	4	0	0	.....	se.	0	0	clear	M. Fénéon, Command't.
Avignon, Normal School	29.81	757.1	29.89	759.1	59.7	15.4	64	e.	.....	.....	2	.....	.....	.....	.....	0.008	0.2	.....	M. Giraud, Director.
Bar-sur-Seine	29.24	742.8	29.80	757.0	50.9	10.5	70	s.	.....	.....	2	0	5 kn	.....	ssw.	0	0	cloudy	M. Saillard, Director.
Beauvais, Normal School	29.48	748.7	29.75	755.6	44.6	7	80	e.	.....	.....	1	.....	5	.....	ese.	0	0	cloudy	M. Frère Eugène Marie.
Besançon, Normal School	28.93	734.8	29.84	757.9	43.2	6.2	94	ne.	.....	.....	1	0	0	.....	.....	0	0	clear	M. Gobin, Director.
Bordeaux, Observatory	29.37	745.9	29.63	752.5	50.5	10.3	77	sse.	.....	.....	1	.....	10	.....	.....	0.008	0.2	raining	M. Rayet, Director.
Bourges, Normal School	29.15	740.4	29.70	754.3	52.7	11.5	97	e.	.....	.....	2	.....	kn	.....	e.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.28	743.8	29.53	750.0	49.6	9.8	95	sw.	.....	.....	1	.....	8	.....	sw.	0.965	24.5	.....	M. de Kermaïdo, Dir.
Caen, Normal School	29.48	748.7	29.55	750.6	52.2	11.2	73	se.	.....	.....	2	.....	10	.....	se.	0.04	1.	covered	M. Berson, Director.
Châlons-sur-Marne, N. Sch'l	29.49	749.0	29.82	757.3	46.2	7.9	80	sse.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Jadot, Director.
Charleville, Normal School	29.34	745.2	29.86	758.5	39.2	4	80	e.	.....	.....	1	.....	2	.....	.....	0	0	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.37	720.6	29.70	754.3	58.6	14.8	52	sse.	.....	.....	2	.....	5	.....	s.	0	0	½ covered	M. Alluard, Director.
Cluny, Normal School	28.99	736.3	29.85	758.3	46.2	7.9	94	sw.	.....	.....	1	.....	2	.....	sw.	0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.06	738.1	29.96	761.0	33.6	0.9	96	e.	.....	.....	1	.....	n	e.	e.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	27.40	695.9	29.96	761.0	46.0	7.8	72	s.	.....	.....	1	.....	1	.....	.....	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.79	731.3	29.88	759.0	53.8	12.1	69	se.	.....	.....	3	.....	7	.....	se.	0.024	0.6	.....	M. Klun, Director.
Grenoble, Normal School	29.14	740.1	29.94	760.4	37.0	2.8	89	e.	.....	.....	1	2 ck	0	s.	.....	0	0	slightly cl'dy	M. Ablard, Director.
Guéret	28.11	714.0	29.69	754.1	53.1	11.7	65	s.	.....	.....	2	.....	cn	.....	s.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.19	741.4	29.40	748.2	49.3	9.6	89	se.	.....	.....	2	.....	5	.....	se.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.01	736.9	29.58	751 2	48.7	9.3	73	sw.	.....	.....	1	.....	5 kn	.....	.....	0	0	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.43	747.6	29.54	750.2	47.5	8.6	83	sw.	.....	.....	1	.....	10	.....	calm	0.024	0.6	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.79	731.3	29.85	758.3	50.0	10.0	77	ene.	.....	.....	1	.....	2	.....	.....	0	0	slightly cl'dy	M. André, Director.
Mans, Normal School	29.33	744.9	29.64	752.8	47.7	8.7	93	sw.	.....	.....	1	.....	8	.....	sw.	0.12	3.	very cloudy	M. Piboën, Director.
Marseille, Observatory	29.63	752.6	29.90	759.4	57.7	14.3	75	se.	.....	.....	2.3	.....	7	.....	se.	0.008	0.2	.....	M. Stephan, Director.
Montlouis	24.48	621.9	29.33	744.9	41.0	5.0	75	se.	5.6	2.5	.....	.....	7	e.	.....	0.819	20.8	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.71	754.6	29.90	759.5	54.7	12.6	98	sse.	.....	.....	4	.....	5	se.	.....	0.205	5.2	cloudy	M. Galzin, Director.
Nancy, Normal School	29.11	739.5	29.93	760.3	32.7	0.4	92	ne.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Hasse, Director.
Nantes, Observatory	29.45	748.0	29.59	751.6	49.6	9.8	92	ssw.	.....	.....	0.1	.....	10	.....	.....	0.181	4.6	rainy	M. Larocque, Director.
Perpignan, Observatory	29.70	754.4	29.81	757.2	55.9	13.3	84	s.	13.0	5.8	.....	.....	10	.....	s.	1.362	34.6	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	20.87	530.0	.....	.....	22.3	5.4	.....	sw.	.....	.....	2	.....	5	.....	sw.	0.039	1.0	cloudy	M. Vaussenat.
Privas, Normal School	28.81	731.8	29.88	759.0	52.2	11.2	68	s.	.....	.....	3	.....	10	s.	s.	.....	.....	raining	M. Tailleu.
Puy de Dôme Obs'y, Summit	24.85	631.3	.....	.....	37.6	3.1	94	sse.	.....	.....	8	.....	8	.....	sse.	0	0	¾ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	29.62	752.3	29.65	753.1	50.0	10.0	89	s.	.....	.....	2	.....	10	.....	sw.	1.46	37.	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.35	745.5	29.56	750.9	47.8	8.8	92	sse.	.....	.....	1	.....	10	.....	.....	0.102	2.6	raining	M. Brotier, Director.
Rodez, Normal School	27.58	700.6	29.72	754.9	50.0	10	72	se.	.....	.....	2	.....	5	s.	.....	0	0	.....	M. Seger, Director.
Rouen, Normal School	29.65	753.0	29.69	754.0	48.2	9	76	se.	.....	.....	1	.....	10	se.	.....	0	0	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	51.8	11	79	s.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.55	750.6	29.72	754.8	52.0	11.1	68	se.	.....	.....	2	.....	1	.....	.....	0	0	.....	M. Renou, Director.
Toulouse, Observatory	28.96	735.6	29.67	753.7	54.1	12.3	73	sse.	.....	.....	8	.....	10	w.	.....	0	0	covered	M. Baillaud, Director.
Tours	29.85	758.2	29.63	752.7	48.2	9.0	86	ene.	.....	.....	1	.....	10	.....	sse.	0.004	0.1	rainy	M. de Tastes.
Versailles, Observatory	29.21	741.8	29.70	754.4	49.3	9.6	74	s.	.....	.....	2	.....	.....	.....	.....	0.012	0.3	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.48	748.9	29.63	752.7	51.3	10.7	76	sw.	11.9	5.3	.....	.....	10 k	.....	s.	0.039	1.0	light rain	M. Cartier, Director.
German.																			
Ansbach	28.54	725.0	30.05	763.3	35.6	2.0	91	se.	.....	.....	2	.....	10	se.	.....	0.016	0.4	.....	Prof. Jnedt.
Bamberg	29.18	741.2	30.02	762.6	37.4	3.0	88	s.	.....	.....	2	.....	9	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.99	761.7	30.17	766.4	36.0	2.2	80	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.74	755.5	30.28	769.1	35.6	2.0	82	ese.	.....	.....	3	.....	10	.....	.....	0.024	0.6	.....	Royal University Obs'y.
Carlsruhe	29.55	750.6	30.01	762.2	34.9	1.6	80	se.	.....	.....	1	.....	1	ne.	.....	0	0	.....	Albert Senz.
Cassel	29.27	743.5	29.98	761.6	36.7	2.6	87	se.	.....	.....	4	.....	8	s.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.64	752.8	30.01	762.3	39.6	4.2	84	se.	.....	.....	1	.....	10	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.55	725 1	30.00	763.5	27.7	— 2.4	100	e.	.....	.....	1	.....	10	n.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	30.05	763.2	30.14	765.5	34.9	1.6	89	ese.	.....	.....	4	.....	10	.....	.....	0	0	light fog	E. Preller.
Kiel	30.16	766.1	30.18	766.5	34.9	1.6	84	ese.	.....	.....	4	.....	10	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.67	753.7	30.11	764.8	36.3	2.4	91	e.	.....	.....	1	.....	10	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.92	759.9	30.11	764.9	36.5	2.5	87	e.	.....	.....	4	.....	10	.....	e.	0	0	foggy	Weather Observatory.
Memel	30.66	778.8	30.71	780.0	19.4	— 7.0	70	ese.	.....	.....	3	2 c	0	.....	.....	.....	.....	.....	Issermann.
Munich	28.15	714 9	30.00	762.1	30.4	— 0.9	97	se.	.....	.....	2	.....	10	.....	.....	0	0	dense fog	Central Station.
Neufahrwasser	30.54	775.8	30.56	776.2	24.3	— 4.3	66	se.	.....	.....	4	.....	4	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.45	748.0	29.98	761.4	37.0	2.8	91	e.	.....	.....	2	.....	10	.....	.....	0	0	foggy	Dicknether.
Stuttgart	29.03	737.4	29.96	761.0	35.1	1.7	69	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	30.27	768.8	30.30	769.5	32.2	0.1	89	ene.	.....	.....	3	.....	10 s	.....	.....	0	0	.....	Profs. Brandes & Reimer.
Greek.																			
Athens	29.70	754.3	30.09	764.2	56.3	13.5	.....	n.	.....	.....	1.5	.....	8	.....	.....	0.228	5.8	covered	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.11	764.8	30.16	766.2	74.3	23.5	81	sw.	14.0	6.3	.....	.....	6	ssw.	.....	0	0	d. clouds	
Deesa	29.58	751.4	30.06	763.5	82.1	27.8	35	wnw.	.....	.....	.....	.....	4	sw.	.....	0	0	d. clouds	
Bombay	29.96	761.0	30.00	762.0	80.3	26.8	66	nw.	15.0	6.7	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.16	715.2	30.01	762.1	83.8	28.8	21	e.	6.0	2.7	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.73	755.2	30.02	762.4	78.5	25.8	58	ne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Belgaum	27.46	697.5	30.00	762.0	78.0	25.6	31	ene.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.32	744.8	30.10	764.6	60.6	15.9	55	calm	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.13	739.8	30.06	763.5	64.8	18.2	35	w.	1.0	0.4	.....	.....	5	w.	.....	0	0	.....	
Agra	29.51	749.6	30.10	764.4	71.2	21.8	34	w.	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	29.00	736.6	30.06	763.4	77.5	25.3	43	calm	1.0	0 4	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.72	729 4	30.10	764.6	71.6	22.0	55	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.68	753.7	30.06	763.6	68.3	20.2	45	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.74	755.5	30.07	763.8	62.6	17.0	72	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.90	759.3	30.09	764.2	67.4	19.7	50	wnw.	4.2	1.9	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	28.00	711.2	30.08	764.1	64.5	18.1	57	w.	5.7	2.6	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.98	761.4	30.06	763.5	73.1	22.8	71	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Allpore	30.05	763.2	30.07	763.7	69.5	20.8	80	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.94	760.4	30.06	763.5	69.1	20.6	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.98	761.4	30.07	763.7	71.1	21.7	67	w.	1.4	0.6	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.74	755.4	30.09	764.4	63.1	17.3	87	ene.	2.0	0.9	.....	.....	6	w.	w.	0	0	d. clouds	
Jeypore	28.64	727.4	30.12	765.0	70.7	21.5	36	nw.	3.2	1.4	.....	.....	3	.....	nw.	0	0	d. clouds	
Italian.																			
Udine	29.69	754.1	30.11	764.7	52.0	11.1	61	e.	6.3	2.8	.....	.....	0	.....	.....	0	0	.....	Prof. Giovanni Clodig.

STATIONS.	BAROMETER. Corrected for instrumental error and for temperature		BAROMETER. Reduced to sea-level.		Temperature of the air.		Relative humidity.	WIND. Direction.	WIND. Velocity.		WIND. Force.	CLOUDS. Amount and kind. Upper.	CLOUDS. Amount and kind. Lower.	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Milan	29.56	750.9	30.10	764.5	47.8	8.8	92	ne.	3.1	1.4			10			0.059	1.5		Prof. Schiapparelli.
Padua	29.97	761.3	30.09	764.2	52.3	11.3	69	ne.	8.1	3.6			1			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.14	740.2	30.08	764.1	46.6	8.1	99	nnw.	0	0			10			0.327	8.3		Prof. F. F. Denza.
Genoa	29.82	757.3	30.01	762.3	56.1	13.4	59	n.	2.5	1.1			10	ne.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.13	714.5	30.11	764.8	42.4	5.8	97	sw.			2		10			0.067	1.7		Prof. D. C. Bruno.
Pesaro	30.05	763.3	30.10	764.6	48.6	9.2	97	n.					10			0	0		Prof. Luigi Guidi.
Florence	29.73	755.1	29.99	761.7	57.9	14.4	61	se.			2		3			0	0		Prof. Costantino Pittei.
Leghorn	29.85	758.3	29.94	760.5	57.2	14.0	69	ene.	13.0	5.8			1			0	0		Prof. P. Monte.
Rome	29.78	756.4	29.96	760.9	58.1	14.5	67	n.	2.5	1.1			8			0	0		Prof. P. Tachini.
Lecce	29.77	756.2	30.03	762.7	59.0	15.0	74	ese.	9.4	4.2			8			0.189	4.8		Prof. C. de Giorgi.
Cosenza	29.11	739.3	30.01	762.3	52.9	11.6	76	ssw.	1.3	0.6			10	sw.		0.016	0.4		Prof. D. Conti.
Cagliari	29.67	753.7	29.87	758.6	60.3	15.7	71						7	se.		0.020	0.5		Prof. A. Pacinotti.
Palermo	29.65	753.0	29.90	759.4	60.4	15.8	58	ene.	1.8	0.8			9			0.031	0.8		Prof. G. Cacciatore
Syracuse	29.65	753.1	29.89	759.2	59.7	15.4	77	ne.	9.4	4.2			10	se.		0.087	2.2		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.43	747.4	29.95	760.6	59.9	15.5	68	e.	1.3	0.6			10	se.		0	0		Prof. F. Brioschi.
Stelvio	22.11	561.6			24.1	— 4.4	91	wsw.			2		8			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.12	561.8			26.8	— 2.9	70	se.			2		10			1.181	30.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.99	761.7	30.02	762.5	26.9	— 2.8	76	n.			6	2 ck	1 ck	sw.	sw.	0.106	2.7	fair	Hattori.
Awomori	29.97	761.2	30.01	762.2	22.0	— 5.6	97	wnw.	10.1	4.5			10 s			0.134	3.4	overcast	K. Ogawa.
Hakodate	29.91	759.8	29.93	760.1	20.8	— 6.2	70	n.	24.6	11.0			10			0.133	3.3	snowing	
Hamamatsu	30.12	765.0	30.15	765.7	30.6	2.6	74	w.			2	1 ck	0	w.		0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					39.0	3.9	67	wnw.	6.8	3.0		0	0			0	0	clear	
Kanazawa	30.05	763.3	30.16	766.0	33.0	0.6	92	sw.	7.9	3.5			10			0.532	13.5	snowing	S. Endo.
Kioto	30.05	763.3	30.23	767.8	29.4	— 1.4	71	nw.	1.1	0.4		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.18	766.4	30.39	771.9	40.0	4.4	67	nw.	4.2	1.9		2 c	0	w.	nw.	0.320	8.1	hailing	S. Takehayashi.
Niigata	30.02	762.5	30.06	763.5	35.4	1.9	72	w.	25.4	11.4			9 ck;s		w.	0.135	3.4	cloudy	M. Morita.
Nobiru	29.98	761.5	30.00	761.9	31.3	— 0.4	87	nw.	6.5	2.9		0	1 s			0.025	0.6	fair	H. Midzushina.
Numazu	29.94	760.5	29.98	761.4	46.6	8.1	51	ssw.			4	0	0			0	0	clear	R. Kaneda.
Osaka	30.23	767 8	30.24	768.2	35.8	2.1	58	nnw.	12.5	5.5		0	0			0	0	clear	H. Omura.
Supporo					21.9	— 5.6	95	nw.	9.0	4.0			10			0	0	covered	
Tokei Obs'y, Yeddo	29.91	759.8	29.99	761.8	41.0	5.0	54	n.	15.6	7.0		5 ck	8	wsw.		0	0	fair	The Staff.
Wakayama	30.20	767.1	30.26	768.6	39.6	4.2	53	nw.	15.6	7.0		0	3ck;ks		nw.	0	0	fair	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.73	755 1	29.92	760.0	80.0	26.7	73	nnw.	12.5	5.6		1 cs	6 ks;kn		nnw.	0	0	fair	Oliver & Figgis.
MEXICAN.																			
Guanajuato	23.64	600.6	29.86	758.6	54.3	12.4	88	w.	inap.	inap.			10 k;kn		sw.	0	0	hazy	Prof. Vicente Fernandez.
Leon	24.32	617.7	30.18	766.6	43.2	6.2	94	wnw.			1	1 c	1 k			0.082	2.1	clear	Prof. M. Leal.
Mazatlan	29.70	754.4	29.96	761.0	66.5	19.2	92	e.	1.6	0.8			9 n		w.	0.380	9.6	very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.11?	586.0?	30.21	767.4	45.9	7.7	80	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.26	616.2	30.13	765.2	44.2	6.8	65	se.			1	1 c	1 k	s.	s.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascallentes	23.88	606.7	29.97	761.1	49.1	9.5	87	calm	0	0		1 cs	0	sw.		0	0	clear	M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.38	593.4	30.05	763.2	55.4	13.0	55	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.45	570.2	30.12	765.0	48.0	8.9	85	sw.	9.8	4.3		4 ck	0 kn	se.	sw.	0	0	covered	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.82	757.4	29.82	757.4	40.1	4.5		ese.			4					0	0		
Groningen	29.92	760.0	29.98	761.4	38.1	3.4		ese.			5					0	0		
Helder	29.89	759.2	29.89	759.2	37.2	2.9		ese.			4					0	0		
Hellevoetsluis	29.85	758.1	29.85	758.1	38.8	3.8	85	e.			3					0	0		
Utrecht	29.85	758.2	29.90	759.4	40.5	4.7	84	se.			3		2			0	0	lightly cl'dy	H. van der Brink.
NORWEGIAN.																			
Bergen	30.12	765.1	30.19	766.7	33.8	1.0	81	calm	0	0			10			0.067	1.7		
Brono	30.28	769.0	30.32	770.0	18.7	— 7.4	61	calm	0	0			2			0	0		
Christiania	30.39	771.8	30.55	775.9	20.3	— 6.5	92	e.	7	3			10					snowing	
Gjæsvær	30.11	764.7	30.13	765.3	29.1	— 1.6		ne.			2		10						
Lodingen	30.28	769.2	30.33	770.4	25.0	— 3.9	75	calm			0		10			0	0		
PORTUGUESE.																			
Angra, Azores	30.07	763.8	30.22	767.7	65.1	18.4	88	wnw.	11.2	5.0			4			0	0		Dr. J. A. Sampaio.
Campo Major	28.72	729.4	29.72	754.8	54.7	12.6	90	sw.	8.7	3.9			10			0.039	1.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.11	764.9	30.20	767.1	66.4	19.1	66	se.					1	n.		0	0		Capt. D. A. da Cunha.
Lisbon, Observatory	29.39	746.6	29.76	755.8	56.5	13.6	92	wsw.	19.2	8.6			10			0.077	17.2		The Staff.
Ponta Delgada, Azores	30.21	767.2	30.28	769.0	65.1	18.4	80	nw.	6.3	2.8			3			0	0		
Saint Paul de Loando	29.70	754.4	29.90	759.5	76.6	24.8	90	nw.	1.8	0.8			10					thund'r st'm	
Serra da Estrella	24 84	630.9	29.60	751.7	38.3	3.5	100	w.	32.2	14.4			10			1.614	41.0	rain & fog	
RUSSIAN.																			
Akmolinski	29.24	742 8	30.44	773.2	4.5	—15.3	68	ene.	12	5		0	0						Major K. Lasarew.
Archangel	30.50	776.2	30.58	770.7	9.5	—12.0	96	w.	9	4			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.32	770.1	30.24	768.1	26.6	— 3.0	91	calm	0	0			10			0	0	heavy cl'd's	Capt. Wisganow.
Barnaul	30.24	768.1	30.82	782.9	— 9.9	—23.2	76	calm	0	0			0			0	0		Meteorological Obs'y.
Bielosersk	30.14	765.6	30.67	779.1	— 9.9	—23.2	93	nw.	2	1		0	2 s			blank	blank		
Dorpat	30.52	775 2	30.79	782.0	1.6	—16.9	97	calm	0	0			10 n			0.004	0.1		Observatory.
Ekaterinburg	29.36	745.7	30.42	772.6	14.7	— 9.6	75	calm	0	0			10			0	0	light clouds	Meteorological Obs'y.
Elissawetgrad	29.96	761.0	30.45	773.4	11.3	—11.5	74	nnw.	9	4		0	8 s			blank	blank		
Kasan	29.95	760.7	30.24	768.2	21.4	— 5.9	71	se.	4	2			10						Observatory.
Kem	30.56	776.1			15.1	— 9.4	87	wsw.	4	2		0	7 ks			0	0	light clouds	
Kertch	30.20	767.1	30.22	767.6	— 3.3	—19.6	96	calm	0	0			10 n			blank	blank		Lagorio & Sustyrez.
Kieff	29.80	756.8	30.50	774.6	34.5	1.4	81	n.	9	4		c	1 ks						Observatory.
Libau	30.68	779 2	30.70	779.8	14.9	— 9.5	70	ese.			1		0			0	0		E. Quass.
Lugan	29.94	760.4	30.15	765.9	18.5	— 7.5	85	nw.	13	6			10			0.035	0.9		Meteorological Obs'y.
Moscow	29.88	759.0	30.42	772.6	20.1	— 3.3	77	n.	14.5	6.5			10 n			0.059	1.5	light snow	
Nikolaiev	30.30	769.7	30.38	771.6	11.1	—12.0	92	n.	4	2			10 n			0	0		Capt. Kurdakow.
Pekin, China	30.44	773.2	30.58	776.8	32.4	0.2	24	nw.	27	12			0						Physical Observatory.
Petrozavodsk	30.48	774 3	30.71	780.1	17.8	— 7.9	83	nnw.	7	3		0	1 s			0	0		Dr. Bergmann.
Pinsk	30.11	764.7			— 0.8	—18.2	61	ne.	4	2		0	0			0	0		
St. Petersburg	30.76	781.4	30.78	781.8	19.0	— 7.2	93	nw.	7	3		0	1 ks			0	0	light clouds	Central Physical Obs'y.
Sevastopol	30.02	762.6	30.19	766.8	— 5.8	—21.0	85	nne.	16	7			10 n			0	0		
Semipalatinsk	30.04	763 1	30.80	782 4	37.9	3.3	75	e.	16	7			0			0	0		Major Lasarew.
Staroi Bykhov	30.17	766.3	30.69	779.6	— 9.8	—23.2	75	ne.	9	4		0	7 k			0.008	0.2		
Tashkend, Laboratory	28.67	728.2	30.32	770.0	2.1	—16.6	54	calm	0	0			10			0	0	heavy cl'd's	Telch, A. M.
Tiflis	28.77	730.7	30.21	767.4	37.4	3.0	51	nnw.	4	2		0	1 k			0	0		Physical Observatory
Tomsk	30.52	775.2	30.85	783.5	48.7	9.3	92	calm	0	0		0	5 k						
Vladivostock	30.11	764.9	30.18	766 0	— 6.9	—21.0	40	nw.	4	2		0	0			0	0		
Warsaw	30.07	763.8	30.53	775 4	25.2	— 3.8	60	ese.	20	9		0	1 s						Astronomical Obs'y.
Wilna	30.28	769.1	30.75	781.1	9.1	—12.7	88	ene.	4	2			2						Berg, Assistant.
Yeniseisk	30.73	780.5	31.08	789.3	—18.9	—28.3	85	se.	2	1			7						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.66	753.4	47	8.3	92	e.			4		10			0.1	3.	hazy	J. Youngclause
North Unst			29.95	760.7				se.			1		10			blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.69	754.1	29.80	756.8	56.7	13.7	91	e.	0.7	0.3			10			0	0	covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.70	754.3	29.76	755.8	53.6	12.0	74	se.	6.9	3.1			10			0.008	0.2	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.67	677.3	29.68	753 8	43.2	6.2	85	s.	12.1	5.4			10			0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	27.52	698.9	29.80	756.8	40.8	4.9	94	ne.	4.3	1.9			10			0.472	12.0	rainy	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	29.69	754 0	29.84	757.9	46.6	8.1	99	ese.	0.9	0.4		5	4	w.		0.331	8.4	almost cov'd	Olayo Diaz, Director.
Oviedo	28.78	731.0	29.65	753.2	45.5	7.5	87	e.	6.5	2.9			10 n		e.	0.260	6,6	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	28.56	725.3	29.45	748.0	47.5	8.6	98	sw.	1.6	0.7			10			0.724	18.4	raining	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	30.00	761.9	30,05	763.3	77.0	25.0	87	ne.	0	0		0	5 k		ne.	0.059	1.5	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.81	757.2	29.91	759.7	56.5	13.6	92	wnw.	21.6	9.6			10		sw.	0.316	8.0	raining	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.91	759.8	30.00	762.1	78.8	26.0	84	calm	0	0		2 s	3 k	e.	se.	0	0		Manuel Muese.
Tuguegarao, Philippine Id's	30.05	763.3	30.18	766.6	70.6	21.4	93	nnw.	12.7	5.7			10 ks		ne.	Inap.	Inap.		José L. Yrastorza.
SWEDISH.																			
Haparanda	30.39	771.9	30.43	772.9	16.2	— 8.8	82	sw.			4		10			0	0		
Umea	30.42	772.7	30.47	774.0	21.9	— 5.6	80	w.			4		10			0	0		
Hernosand	30.47	774.0	30.52	775.3	21.9	— 5.6	75	sw.			2		10			0	0		
Stockholm	30.44	773.1	30.61	777.6	27.0	— 2.8	66	sse.			2		8			0	0		
Wisby	30.55	776.0	30.61	777.5	27.3	— 2.6	70	sse.			4		0			0	0		
Sub-series.																			
Upsala	30.51	774.9	30.60	777.1	19.2	— 7.1	100	se.	4.9	2.2			9	wsw.	s.	0	0		S. G. Fineman.
SWISS.																			
Geneva	28.54	724.8	30.02	762.6	33.1	0.6	100	ese.			1		10			0.016	0.4	foggy	The Observatory.
TURKISH.																			
Constantinople			30.22	767.7	46.8	8.2	82	nne.	13	6,0			10		n.	0.047	1.2		The Observatory.
Valona			30.03	762.8	59.5	15.3		s.			1		2			0	0	slightly cl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.04	763.0	67.8	19.9	51	n.			3	5 c				0	0		Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.10	764.5	30.19	766.8	22.5	— 5.3	67	ne.	5	2.2			10 s			0	0	cloudy	J. C. Barnes.
Alpena, Michigan	29.57	751.1	30.28	769.1	15	— 9.4	83	nw.	4	1.8		0	5 s			0.04	1.0	fair	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.80	629.9	29.88	758.9	19	— 7.2	48	e.	1	0.4			10 s			0	0	cloudy	W. O. Barnes.
Assinnaboine, Ft., Montana	26.65	676.9	29.68	753.9	31	— 0.6	62	sw.	2	0.9		c	2 s		sw.	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	28.97	735.8	30.20	767.1	31.5	— 0.3	62	s.	6	2.7		0	fg.			0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.13	765.3	30.14	765.5	24	— 4.4	73	nw.	4	1.8		0	0			0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.02	762.5	30.22	767.6	33	0.6	68	calm	0	0		0	0			0	0	clear	John Healy.
Baltimore, Maryland	30.16	766 1	30.21	767.3	27	— 2.8	77	w.	4	1.8		5 cs	hz.	w.		0	0	fair	Geo W Felger.
Barnegat, New Jersey	30.12	765.0	30.14	765.5	25.0	— 3.9	88	nw.	14	6.3		3 k	0			0	0	clear	G. A. Hill.
Behring Id., Behring Sea	29.84	757.9	29.86	758.4	23.1	— 4.9		n.	18	8.0			10 n			0.08	2.0	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.16	715.3	29.92	760.0	27	— 2.8	88	se.	5	2.2			10 s			0	0	cloudy	A. Pritchard.
Benton, Fort, Montana	26 70	678.2	29.70	754.4	28	— 2.2	59	sw.	2	0.9		0	0			0	0	clear	S. Wheaton.
Bismarck, Dakota	27 83	706.9	29.84	757.9	17	— 8.3	83	e.	3	1.3			10 s			0	0	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.00	763 5	30.09	764.3	27	— 2.8	77	n.	8	3.6		8 cs	0	nw.		0	0	cloudy	J. T. Elker.
Boise City, Idaho	29.75	679 4	29.73	755.1	32	0.0	88	ne.	4	1.8			10 s			0	0	cloudy	B. E. Light.
Boston, Massachusetts	29.93	760 2	30.09	764.3	24.0	— 4.4	73	nw.	9	4 0		0	4 s;fg	w.		0	0	fair	O. B. Cole.
Brownsville, Texas	29.77	756.1	29.82	757 4	62.2	16.8	84	s.	10	4.5		0	8k.	s.		0	0	fair	M. McCarty.
Buffalo, New York	29.46	748.3	30.26	768.6	13.2	—10.4	85	se.	4	1.8		0	8k.			0.01	0.3	dense smoke	W. Winn.
Buford, Fort, Dakota	27.65	702 3	29.89	759.2	18	— 7.8	87	e.	2	0.9			10 s			0	0	cloudy	F. A. Mellen.
Burlington, Vermont	29.88	758.9	30.19	766.8	17.9	— 7.8	83	ne.	7	3.1			10 s		w.	Inap.	Inap.	cloudy	G. C. Schaeffer.
Cairo, Illinois	29.67	753.6	30.09	764.3	31.0	— 0.6	72	se.	8	3.6			10 s			0	0	cloudy	W. H. Ray.
Cape Henry, Virginia	30.16	766.1	30.18	766.6	30	— 1.1	47	nw.	19	8.5			10 s		nw.	0.06	1.5	cloudy	A. K. Alderson.
Cape May, New Jersey	30.13	765.3	30.16	766.1	29.0	— 1.7	77	nw.	9	4.0		0	0			0	0	clear	W. E. Smith.
Cape Mendocino, California																			J. J. McLean.
Cedar Keys, Florida	30.21	767.3	30.23	767.8	45	7.2	83	se.	8	3.6		0	0			0	0	clear	F. W. Mixer.
Champaign, Illinois	29.32	744.7	30.19	766.8	16.5	— 8.6	66	se.	11	4.9			10 s		se.	0.06	1.5	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.13	765.3	30.19	766.8	38	3.3	72	w.	3	1.3		5 ck	0	w.		0	0	fair	J. H. Smith.
Charlotte, N. Carolina	29.30	744.2	30.19	766.8	23.0	— 5.0	84	e.	1	0.4		0	fg.			0.01	0.3	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.31	744.5	30.17	766.3	24.5	— 4.2	66	ne.	1	0.4		1 cs	0			0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	23.03	600.2	29.91	759.7	33.2	0.7	74	n.	8	3.6			10 s			0	0	cloudy	E. McGovern.
Chicago, Illinois	29.48	748.8	30.24	768.1	22.2	— 5.4	70	se.	5	2.2		0	2 k		se.	0.02	0.5	clear	J. Mitchell.
Chincoteague, Virginia	30.15	765.8	30.17	766.3	28	— 2.2	77	nw.	10	4 5			10 ks			0	0	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.56	750.8	30.26	768.6	15	— 9.4	67	ne.	1	0.4			10 s		e.	0.09	2.3	cloudy	R. B. Watkins.
Cleveland, Ohio	29.51	749 5	30.30	769.6	12.4	—19.9	100	s.	4	1.8			10s:fg		e.	0	0	cloudy	J. B. Newlin.
Coleman City, Texas	27.94	709.7	29.84	757.9	31	— 0.6	100	se.	3	1.3		0	0			0	0	clear	L. Dorman.
Columbus, Ohio	29.33	745.0	30.24	768 1	22	— 5.6	87	e.	7	3.1			10 s			0.02	0.5	cloudy	D. Cuthbertson.
Concho, Fort, Texas	27.79	705.9	29.81	757.2	36.3	2.4	82	s.	2	0.9		0	0			0	0	clear	J. McGlone.
Custer, Fort, Montana	26.38	670.0	29.78	756.4	28	— 2.2	77	e.	2	0.9		0	0			0	0	clear	W. B. Lamar.
Davenport, Iowa	29.46	748.3	30.17	766.3	26	— 3.3	64	se.	11	4.9			10 s			0.02	0.5	cloudy	R. R. Martin.
Davis, Fort, Texas	25.13	638.3	30.07	763.8	43	6.1	71	calm	0	0		0	0			0	0	clear	J. Williams.
Dayton, Washington T'y	27.85	707.4	29.68	753.9	36.3	2.4	81	s.	2	0.9			10 s			0	0	cloudy	D. Moore.
Deadwood, Dakota	24.90	632 4	29.89	759.2	32	0.0	82	e.	2	0.9			10 s			0	0	cloudy	F. Willson.
Delaware Breakwater, Del.	30.15	765.8	30.17	766.3	31	— 0.6	68	n.	12	5.4		0	1 s			0	0	clear	T. S. Townsend.
Denison, Texas	28.97	735.8	29.82	757.4	44.0	6.7	76	se.	8	3.6		0	0			0	0	clear	J. W. Byram.
Denver, Colorado	24.32	617.7	29.84	757.9	39.4	4.1	49	nw.	3	1.3		0	0			0	0	clear	F. M. Neal.
Des Moines, Iowa	29.08	738.6	30.06	763.5	26	— 3.3	77	se.	8	3.0			10 s		se.	Inap.	Inap.	cloudy	F. W. Conrad.
Detroit, Michigan	29.54	750.3	30.30	769.6	19.0	— 7.2	84	nw.	3	1.3		0	4 k		nw.	0.03	0.8	fair	C. F. R. Wappenhans.
Dodge City, Kansas	26.99	685.5	29.79	756.7	28	— 2.2	67	calm	0	0		0	0			0	0	clear	V. P. Temple.
Dubuque, Iowa	29.40	746.7	30.17	766.3	19.8	— 6.8	76	se.	8	3.6			10 s			Inap.	Inap.	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.31	744.5	30.12	765.0	18	— 7.8	84	s.	1	0.4			10 s			0	0	cloudy	N. B. Conger.
Eagle Pass, Texas	29.04	737.6	29.88	758.9	32.0	0.0	78	calm	0	0		0	0			0	0	clear	F. Belford.
Eagle Rock, Idaho	24.89	632.2	29.81	757.2	22	— 5.6	88	sw.	8	3.6			10 s		sw.	0	0	cloudy	J. M. Clifford.
Eastport, Maine	29.94	760.5	30.01	762.2	21.0	— 6.1	70	w.	10	4.5		0	0			0.01	0.3	clear	D. C. Murphy.
Elliott, Fort, Texas	26.84	681.7	29.80	756.9	19	— 7.2	58	n.	4	1.8		0	0			0	0	clear	W. J. Cundall.
El Paso, Texas	26.08	662.4	29.94	760.5	45.0	7.2	86	nw.	4	1.8			10 s		nw.	0	0	cloudy	J. O'Dowd.
Erie, Pennsylvania	29.48	748.8	30.25	768 3	13	—10.6	80	s.	6	2.7			9 s		ne.	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.52	749.8	30.24	768.1	27.0	— 2.8	70	se.	8	3.6			10 s			0.03	0.8	cloudy	George Heathcote.
Fredericksburg, Texas	28.03	711 9	29.85	758.2	49	9.4	100	sw.	3	1.3		0	0			0	0	clear	Frank Hallwegler.
Galveston, Texas	29.86	758.4	29.91	759.7	62	16.7	84	se.	20	8.9		8 cs	0	sw.		0	0	cloudy	E. O'C. MacInerney.
Grand Haven, Michigan	29.53	750.0	30.24	768.1	0	—17.8	68	ne.	3	1.3		0	0			0	0	clear	J. E. Mueller.
Grant, Fort, Arizona	25.02	635.5	29.90	759.4	46.5	8.1	54	nw.	2	0.9			10 s			0	0	cloudy	Robert C. Lord.
Hatteras, North Carolina	30.15	765.8	30.17	766.3	28	— 2.2	88	n.	16	7.2		6 k	3 s	n.		0.02	0.5	cloudy	R. M. Crawford.
Helena, Montana	25.29	642.4	29.67	753.6	28	— 2.2	77	sw.	4	1.8		3 ck	0	calm		0	0	clear	N. C. Smith.
Henrietta, Texas	28.75	730.2	29.83	757.7	36	2.2	72	s.	2	0.9		0	0			0	0	clear	J. P. Sherry.
Huron, Dakota	28.32	719.3	29.86	758.4	30.3	— 0.9	81	se.	16	7.2			10 s			0	0	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.35	745.5	30.20	767.1	14	—10.0	70	e.	6	2.7		0	0			0.24	6.1	clear	O. Schutze.
Indianola, Texas	29.82	757.4	29.85	758.2	63.2	17.3	88	sw.	6	2.7		0	5 n		sw.	0.01	0.3	light rain	I. A. Reed.
Jacksboro, Texas																			D. J. Carr.
Jacksonville, Florida	30.20	767.1	30.24	768.1	36	2.2	79	calm	0	0			10 s		w.	0	0	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.03	686.5	29.73	755 1	25	— 3.9	88	e.	5	2.2			10 s			0	0	cloudy	A. Schneider.
Keokuk, Iowa	29.39	746.5	30.10	764.5	21.0	— 6.1	76	e.	13	5.8			10 s		e.	0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.13	765.3	30.15	765.8	57.0	13.9	64	ne.	10	4.5		0	0			0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.12	765 0	30.14	765.5	27	— 2.8	82	nw.	12	5.4		hz.	3 k		n.	0.22	5.6	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	29.11	739.4	30.19	766.8	13.8	—10.1	96	ne.	5	2.2		0	0			0.10	2.5	clear	J. A. Cody.
La Crosse, Wisconsin	29.31	744.5	30.16	766.1	20	— 6.7	70	se.	8	3.6			10 s			0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	28.98	736.1	29.94	760.5	31	— 0.6	78	e.	6	2.7		2 cs	0			0	0	clear	A. W. Browne.
Lewiston, Idaho	28.80	731.5	29.68	753.9	34.0	1.1	88	e.	6	2.7		0	2 s			0	0	clear	W. Bell.
Little Rock, Arkansas	29.64	752 8	29.97	761.2	36	2.2	79	calm	0	0		0	hz			0	0	clear	W. U. Simons.
Los Angeles, California	29.47	748.5	29.87	758.7	50	10.0	86	ne.	5	2.2		0	0			0	0	clear	T. S. Collins.
Louisville, Kentucky	29.56	750.8	30.16	766.1	25	— 3.9	64	ne.	4	1.8			10 s			0.03	0.8	cloudy	L. M. Dey.

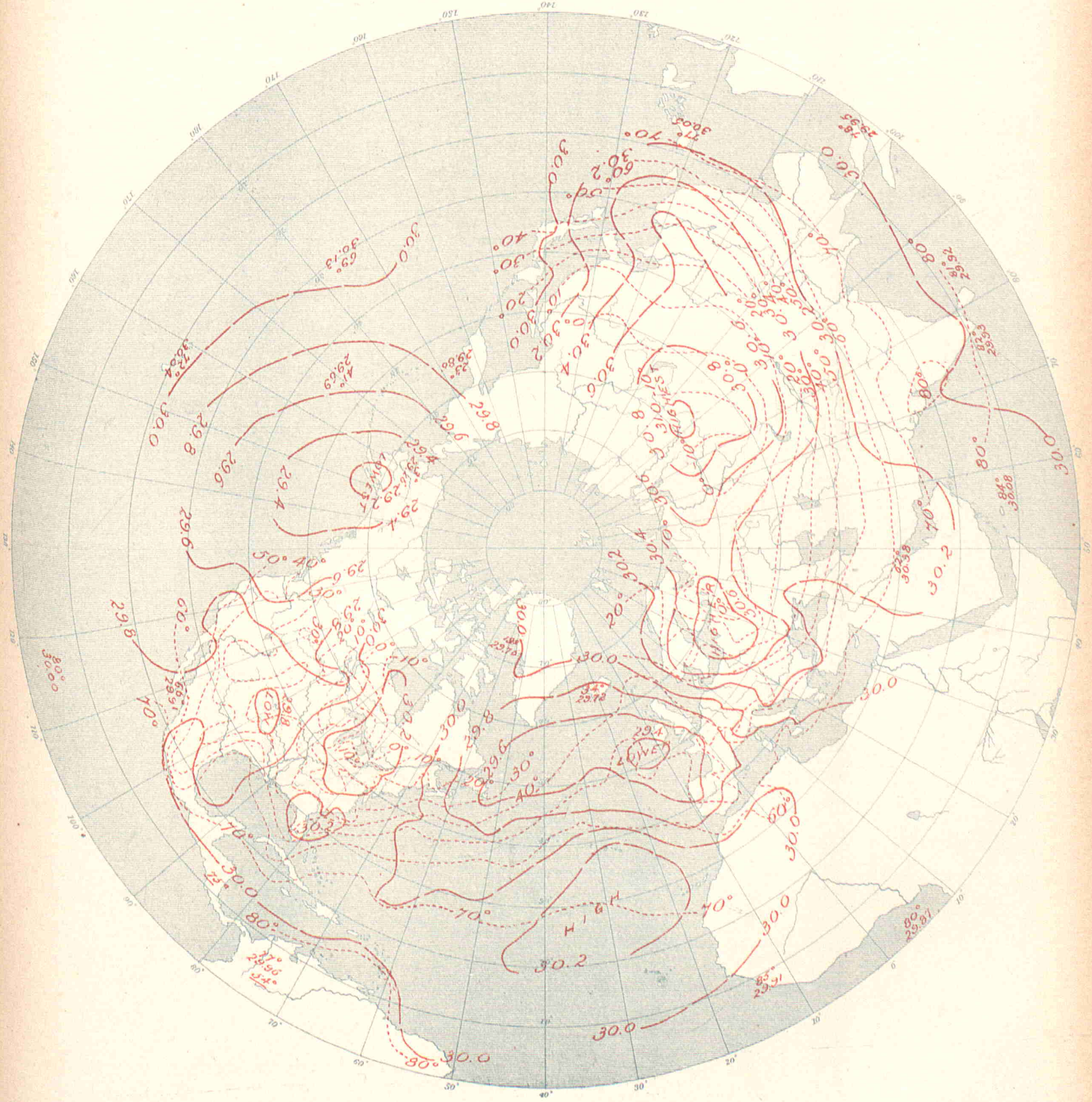
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.46	748.3	30.19	766.8	20	— 6.7	76	calm	0	0	.....	0	2 s	.....	.....	0.04	1.0	clear	Lewis Duane.
Mackinaw City, Michigan	29.59	751.6	30.29	769.4	12.5	—10.8	70	s.	4	1.8	.....	0	0	.....	.....	0.07	1.8	clear	F. R. Day.
Macon, Fort, North Carolina	30.19	766.8	30.20	767.1	25	— 3.9	73	nw.	4	1.8	.....	hz.	0	.....	.....	inap.	inap.	dense haze	C. A. Shaw.
Madison, Wisconsin	29.11	739.4	30.21	767.3	22	— 5.6	87	se.	5	2.2	.....	3 cs	0	w.	.....	0	0	clear	F. P. Chaffee.
Maginnis, Fort, Montana	25.05	636.3	29.59	751.6	28	— 2.2	59	w.	8	3.6	.....	6 k	0	w.	.....	0	0	fair	F. Burke.
McKavett, Fort, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. E. Thatcher.
Marquette, Michigan	29.41	747.0	30.19	766.8	26	— 3.3	76	s.	6	2.7	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. Gilligan.
Memphis, Tennessee	29.71	754.6	30.07	763.8	38	— 3.3	72	se.	4	1.8	.....	5 cs	fg.	s.	.....	0	0	fair	D. T. Flannery
Milwaukee, Wisconsin	29.40	746.7	30.21	767.3	27	— 2.8	88	sw.	5	2.2	.....	.....	10s;fg	.....	.....	0.11	2.8	cloudy	W. Line
Missoula, Fort, Montana	26.27	667.2	29.73	755.1	29	— 1.7	67	w.	5	2.2	.....	0	4 s	.....	w.	0.01	0.3	fair	J. H. Young.
Mobile, Alabama	30.10	764.5	30.14	765.5	36.5	2.5	83	n.	2	0.9	.....	7c;ck	0	sw.	.....	0	0	fair	C. A. Read.
Montgomery, Alabama	29.93	760.2	30.17	766.3	29.5	— 1.4	72	calm	0	0	.....	1 c	0	.....	.....	0	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	28.79	731.3	29.90	759.4	22	— 5.6	100	se.	32	14.3	.....	.....	10 n	.....	se.	0.09	2.3	light snow	H. Bessant.
Morgantown, W. Virginia	29.18	741 2	30.25	768.3	24.0	— 4.4	88	ne.	2	0.9	.....	0	4 s	.....	.....	0	0	clearing	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.56	598.4	30.18	766.6	16.0	— 8.9	87	nw.	5	2.2	.....	0	3 ks	.....	.....	0.04	1.0	clear	B. S. Pague.
Nashville, Tennessee	29.51	749 5	30.12	765.0	20.0	— 6.7	91	e.	2	0.9	.....	0	0	.....	.....	0.02	0.5	clear	L. N. Jesunofsky.
New Haven, Connecticut	29.99	761.7	30.11	764.8	21	— 6.1	84	nw.	4	1.8	.....	10 c	0	.....	.....	0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.08	764.0	30.13	765.3	22	— 5.6	73	calm	0	0	.....	5 c	0	.....	.....	0	0	fair	J. G. Lynch.
New Orleans, Louisiana	30.03	762.7	30.09	764.3	47.3	8.5	79	e.	5	2.2	.....	9 c	0	w.	.....	0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.01	763.0	30.09	764.3	23.7	— 4.6	83	nw.	7	3.1	.....	4 c	2 s	nw.	.....	0	0	fair	W. McGillivray.
New York, New York	29.96	761.0	30.15	765.8	29	— 1.7	77	w.	2	0.9	.....	0	9 s	.....	w.	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.16	766.1	30.19	766.8	30	— 1.1	67	n.	6	2.7	.....	0	3 s	.....	n.	0.02	0.5	clear	Wm. Davis.
North Platte, Nebraska	26.09	077.9	29.85	758.2	20.6	— 6.3	82	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y	29.51	749.5	29.55	750.6	36.0	2.2	89	nw.	1	0.4	.....	.....	10 s	.....	.....	0.89	22.6	cloudy	J. Dascomb.
Omaha, Nebraska	28.67	728.2	29.96	761.0	28.5	— 1.9	82	se.	14	6.3	.....	0	4 s	.....	.....	0	0	fair	A. Pollak.
Oswego, New York	29.85	758.2	30.20	767.1	24.0	— 4.4	80	nw.	8	3.6	.....	hz.	6 k	.....	nw.	inap.	inap.	fair	J. G. Linsley.
Palestine, Texas	29.33	745.0	29.91	759.7	57.5	14.2	80	s.	16	7.2	.....	.....	10 ks	.....	s.	0	0	threatening	L. M. Pindell.
Pensacola, Florida	30.14	765.5	30.17	766.3	40.1	4.5	86	ne.	6	2.7	.....	0	4 s	.....	se.	0	0	fair	M. McGauran.
Philadelphia, Pa	30.08	764.0	30.18	766.6	28	— 2.2	77	nw.	8	3.6	.....	.....	10s;fg	.....	nw.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.35	440.7	30.01	762.2	6	—14.4	100	w.	.....	.....	7	.....	10 s	.....	w.	0	0	cloudy	H. Hall.
Ploche, Nevada	23.75	603.2	29.92	760.0	30	— 1.1	54	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.40	746.7	30.26	768.6	16.5	— 8.6	91	n.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	W. A. Reid.
Poplar River, Montana	27.46	697.5	29.82	757.4	.....	.....	.....	ne.	.....	.....	1	.....	10 s	.....	.....	0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.10	764.5	30.11	764.8	54.1	12.3	86	ne.	6	2.7	.....	0	8 ks	.....	w.	0	0	cloudy	H. B. Boyer.
Port Huron, Michigan	29.56	751.3	30.31	769.9	6.8	—14.0	86	calm	0	0	.....	0	0	.....	.....	0	0	clear	W. O. Bailey.
Portland, Maine	30.02	762.5	30.08	764.0	21.0	— 6.1	70	nw.	4	1.8	.....	0	hz.	.....	.....	inap.	inap.	dense haze	W. W. Elchelberger.
Portland, Oregon	29.43	747.5	29.50	749.3	41.2	5.1	92	w.	4	1.8	.....	.....	10 n	.....	sw.	0.37	9.4	light rain	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	30	— 1.1	88	n.	.....	.....	2	6 k	3 ks	nw.	.....	0.02	0.5	cloudy	F. S. Coburn.
Prescott, Arizona	24 55	623.6	29.92	760.0	26.8	— 2.9	70	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass.	30.03	762.7	30.06	763.5	29	— 1.7	77	nw.	3	1.3	.....	0	8 s	.....	.....	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.19	766.8	30.20	767.1	40	4.4	65	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. J. Evans.
Red Bluff, California	29.31	744.5	29.68	753.9	49	9.4	86	se.	20	8.9	.....	.....	10 ks	.....	se.	0	0	threatening	J. R. Williams.
Rochester, New York	29.51	749.5	30.22	767.6	14.5	— 9.7	91	sw.	7	3.1	.....	.....	10s;hz	.....	.....	0.01	0.3	cloudy	E. W. McGann
Roseburg, Oregon	28.86	733.0	29.44	747.8	42.3	5.7	92	sw.	2	0.9	.....	.....	10 n	.....	.....	0.35	8.9	light rain	J. J. Naury.
Sacramento, California	29.75	755.6	29.83	757.7	50.4	10.2	93	se.	7	3.1	.....	.....	10 n	.....	.....	inap.	inap.	light rain	J. A. Barwick.
St. Louis, Missouri	29.45	748.0	30.10	764.5	21.9	— 5.6	91	ne.	8	3.6	.....	1 ck	18;sk	.....	.....	0	0	clear	J. H. Weber.
St. Michael, Fort, Alaska	29.23	742 4	29.26	743.2	3	—16.1	100	ne.	5	2.2	.....	0	8 s	.....	.....	0.08	2.0	cloudy	A. P. Leavitt.
St. Paul, Minnesota	29.11	739.4	30.07	763.8	14.0	—10.0	87	se.	19	8.5	.....	.....	10 s	.....	se.	inap.	inap.	cloudy	P. F. Lyons.
St. Vincent, Minnesota	28.85	732.8	29.84	757.9	22	— 5.6	94	s.	18	8.0	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	C. B Dilley.
Salt Lake City, Utah	25.33	643.4	29.87	758.7	38	3.3	65	e.	4	1.8	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. Craig.
San Antonio, Texas	29.14	740.1	29.86	758.4	47.0	8.3	100	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	T. J. Kenan.
San Diego, California	29.76	755.9	29.83	757.7	54.0	12.2	90	se.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.55	750.6	30.28	769.1	21.3	— 5.9	76	w.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.11	764.8	30.14	765.5	28.5	— 1.9	88	nw.	12	5.4	.....	.....	10 ks	.....	.....	0	0	cloudy	B. A. Blundon.
San Francisco, California	29.75	755.6	29.82	757.4	54	12.2	93	se.	6	2.7	.....	.....	10 n	.....	sw.	0.01	0.3	light rain	N. Gorom.
Santa Fé, New Mexico	22.89	581.4	29.88	758.9	31	— 0.6	60	n.	12	5.4	.....	4 cs	0	n.	.....	0	0	fair	H. U. Jones.
Savannah, Georgia	30.13	765.3	30.23	767.8	35.5	1.9	68	sw.	1	0.4	.....	0	sk	.....	.....	0	0	clear	H. W. Ford.
Shaw, Fort, Montana	25.86	656.8	29.09	754.1	32	0.0	62	s.	14	6.3	.....	0	6 s	.....	s.	0	0	fair	A. L. Mathews.
Shreveport, Louisiana	29.67	753.6	29.92	760.0	47	8.3	86	se	7	3.1	.....	0	9 s	.....	se.	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.45	722.6	29.78	756.4	36.5	2.5	74	s.	12	5.4	.....	0	0	.....	.....	0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.11	612.4	29.95	760.7	30.5	— 0.8	69	calm	0	0	.....	0	6 s	.....	.....	0	0	fair	N. D. Lane.
Sitka, Alaska	29.36	745.7	29.43	747.5	34.5	1.4	79	s.	8	3.6	.....	.....	10 n	.....	s.	0.30	7.6	light snow	F. W. Fickett.
Smith, Fort, Arkansas	29.39	746.5	29.89	759.2	35.4	1.9	69	e.	6	2.7	.....	0	3 s	.....	.....	0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.17	766.3	30.21	767.3	26	— 3.3	76	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	27.55	699.8	29.68	753.9	33	0.6	88	sw.	18	8.0	.....	0	4 s	.....	sw.	0.03	0.8	fair	H. Clifford.
Springfield, Illinois	29.42	747.3	30.15	765.8	18	— 7.8	70	e.	8	3.6	.....	0	0	.....	.....	inap.	inap.	clear	T. B. Jennings.
Springfield, Massachusetts	30.00	762.0	30.14	765.5	10.0	—12.2	91	nw.	.....	.....	1	0	fg.	.....	.....	0	0	clear	Charles Mayr.
Springfield, Mo.	28.45	722 6	29.98	761.5	39	3.9	73	se.	8	3.6	.....	0	3 s	.....	e.	0	0	clear	J. B. Marbury.
Starkville, Miss.	29.62	752.3	30.12	765.0	35	1.7	79	se.	9	4.0	.....	2 c	2 s	.....	se.	0	0	fair	O. Dill.
Stevenson, Fort, Dakota	27.70	703.6	29.76	755.9	21	— 6.1	84	e.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	W. Burrows.
Stockton, Fort, Texas	26.72	678.7	29.86	758.4	45	7.2	49	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	30.04	763.0	30.10	764.5	28.4	— 2.0	77	n.	12	5.4	.....	8 k	0	w.	.....	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.02	686.3	29.84	757.9	42	5.6	59	e.	.....	.....	1	.....	10 s	.....	.....	0	0	cloudy	J. T. Fitzgerald.
Toledo, Ohio	29.51	749.5	30.25	768.3	17	— 8.3	83	nw.	6	2.7	.....	0	6 s	.....	ne.	inap.	inap.	fair	A. Buell.
Tucson, Arizona	27.36	694.9	29.80	758.4	50	10.0	55	calm	0	0	.....	.....	10 s	.....	.....	0	0	threatening	J. L. Whiteside.
Umatilla, Oregon	29.24	742.7	29.03	752.6	39.5	4.2	78	s.	3	1.3	.....	hz.	6 s	.....	.....	inap.	inap.	fair	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	28.3	— 2.1	77	n.	.....	.....	1	0	5 s	.....	nw.	0	0	fair	D. Brooks.
Vicksburg, Mississippi	29.79	756.7	30.06	763.5	42.0	5.6	85	se.	14	6.3	.....	4 c	0	w.	.....	0	0	fair	James Kenealy.
Visalia, California	29.48	748.8	29.86	758.4	43.3	6.3	92	se.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	O. D. Stewart.
Washakie, Fort, Wyoming	24.04	610.6	29.81	757.2	27.8	— 2.3	80	nw.	14	6.3	.....	0	0	.....	.....	0	0	clear	T. M. Ambler.
Washington, D. C.	30.08	764.0	30.20	767.1	24.5	— 4.2	80	calm	0	0	.....	0	sk.	.....	.....	0	0	clear	B. M. Pursell.
West Las Animas, Colorado	25.58	649.7	29.74	755.4	22.5	— 5.3	56	w.	4	1.8	.....	0	4 s	.....	w.	0	0	fair	F. H. Brandenburg.
Williamsport, Pa.	29.61	752.1	30.24	768.1	15	— 9.4	67	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	B. F. Hough.
Wilmington, N. Carolina	30.16	766.1	30.22	767.6	30	— 1.1	68	n.	1	0.4	.....	0	5 s	.....	.....	0	0	fair	Samuel A. Haney.
Winnemucca, Nevada	25.22	640.6	29.79	755.9	35	1.7	82	w.	13	5.8	.....	.....	10 s	.....	w.	0	0	cloudy	J. Grover.
Yankton, Dakota	28.40	721.3	29.83	757.7	28	— 2.2	77	s.	20	8.9	.....	.....	10 s	.....	.....	0	0	cloudy	J. H. Atfield.
Yuma, Arizona	29.58	751.3	29.73	755.1	49.0	9.4	50	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.98	558.3	.....	.....	54.0	12.2	88	calm	0	0	.....	4 c	2 ks	n.	s.	0.01	0.3	fair	Joaquin Gomez.
Havana, Cuba, W. I.	30.02	762.5	30.09	764.3	51.9	11.1	93	se.	3	1.3	.....	2 c	2 ks	sw.	se.	0	0	fair	Benito Vines, S. J.
Kingston, Jamaica, W. I.	.....	.....	.....	.....	76	24.4	77	n.	1	0.4	.....	10 cs	0	.....	.....	0.25	6.3	fair	Robert Johnston.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	78	25.6	86	e.	.....	.....	3	4 c	5 k	e.	.....	0	0	.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.40	746.7	29.96	761.0	77	25.0	89	calm	.....	.....	0	.....	10 ks	.....	calm	0.04	1.0	foggy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	75	23.9	90	ne.	.....	.....	1	5 cs	0	ne.	.....	0	0	fair	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.07	738.4	29.13	739.9	33	0.6	88	ne.	.....	.....	6	.....	10 n	.....	.....	0.13	3.3	light rain	W. J. Fisher.
St. Thomas, W. I.	29.94	760.5	30.06	763.5	78	25.0	88	se.	.....	.....	.....	2 c	3 k	e.	se.	0	0	fair	Aug. Walloe.
York Factory, B. A.	30.13	765.3	30.20	767.1	—10.5	—23.6	76	sw.	11	4.9	.....	4 k	4 s	sw.	sw.	0.18	4.6	cloudy	Forrester & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower From.	Inch.	Mill			
British Naval.																	
H. M. S. Amethyst, Montevideo, Uruguay†	30.11	764.8	69.5	20.8	67	n.			2-3		4	sw.					d. clouds.
H. M. S. Audacious, N. 1° 21′, E. 103° 15′	29.85	758.2	80	26.7	91	var.			1								
H. M. S. Beacon, Lake Timsah, Egypt			68	20.0	69	ene.			1		1	sse.			1	ene.	blue sky.
H. M. S. Boadicea, Saldanha Bay, Cape Colony	29.78	756.4				calm			0		2						d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.01	762.2	72	22.2	71	calm			0		0						blue sky.
H. M. S. Champion, N 17° 00′, E. 113° 25′			75	23.9	90	nne.			6		10				6	ne.	showery
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.62	777.7	32	0.0							0						blue sky.
H. M. S. Comus, N. 42° 08′, W. 125° 00′	29.50	749.3	51.5	10.8	89	w.			7		10				6	wnw.	showery.
H. M. S. Curacoa, Yokohama, Japan	29.88	758.9	47.5	8.6	77	n.			2-3		6						d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.65	753.1	69	20.6	75	ne.			1-2		2						d. clouds.
H. M. Dock Yard, Bermuda, W. I	29.99	761.7	61	16.1	66	wnw.			1		4	wnw.					d clouds.
H. M. S. Eclipse, N. 9° 04′ E. 75° 51′	29.83	767.7	82	27.8		calm			0		2				1		d. clouds.
H. M. S. Fawn, S. 29° 53′, E. 31° 04′	29.89	759.2	74.5	23.6	85	ne.			2		10				3	ne.	overcast
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.99	761.7	60	15.6	82	nnw.			2		10						overcast.
H. M. S. Heroine, N. 32° 38′, W. 16° 20′	30.20	767.1	65	18.3	59	w.			4		4	wnw.			sm'h		d. clouds.
H. M. S. Iron Duke, N. 1° 17′, E. 103° 51′	29.95	760.7	78	25.6	90	ne.			1		10	n.					raining.
H. M. S. Lark, S. 33° 52′, E 151° 14′	29.87	758.7	70.3	21.3	77	ne.			3		6						d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.95	760.7	62	16.7		n.			2						1	n.	d. clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.40	772.1	43.3	6.3	69	nnw.			1-2		4						showery.
H. M. S. Monarch, N. 34° 48′, E. 26° 33′			65	18.3		e.			3		6	ese.			2	ese.	showery
H. M. S. Rambler, S. 39° 10′, W. 59° 00′	29.77	756 1	62	16.7	88	n.			3		10				2	nw.	d. clouds.
H. M. S Rocket, S. 26° 00′, W. 70° 55′	30.03	762.7	64	17.8	94	s.			2		2				2-3	sw.	d. clouds.
H. M. S. Starling, N. 2° 02′, E. 4° 24′	29.87	758.7	79.7	26.5	90	s.			4-5		10	ssw.			3	ssw.	raining.
H. M. S. Superb N. 34° 40′, E. 33° 03′*	30.20	767.1	70	21.1	75	e.			3-4		3	nw.			3	e.	d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.94	760.5	64	17.8	100	se.			1		10						overcast.
H. M. S. Sylvia, Surrey Channel, Patagonia	29.29	744.0	49	9.4	89	wnw.			4-6		10						showery.
H. M. S. Woodlark, Shat-el Arab river	30.28	769.1	61.5	16.4	61	nne.			2		1	ne.					blue sky.
H. M. S. Zephyr, Chee-foo, China	30.47	773.9	22.5	— 5.3		nnw.			4-5		5	w.			2	nw.	d clouds.
Portuguese Naval.																	
Tamega, Macao, China	30.31	769.8	51.8	11.0	58	nne.			7		5		ne.		3	n.	d. clouds.
United States Naval.																	
Navy Yard, Pensacola, Fla	29.98	761.5	45	7.2	84	ne.	4	1.8			8		ne.		0	0			fair.
Navy Yard, Portsmouth, N. H	30.08	764.0	15	— 9.4	?	calm	0	0			0				0	0			clear.
Naval Hospital, Yokohama, Japan*	29.80	756.9	42.5	5.8	42	nnw.			5		1		w.		0.02	0.5			clear.
Adams, Sitka, Alaska *†	29.49	749 0	31	— 0.6	89	ne.			1		10								cloudy.
Alaska, Off Nappa river, Cal	29.90	759.4	52	11.1	93	s.			3		10				0	0			cloudy.
Alliance, N. 34° 38′, W. 73° 00′	29.97	761.2	52	11.1	100	nw.			4-5		10				light	light	sm'h		cloudy.
Ashuelot, Nagasaki, Japan	30.39	771.4	42	5.6	91	n.			1		10		wnw.				rainy.
Brooklyn, S. 46° 55′, W. 63° 43′	29.73	755.1	56	13.3	93	nnw.	20	8.9			0				0	0	mod	nnw.	clear.
Colorado, New York, N. Y	30.20	767.1	28	— 2.2	100	wnw.	4	1.8			8		wnw.		0	0			cloudy.
Enterprise, Norfolk, Va	30.20	767.1	29	— 1.7	78	nw.			1		8		nw.						cloudy.
Essex, Callao, Peru	30.00	762.0	65	18.3	94	sse.			1		10				sm'h	se.	misty.
Franklin, Norfolk, Va	30.17	766.3	29	— 1.7	?	wnw.	7	3.1			5		nnw.		0	0			fair.
Galena, Montevideo, Uruguay	29.98	761.5	68	20.0	84	n.			2		2				sm'h		clear.
Hartford, S. 53° 15′, W. 77° 45′*	29.96	761.0	48	8.9	85	nw.			8-10		10		n;w.		driz.	driz.	r'gh	wsw.	cloudy.
Independence, Mare Island, Cal	29.90	759.4	53	11.7	93	s.			3		10						raining.
Iroquois, Callao, Peru	30.00	702.0	65	18.3	94	se.			1		10						foggy.
Jamestown, Boston, Mass	30.05	763.3	17	— 8.3	100	nw.			1		2		calm		0	0			fair.
Juniata, Fayal, Azores Islands *	30.25	768.3	67	19.4	84	wsw.			4		8				0	0	sm'h		cloudy.
Kearsarge, N. 34° 32′ W. 72° 56′	29.99	761.7	53	11.7	93	wnw.			5		10		wnw.				mod.	nw.	squally.
Lackawanna, S. 10° 25′, W. 83° 27′*	29.96	761.0	72	22.2	80	sse.			1		8		se.				sm'h	se.	fair.
Lancaster, Leghorn, Italy*	29.88	758.9	61	16.1	70	e.			2		2		e.				sm'h		fair.
Michigan, Erie, Pennsylvania	30.28	769.1	30	— 1.1	89	nw.			3		8		se.						fair.
Minnesota, New York, N. Y	30.18	766.6	29	— 1.7	100	nnw.	10	4.5			10		nnw.						foggy.
Monocacy, Nagasaki, Japan	30.37	771.4	43	6.1	91	nnw.			2		10		n.						hailing
New Hampshire, Newport, R. I	30.13	705.3	25	— 3.9	100	n.			3		5		w.		sm'h				fair.
Nipsic, Lisbon, Portugal*	29.75	755.6	58	14.4	87	w.			3		10				sm'h				rainy.
Onward, Callao, Peru†	30.11	764.8	64	17.8	100	sse.			2		10		n.				long	w.	cloudy.
Palos, Tientsin, China*	30.77	781.5	15	— 9.4	100	nne.			1		0								clear.
Pensacola, S. 8° 18′, W. 80° 36′*	29.92	760.0	69	20.6	90	se.			1		10		se.		0	0	mod	se.	cloudy.
Powhatan, Boston, Mass	30.04	763.0	17	— 8.3	100	nw.			2		2								misty.
Quinnebaug, Villafranche, France*	29.96	761.0	61	16.1	60	sse.			3		5?		sse.						clear ?
Ranger, N. 16° 03′, W. 98° 47′	30.00	762.0	80	26.7	78	nne.			2		2		n.				sm'h		fair.
Richmond, Nagasaki, Japan *	30.30	769.6	45	7.2	67	nnw.			1		8		nnw.						snowing.
Saratoga, Newport, R. I	30.03	762.7	26	— 3.3	88	n.			3		8		calm		0	0	sm'h		cloudy.
St. Louis, League Island, Pa	30.39	771.9	23	— 5.0	86	calm			0		2		sse.		0	0			clear.
Tennessee, N. 34° 30′, W. 72° 50′	30.02	762.5	54	12.2	86	nw.	22	9.8			10				0	0	mod.	nw.	cloudy.
Vandalia, N. 34° 30′, W. 72° 50′*	30.00	762.0	53	11.7	93	w.			5		10		wnw.				long	nw.	cloudy.
Wabash, Boston, Mass	30.07	763.8	18	— 7.8	68	nw.	2	0.9			2		nw.		0	0			fair.
Wachusetts, Mare Island, Cal*	29.79	756 7	52	11.1	100	se.			1		10		calm				sm'h		raining.
Wyandotte, Washington, D C	30.44	773.2	43	6.1	75	nw.			2		0				0	0			clear.
Yantic, N. 34° 37′, W. 73° 09′	30.13	765.3	54	12.2	79	w.			4		8						mod.	nw.	squally.
Merchant Marine.																	
S. S. Grecian, N. 38° 45′ W. 13° 05′*	29.64	752.8	62	16.7	94	wnw.			6		10		wnw.		1 h'r	1 h'r	high	wnw.	cloudy.
S. S. Nova Scotian, N. 55° 18′ W. 13° 27′	29.42	747.3	48	8.9		var.			2		10		sse.				sll't	s.	showery.
S. S. Polynesian, N. 49° 34′, W. 31° 41′*	29.53	750.0	52	11.1		s.			5		10		s.		24 h'r	24 h'r	mod.	s.	overcast.
S. S. Scandinavian, N. 42° 53′, W. 61° 38′	29.92	760.0	34	1.1		wnw.			5		10		wnw.		0	0	high	w.	overcast.
S. S. Indiana, N. 40° 05′, W. 68° 54′†	30.07	763 8	35	1.7	90	w.			3		2		ne.				sm'h	n.	fine.
S. S. Lord Clive, N. 51° 20′, W. 26° 30′*†	29.70	754.4				s.			4		10		sw.		0	0	mod.	sw.	cloudy.
S. S. Lord Gough, N. 52° 48′, W. 5° 23′	29.45	748.0				se.			4		8		se.		0	0	sm'h		cloudy.
S. S. Ohio, N. 51° 21′, W. 11° 52′†	29.20	741.7	48	8.9	92	ne.			4		7		ene.				mod.	ne.	cloudy.
S. S. Pennsylvania, N. 40° 05′ W. 69° 30′†	29.97	761.2	36	2.2		n.			4		10		nw.				sm'h	nw.	cloudy.
S. S. Castor, N. 43° 30′, W. 47° 30′*	29.82	757.4	44.6	7		w			3		5?		w.		0	0	5	nw.	cloudy.?
S. S. Jason, N. 49° 59′, W. 23° 42′			51.8	11.0		nnw.			5		7 k						5	nw.	gloomy.
S. S. Anchoria. N. 43° 05′, W. 59° 06′†	29.79	756.7				wnw.			5		1		w.		snow	snow	hv'y	w.	clear.
S. S. Bolivia, N. 54° 39′, W. 19° 06′*†	29.61	752.1	54	12.2	67	wsw.			2		2		wsw.		4 h'r	4 h'r	h'vy	w.	clear.
S. S. Dorian, N. 52° 59′, W. 5° 40′*	29.36	745.7	49	9.4		se.			6		10		s.		16 h'r	16 h'r	mod	ssw.	hazy.
S. S. Elysia, N. 50° 08′, W. 24° 33′†	29.81	757.2	53	11.7		ne.			3		8		e.				light	nw.	showery.
S. S. Galatia, N. 32° 51′, E. 25° 31′†	30.12	765.0	71.3	21.8	?	sse.			5		1		nw.		0	0	r'gh	sse.	clear.
S. S. Ailsa, N. 11° 15′, W. 74° 17′†	30.06	763 5	82	27.8	91	e.			2		8		e.		0.	0	sm'h	e.	cloudy.
S. S. Alvo, N. 29° 40′, W. 74° 15′	30.12	765.0	65	18.3		nw.			5		1				0	0	r'gh	sse.	
S. S. Ambrose, N. 31° 20′ W. 60° 30′†	30.14	765.5	66	18.9		calm			0		0				0	0	short	wnw.	
S. S. Carroll, Halifax, N. S*†	29.94	760.5	27	— 2.8		var.			2		9?		nw.		snow	snow			clear?
S. S. City of Agra, S. 47° 12′, E. 161° 00′	29.62	752.3	51.4	10.8	90	ssw.			5		7								d. clouds.
S. S. Commewyne, N. 22° 09′, W. 56° 19′	30.11	764.8	78.9	26.1	86	se.			4		7								d. clouds.
S. S. Gordon Castle, N. 6° 15′, E. 84° 47′	29.92	760 0	81.0	27.2	78	ne.			3		3								d. clouds.
Inchkeith, S. 17° 49′, E. 96° 15′	30.03	762 7	74.8	23.8	86	e.			6		7								showery.
Mertola, N. 51° 36′ W. 6° 52′	29.43	747.5	48.2	9.0	93	sse.			1		10								overcast.
Ptolmey, N. 47° 28′, W. 22° 05′	29.75	755.0	54	12.2		wnw.			4		9								d. clouds.
S. S. Mexico, La Paz, Lower Cal †	29.91	759.7	66	18.9	100	s.			2		0								clear.
S. S. Bothnia, N. 41° 26′, W. 59° 03′	29.86	758.4	42	5.6	83	w.			6		7		w.		sh's	sh's	r'gh	w.	gloomy.
S. S. Marathon, Malaga, Spain			60	15.6		w.			2		7		w.		7 h'r	7 h'	sm'h	w.	raining.
S. S. Pavonia, off Queenstown, Ireland*	29.35	745.5	51	10.6	79	nnw.			5		3		nnw.		8 h'r	8 h'r	light	s.	threatening
S. S. Colina, St. Johns, N. F						w.			2		7		wnw.		0	0			cloudy.
S. S. Labradore, N. 50° :3′, W. 16° 03′*†	29.57	751.1	46.4	8.0		nw.			3		4		w.		rain	rain	h'vy	sw.	

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		WEATHER.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Abyssinia, N. 49° 34′, W. 33° 54′	.....	.....	58	14.4	88	sSW.	.....	.....	5	.....	10	.....	W.	12 h'r	12 h'r	mod.	sw.	gloomy.
S. S. Wyoming, N. 51° 25′, W 16° 38′	29.56	750.8	49	9.4	.....	nnW.	.....	.....	6	.....	5	.....	NW.	o	o	r'gh	W.	clearing.
S. S. Bohemia, N. 40° 30′, W. 69° 06′†	30.10	764.5	30	—1.1	.....	n.	.....	.....	2	.....	5	.....	.....	o	o	mod.	nw.	foggy
S. S. Cimbria, N. 43° 08′, W. 58° 00′	29.75	755.6	37.6	3.1	.....	WNW.	.....	.....	8	.....	5	.....	WNW.	rain	rain	r'gh	WNW.	cloudy.
S. S. Gellert, Hamburg, Germany	30.18	766.6	33	0.5	.....	ese.	.....	.....	5	.....	10	.....	ese.	o	o	.....	.....	covered.
S. S. Rugia, N. 44° 07′, W. 48° 37′ *	29.78	756.4	42	5.6	.....	sW.	.....	.....	4	.....	5	.....	sw.	12 mi	nutes	o	sw.	
S. S. Silesia, N. 49° 44′, W. 10° 07′†	29.40	746.7	52.2	11.2	86	sw.	.....	.....	4	.....	2	.....	sw.	8 h'r	8 h'r	5	wsw.	fair.
S. S. Vandalia, N. 42° 05′, W. 62° 40′	30.04	763.0	41.0	5.0	87	W.	.....	.....	5	.....	2	.....	W.	o	o	mod.	w.	fair.
S. S. Wieland, Cherbourg, France	29.75	755.6	.....	.....	.....	ese.	.....	.....	6	.....	10	.....	ese.	o	o	long	ese.	misty.
S. S. City of Berlin, N. 41° 30′, W. 65° —	30.03	762.7	37	2.8	?	WNW.	.....	.....	2	.....	10	.....	NW.	o	o	mod.	WNW.	fair.
S. S. Mentmore, Liverpool, Eng*	29.46	748.3	.....	.....	.....	se.	.....	.....	4	.....	8	.....	se.	o	o	.....	.....	gloomy.
S. S. Hevelius, N. 51° 15′ W. 3° —*	29.70	754.4	45	7.2	.....	sSW.	.....	.....	6	.....	10	.....	W.	4 h'r	4 h'r	.....	.....	raining.
S. S. Sirius, S. 17° 30′, W. 38° 30′ *	29.90	759.4	.....	.....	.....	s.	.....	.....	4	.....	8	.....	s.	16 h'r	16 h'r	mod.	s.	overcast.
S. S. Colorado, N. 34° 03′, W. 77° 00′†	30.15	765.8	38	3.3	.....	nw.	.....	.....	6	.....	2	.....	NW.	o	o	mod.	nw.	fair.
S. S. Archimede, N. 38° 12′, W. 62° 45′†	29.94	760.5	58	14.4	76	n.	.....	.....	3	.....	9	.....	nnw.	2 h'r	2 h'r	r'gh	nw.	covered.
S. S. John Hopkins, Baltimore, Md*†	30.30	769.6	23	—5.0	.....	W.	.....	.....	2	.....	0	.....	.....	o	o	.....	.....	hazy.
S. S. Glenapp, N. 20° 00′, W. 21° 10′	.....	.....	.....	.....	.....	ene.	.....	.....	4	.....	8	.....	ne.	o	o	high	ne.	squally.
S. S. Glenfyne, S. 10° 30′, W. 35° 46′*†	29.61	752.1	.....	.....	.....	nne.	.....	.....	2	.....	1	.....	ne.	o	o	sm'h	.....	fair.
S. S. Chalmette, Algiers, La†	30.05	763.3	47	8.3	.....	e.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
S. S. New York, N. 28° 10′ W. 88° 00′†	30.13	765.3	65	18.3	.....	s.	.....	.....	2	.....	7	.....	se.	.....	.....	sm'h	.....	cloudy.
S. S Denmark, N. 49° 47′, W. 9° 20′	.....	.....	50	10.0	.....	sw.	.....	.....	4	.....	5?	.....	W.	12 h'r	12 h'r	r'gh	wsw.	clear.?
S. S. England, N. 50° 18′, W. 27° 33′	29.61	752.1	.....	.....	.....	W.	.....	.....	3	.....	10	.....	W.	sh'rs	sh'rs	h'vy	W.	overcast.
S. S. Erin, N. 40° 38′, W. 69° 02′	30.08	764.0	31	—0.6	.....	ne.	.....	.....	6	.....	2	.....	nnw.	o	o	.....	.....	clear.
S. S. Helvetia, Liverpool, Eng	29.56	750.8	47	8.3	.....	sse.	.....	.....	4	.....	10	.....	se.	o	o	.....	.....	misty.
S. S. Holland, N. 47° 41′, W. 23° 48′	29.66	753.4	51	10.6	.....	WNW.	.....	.....	2	.....	10	.....	.....	3 h'r	3 h'r	brk'n	nw.	cloudy.
S. S. City of Merida, N. 21° 17′, W. 89° 40′*†	29.92	760.0	68	20.0	.....	e.	.....	.....	4	.....	0	.....	.....	o	o	light	ene.	fine.
S. S. Amsterdam, N. 41° 24′, W. 65° 54′ *	30.11	764.8	39	3.9	.....	WNW.	.....	.....	3	.....	.....	.....	.....	.....	.....	5	W.	cloudy.
S. S. Alene, N. 25° 46′, W. 74° 19′†	29.98	761.5	67	19.4	.....	n.	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	nne.	clear.
S. S. America, N. 49° 41′, W. 10° 36′ *	29.43	747.5	53.5	11.9	70	sSW.	.....	.....	3	.....	3	.....	WSW.	o	o	mod.	W.	fair.
S. S. Braunschweig, N. 23° 35′, W. 22° 00′	30.21	767.3	72.0	22.2	71	WNW.	.....	.....	4	.....	7	.....	NW.	o	o	light	nw.	cloudy.
S. S. Elbe, N. 50° 53′, E. 0° 31′	29.69	754.1	45.5	7.5	.....	s.	.....	.....	5	.....	3	.....	s.	o	o	mod.	s.	misty
S. S. Gen. Werder, N. 38° 00′, W. 74° 50′	30.17	766.3	33.8	1.0	.....	nnw.	.....	.....	2	.....	5?	.....	n.	o	o	sm'h	s.	misty
S. S. Hohenstaufen, S. 20° 07′, W. 38° 29′	29.95	760.7	75.2	24.0	.....	s.	.....	.....	6	.....	5	.....	s.	o	o	sm'h	WNW.	clear.
S. S. Neckar, N. 49° 33′, W. 7° 33′	29.40	746.7	49.0	9.4	90	sse.	.....	.....	2	.....	2	.....	se.	14 h'r	14 h'r	r'gh	ssw.	fair.
S. S. Oder, N. 53° 50′, E. 6° 42′	30.05	763.3	36.5	2.5	.....	ese.	.....	.....	0	.....	10	.....	ese.	5 h'r	5 h'r	mod.	sw.	fair.
S. S. Ohio, N. 49° 30′, W. 14° 34′	29.40	746.7	.....	.....	.....	nw.	.....	.....	4	.....	10	.....	ese.	o	o	mod.	ese.	covered.
S. S. Rhein, N 41° 03′ W. 66° 20′	30.02	762.5	.....	.....	.....	W.	.....	.....	4	.....	10	.....	nw.	7 h'r	7 h'r	mod	W.	misty.
S. S. Salier, N. 40° 40′, W. 68° 26′	30.07	763.8	34.7	1.5	.....	nw.	.....	.....	4	.....	7	.....	W.	snow	snow	mod.	w.	fair.
S. S. Werra, N. 45° 02′, W. 51° 46′*†	29.76	755.9	35.6	2.0	.....	WNW.	.....	.....	3	.....	10	.....	W.	o	o	mod.	nw.	cloudy.
S. S. Belgic, San Francisco, Cal †	29.84	757.9	57	13.9	87	se.	.....	.....	6	.....	10	.....	WNW.	2 h'r	2 h'r	high	W.	raining.
S. S. Coptic, N. 31° 45′, E. 132° 04′	30.31	769.9	51.0	10.6	59	nnW.	.....	.....	2	.....	3	.....	s.	4 h'r	4 h'r	.....	.....	clear.
S. S. Gaelic, N. 38° 00′, W. 129° 10′ *	29.65	753.1	57	13.9	94	W.	.....	.....	4-6	.....	6	.....	NW.	o	o	slit	nw.	fair.
S. S. Oceanic, Hong Kong, China	.....	.....	60	15.6	65	ne.	.....	.....	7	.....	3	.....	W.	.....	.....	.....	W.	misty.
S. S. Mississippi, N. 46° 16′, W. 124° 13′ †*	29.50	749.3	45	7.2	92	ene.	.....	.....	4	.....	2	.....	ne.	.....	.....	.....	.....	clear.
S. S. Oregon, N. 39° 23′, W. 124° 09′†	29.72	754.9	55	12.8	87	sse.	.....	.....	3	.....	9	.....	e.	.....	.....	mod.	W.	cloudy.
S. S. Ancon, N. 32° 44′, W. 117° 21′†	29.80	756.9	58	14.4	88	se.	.....	.....	2	.....	8	.....	sw.	.....	.....	high	sw.	squally.
S. S. City of Chester, San Francisco, Cal *†	29.79	756.7	54	12.2	93	se.	.....	.....	2	.....	2	.....	se.	.....	.....	mod.	ssw.	fair.
S. S. State of California, N. 45° 56′, W. 124° 10′*†	29.40	746.7	45	7.2	.....	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	light rain.
S. S. Australia, N. 21° 18′, W. 157° 52′	30.04	763.0	72	22.2	85	ne.	.....	.....	4	.....	10	.....	n.	o	o	long	WNW.	overcast.
S. S. City of New York, Sydney, N. S. W †	29.83	757.7	76	24.4	60	ne.	.....	.....	6	.....	1?	.....	ne.	o	o	r'gh	ne.	cloudy.?
S. S. City of Pekin, N. 44° 04′, W. 172° 05′†	29.79	756.7	41	5.0	82	sse.	.....	.....	1	.....	0	.....	.....	o	o	.....	.....	clear.
S. S. City of Rio de Janeiro, N. 15° 37′, W. 90° 26′ †	29.99	761.7	78	25.6	91	n.	.....	.....	4	.....	10	.....	sw.	o	o	sm'h	.....	cloudy.
S. S. City of Tokei, N. 29° 45′, E. 173° 45′ †	30.23	767.8	69	20.6	.....	sW.	.....	.....	1	.....	0	.....	.....	o	o	light	W.	clear.
S. S. Colima, Punta Arenas, Costa Rico †	29.93	760.2	76	24.4	86	ene.	.....	.....	5	.....	.....	.....	W.	2 h'r	2 h'r	mod.	nw.	
S. S. Grenada, N. 37° 32′, W. 122° 30′ †	29.81	757.2	55	12.8	93	sse.	.....	.....	2-3	.....	8	.....	e.	o	o	sm'h	s.	cloudy.
S. S. San José, N. 27° 08′, W. 115° 50′ †	29.88	758.9	.....	.....	.....	WNW.	.....	.....	1	.....	10	.....	.....	2 h'r	2 h'r	mod.	WNW.	
S. S. Zealandia, Sydney, N. S. W	29.73	755.1	68	20.0	79	nw.	.....	.....	2	.....	2 k	.....	WNW.	o	o	mod.	nw.	clear.
S. S. Muriel, N. 28° 40′, W. 67° 26′	30.08	764.0	69	20.6	.....	n.	.....	.....	2	.....	2	.....	se.	.....	.....	mod.	e.	fine.
S. S. Curacoa, Curacoa, W. I.†	30.02	762.5	81	27.2	87	ese.	.....	.....	3	.....	0	.....	.....	o	o	long	n.	fair.
S. S. Claudius, Greytown, Nicaragua†	30.07	763.8	.....	.....	.....	calm	.....	.....	4	.....	0	.....	.....	o	o	sm'h	.....	fair.
S. S. Valencia, N. 33° 57′ W. 71° 55′†	30.02	762.5	.....	.....	74	nw.	.....	.....	0	.....	10	.....	.....	o	o	sm'h	.....	clearing.
S. S. Belgenland, Jersey City, N. J.	30.29	769.4	23	— 5.0	.....	n.	.....	.....	6	.....	7	.....	nnw.	15 h'r	15 h'r	long	ne.	rainy.
S. S. Rhynland, Antwerp, Belgium	29.90	759.4	47	8.3	77	e.	.....	.....	4	.....	8	.....	n.	7 h'r	7 h'r	r'gh	sw.	clearing.
S. S. Switzerland, N. 46° 41′ W. 52° 56′†	29.52	749.8	.....	.....	.....	WSW.	.....	.....	4	.....	4	.....	se.	o	o	.....	.....	fair.
S. S. Waesland, N. 50° 03′, W. 3° 54′	29.52	749.8	51	10.6	86	sSW.	.....	.....	6	.....	10	.....	sse.	o	o	.....	.....	fair.
S. S. Leerdam, N. 49° 42′, W. 10° 40′ †	29.51	749.5	55	12.8	71	sw.	.....	.....	4	.....	10	.....	WSW.	snow	snow	r'gh	v'sw.	cloudy.
S. S. P. Caland, New York, N. Y.	30.15	765.8	31.8	—1.1	98	nW.	.....	.....	5	.....	10	.....	WSW.	4 h'r	4 h'r	sm'h	.....	clearing.
S. S. W. A. Scholten, Rotterdam, Holland	30.02	762.5	40.0	4.4	99	sse.	.....	.....	5	.....	5	.....	sW.	4 h'r	4 h'r	mod.	w.	fair.
S. S. Zaandam, N. 45° 08′, W. 48° 30′	29.77	756.1	54.3	12.4	80	W.	.....	.....	5	.....	2	.....	nw.	o	o	.....	.....	fair.
S. S. State of Florida, N. 45° 00′, W. 49° 45′	29.62	752.3	43	6.1	.....	WSW.	.....	.....	5	.....	5	.....	NW.	1 h'r	1 h'r	mod.	nw.	snowing.
S. S. State of Georgia, N. 43° 04′, W. 57° 54′†	29.83	757.7	36	2.2	.....	WNW.	.....	.....	5	.....	6 k	.....	W.	sleet	sleet	mod.	WSW.	fair.
S. S. State of Indiana, N. 55° 07′, W. 13° 36′†	29.46	748.3	48	8.9	.....	e.	.....	.....	4	.....	8	.....	WSW.	o	o	r'gh	sw.	clearing.
S. S. Hekla, N. 59° 10′, W. 11° 20′*	29.71	754.5	51.8	11.0	.....	e.	.....	.....	4	.....	3	.....	WNW.	o	o	.....	W.	cloudy.
S. S. Plantyn, N. 49° 53′, W. 11° 43′	29.34	745.2	.....	.....	.....	.....	.....	.....	3	.....	9	.....	se.	o	o	.....	.....	clearing.
S. S. Baltic, N. 50° 40′, W. 28° 57′	29.63	752.6	48	8.9	85	nW.	.....	.....	3	.....	5	.....	sw.	8 h'r	8 h'r	sm'h	.....	clearing.
S. S. Celtic, New York, N. Y.†	30.06	763.5	34	1.1	.....	nnw.	.....	.....	5	.....	5	.....	W.	rain	rain	r'gh	WSW.	squally.
S. S. Germanic, N. 40° 56′, W. 59° 48′†	29.98	761.5	48	8.9	.....	WNW.	.....	.....	5	.....	5	.....	.....	3 h'r	3 h'r	r'gh	W.	fair.
S. S. Lepanto, N. 46° 37′, W. 29° 00′*	29.74	755.4	59	15.0	.....	sW.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	overcast.
S. S. Marengo, N. 40° 50′, W. 55° 15′	29.86	758.4	.....	.....	.....	WNW.	.....	.....	9	.....	10	.....	ese.	o	o	.....	.....	d. clouds.
S. S. Salerno, Hull, Eng *	29.52	749.8	.....	.....	.....	sW.	.....	.....	6	.....	10	.....	WNW.	12 h'r	12 h'r	r'gh	WNW.	rainy.
S. S. Catherine Whiting, Delaware River†	30.24	768.1	66	18.9	.....	nnW.	.....	.....	3	.....	9	.....	sW.	2 h'r	2 h'r	.....	.....	raining.
S. S. Saxon, N. 38° 49′, W. 75° 11′ †	30.04	763.0	31	—0.6	.....	nnW.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	
MISCELLANEOUS									5	.....	1	.....	.....	.....	.....	sm'h	.....	fine.
Bg. Abbie Clifford, N. 32° 11′, W. 73° 18′	.....	.....	57	13.9	.....	nW.	.....	.....	5	.....	10	.....	NW.	2 h'r	2 h'r	mod.	W.	cloudy.
Bk. Adelaid, N. 36° 42′, W. 75° 01′ *†	30.24	768.1	45	7.2	.....	nnw.	.....	.....	6	.....	10	.....	WNW.	.....	.....	sm'h	nw.	sleeting.
Bg. Aleira, N. 30° 31′, W. 71° 49′	30.12	765.0	66	18.9	.....	W.	.....	.....	4	.....	6?	.....	NW	o	o	mod.	n	clear ?
Bk. Alpha, N. 39° 50′, W. 13° 30′ †	29.75	755.6	59	15.0	.....	nW.	.....	.....	9	.....	9	.....	nw.	4 h'r	4 h'r	r'gh	nw.	raining.
Schr. Annie Lewis, N. 25° 15′, W. 93° 10′ †	30.09	764.3	72	22.2	.....	se.	.....	.....	3	.....	8	.....	se.	o	o	short	se.	cloudy.
S. Annie, M. Law, Manila Bay *†	29.73	755.1	74	23.3	.....	ne.	.....	.....	2	.....	0	.....	.....	1 h'r	1 h'r	.....	.....	fine.
Bk. Anna Thormann, S. 29° 35′, E. 38° 43′*	30.11	764.9	70.3	21.3	65	se.	.....	.....	3	.....	2 k	.....	se.	shr's	shr's	mod.	se.	clear.
S. S. Antonio Lopez, N. 34° 05′, W. 28° 02′*	30.38	771.6	66	18.9	79	nnW.	.....	.....	1	.....	3	.....	.....	.....	.....	.....	.....	
Bk. Aquidneck, S. 16° 45′ W. 34° 26′ *†	30.10	764.5	82	27.8	.....	sW.	.....	.....	4	.....	.....	.....	.....	o	o	long	nw.	fair.
Bgt. Arthur, N. 24° 16′, W. 27° 03′*†	30.26	768.6	.....	.....	.....	ene.	.....	.....	5	.....	.....	.....	sw.	2 h'r	2 h'r	h'vy	sw.	cloudy.
Schr. Anna A. Holton, N. 28° 50′, W. 74° 07′†	30.21	767.3	66	18.9	.....	W.	.....	.....	4	.....	2	.....	e.	o	o	.....	var.	
Bg. Belle of the Bay, N. 24° 10′, W. 79° 32′ *†	30.03	762.7	.....	.....	.....	nE.	.....	.....	3	.....	4	.....	W.	o	o	mod.	W.	clear.
Bk. Champion, N. 24° 27′, W. 68° 32′	.....	.....	77.0	25.0	.....	ne.	.....	.....	3	.....	8	.....	ne.	o	o	sm'h	ne.	clear.
Schr. Chas. F. Heyer, New York, N. Y	30.14	765.5	29	— 1.7	78	W.	.....	.....	.....	.....	.....	.....	.....	1 h'r	1 h'r	h'vy	nne.	cloudy.
Bg. Clara M. Goodrich, Key Francis, W. I *†	30.01	762.2	.....	.....	.....	nE.	.....	.....	5	.....	10 k	.....	NW.	o	o	.....	.....	cloudy.
Schr. C. R. Flint, N. 25° 15′, W. 83° 12′	.....	.....	59	15.0	.....	nE.	.....	.....	3	.....	8	.....	ne.	o	o	.....	.....	cloudy.
Bkt. David Preston, Pensacola, Fla	30.39	772.0	.....	.....	.....	ese	.....	.....	.....	.....	2	.....	ne.	o	o	sm'h	nne.	clear.
Bk. E. L. Pettingill, N. 5° 10′, W. 117° 32′ *†	30.00	762.0	80	26.7	.....	s.	.....	.....	4	.....	8	.....	se.	o	o	.....	.....	
Schr. Edith R. Seward, Baltimore, Md *†	30.20	767.1	27	—2.8	.....	W.	.....	.....	1	.....	7	.....	.....	.....	.....	.....	.....	heavy rain.
S. E. J. Spicer, N. 51° 30′, W. 8° 09′ *	29.43	747.4	55	12.8	.....	sW.	.....	.....	4	.....	10	.....	sw.	12 h'r	12 h'r	mod.	sse.	
Bk. Essex, N. 11° 37′, E. 57° 27′*†	29.98	761.5	84	28.9	.....	nne.	.....	.....	6	.....	.....	.....	.....	sq'lls	sq'lls	cross	.....	fair.
														o	o	.....	nne.	fine.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Schr. F. E. McDonald, Rockland, Maine†	30.07	763.8	9	—12.8		w.			1		0			0	0			fine.
S. S. Foscolia, N. 39° 56′ W. 70° 26′						var.			5		8		ne.	0	0	sm'h		cloudy.
Bk. Freya, N. 21° 45′, W. 84° 59′			69	20.6		nne.			4		1		nnw.	0	0	mod.	n.	fair.
S. J. W. Gildemeister, N. 49° 39′, W. 7° 04′ *	29.46	748.3	50.0	10	50	ssw.			2	c	2 ck	e.	w.	5½h'r	5½h'r	4	e.	blue sky.
Bg. George, N. 30° 55′, W. 56° 20′ *†	30.12	765.0				sse.			5		10			h'vy	h'vy	mod.	sw.	cloudy.
Bk. Gronsvaer, S. 40° 07′, E. 177° 06′ †	29.72	754.9	74.0	23.3	94	var.			2		5		ne.	0	0	sm'h		fine.
Bk. Godeffroy, S. 59° 31′, W. 67° 57′ †	28.85	732.8	39.2	4.0	98	nw.			2		9			8 h'r	8 h'r	long	w.	cloudy.
Bk. Great Surgeon, S. 23° 59′, E. 68° 22′ *†	30.07	763.8	81	27.2		nnw.			5		5		w.	0	0	mod.	sw.	fair
Bk. Grey Eagle, S. 14° 56′, W. 34° 58′ *†	29.80	756.9				nw.			0–5		10		nne.	0	0	h'vy	sw.	fair.
Bk Hattie G. McFarland, New York, N. Y.†	30.19	766.8	31	— 0.6		ne.			1		8		ne.	0	0	sharp	ne.	
Schr. Isabel Alberto, N. 35° 21′, W. 74° 23′ †	30.11	764.8				nw.			6		10		nw.	light	light	sharp	nw.	cloudy.
Schr. Jennie N. Huddell, N. 34° 45′, W. 72° 40′†	30.11	764.8	45	7.2		nw.			6		10		nw.	light	light	h'vy	nw.	threatening.
Bk. Joseph A. Ropes, S. 6° 08′, E. 50° 16′ *†	29.93	760.2	85	29.4	79	n.			1		7		n.	0	0	mod.	se.	cloudy.
Bkt. Josephine, N. 25° 22′, W. 35° 50′ †	30.29	769.4	75	23.9	64	ene.			4		2		e.	0	0	long	ese.	fair.
Bk. Julia H, N. 47° 57′, W. 18° 29′	29.62	752.3	53.0	11.7	80	nnw.			5		3			0	0	7	nw.	d. clouds.
S. S. J. W. Wilson, Cedar Keys, Fla.†	30.09	764.3				wsw.			4		5?		w.	0	0	r'gh	sw.	cloudy.?
Light House Tender, Laurel, Pensacola, Fla†	30.10	764.5	46	7.8		ne.			1		9		e.	3 h'r	3 h'r	h'vy	se.	cloudy.
Bk. Louise Adelaide, N. 28° 30′, W. 76° 00′ *†	30.25	768.3	64	17.8		w.			2		8		w.	0	0	long	nnw.	fine.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.04	763.0							1		2		ene.	2 h'r	2 h'r	sm'h		clearing.
S. S. Madrid, N. 42° 30′, W. 34° 57′*†	30.04	763.0	62	16.7		ssw.			6		8		wsw.	0	0	r'gh	wnw.	overcast.
S. S. Malabar, Marseilles, France†	30.02	762.5				nw.			1		0			0	0			clear.
Bk. Matilda C. Smith, N. 37° 24′, W. 73° 15′ *†	30.20	767.1				n.			6		5		n.	snow	snow	mod.	n.	squally.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.24	768 1	56	13.3		sw.			1				wnw.					cloudy.
S. Minnie N. Gerow, N. 33° 38′, W. 51° 30′ *†	29.96	761.0				sse.			4		10		sw.			r'gh	sw.	squally.
S. M. P. Grace. S. 37° 06′, W. 123° 45′ *†	29.83	757.7	67	19.4		nnw.			8		10		nw.	rain	rain	r'gh	var.	squally.
Bg. Myrtle, Clements Port, Nova Scotia*†	29.80	756.9				calm			0		10			snow	snow			hazy.
Bg. O. C. Clary, N. 18° 20′, W. 65° 10′*†	30.05	763.3	85	29.4	92	ese.			2		1		e.	0	0			clear.
Bk. Ottawa, N. 40° 31′, W. 37° 45′*	29.97	761.2	66	18.9		sw.			6		2		sw.	0	0	mod.	wsw.	hazy.
S Paramita, San Francisco, Cal†	29.75	755.6	54	12.2		sw.			6					0	0			
Bk. Pilgrim, N. 24° 00′, W. 62° 00′*†	30.05	763.3				e.			2		5?		e.	1 h'r	1 h'r	sm'h		cloudy.?
S. S. Radnorshire, Hong Kong, China*†	30.25	768.3				var.			6					0	0			
S. S. Raleigh, Hunter's Point, Long Island*†	30.01	762.2	27	— 2.8							10			0	0			
Bk. Rebus, N. 47° 08′, W. 160 58′ *	29.46	748.3				nw.			8		5		nw.	h'vy	hv'y	h'vy	wnw.	fair.
Bk. Samuel B. Hale, N. 40° 20′, W. 62° 30′*†	30.00	762.0				n.					5		nw.			mod.	nnw.	fair.
S. St. Francis. N. 36° 30′, W. 126° 15′			60	15.6		sw.			9		9		sw.	5 h'r	5 h'r	h'vy	wnw.	rainy.
Schr. S. B. Hubbard, New London, Conn†	30.11	764.8	23	— 5.0		nnw.			1		5		n.	0	0			fine.
Bk. Scud, N. 32° 24′, W. 71° 05′*†	30.14	765.5				w.			3		8		w.	sq 'lls	sq 'lls	short	nw.	
Bk. Sunbeam, N. 38° 59′, W. 66° 06′	29.95	760.7	50	10.0	72	n.			4		10		nne.	rain	rain	mod.	nw.	cloudy.
Schr. T. S. McLellan. N. 26° 20′, W. 66° 08′ *†	29.90	759.4	68	20.0		one							ne.				ene.	
U. S. F. C. S. S. FishHawk, Washington, D. C†	30.27	768.8	31	— 0.6		ne.			1		4		calm	0	0			clear.
Bk. Vincenzo Accame, N. 37° 25′, W. 52° 45′†	29.97	761.3	69.8	21.0		nw.			2		10		nnw.	5 h'r	5 h'r		w;nw	
Schr. Walter L. Plummer, Providence, R. I. *†	30.10	764.5				nw.			3		8			0	0			fine.
Bk. Wandering Jew, Montevideo, Uruguay †	29.99	761.7	69	20.6		nne.			3		7		n.	0	0			fair.
Bk. Warden Law, Tocapilla, Peru, S. A.*	30.06	763.5				calm			0		2		sse.			sm'h	s.	fair.
S. Wm. Woodbury, N. 49° 50′, W. 4° 43′*	29.50	749.3	51	10.6		ssw.			2		3?		w.			long	sw.	cloudy.?

International Chart I. December 18, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.

W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 19, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer, corrected for instrumental error and for temperature.		Barometer, reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	29.56	750.7	58.3	14.6	72	o.	.....	.....	7	.....	2	.....	.....	0.591	15.0	fair	Malaterre.
Algiers	.....	.....	29.54	750.2	56.5	13.6	92	ese.	.....	.....	2	.....	6	.....	.....	0.299	7.6	cloudy	Thève.
La Calle	.....	.....	29.76	755.9	59.4	15.2	81	w.	.....	.....	1	.....	4	.....	.....	o	o	cloudy	Foufrède.
Tunis	.....	.....	29.81	757.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	29.57	751.0	45.7	7.6	98	ese.	.....	.....	2	.....	9	.....	.....	1.051	26.7	covered	Pérès.
Tebessa	.....	.....	29.89	759.1	49.6	9.8	69	s.	.....	.....	1	.....	1	.....	.....	o	o	very fair	Dognon.
Geriville	.....	.....	.....	.....	34.2	1.2	78	wnw.	.....	.....	4	.....	6	.....	.....	0.591	15.0	cloudy	Lonchamp.
Laghouat	.....	.....	29.74	755.3	54.3	12.4	44	nnw.	.....	.....	1	.....	5	.....	.....	o	o	cloudy	Abraham.
Biskra	.....	.....	29.78	756.5	51.1	10.6	93	calm	.....	.....	o	.....	10	.....	.....	0.461	11.7	covered	Malau.
Australian.																			
Melbourne, Victoria	29.59	751.6	29.68	753.9	56.9	13 8	57	w.	15	6.7	.....	.....	7	.....	.....	o	o	squally	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.76	755.8	30.33	770.4	40.5	4.7	84	se.	.....	.....	2	.....	10	.....	.....	o	o	.....	Prof. Ivan Stozir.
Oracow, I. R Observatory	29.62	752 4	30.44	773.1	30.6	— 0.8	92	e.	9.4	4.2	.....	.....	10	.....	.....	o	o	.....	Dr. Wierzbiski.
Eperies	29.47	748.6	30.40	772.2	34.2	1.2	89	n.	.....	.....	2	c	5 8	.....	.....	o	o	foggy	Julius Mikolik.
Gratz	29.02	737.0	30.32	770.0	38.8	3.8	84	nw.	.....	.....	1	.....	6	.....	.....	0.047	1.2	.....	Andreas Rospini.
Hermannstadt	28.89	733 7	30.38	771 7	37.4	3.0	79	se.	.....	.....	2	.....	5	.....	.....	o	o	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.75	730.2	30.36	766.1	30.9	— 0.6	90	sw.	.....	.....	1	.....	1	.....	.....	o	o	clear	The Staff.
Lemberg	29.48	748.9	30.56	776.2	41.0	5.0	66	se.	.....	.....	2	.....	0	.....	.....	o	o	.....	Dr. T. Stanecki.
Pola	30.05	763 2	30.16	766.1	49.5	9.7	59	ene.	.....	.....	3	.....	2	.....	.....	o	o	.....	I. R. Hydrographic Office.
Szathmar	29.88	759.0	30.35	771 0	44.1	6.7	66	e.	.....	.....	2	.....	0	.....	.....	o	o	.....	Joseph Midlinszky, S. J.
Szegedin	30.07	763 7	30.36	771.1	39.7	4.3	76	s.	.....	.....	1	.....	5	.....	.....	o	o	.....	Karl Stancel.
Trieste	30.10	764.6	30.21	767.2	47.1	8.4	52	ne.	.....	.....	2	.....	0	.....	.....	o	o	.....	Royal Academy.
Vienna	29.55	750.6	30.30	769.5	39.9	4.4	84	se.	.....	.....	4	.....	5	.....	.....	o	o	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.96	761.0	30.06	763.5	44.1	6.7	95	sse.	20	8.9	.....	.....	10	.....	.....	.....	.....	drizzling	W. Boswell
Armagh, Observatory	29.80	756.9	30.04	763.0	43.6	6.4	96	sw.	4	1.8	.....	.....	10	.....	.....	.....	.....	foggy	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.03	762.7	43.0	6.1	91	ese.	13	5.8	.....	.....	9	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	29.51	749 5	30.05	763.3	43.9	6.6	92	ene.	6	2.7	.....	.....	10	.....	.....	.....	.....	overcast	Thomas Mackereth.
Bradford, Yorkshire	29.68	753.9	30.08	764.0	41.3	5.2	97	se.	.....	.....	1	.....	10	.....	.....	o	o	misty	McLandsborough&Preston
Bridgetown, Barbadoes	29.89	759.2	29.92	760.0	81.0	27.2	74	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	47.0	8.3	88	se.	.....	.....	0.4	.....	2	.....	.....	.....	.....	blue sky	John McLaren.
Chatham, School M. E	29.94	760.5	30.08	764.0	43.7	6.5	96	calm	.....	.....	o	.....	7	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.76	755.9	29.99	761.7	48.6	9.2	89	nnw.	.....	.....	1	.....	8	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.50	698.5	29.71	754 6	84.2	29.0	19	n.	.....	.....	1	.....	2	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.67	753.6	29.90	759.4	84.0	28.9	83	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	.....	.....	.....	.....	58.0	14.4	95	se.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.84	757.9	30.05	763.3	42.0	5.6	91	ne.	.....	.....	2	.....	.....	.....	.....	.....	.....	gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.88	758.9	30.06	763 5	46.7	8.2	85	se.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky	The Staff.
Guernsey	29.68	753.9	29.98	761.5	50.0	10.0	93	s.	.....	.....	1	.....	8	.....	.....	.....	.....	gloomy	A. Coltenette, F. M. S.
Kew, Observatory	30.03	762 7	30.06	763 5	47.2	8.4	83	e.	8	3.6	.....	.....	.....	.....	.....	.....	.....	foggy	The Staff.
Leicester, Museum	29.76	755.9	30.03	762 7	42.3	5.7	97	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.77	756 1	29 83	757.7	62.6	17.0	97	se.	.....	.....	2	.....	9	.....	.....	blank	blank	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.10	764.5	30.15	765.8	68.2	20.1	63	ne.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	29.50	749.3	30.04	763.0	41.7	5.4	95	ne.	.....	.....	3	.....	9	.....	.....	.....	.....	d. clouds	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.80	756.9	30.03	762.7	45.1	7.3	97	ne.	.....	.....	1	.....	6	.....	.....	.....	.....	misty	The Staff.
Plymouth	29.88	758 9	29.95	760.7	50.7	10.4	93	e.	.....	.....	1	.....	5	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	29.85	758.2	29.95	760.7	43.8	6.6	94	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.18	766.6	30.25	768 3	45.0	7.2	96	ne.	.....	.....	3	.....	10	.....	.....	blank	blank	gloomy	W. H. Lyne.
Sheffield	29.80	756.9	30.09	764.3	41.6	5.3	100	ne.	.....	.....	1	.....	10	.....	.....	o	o	misty	W. F. Cooper.
Silloth Rectory	30.01	762.2	30.04	763.0	42.0	5 6	92	e.	.....	.....	2	.....	7	.....	.....	o	o	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.08	764.0	42.0	5.6	91	ne.	8	3.6	.....	.....	10	.....	.....	.....	.....	misty	I. New.
Stratfield Turgiss	29.82	757.4	30.04	763.0	47.7	8.7	89	s.	.....	.....	1	.....	8	.....	.....	.....	.....	d. clouds	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.98	761.5	30.02	762.5	50	10.0	93	se.	.....	.....	1	.....	7	.....	.....	.....	.....	gloomy	W. Newcombe.
Valencia, Observatory	29.99	761.7	30.01	762.2	43.5	6 4	79	ene.	5	2.2	.....	.....	2	.....	.....	.....	.....	misty	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.07	763.8	30.12	765.0	29	— 1.7	75	n.	11	4.9	.....	10 n	.....	.....	calm	o	o	cloudy	H. J. Cundall, C. E
Chatham, N. B*	30.14	765.5	30.21	767.3	19	— 7.2	84	nw.	9	4.0	.....	o	o	.....	.....	o	o	clear	G. A. Blair.
Father Point, Quebec*	30.39	771.9	30.41	772.4	19	— 7.2	96	calm	o	o	.....	o	o	.....	.....	o	o	clear	J. McWilliams.
Fort Garry, Manitoba*	28.70	729.0	29.55	750.6	24	— 4.4	96	s.	23	10.3	.....	10 n	.....	.....	s.	0.45	11.4	light snow	James Stewart.
Halifax, N. S*	30.01	762.2	30.15	765.8	20	— 6.7	87	w.	3	1.3	.....	5 k	o	n.	.....	o	o	fair	A. Allison.
Kingston, Ontario*	30.15	765.8	30.52	775 2	3	—16.1	91	n.	2	0.9	.....	.....	fg.	.....	.....	fnap.	fnap.	foggy	A. P. Knight, M. A.
Montreal, Quebec*	30.29	769.4	30.52	775.2	8	—13.3	96	w.	4	1.8	.....	.....	10 ks	.....	w.	o	o	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.71	754.6	30.50	774.7	1	—17.2	68	e.	4	1.8	.....	.....	fg	.....	.....	o	o	foggy	Rev. R. Mosley.
Port Dover, Ontario	29.68	743 9	30.43	772 9	25	— 3.9	100	e.	6	2.7	.....	.....	10 n	.....	.....	o	o	cloudy	H. Morgan.
Port Stanley, Ontario	29.71	754.6	30.41	772.4	24	— 4.4	84	e.	7	3.1	.....	.....	10 n	.....	e.	o	o	cloudy	M. Payne.
Quebec, Quebec*	30.13	765.3	30.49	774.4	8	—13.3	100	nw.	.....	.....	3	.....	1c n	.....	nw.	o	o	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.02	762.5	30.56	776 2	— 8	—22.2	86	calm	o	o	.....	o	o	.....	.....	o	o	clear	W. H. McIntyre.
Saugeen, Ontario*	29.66	753.4	30.44	773.2	20	— 6.7	91	se.	8	3.6	.....	.....	10 s	.....	.....	o	o	cloudy	
St. Andrews, N. B	30.20	767.1	30.25	768 3	16	— 8.9	88	nw.	2	0.9	.....	o	o	.....	.....	o	o	clear	
Sydney, C. B*	29.95	760.7	30.02	762.5	29	— 1.7	80	nw.	9	4.0	.....	.....	10 s	.....	nw.	o	o	fair	T. C. Hill, C. E
Toronto, Ontario*	30.08	764.0	30.49	774.4	22	— 5.6	92	n.	5	2.2	.....	.....	10 n	.....	.....	o	o	cloudy	Magnetic Observatory.
Yarmouth, N. S*	30.12	765.0	30.19	766.8	26	— 3.3	74	ne.	4	1.8	.....	2 k	o	ne.	.....	o	o	clear	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.92	734 6	30.42	772.6	17.0	— 8.3	83	se.	.....	.....	2	.....	10 s	.....	se.	o	o	overcast	Wm. Wylie.
St. Johns, Newfoundland	29.60	751.8	29.86	758.4	30	— 1.1	100	w.	1	0.4	.....	o	o	.....	.....	o	o	clear	John Delany.
Cape Colony.																			
Cape St. Francis Lt House	29.84	757.9	29.87	758.7	67.0	19.4	94	w.	8.6	3.8	.....	.....	1c s	.....	.....	o	o	foggy	John Duthie.
Cape Town, C G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction Upper. From.	Clouds. Direction Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	OBSERVERS
CHINESE (*Sub-sertes*).																			
Sung-shu-chwang	24.83	630.7	.....	.....	8.1	—13.3	.....	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.50	774.8	30.61	777.6	13.1	—10.5	77	calm	3.8	1.7	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai.	30.61	777.4	30.63	778.0	30.7	— 0.7	80	w.	7.4	3.3	.....	0	2 k	.....	w.	0	0	fair	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	30.30	769.7	30.35	770.9	30.4	— 0.9	88	ese.	25	11	.....	.....	10	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanoe	30.25	768.3	30.27	768.8	31.8	— 0.1	90	e.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.54	750 4	29.59	751.5	20.8	— 6.2	74	nne.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.39	746.6	29.41	747.1	28.0	— 2.2	.....	calm	.....	.....	0	.....	7	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.03	752.6	29.68	753.8	3.6	—15.8	.....	calm	.....	.....	0	.....	6	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.49	749 0	29.53	750.1	36.0	2.2	80	se.	.....	.....	6	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.76	755.9	29.80	756.8	47.8	8.8	88	sw.	21.3	9.5	.....	.....	10	.....	.....	.....	.....	raining	Overloerer Bergh.
Vestervig	30.22	767.7	30.32	770.1	31.1	— 0.5	92	e.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Loerrer Oesterboi.
Upernavik, Greenland	29.70	754.4	29.75	755.6	10.9	—11.7	.....	e.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.32	744 8	29.97	761.2	54.7	12.6	90	sse.	.....	.....	1	.....	n	.....	se.	0	0	.....	M. Labroue, Director.
Alençon, Normal School	29.50	749.2	30.05	763.2	48.2	9	97	se.	.....	.....	1	.....	kn	nw.	nw.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.91	759.8	30.18	766.5	44.6	7.0	96	se.	.....	.....	1	.....	0	.....	.....	0	0	foggy	M. Fénéon, Command't.
Avignon, Normal School	29.96	761.0	30.04	763.0	54.3	12.4	68	n.	.....	.....	1	.....	5	.....	se.	0.04	1.	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.54	750.4	30.13	765.2	36.7	2.6	89	ese.	.....	.....	1	.....	5	.....	ese.	0	0	cloudy	M. Saillard, Director.
Beauvais, Normal School	29.85	758.3	30.13	765.4	39.2	4	90	e.	.....	.....	2	.....	8	.....	se.	0	0	very cloudy	M. Frère Eugène Marie.
Besançon, Normal School	29.20	741.6	30.13	765.2	38.5	3.6	80	ene.	.....	.....	1	0	0	.....	.....	0	0	clear	M. Gobin, Director.
Bordeaux, Observatory	29.63	752.6	29.89	759.2	54.7	12.6	71	se.	.....	.....	3	.....	8	.....	.....	0.189	4.8	raining	M. Rayet, Director.
Bourges, Normal School	29.50	749.3	30.06	763.5	49.6	9.8	72	e.	.....	.....	1	.....	n	.....	e.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.78	756.4	30.02	762.6	47.5	8.6	94	calm	.....	.....	0	.....	2	.....	.....	0.709	18.0	hazy	M. de Kermaïec, Dir.
Caen, Normal School	29.91	759.7	29.98	761.6	50.2	10.1	80	se.	.....	.....	1	.....	10	.....	se.	0.04	1.	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.80	757.0	30.13	765.4	36.1	2.3	97	se.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.59	751.6	30.16	766.1	37.4	3	80	s.	.....	.....	1	.....	10	sw.	s.	0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28 67	728.1	30.02	762.5	55.0	12.8	55	se.	.....	.....	2	5 c	0	.....	.....	0	0	½ covered	M. Allnard, Director.
Cluny, Normal School	29.24	742.7	30.12	765.0	34.7	1.5	93	ne.	.....	.....	1	.....	6	.....	.....	0.020	0.5	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.26	743.1	30.16	766.0	32.9	0.5	96	e.	.....	.....	1	.....	n	e.	e.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	27.52	699.0	30.09	764.3	47.8	8.8	63	sw.	.....	.....	1	.....	1	.....	.....	0	0	..	M. Jeangirard, Director.
Gréasque, du Rhone	28.89	733.9	30.02	762.5	55.6	13.1	61	se.	.....	.....	3	.....	5	.....	se.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.34	745.1	30.18	766.6	38.5	3.6	83	s.	.....	.....	1	cs	0	.....	.....	0	0	.....	M. Ablard, Director.
Guéret	28.46	722.8	30.04	763.1	55.0	12.8	55	s.	.....	.....	2	.....	.....	.....	s.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	29.71	754.5	29.98	761.4	47.3	8.5	94	sse.	.....	.....	1	.....	5	.....	sse.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.36	745.8	29.93	760.2	50.9	10.5	86	ne.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.93	760.1	30.03	762.7	46.4	8.0	81	n.	.....	.....	1	.....	10	.....	.....	0.039	1.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.04	737.7	30.15	765.8	33.4	0.8	100	wnw.	.....	.....	1	.....	fg	.....	.....	0	0	dense fog	M. André, Director.
Mans, Normal School	29.73	755 1	30.04	763.1	48.0	8.9	93	nw.	.....	.....	1	.....	10	.....	.....	0.35	9.	raining	M. Piboën, Director.
Marseille, Observatory	29.72	755.0	30.00	761.9	59.9	15.5	58	ese.	.....	.....	3	.....	7	.....	se.	0.008	0.2	.....	M. Stephan, Director.
Montlouis	24.71	627.5	29.55	750.5	36.0	2.2	100	w.	5.6	2.5	.....	.....	8	s.	.....	0.358	9.1	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.88	759 0	30.07	763.8	60.8	16	79	sse.	.....	.....	2	.....	2	.....	.....	0.244	6.2	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.05	737.9	29.87	758.7	33.4	0.8	96	nw.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Hasse, Director.
Nantes, Observatory	29.84	757.8	30.00	762.0	50.4	10.2	95	ne.	.....	.....	0–1	.....	10 n	.....	sse.	0.466	10.3	.....	M. Larocque, Director.
Perpignan, Observatory	29.85	758.1	29.96	761.0	56.8	13.8	91	se	20.6	9.2	.....	.....	10	.....	ese.	0.244	6.2	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21 02	534.0	.....	.....	23.7	— 4.6	.....	sw.	.....	.....	2	.....	fg	.....	sw.	0.157	4.0	dense fog	M. Vaussenat.
Privas, Normal School	29.01	736.8	30.10	764.6	44.6	7	82	s.	.....	.....	1	.....	5	s.	s.	0.039	1.0	cloudy	M. Taffien.
Puy de Dôme Obs'y, Summit	25.06	636.5	.....	.....	36.5	2.5	95	sse.	.....	.....	6	.....	5	.....	sse.	0.004	0.1	½ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.93	760.1	29.96	760.9	51.8	11.0	90	sse.	.....	.....	1	.....	10	.....	s.	1.42	36.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.69	754.0	29.90	759.5	50.4	10.2	93	se.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	M. Brotier, Director.
Rodez, Normal School	27.83	706.9	29.98	761.6	48.9	9.4	71	e.	.....	.....	4	.....	5	.....	.....	0.256	6.5	cloudy	M. Seger, Director.
Rouen, Normal School	30.05	763.2	30.10	764.4	45.0	7.2	77	se.	.....	.....	1	.....	2	s.	.....	0	0	slightly cl'dy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	50.0	10	92	s.	.....	.....	1	.....	5	.....	s.	0.122	3.1	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.95	760.6	30.11	764 8	42.4	5.8	84	ese.	.....	.....	1	.....	0	s.	.....	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.24	742.7	29.97	761.1	54.7	12.6	81	sse.	.....	.....	6	.....	8	se.	.....	0	0	very cloudy	M. Baillaud, Director.
Tours	29.84	757.8	30.01	762.3	49.3	9.6	86	ne.	.....	.....	1	.....	10	.....	s.	0.228	5.8	raining	M. de Tastes.
Versailles, Observatory	29.60	751.9	30.10	764.4	41.0	5.0	90	se.	.....	.....	1	.....	0	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
Sub-sertes.																			
St. Martin du Hinx	29.77	756.2	29.92	760.0	54.9	12.7	81	w.	15.7	7.0	.....	.....	10 kn	.....	w.	0.004	0.1	covered	M. Cartier, Director.
GERMAN.																			
Ansbach	28.66	728.0	30.18	766.6	34.2	1.2	86	calm	.....	.....	0	.....	2	.....	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.24	742.7	30.09	764.2	38.7	3.7	73	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	30.03	762.7	30.21	767.4	35.8	2.1	93	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.82	757.3	30.35	770.9	32.4	0.2	94	se.	.....	.....	3	.....	10	.....	.....	0	0	foggy	Royal University Obs'y.
Carlsruhe	29.70	754.4	30.16	766.1	34.9	1.6	82	e.	.....	.....	1	.....	10	ne.	.....	0	0	.....	Albert Senz.
Cassel	29.37	745.9	30.08	764.0	38.1	3.4	82	s.	.....	.....	2	.....	10	s.	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.77	756.2	30.15	765.9	38.8	3.8	83	ese.	.....	.....	1	.....	10	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.67	728.1	30.18	766.5	30.2	— 1.0	94	ne.	.....	.....	3	.....	10	w.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	30.13	765.4	30.22	767.7	34.5	1.4	96	ese.	.....	.....	3	.....	10	.....	.....	0	0	light fog	E. Preller.
Kiel	30.23	767.8	30.24	768.2	34.5	1.4	87	ene.	.....	.....	1	.....	10	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.75	755 7	30.19	766.8	39.2	4.0	84	sse.	.....	.....	1	.....	2	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.98	761.5	30.18	766.5	39.0	3.9	87	ene.	.....	.....	1	0	6 ks	.....	se.	0	0	.....	Weather Observatory.
Memel	30.65	778.4	30.69	779.6	18.0	— 7.8	66	se.	.....	.....	4	8 c	0	.....	.....	.....	.....	.....	Issermann.
Munich	28.26	717.7	30.12	765.1	26.8	— 2.9	97	calm	.....	.....	0	.....	10	.....	.....	0	0	dense fog	Central Station.
Neufahrwasser	30.52	775.3	30.54	775.7	23.2	— 4.9	74	se.	.....	.....	2	.....	3	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.58	751.3	30.11	764 7	36.1	2.3	94	e.	.....	.....	2	.....	10	.....	.....	0	0	foggy	Dicknether.
Stuttgart	29.15	740.5	30.10	764.4	31.6	— 0.2	89	n.	.....	.....	1	.....	3	n.	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	30.30	769.5	30.32	770.2	29.7	— 1.3	96	se.	.....	.....	3	.....	10 s	.....	.....	0	0	.....	Profs. Brandes & Reimer.
GREEK.																			
Athens	29.66	753.3	30.05	763.2	55.8	13.2	.....	n.	.....	.....	3.0	0	4 k	.....	.....	0.004	0.1	.....	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	30.13	765.3	30.18	766.6	76.1	24.5	68	wsw.	7.0	3.1	.....	.....	7	w.	.....	0	0	d. clouds	
Deesa	29.60	751.9	30.08	763.9	84.5	29.2	30	nnw.	5.0	2.2	.....	.....	0	.....	.....	0	0	hazy	
Bombay	29.97	761.2	30.01	762.2	79.7	26.5	72	nnw.	17.0	7.6	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.15	715.0	30.00	762.0	83.9	28.8	19	ene.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29.74	755.3	30.02	762.4	81.3	27.4	54	ene.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Belgaum	27.46	697.4	30.01	762.2	76.6	24.8	30	ene.	7.0	3.1	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.38	746.2	30.16	766.0	60.2	15.7	52	calm	0	0	.....	.....	2	.....	.....	0	0	blue sky	
Roorkee	29.18	741.3	30.12	764.8	64.2	17.9	63	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.58	751 3	30.16	766.2	69.2	20.7	32	w.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	29.02	737.1	30.08	763.9	77.5	25.3	35	ene.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.74	729.9	30.12	765.0	74.0	23.3	46	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.74	755.4	30.13	765.3	69.3	20.7	46	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.80	757.0	30.13	765.4	60.7	15.9	73	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.94	760.6	30.14	765.5	65.8	18.8	63	nw.	2.9	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	28.04	712.3	30.13	765.3	63.5	17.5	56	nw.	5.3	2.4	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	30.01	762.2	30.09	764.4	74.8	23.8	67	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	30.07	763.7	30.09	764.3	68.7	20.4	81	nw.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.96	761.0	30.09	764.2	70.2	21.2	75	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.98	761 6	30.08	763.9	72.1	22.3	74	wsw.	1.5	0.7	.....	.....	1	.....	.....	0	0	blue sky	
Sibsagar	29.79	756.7	30.04	763.0	65.3	18.5	88	ene.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jeypore	28.67	728.3	30.15	765.8	72.9	22.7	33	nne.	5.0	2.2	.....	.....	3	nne.	.....	0	0	d. clouds	
ITALIAN.																			
Udine	29.80	756.9	30.22	767.5	48.0	8.9	50	se.	8.1	3.6	.....	.....	0	.....	.....	0	0	.....	Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
ITALIAN.—Continued.																			
Milan	29.70	754.3	30.23	767.9	48.6	9.2	71	e.	3.1	1.4	.....	.....	7	ene.	.....	0.020	0.5	.....	Prof. Schiapparelli.
Padua	30.11	764.8	30.22	767.7	48.4	9.1	60	ene.	9.4	4.2	.....	.....	0	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.30	744.1	30.24	768.0	44.2	6.8	99	nnw.	2.5	1.1	.....	.....	10	.....	.....	0.213	5.4	.....	Prof. F. F. Denza.
Genoa	29.91	759.8	30.11	764.8	52.9	11.6	64	n.	11.2	5.0	.....	.....	10	s.	.....	0	0	....	Prof. G. M. Garibaldi
Mondovi	28.26	717.8	30.24	768.1	40.8	4.9	97	s.	.....	.....	4	.....	10	.....	.....	0.524	13.3	.....	Prof. D. C. Bruno.
Pesaro	30.15	765.8	30.20	767.1	50.2	10.1	82	ne.	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.84	757.9	30.10	764.5	57.2	14.0	61	ne.	.....	.....	4	.....	5	.....	.....	0	0	.....	Prof. Costantino Pittei.
Leghorn	29.93	760.1	30.01	762.3	58.8	14.9	63	n.	8.7	3.9	.....	.....	8	.....	.....	0.020	0.5	.....	Prof. P. Monte.
Rome	29.85	758.1	30.02	762.6	60.8	16.0	49	n.	0	0	.....	.....	1	.....	.....	0.016	0.4	.....	Prof. P. Tachini.
Lecce	29.82	757.5	30.08	764.0	57.2	14.0	70	e.	2.5	1.1	.....	.....	6	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.12	739.7	30.03	762.7	53.6	12.0	76	wsw.	1.8	0.8	.....	.....	10	sw.	.....	0	0	.....	Prof. D. Conti.
Caglinri	29.66	753.3	29.85	758.2	60.8	16.0	72	ese.	.....	.....	4	.....	3	.....	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.69	754.0	29.94	760.4	61.2	16.2	49	ne.	6.3	2.8	.....	.....	0	.....	.....	0	0	.....	Prof. G. Cacciatore
Syracuse	29.87	758.6	29.91	759.7	59.5	15.3	75	ene.	22.4	10.0	.....	.....	9	e.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.51	749 6	30.04	762.9	59.7	15.4	54	ne.	6.3	2.8	.....	.....	5	ene.	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.19	593.5	.....	.....	23.0	— 5.0	80	sw.	.....	.....	2	.....	0	.....	.....	0	0	misty.	Prof. P. F. Denza.
Valdobbia	22.21	564.1	.....	.....	26.4	— 3.1	71	ne.	.....	.....	2	.....	10	.....	.....	0.787	20.0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.18	766.6	30.21	767.4	24.0	— 4.4	100	calm	.....	.....	0	6 ck	0	sw.	.....	0.012	0.3	fair	Hattori.
Awomori	30.17	766.3	30.20	767.1	16.0	— 8.9	83	wsw.	4.9	2.2	.....	0	0	.....	.....	0.033	0.8	clear	K. Ogawa.
Hakodate	30.19	766.7	30.20	767.0	6.5	—14.2	.....	ne.	6.0	2.7	.....	3	0	w.	.....	0	0	clear	Y. Miwa.
Hamamatsu	30.26	768.6	30.29	769.3	36.9	2.7	61	w.	.....	.....	4	0	0	.....	.....	0	0	clear	
Hiroshima, I. M. Obs'y	.....	.....	.....	.....	36.1	2.3	76	w.	15.4	6.9	.....	0	1ks;ck	.....	w.	1.110	28.3	overcast	S. Endo.
Kanazawa	30.12	765.2	30.23	767.9	34.4	1.3	89	s.	9.8	4.4	.....	.....	10	.....	.....	0	0	clear	M. Tojima.
Kioto	30.11	764.8	30.30	769.6	27.4	— 2.6	74	wnw.	1.0	0.4	.....	0	0	.....	.....	0.290	7.4	cloudy	S. Takehayashi.
Nagasaki, I. M. Obs'y	30.21	767.2	30.42	772.6	40.1	4.5	74	n.	4.5	2.0	.....	.....	9 cs	.....	nw.	0.290	7.4	snowing	M. Moritz.
Niigata	30.13	765.3	30.16	766.0	32.9	0.5	97	sw.	5.3	2.3	.....	.....	10 n	.....	.....	1.095	27.8	fair	H. Midzushima.
Nobiru	30.17	766.4	30.19	766.8	25.0	— 3.9	87	nnw.	6.1	2.8	.....	8 ck	0	w.	.....	0.020	0.5	clear	R. Kaneda.
Numazu	30.17	766.3	30.21	767 2	42.2	5.7	59	wnw.	.....	.....	6	0	0	.....	.....	0	0	clear	H. Omura.
Osaka	30.30	769.5	30.31	769.9	33.9	1.1	72	nw.	2.0	0.9	.....	1 ck	0	sw.	.....	0	0	overcast	
Sapporo	.....	.....	.....	.....	15.0	— 9.4	81	s.	3.6	1.6	.....	5	4	nw.	.....	0	0	clear	The Staff.
Tokei Obs'y, Yeddo	30.09	764.4	30.18	766.5	35.6	2.0	67	nw.	6.8	3.0	.. ..	0	0	.....	.....	0	0	cloudy	Y. Kuwamura.
Wakayama	30.26	768.5	30.32	770.0	42.7	5.9	57	nw.	13.8	6.2	.....	.....	10 ck	.....	w.	0	0	.....	
MAURITIUS.																			
Mauritius Observatory	29.77	756.1	29.96	761.0	79.4	26.3	71	nne.	16.0	7.2	.. ..	6 cs;c	4 k;n	w.	n.	0.04	1.0	cloudy..	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.68	601.5	29.90	759.5	50.0	10.0	96	calm	0	0	.....	0	0	.....	.....	0	0	foggy	Prof. Vicente Fernandez.
Leon	24.34	618.2	30.16	766.1	47.7	8.7	88	wnw.	.....	.....	1	0	1 ks	.....	.....	0	0	clear	Prof. M. Leal.
Mazatlan	29.79	756.6	30.05	763.3	67.0	19.4	87	e.	5.3	2.3	.....	0	1 k	.....	.....	0	0	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.1	30.29	769.3	44.2	6.8	63	calm	0	0	.....	0	0	.....	.....	0	0	very fine	The Staff.
Morelia	24.22	615.2	30.10	764.5	45.0	7.2	68	e.	.....	.....	.....	0	0	.....	.....	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.90	607.1	29.99	761.7	50.7	10.4	83	wsw.	.....	.....	2	0	0	.....	.....	0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.5	30.16	766.0	51.8	11.0	39	calm	0	0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.45	570.2	30.16	766.2	44.07	7.07	91	sw.	3.9	1.7	.....	1 c	9 n	ne.	sw.	0.197	5.0	covered	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.13	765.2	30.13	765.2	40.6	4.8	.....	e.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Groningen	30.13	765.2	30.18	766.6	39.9	2.7	.....	e.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	30.17	766.2	30.17	766.2	36.1	2.3	.....	e.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.13	765.4	30.13	765.4	37.9	3.3	89	ene.	.....	.....	1	.....	.....	.....	.....	0	0	hazy	H. van der Brink.
Utrecht	30.12	765.1	30.17	766.3	34.0	1.1	96	ese.	.....	.....	2	.....	hz.	.....	.....	.....	.....	.....	
NORWEGIAN.																			
Bergen	30.21	767.4	30.28	769.0	35.2	1.8	78	sse.	7	3	.....	.....	9	.....	.....	0	0	.....	
Brono	30.18	766.5	30.22	767.5	30.9	— 0.6	55	n.	5	2	.....	.....	9	.....	.....	0.276	7.0	.....	
Christiania	30.30	769.7	30.46	773.7	25.2	— 3.8	87	e.	0	0	.....	.....	10	.....	.....	0.055	1.4	.....	
Gjæsvær	30.21	767 3	30.23	767.9	24.1	— 4.4	.....	se.	.....	.....	7	.....	3	.....	.....	.....	.....	.....	
Lodingen	30.19	766.9	30.24	768.1	31.5	— 0.3	55	se.	.....	.....	6	.....	2	.....	.....	0	0	.....	
PORTUGUESE.																			
Angra, Azores	30.11	764.7	30.26	768.6	65.8	18.8	88	wsw.	6.3	2.8	.....	.....	4	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	28.87	733.4	29.88	759.0	53.8	12.1	63	n.	11.2	5.0	.....	.....	0	.....	.....	0.315	8.0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.15	765.7	30.23	767.9	68.2	20.1	71	wsw.	7.4	3.3	.....	.....	0	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.05	753.0	30.01	762.2	55.0	12.8	77	n.	16.8	7.5	.....	.....	8	.....	.....	0.366	9.3	.....	The Staff.
Ponta Delgada, Azores	30.20	768.6	30.33	770.4	63.3	17.4	88	w.	6.9	3.1	.....	.....	3	.....	.....	0.020	0.5	.....	
Saint Paul de Loando	29.66	753.3	29.86	758.4	82.4	28.0	77	wsw.	2.5	1.1	.....	.....	8	.....	.....	blank	blank	.....	
Serra da Estrella	25.16	639.1	30.03	762.8	33.6	0.9	91	nne.	15.4	6.9	.....	.....	3	n.	.....	2.047	52.0	.....	
RUSSIAN.																			
Akmolinski	29.22	742.3	30.43	772.8	5.9	—14.5	74	se.	7	3	.....	4 ck	0	.....	.....	.....	.....	.....	Major K. Lasarew.
Archangel	30.02	777.8	30.04	778.3	4.6	—15.2	91	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	30.42	772.7	30.34	770.7	27.3	— 2.6	92	nnw.	4	2	.....	.....	10 n	.....	.....	0.094	2.4	.....	Capt. Wisganow.
Barnaul	30.24	768 0	30.83	783.0	—11.9	—24.4	78	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Bielosersk	30.24	768.1	30.78	781.7	— 0.8	—18.2	93	wsw.	0	0	.....	0	8 ks	.....	.....	0.004	0.1	.....	
Dorpat	30.55	776.0	30.82	782.9	— 7.2	—13.8	92	calm	0	0	.....	.....	9 kn	.....	.....	0	0	.....	Observatory.
Ekaterinburg	29.37	746.1	30.45	773.4	3.0	—16.1	91	n.	4	2	.....	.....	10	.....	.....	.....	.....	light snow	Meteorological Obs'y.
Elissawetgrad	30.11	764.8	30.61	777.5	13.6	—10.2	70	nnw.	4	2	.....	0	5 k	.....	.....	0	0	.....	
Kasan	30.04	763.1	30.34	770.7	5.4	—14.8	74	nne.	11	5	.....	.....	9	.....	.....	.....	.....	.....	Observatory.
Kem	30.66	778.7	.....	.....	7.5	—13.6	92	calm	0	0	.....	.....	9 ks	.....	.....	0	0	.....	
Kertch	30.39	771.9	30.41	772.4	20.5	— 6.4	82	nw.	7	3	.....	.....	9 n	.....	.....	blank	blank	.....	Lagorio & Sastyrez.
Kieff	29.90	759.4	30.01	777.6	7.5	—13.6	83	nw.	9	4	.....	c	1 ks	.....	.....	.....	.....	.....	Observatory.
Libau	30.04	778.2	30.66	778.8	16.7	— 8.5	71	se.	.....	.....	1	.....	5	.....	.....	0	0	.....	E. Quaas.
Lugan	29.99	761.7	30.21	767.4	13.5	—10.3	73	w.	18	8	.....	.....	0	.....	.....	0.016	0.4	.....	Meteorological Obs'y.
Moscow	30.02	762.4	30.57	776.4	1.2	—17.1	78	nnw.	14.5	6.5	.....	.....	0	.....	.....	0	0	.....	
Nikolaiev	30.53	775 4	30.60	777.3	16.7	— 8.5	82	n.	9	4	.....	0	0	.....	.....	0	0	.....	Capt. Kurdakow.
Pekin, China	30.50	774.7	30.64	778.3	15.4	— 9.2	32	nw.	10	7	.....	0	2 k	.....	.....	0	0	.....	Physical Observatory.
Petrozavodsk	30.48	774.3	30.71	779.9	12.0	—10.8	86	nw.	11	5	.....	.....	10	.....	.....	0.012	0.3	.....	Dr. Bergmann.
Pinsk	30.18	766.0	.....	.....	10.4	—12.0	85	ene.	9	4	.....	3 cs	0	.....	.....	0	0	light clouds	
St. Petersburg	30.80	782.2	30.81	782.6	— 3.6	—19.8	100	sw.	2	1	.....	4 cs	0	.....	.....	0	0	.....	Central Physical Obs'y.
Sevastopol	30.22	767.5	30.38	771.7	25.2	— 3.8	53	nne.	27	12	.....	0	2 s	.....	.....	0	0	.....	
Semipalatinsk	30.06	763.4	30.82	782.8	— 7.2	—21.8	77	e.	20	9	.....	.....	0	.....	.....	0	0	light clouds	Major Lasarew.
Starol Bykhov	30.22	767.7	30.74	780.8	8.2	—13.2	94	se.	7	3	.....	7 cs	0	.....	.....	0	0	.....	
Tashkend, Laboratory	28.84	732 5	30.48	774.1	41.2	5.1	78	calm	0	0	.....	.....	2	.....	.....	0.079	2.0	.....	Teich, A. M.
Tiflis	28.80	731 5	30.26	768.5	46.8	8.2	61	nnw.	18	8	.....	.....	9 s	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.56	776.2	30.89	784.6	—13.2	—25.1	83	calm	0	0	.....	0	0	.....	.....	.....	.....	.....	
Vladivostock	30.19	766.9	30.26	768.7	1.4	—17.0	41	calm	0	0	.....	0	5 k	.....	.....	0	0	.....	
Warsaw	30.09	764 3	30.55	775.9	22.1	— 5.5	56	se.	18	8	.....	1 cs	0	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	30.32	770.1	30.79	782.0	12.9	—10.6	90	e.	2	1	.....	.....	8	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	30.67	779.1	31.01	787.7	—12.6	—24.8	87	calm	0	0	.....	.....	3	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.91	759.7	48	8.9	92	s.	.....	.....	4	.....	10	.....	.....	0	0	hazy	J. Youngclause
North Unst	.....	.....	29.91	759.7	.....	.....	.....	s.	.....	.....	4	.....	10	.....	.....	blank	blank	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.86	758.4	29.97	761.1	57.2	14.0	89	e.	5.8	2.6	.....	.....	9	.....	.....	0.181	4.6	stormy	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.60	751.7	29.65	753.2	52.2	11.2	90	se.	1.8	0.8	.....	.....	10	.....	.....	0.803	20.4	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.95	684.5	29.99	761.7	43.3	6.3	88	n.	10.3	4.6	.....	.....	9	.....	.....	0.054	16.6	almost cov'd	Domingo Martin.
Madrid, Royal Obs'y	27.54	699.4	29.77	756.2	50.7	10.4	64	ne.	25.1	11.2	.....	0	3	.....	.....	0.803	20.4	cloudy	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	29.79	756.7	29.93	760.2	52.5	11.4	98	nnw.	6.5	2.9	.....	5	5	.....	.....	0.906	23.0	raining	Olayo Diaz, Director.
Oviedo	29.08	738.6	29.96	760.9	45.5	7.5	92	e.	3.6	1.6	.....	.....	10	.....	e.	0.134	3.4	covered	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.07	738.4	29.96	761.5	48.9	9.4	88	nw.	1.8	0.8	.....	.....	7	.....	.....	0.378	9.6	cloudy	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	30.02	762.4	30.07	763.8	76.2	24.6	83	n.	4.4	2.0	.....	0	8 k	.....	se.	1.032	26.2	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.75	755.6	29.85	758.1	55.8	13.2	67	calm	0	0	.....	0	4	.....	nw.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.89	759.1	29.98	761.4	75.2	24.0	92	calm	0	0	.....	3 s.	2 k	e.	e.	0	0	.....	Manuel Maese.
Tuguegarao, Philippine Id's	30.07	763.8	30.21	767.1	71.9	22.2	92	nw.	11.3	5.1	.....	.....	10 ks	.....	ne.	inap.	inap.	.....	José L. Yrastorza.
SWEDISH.																			
Haparanda	30.55	776.0	30.59	777.0	0.7	—17.4	100	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.52	775.2	30.57	776.5	13.6	—10.2	100	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Hernosand	30.47	773 9	30.52	775.2	20.5	— 6.4	95	calm	.....	.....	0	.....	10	.....	.....	0.008	0.2	.....	
Stockholm	30.38	771.7	30.56	776.2	29.7	— 1.3	74	sse.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Wisby	30.47	774.0	30.53	775.5	27.7	— 2.4	75	s.	.....	.....	4	.....	0	.....	.....	0	0	.....	
Sub-series.																			
Upsala	30.47	774.0	30.56	776·2	25.7	— 3.5	93	ese.	5.1	2.3	.....	.....	10	w.	sw.	0	0	.....	S. G. Fineman.
SWISS.																			
Geneva	28.70	728.9	30.19	766.9	32.0	0.0	97	se.	.....	.....	1	.....	10	.....	.....	0	0	foggy	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.30	769.6	45.1	7.3	65	ne.	27	12.0	.....	.....	10	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.09	764.2	56.7	13.7	.....	se.	.....	.....	1	.....	10	.....	.....	0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.07	763.7	68.9	20.5	60	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.42	772.7	30.51	774.9	23	— 5.0	73	nw.	5	2.2	.....	.....	10 n	.....	.....	0.01	0.3	light snow	J. C. Barnes.
Alpena, Michigan	29.64	752.8	30.35	770.9	21.5	— 5.8	73	s.	5	2.2	.....	.....	10 s	.....	se.	0	0	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.71	627.6	29.79	756.7	34	1.1	92	sw.	8	3.6	.....	.....	10 s	.....	.....	0.16	4.1	cloudy	W. C. Barnes.
Assinnaboine, Ft., Montana	26.82	681.2	29.85	758.2	20	— 6.7	73	sw.	8	3.6	.....	0	1 s	.....	sw.	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.14	740.1	30.30	771.1	33.5	0.8	74	ne.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.38	771.6	30.40	772.1	22	— 5.6	73	n.	7	3.1	.....	0	0	.....	.....	0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.21	767.3	30.41	772.4	33	0.6	68	e.	3	1.3	.....	0	4 s	.....	.....	0	0	fair	John Healy.
Baltimore, Maryland	30.43	772.9	30.48	774.2	25	— 3.9	73	n.	4	1.8	.....	2 cs	fg.	.....	.....	0	0	clear	Geo W Felger.
Barnegat, New Jersey	30.37	771.4	30.39	771.9	21.0	— 6.1	84	n.	9	4.0	.....	1 k	0	.....	.....	0	0	clear	G. A. Hill.
Behring Id., Behring Sea	29.72	754.9	29.74	755.4	18.0	— 7.8	.....	n.	9	4.0	.....	0	6 n	.....	.....	0.01	0.3	fair	Leonard Steineger.
Bennett, Fort, Dakota	28.07	713.0	29.83	757.7	19	— 7.2	87	nw.	2	0.9	.....	0	4 s	.....	.....	inap.	inap.	fair	A. Pritchard.
Benton, Fort, Montana	26.86	682.2	29.86	758.4	28	— 2.2	67	sw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	S. Wheaton.
Bismarck, Dakota	27 75	704.8	29.76	755.9	31	— 0.6	88	nw.	11	4.9	.....	.....	10 s	.....	.....	0.29	7.4	cloudy	Cyrus Cramor.
Block Island, Rhode Island	30.33	770.4	30.36	771.1	26	— 3.3	64	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	J. T. Elker.
Boise City, Idaho	27.08	687.8	30.06	763.5	20	— 6.7	91	e.	4	1.8	.....	.....	10 s	.....	.....	0.34	8.6	cloudy	B. E. Light.
Boston, Massachusetts	30.22	767.6	30.38	771.6	22.0	— 5.6	73	nw.	12	5.4	.....	0	fg.	.....	.....	0	0	clear	O. B. Cole.
Brownsville, Texas	29.68	753.9	29.74	755.4	68.5	20 3	92	s.	10	4.5	.....	0	6 s	.....	s.	0.02	0.5	fair	M. McCarty.
Buffalo, New York	29.67	753.6	30.47	773.9	23.2	— 4.9	85	ne.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	W. Finn.
Buford, Fort, Dakota	27.61	701.3	29.85	758.2	29	— 1.7	80	w.	7	3.1	.....	.....	10 s	.....	.....	0.30	7.6	cloudy	F. A. Mellen.
Burlington, Vermont	30.21	767.3	30.52	775.2	17.0	— 8.3	87	ne.	5	2.2	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	G. C. Schneffer.
Cairo, Illinois	29.59	751.6	30.01	762.2	47.7	8.7	92	s.	10	4.5	.....	.....	10 s	.....	s.	0.05	1.3	cloudy	W. H. Ray.
Cape Henry, Virginia	30.42	772.7	30.44	773.2	30	— 1.1	67	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.40	772.1	30.43	772.9	27	— 2.8	82	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	30.18	766.6	30.20	767.1	47	8.3	86	e.	8	3.6	.....	0	hz.	.....	.....	0	0	clear	F. W. Mixer.
Champaign, Illinois	29.15	740.4	30.02	762.5	35.0	1.7	69	se.	24	10.7	.....	.....	10 s	.....	se.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.31	769.9	30.37	771.4	34	1.1	78	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29 51	749.5	30.40	772.1	24.0	— 4.4	88	ne.	4	1.8	.....	0	fg.	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.43	747.5	30.29	769.4	34.0	1.1	71	e.	8	3.6	.....	.....	10 s	.....	s.	0	0	cloudy	B. L. Goulding.
Cheyenne, Wyoming	23.56	598.4	29.84	757.9	29.8	— 1.2	59	n.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	E. McGovern.
Chicago, Illinois	29.31	744.5	30.07	763.8	30.0	— 1.1	85	se.	12	5.4	.....	.....	10 n	.....	.....	0.03	0.8	sleeting	J. Mitchell.
Chincoteague, Virginia	30.40	772.1	30.42	772.7	24	— 4.4	88	nw.	13	5.8	.....	3 ck	0	nw.	.....	0	0	clear	C. F. Dickens.
Cincinnati, Ohio	29.57	751.1	30.27	768.8	27	— 2.8	88	ne.	4	1.8	.....	.....	10 ks	.....	e.	0	0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.58	751.3	30.38	771.6	16.3	— 8.7	86	se.	14	6.3	.....	1 c	0	w.	.....	0	0	clear	J. B. Newlin.
Coleman City, Texas	27.89	708.4	29.79	756.7	56	13.3	69	sw.	8	3.6	.....	0	6 s	.....	.....	0	0	fair	L. Dorman.
Columbus, Ohio	29.39	746.5	30.30	769.6	23	— 5.0	88	e.	8	3.6	.....	0	4 s	.....	.....	0.02	0.5	fair	D. Cuthbertson.
Concho, Fort, Texas	27.73	704 3	29.75	755.6	47.0	8.3	86	s.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. McClone.
Custer, Fort, Montana	26.48	672.6	29.88	758.9	15	— 9.4	83	e.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.22	742.2	29.94	760.5	37	2.8	61	se.	10	4.5	.....	.....	10 s	.....	.....	0.08	2.0	cloudy	R. R. Martin.
Davis, Fort, Texas	24.97	634.2	29.91	759.7	42	5.6	86	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.14	714.7	29.97	761.2	32	0.0	88	sw.	8	3.6	.....	0	0	.....	.....	0.17	4.3	clear	D. Moore.
Deadwood, Dakota	24.96	634.0	29.95	760.7	29	— 1.7	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. Willson.
Delaware Breakwater, Del	30.41	772.4	30.43	772.9	28	— 2.2	77	n.	14	6.3	.....	1 k	0	n.	.....	0	0	clear	T. S. Townsend.
Denison, Texas	28.91	734.3	29.70	755 9	62.0	16.7	93	sw.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	J. W. Byram.
Denver, Colorado	24.23	615.4	29.75	755.6	29.5	— 1.4	57	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	28.86	733 0	29.84	757.9	36	2.2	89	se.	3	1.3	.....	.....	10 s	.....	se.	0.05	1.3	threatening	F. W. Conrad.
Detroit, Michigan	29.60	751.8	30.36	771.1	25.0	— 3.9	88	e.	6	2.7	.....	5 ck	0	.....	.....	0	0	fair	C. E. R. Wappenhans.
Dodge City, Kansas	26.98	685.3	29.78	756.4	26	— 3.3	67	calm	0	0	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.17	740.9	29.94	760.5	32.2	0.1	88	se	6	2.7	.....	.....	10 n	.....	.....	0.02	0.5	light rain	J. Harvey Smith.
Duluth, Minnesota	29.07	738.4	29.88	758.9	29	— 1.7	88	e.	7	3.1	.....	.....	10 n	.....	.....	inap.	inap.	light snow	N. B. Conger.
Eagle Pass, Texas	28.95	735.3	29.79	756.7	43.1	6.2	74	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	24.98	634.5	29.90	759.4	24	— 4.4	100	calm	0	0	.....	.....	10 n	.....	.....	0.29	7.4	light snow	J. M. Clifford.
Eastport, Maine	30.19	766.8	30.26	768.6	16.0	— 8.9	67	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	D. C. Murphy.
Elliott, Fort, Texas	26.85	682.0	29.81	757.2	25	— 3.9	53	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	25.96	659.4	29.82	757.4	49.0	9.4	58	w.	20	8.9	.....	0	6 s	.....	w.	0	0	fair	J. O'Dowd.
Erie, Pennsylvania	29.66	753.4	30.43	772.9	18	— 7.8	84	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	Peter Wood.
Escanaba, Michigan	29.44	747.8	30.16	766.1	30.0	— 1.1	77	se.	22	9.8	.....	.....	10 s	.....	se.	0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.15	715.0	29.97	761.2	53	11.7	74	e.	4	1.8	.....	0	8 n	.....	.....	0.01	0.3	light rain	Frank Halwegler.
Galveston, Texas	29.73	755.1	29.78	756.4	66	18.9	100	s.	16	8.0	.....	.....	10 n	.....	sw.	1.73	43.9	thund'r st'm	E. O'C. Machernesy.
Grand Haven, Michigan	29.46	748.3	30.17	766.3	20.0	— 6.7	84	ne.	9	4.0	.....	.....	10 s	.....	.....	0	0	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.08	637.0	29.96	761.0	39	3.9	82	nw.	12	5.4	.....	.....	10 n	.....	nw.	0.03	0.8	light rain	Robert O. Lord.
Hatteras, North Carolina	30.35	770.9	30.37	771.4	34	1.1	78	ne.	19	8.5	.....	6 k	3 s	ne.	n.	0	0	cloudy	R. M. Crawford.
Helena, Montana	25.45	646.4	29.83	757 7	30	— 1.1	88	sw.	16	7.2	.....	.....	10 s	.....	.....	0	0	cloudy	N. C. Smith.
Henrietta, Texas	28.07	728.2	29.75	755.6	50	10.0	77	s.	2	0.9	.....	.....	10 s	.....	s.	0	0	cloudy	J. P. Sherry.
Huron, Dakota	28.27	718.0	29.81	757.2	22	— 5.6	67	se.	4	1.8	.....	0	0	.....	.....	0.01	0.3	clear	S. W. Glenn.
Indianapolis, Indiana	29.31	744.5	30.16	766.1	29	— 1.7	84	se.	6	2.7	.....	2 ck	7 s	se.	se.	0	0	cloudy	O. Schutze.
Indianola, Texas	29.71	754.6	29.74	755.4	63.5	17.5	98	s.	2	0.9	.....	0	8 s	.....	s.	inap.	inap.	cloudy	I. A. Reed.
Jacksboro, Texas	28.50	723.9	29.74	755.4	50	10.0	86	n.	4	1.8	.....	.....	10 s	.....	n.	0	0	cloudy	D. J. Carr.
Jacksonville, Florida	30.21	767.3	30.26	768 6	44	6.7	83	e.	1	0.4	.....	2 cs	fg.	.....	.....	0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.11	688.6	29.81	757.2	15	— 9.4	83	calm	0	0	.....	0	0	.....	.....	0.09	2.3	clear	A. Schneider.
Keokuk, Iowa	29.16	740.7	29.87	758.7	37.0	2.8	89	e.	7	3.1	.....	.....	10 s	.....	e.	0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.08	764.0	30.10	764.5	63.5	17.5	81	ne.	14	6.3	.....	2 c	0	w.	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.39	771.9	30.41	772.4	36	2.2	79	ne.	20	8.9	.....	0	9 ks	.....	ne.	0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.24	742.7	30.32	770.1	24	— 4.4	88	ne.	3	1.3	.....	0	9 s	.....	ne.	0	0	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.10	739.1	29.96	761.0	30	— 1.1	88	se.	8	3.6	.....	.....	10 n	.....	.....	0.01	0.3	sleeting	S. C. Emery.
Leavenworth, Kansas	28.83	732.3	29.79	756.7	47	8.3	86	calm	0	0	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	A. W. Browne.
Lewiston, Idaho	29.05	737.9	29.93	760.2	37.5	3.1	77	s.	2	0.9	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	W. Bell.
Little Rock, Arkansas	29.54	750.3	29.87	758.7	56	13.3	80	se.	8	3.6	.....	.....	10 s	.....	.....	0.18	4.6	cloudy	W. U. Simons.
Los Angeles, California	29.59	751.6	29.99	761.7	48	8.9	93	ne.	6	2.7	.....	0	0	.....	.....	0.03	0.8	clear	T. S. Collins.
Louisville, Kentucky	29.56	750.8	30.16	766.1	33	0.6	68	ne.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	L. M Dey.

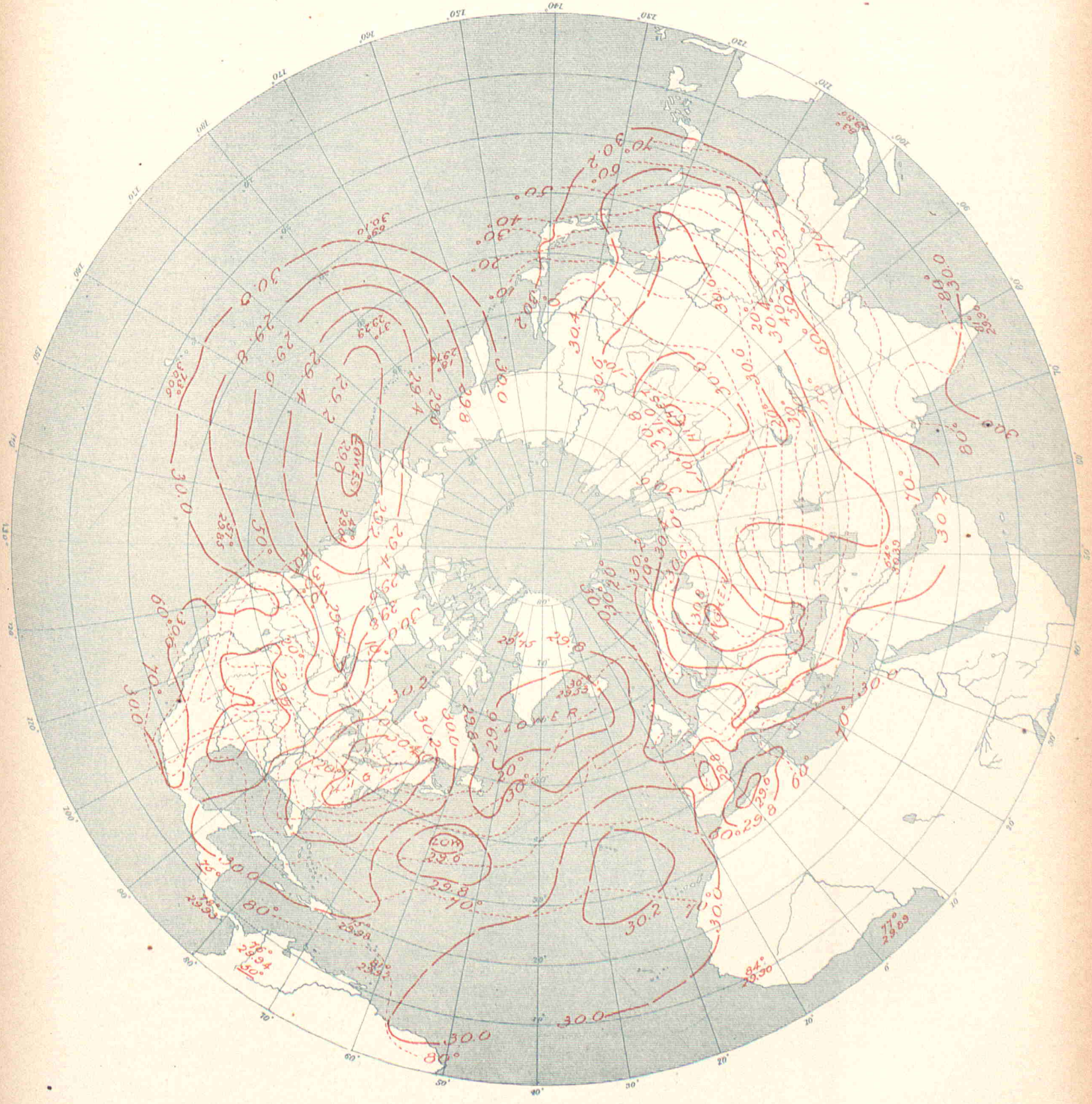
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.72	754.9	30.45	773.4	18	— 7.8	83	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.60	751.8	30.30	769.6	21.0	— 6.1	70	se.	24	10.7	.....	8 k	0	s.	.....	0	0	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.37	771.4	30.38	771.6	29	— 1.7	77	n.	12	5.4	.....	hz.	0	.....	.....	0	0	clear	C. A. Shaw.
Madison, Wisconsin	28.91	734.3	30.01	762.2	29	— 1.7	88	se.	14	6.3	.....	.....	10 s	.....	.....	0	0	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.17	639.3	29.71	754.6	25	— 3.9	64	w.	5	2.2	.....	.....	10 k	.....	.....	0	0	cloudy	F. Burke.
McKavett, Fort, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. E. Thatcher.
Marquette, Michigan	29.32	744.7	30.10	764.5	29	— 1.7	77	se	18	8.0	.....	.....	10 s	.....	.....	0	0	cloudy	J. Gilligan.
Memphis, Tennessee	29.72	754.9	30.08	764.0	53	11.7	86	se.	4	1.8	.....	.....	10 s	.....	se.	0.01	0.3	cloudy	D. T. Flannery
Milwaukee, Wisconsin	29.28	743.7	30.09	764.3	34	1.1	89	se.	20	8.9	.....	.....	10 n	.....	.....	inap.	inap.	light rain	W. Line
Missoula, Fort, Montana	26.44	671.6	29.90	759.4	20	— 6.7	58	n.	2	0.9	.....	0	7 s	.....	.....	0	0	fair	J. H. Young.
Mobile, Alabama	30.00	762.0	30.04	763.0	55.8	13.2	86	se.	4	1.8	.....	.....	10 s	.....	se.	0	0	cloudy	C. A. Read.
Montgomery, Alabama	29.93	760.2	30.17	766.3	46.7	8.2	78	e.	7	3.1	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	J. B. McLaughlin.
Moorhead, Minnesota	28.62	726.9	29.73	755.1	25	— 3.9	100	s.	36	16.1	.....	.....	10 n	.....	s.	0.18	4.6	heavy snow	H. Bessant.
Morgantown, W. Virginia	29.32	744.7	30.39	771.9	16.5	— 8.6	72	n.	3	1.3	.....	1 ck	0	n.	.....	0	0	clear	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.81	604.8	30.44	773.2	9.0	—12.8	83	n.	13	5.8	.....	0	2 ks	.....	.....	0	0	clear	B. S. Pague.
Nashville, Tennessee	29.54	750.3	30.14	765.5	42.0	5.6	76	e.	6	2.7	.....	.....	10 n	.....	sw.	inap	inap.	light rain	L. N. Jesunofsky.
New Haven, Connecticut	30.28	769.1	30.40	772.1	13.5	—10.3	89	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. H. Sherman.
New London, Connecticut	30.39	771.9	30.44	773.2	18	— 7.8	67	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. G. Lynch.
New Orleans, Louisiana	29.86	758.4	29.92	760.0	61.2	16.2	93	se.	13	5.8	.....	.....	10 n	.....	.....	0.11	2.8	light rain	L. Dunne.
Newport, Rhode Island	30.31	769.9	30.36	771.1	21.3	— 5.9	79	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. McGillivray.
New York, New York	30.25	768.3	30.44	773.2	23	— 5.0	88	nw.	3	1.3	.....	0	0	.....	.....	inap.	inap.	clear	J. B. Merrill.
Norfolk, Virginia	30.39	771.9	30.42	772.7	31	— 0.6	57	n.	3	1.3	.....	0	hz.	.....	.....	0	0	clear	Wm. Davis.
North Platte, Nebraska	26.69	677.9	29.85	758.2	24.6	— 4.1	78	calm	0	0	.....	0	2 s	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y	29.60	751.8	29.64	752.8	34.0	1.1	88	s.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	J. Dascomb.
Omaha, Nebraska	28.54	724.9	29.83	757.7	36.8	2.7	82	s.	1	0.4	.....	0	fg.	.....	.....	0	0	clear	A. Pollak.
Oswego, New York	30.13	765.3	30.48	774.2	24.0	— 4.4	68	e.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	J. G. Linsley.
Palestine, Texas	29.22	742.2	29.80	756.9	63.0	17.2	92	s.	12	5.4	.....	.....	10 n	.....	s.	0.07	1.8	light rain	L. M. Pindell.
Pensacola, Florida	30.05	763.3	30.08	764.0	60.1	15.6	78	se.	17	7.6	.....	.....	10 s	.....	se.	0	0	cloudy	M. McGauran.
Philadelphia, Pa	30.33	770.4	30.44	773.2	26.5	— 3.1	77	nw.	7	3.1	.....	0	0	.....	.....	0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.30	439.4	29.96	761.0	4	—15.6	100	w.	.....	.....	7	0	4 s	.....	.....	inap.	inap.	fair	H. Hall.
Pioche, Nevada	23.76	603.5	29.93	760.2	28	— 2.2	70	n.	10	4.5	.....	0	0	.....	.....	0.04	1.0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.56	750.8	30.42	772.7	15.0	— 9.4	91	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	W. A. Reid.
Poplar River, Montana	27.27	692.6	29.63	752.6	.....	.....	.....	nw.	.....	.....	1	0	8 n	.....	ne.	0.25	6.3	light snow	W. D. Maxwell.
Port Eads, Louisiana	29.96	761.0	29.96	761.0	65.1	18.4	35	se.	28	12.5	.....	.....	10 s	.....	se.	0	0	cloudy	H. B. Boyer.
Port Huron, Michigan	29.64	752.8	30.37	771.4	20.6	— 6.3	73	e.	3	1.3	.....	0	8 ks	.....	e.	0	0	cloudy	W. O. Bailey.
Portland, Maine	30.31	769.9	30.36	771.1	21	— 6.1	70	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	W. W. Eichelberger.
Portland, Oregon	29.82	757.4	29.89	759.2	40.2	4.6	89	calm	0	0	.....	.....	10 s	.....	s.	0.97	24.6	cloudy	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	33	0.6	78	n	.....	.....	2	.....	10 ks	.....	nw.	0	0	cloudy	F. S Coburn.
Prescott, Arizona	24.50	622.3	29.87	758.7	34.8	1.6	69	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.30	769.6	30.33	770.4	33.5	0.8	71	n.	6	2.7	.....	1 k	0	n.	.....	0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	30.15	765.8	30.16	766.1	51	10.6	83	ne.	9	4.0	.....	0	0	.....	.....	0	0	clear	W. J. Evans.
Red Bluff, California	29.66	753.4	30.03	762.7	38	3.3	100	n.	3	1.3	.....	2 ck	0	w.	.....	0.24	6.1	clear	J. R. Williams.
Rochester, New York	29.76	755.9	30.48	774.2	24	— 4.4	88	e.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.32	744.7	29.89	759.2	33	0.6	88	se.	1	0.4	.....	.....	10 s	.....	.....	0.26	6.6	cloudy	J. J. Naury.
Sacramento, California	29.95	760.7	30.03	762.7	41.7	5.4	93	se.	9	4.0	.....	0	0	.....	.....	0.11	2.8	clear	J. A. Barwick.
St. Louis, Missouri	29.31	744.5	29.96	761.0	40.4	4.7	90	se.	15	6.7	.....	.....	10s;sk	.....	.....	0.01	0.3	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.38	746.2	29.42	747.3	— 4	—20.0	100	ne.	12	5.4	.....	0	0	.....	.....	0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	28.92	734.6	29.88	758.9	26.0	— 3.3	88	se.	13	5.8	.....	.....	10 s	.....	se.	0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	28 73	729.7	29.72	754.9	25	— 3.9	94	s.	19	8.5	.....	.....	10 n	.....	.....	0.07	1.8	light snow	C. B Dilley.
Salt Lake City, Utah	25.29	642.4	29.83	757.7	34	1.1	81	calm	0	0	.....	.....	10 n	.....	.....	0.25	6.3	light snow	J. Craig.
San Antonio, Texas	29.02	737.1	29.74	755.4	51.5	10.8	86	e.	1	0.4	.....	4 k	0	.....	.....	0	0	fair	T. J. Kenan.
San Diego, California	29.91	759.7	29.98	761.5	55.3	12.9	85	w.	3	1.3	.....	.....	9 s	.....	.....	0.02	0.5	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.61	752.1	30.34	770.6	18	— 7.8	76	se.	10	4.5	.....	0	0	.....	.....	0	0	clear	M. H. Perry.
Sandy Hook, New Jersey	30.40	772.1	30.43	772.9	24.0	— 4.4	88	n.	9	4.0	.....	0	0	.....	.....	inap.	inap.	clear	B. A. Blundon.
San Francisco, California	29.97	761.2	30.04	763 0	48	8.9	86	sw.	5	2.2	.....	0	0	.....	.....	0.29	7.4	clear	N. Gorom.
Santa Fé, New Mexico	22.74	577.6	29.73	755.1	35	1.7	72	s.	3	1.3	.....	.....	10 n	.....	.....	0.07	1.8	light snow	H. U. Jones.
Savannah, Georgia	30.25	768.3	30.35	770.9	38	3.3	82	ne.	6	2.7	.....	8 ck	0	.....	.....	0	0	cloudy	H. W. Ford.
Shaw, Fort, Montana	20.01	660.6	29.84	757.9	23	— 5.0	73	w.	10	4.5	.....	6 cs	0	.....	.....	0	0	fair	A. L. Mathews.
Shreveport, Louisiana	29.57	751.1	29.82	757.4	59	15.0	93	se.	4	1.8	.....	.....	10 s	.....	se.	0.01	0.3	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.40	721.3	29.73	755.1	41.5	5.3	69	calm	0	0	.....	0	0	.....	.....	0	0	clear	W. M. Mattingly.
Silver City, New Mexico	23.98	609.1	29.82	757.4	35.0	1.7	92	nw.	6	2.7	.....	.....	10 n	.....	.....	0.26	6.6	light rain	N. D. Lane.
Sitka, Alaska	28.97	735.8	29.04	737.6	41.2	5.1	76	e.	24	10.7	.....	.....	10 s	.....	e.	0.11	2.8	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.26	743.2	29.76	755 9	53.5	11.9	93	e.	8	3.6	.....	.....	10 s	.....	e.	0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.35	770.9	30.39	771.9	20	— 3.3	76	n.	9	4.0	.....	1 c	1 s	.....	.....	0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	27.80	706.1	29.93	760.2	30.5	— 0.8	83	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear	H. Clifford.
Springfield, Illinois	29.21	741.9	29.94	760.5	38	3.3	82	se.	16	7.2	.....	3 c	3 s	w.	sw.	0.20	5.1	fair	T. B. Jennings.
Springfield, Massachusetts	30.31	769.9	30.45	773.4	11.5	—11.4	85	n.	.....	.....	2	0	fg.	.....	.....	0	0	clear	Charles Mayr.
Springfield, Mo	28.31	719.1	29.84	757.9	53	11.7	83	se.	13	5.8	.....	0	8 ks	.....	se.	0.01	0.3	cloudy	J. B. Marbury.
Starkville, Miss	29.56	750.8	30.06	763 5	50	10.0	86	e.	10	4.5	.....	.....	10 n	.....	e.	0.03	0.8	light rain	G. Dill.
Stevenson, Fort, Dakota	27.70	703.6	29.70	755.9	26	— 3.3	88	w.	6	2.7	.....	.....	10 s	.....	.....	0.21	5.3	cloudy	W. Burrows
Stockton, Fort, Texas	26.68	677.7	29.82	757.4	50	10.0	68	sw	10	4.5	.....	0	5 s	.....	sw.	0	0	fair	J. F. Marshall.
Thatcher's Island, Mass	30.32	770.1	30.38	771.6	49.0	— 1.7	77	nw.	18	8.0	.....	0	0	.....	.....	0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	26.95	684.5	29.77	756.1	49	9.4	80	nw.	.....	.....	2	.....	9 ks	.....	w.	0.19	4.8	cloudy	J. T. Fitzgerald.
Toledo, Ohio	29.50	750.8	30.30	769.6	23	— 5.0	73	e.	4	1.8	.....	4 cs	0	sw.	.....	0	0	fair	A. Buell.
Tucson, Arizona	27.38	695.4	29.88	758 9	51	10.6	80	w.	5	2.2	.....	0	0	.....	.....	0.01	0.3	clear	J. L. Whiteside.
Umatilla, Oregon	29.58	751.3	29.97	761.2	32.5	0.3	83	s.	3	1.3	.....	0	0	.....	.....	0.02	0.5	clear	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	35.4	1.9	89	w.	.....	.....	1	0	0	.....	.....	0.07	1.8	clear	D. Brooks.
Vicksburg, Mississippi	29.72	754.9	29.99	761.7	59.2	15.1	92	se.	10	4.5	.....	.....	10 n	.....	se.	0.05	1.3	light rain	James Keneally.
Visalia, California	29.70	754.4	30.08	764.0	37.7	3.2	86	n.	1	0.4	.....	0	0	.....	.....	0.02	0.5	clear	O. D. Stewart.
Washakie, Fort, Wyoming	24.00	609 6	29.78	756 4	14.5	— 9.7	78	w.	1	0.4	.....	0	4 k	.....	.....	0	0	fair	T. M. Ambler.
Washington, D. C.	30.36	771.1	30.48	774 2	20.0	— 6.7	85	calm	0	0	.....	4 c	sk	sw.	.....	0	0	fair	B. M. Purssell.
West Las Animas, Colorado	25.00	650.2	29.70	755.9	26	— 3.3	82	ne.	7	3.1	.....	0	4 s	.....	ne.	0	0	fair	F. H. Brandenburg
Williamsport, Pa	29.84	757.9	30.47	773.9	29.5	— 1.4	67	ne.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.35	770.9	30.41	772.4	27	— 2.8	77	ne.	3	1.3	.....	0	sk.	.....	.....	0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.49	647.4	30.02	762.5	23	— 5.0	82	w.	3	1.3	.....	0	0	.....	.....	0.03	0.8	clear	J. Grover.
Yankton, Dakota	28.40	721.3	29.83	757.7	23	— 5.0	73	se.	5	2.2	.....	0	4 ks	.....	.....	0	0	fair	J. H. Attfield.
Yuma, Arizona	29.68	753.9	29.83	757.7	52.0	11.1	69	sw.	2	0.9	.....	hz.	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.03	559.6	.....	.....	50.0	10.0	59	calm	0	0	.....	0	2 ks	.....	w.	0.82	20.8	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.99	761.7	30.05	763.3	60.2	15.7	87	se.	3	1.3	.....	2 cs	8	w.	.....	0	0	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	29.99	761.7	30.00	762.0	75	23.9	87	n.	1	0.4	.....	1 cs	4 s	.....	e.	0	0	fair	Robert Johnston.
Paramaribo, S. A.	30.02	762.5	30.03	762.7	79	26.1	87	se.	.....	.....	3	5 ck	4 s	e.	.....	0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.94	760.5	76	24.4	89	calm	.....	.....	0	5 ck	5 ks	w.	calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	75	23.9	92	ne.	.....	.....	2	5 ck	0	ne.	.....	0.08	2.0	fair	Earl Flint.
St. Paul, Kodiak Id., Alaska	28.90	734.0	28.96	735.6	34	1.1	78	ne.	.....	.....	7	.....	8 ks	.....	.....	0.08	2.0	cloudy	W. J. Fisher.
St. Thomas, W. I.	29.90	759.4	30.02	762.5	79	26.1	82	ne.	.....	.....	.....	1 c	1 k	.....	ne.	0	0	fine	Aug. Walloe.
York Factory B. A.	30.10	764.5	30.17	766.3	— 7.5	—21.9	79	w.	8	3.6	.....	2 k	0	w.	.....	0	0	fair	Forbes ne & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	29.87	758.7	74	23.3	72	n.			2-3		4	nw.						misty.
H. M. S. Audacious, N. 1° 21′, E. 103° 15′	29.78	756.4	81	27.2	87	nw.			1		1	nw.						blue sky.
H. M. S. Beacon, Lake Timsah, Egypt			70	21.1	52	nnw.			1		0					1	nne.	blue sky.
H. M. S. Boadicea, Saldanha Bay, Cape Colony	29.81	757.2				var.			1-2		2							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.06	763.5	64	17.8	69	calm			0		10							overcast.
H. M. S. Champion, N. 13° 20′ E. 112° 10′	29.92	760.0	76	24.4	100	une.			6		10					6	ne.	raining.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.61	777.5	33	0.6		calm			0		3							d. clouds.
H. M. S. Comus, N. 43° 58′ W. 125° 16′	29.72	754.9	47	8.3	92	s			5		10					6	wnw.	drizzling.
H. M. S. Curacoa, Yokohama, Japan	29.91	759.7	44.5	6.9	76	wnw.			1		0							blue sky
H. M. S. Diamond, Sydney, N. S. W*†	29.35	745.5	82	27.8	49	calm			0		1							blue sky.
H. M. Dock-Yard, Bermuda, W. I.	29.84	757.9	60	15.6	70	nw.			3-4		4	nw.						d. clouds.
H. M. S. Eclipse, N. 7° 17′, E. 77° 10′	29.80	756.9	81	27.2		e.			4		4					3	ne.	d. clouds.
H. M. S. Fawn, S. 32° 08′ E. 29° 49′	29.70	754.4	78.5	25.8	82	nne.			3		1					3	n.	blue sky.
H. M. S. Gannet. S. 29° 56′, W. 71° 20′	29.98	761.5	61	16.1	88	nnw.			1		10							overcast.
H. M. S. Iron Duke, N. 1° 17′ E. 103° 51′	29.86	758.4	83	28.3	87	sw.			1		3	sw.						d. clouds.
H. M. S. Lark. S 33° 52′, E. 151° 14′	29.56	750.8	82.3	27.9	78	wnw.			2		5					1	nw.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.96	761.0	60	15.6		n.			2							2	n.	d. clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.41	772.4	41.3	5 2	77	n.			1-2		8							showery.
H. M. S. Monarch, N. 33° 00′, E. 28° 58′			70	21.1		sse.			2		0					1	sse.	blue sky
H. M. S. Rambler, Bahai Blanca La Plata, S, A	29.57	751.1	65	18.3	94	nw.			5		0							blue sky.
H. M. S. Rocket, S. 28° 09′, W. 71° 22′	30.05	763.3	65	18.3	94	calm			0		2					2-3	sw.	d. clouds.
H. M. S. Sarapis, N. 37° 23′, E. 9° 27′	29.78	756.4	63	17.2	67	sse.			3		4							d. clouds.
H. M. S. Starling, N. 1° 25′, E. 2° 24′	29.89	759.2	76.5	24.7	89	s.			2-3		7	sswv.				2	ssw.	raining.
H. M. S. Superb, N. 34° 40′ E. 33° 03′*	30.13	765.3	72	22.2	63	ene.			4-5		3	nw.				5	ese.	squally.
H. M. S. Swiftsure, Callao Bay, Peru	29.97	761.2	64	17.8	100	s.			2		5							d. clouds.
H. M. S. Sylvia, Surrey Channel, Patagonia	29.53	750.0	42	5.6	80	sw.			2		8	sswv.						showery.
H. M. S. Woodlark, Shat-el Arab river	30.29	769.4	63.5	17.5	57	nw.			2		6	nw.						blue sky.
H. M. S. Zephyr, Chee-foo, China	30.53	775.4	22.5	— 5.3		w.			3-5		6	nw.				2	nw.	squally.
Portuguese Naval.																		
Tamega, Macao, China	30.45	773.3	55.0	12.8	55	n.			3		0							blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.02	762.5	63	17.2	88	se.	25	11.2			10		se.	0.22	5.6			cloudy.
Navy Yard, Portsmouth, N. H.	30.33	770.4	17	— 8.3	?	nw.	2	0.9			0			0	0			clear.
Naval Hospital, Yokohama, Japan*	30.01	762.2	37	2.8	58	calm			0		0			0	0			clear.
Adams, Sitka, Alaska *†	29.11	739.4	38	3.3	90	nne.			4		10		nne.					cloudy.
Alaska, Mare Island, Cal	29.97	761.2	49	9.4	93	sse.			2		5		s.	0	0			fair.
Alliance, N. 32° 13′, W. 71° 10′	30.13	765.3	57	13.9	93	nw.			4		8		light	light	mod.			cloudy.
Ashuelot, N. 32° 36′, E. 128° 40′	30.45	773.4	45	7.2	84	wnw.			4		8		wnw.		mod	se.		light rain.
Brooklyn, S. 45° 06′ W. 61° 34′	29.45	748.0	56	13.3	100	wnw.	10	4.5			2		nw.	0	0	sm'h		fair.
Colorado, New York, N. Y.	30.48	774.2	23	— 5.0	100	n.	4	1.8			0			0	0			clear.
Enterprise, Norfolk, Va	30.40	772.1	30	— 1.1	100	nw.			1		0							clear.
Essex, Callao, Peru	29.94	760.5	66	18.9	90	sse.			1		8		se.			sm'h	sse.	cloudy.
Franklin, Norfolk, Va	30.42	772 7	32	0.0	?	nw.	6	2.7			0			0	0			clear.
Galena, Montevideo, Uruguay	29.75	755.6	72	22.2	100	n.			2		5					sm'h		fair.
Hartford, S. 52° 20′ W. 78° 32′*	29.58	751.3	43	6.1	91	w.			6		5		wsw.	light	light	r'gh	wnw.	fair.
Independence, Mare Island, Cal.	30.06	763 5	45	7.2	92	w.			1		2		w.	2.5	64.			fair.
Iroquois, Callao, Peru	29.99	761 7	65	18.3	94	se.			1		10							foggy.
Jamestown, Boston, Mass	30.36	769.6	18	— 7.8	84	nw.			1		5			0	0			misty.
Juniata, Fayal, Azores Islands*	30.29	769.4	68	20.0	84	ssw.			5		8		w.			sm'h		squally.
Kearsarge, N. 32° 05′, W. 71° 05′	30.10	764.5	56	13.3	93	nnw.			5		10		nnw.			mod	nw.	rainy.
Lackawanna, S. 9° 55′, W. 85° 12′*	29.95	760.7	71	21.7	90	se.			3		8		se.			sm'h	se.	cloudy.
Lancaster, Genoa, Italy*	29.82	757.4	55	12.8	87	n.			5		5		n.			sm'h		fair.
Michigan, Erie, Pa	30.18	766 6	30	— 1.1	100	ne.			4		0							clear.
Minnesota, New York, N. Y	30.45	773.4	22	— 5.6	100	nnw.	6	2.7			2		nnw.					clear.
Monocacy, Nagasaki, Japan	30.35	770.9	45	7.2	84	nnw.			2		8		calm					fair.
New Hampshire, Newport, R. I.	30.37	771.4	27	— 2.8	100	nne.			3		0					sm'h		clear.
Nipsic, Lisbon, Portugal*	29.94	760.5	60	15.6	65	nne.			4		8		s.			sm'h		squally.
Onward, Callao, Peru†	30.09	764.3	66	18.9	94	sse.			1		10		n.			long	w.	cloudy.
Palos, Tientsin, China*	30.50	774.7	15	— 9.4	100	nnw.			1		0							clear.
Pensacola, S. 7° 22′, W. 81° 22′*	29.90	759.4	69	20.6	95	se.			3		10		s.			long	sse.	cloudy.
Powhatan, Boston, Mass	30.34	770.6	15	— 9.4	100	nw.			1		0							clear.
Quinnebaug, Villafranche, France*	30.02	762.5	62	16.7	83	se.			2		5		se.			sm'h		fair.
Ranger, N. 16° 39′, W. 99° 38′	29.98	761.5	77	25.0	86	nne.			2		2		n.			sm'h		clear.
Richmond, Nagasaki, Japan*	30.35	770.9	43	6.1	75	ne.			1		5		ne.	0.05	1.3			fair.
Saratoga, Newport, R. I.	30.26	768.6	21	— 6.1	100	nne.			2		0			0	0	sm'h		clear.
St. Louis, League Island, Pa.	30.03	778.0	22	— 5.6	85	n.			2		2			0	0			clear.
Tennessee, N. 32° 05′, W. 71° 01′	30.09	764.3	50	10.0	?	wnw.	16	7.2			10			0.02	0.5	mod.	nw.	cloudy.
Vandalia, N. 32° 10, W. 70° 57′*	30.09	764.3	59	15.0	70	n.			4		8		ne.			mod.	ne.	fair.
Wabash, Boston, Mass	30.32	770.1	16	— 8.9	66	nnw.	3	1.3			0			0	0			clear.
Wachusetts, Mare Island, Cal*	29.99	761.7	44	6.7	92	var.			1		1		calm	bl'k	bl'k	sm'h		clear.
Wyandotte, Washington, D. C.	30.58	776.7	43	6.1	43	calm			0		0			0	0			clear.
Yantic, N. 32° 11′, W. 71° 26′	30.21	767.3	59	15.0	76	n.			4		10		n.			mod.	nw.	cloudy.
Merchant Marine.																		
S. S. Grecian, N. 41° 45′, W. 10° 57′*	30.03	762 7	56	13.3	81	n.			3		10		n.	2 h'r	2 h'r	high	nw.	cloudy.
S. S. Nova Scotian, Off Inishhowen, Ireland	29.88	758.9	46	7.8		sse.			3		10		sse.			sm'h		hazy.
S. S. Polynesian, N. 50° 23′, W. 22° 19′*	29.73	755.1	54	12.2		w.			3		8		ne.	9 h'r	9 h'r	mod.	wnw.	cloudy.
S. S. Scandinavian, N. 43° 48′, W. 55° 51′	29.95	760.7	33.5	0.8		nnw.			3		10		ene.	0	0	cross	var.	snowy.
S. S. Indiana, Delaware Bay			25	— 3.9	75	nw.			3		2		ne.					fine.
S. S. Lord Clive, N. 50° 51′, W. 19° 05′†*	29.76	755 9				s.			4		10		s.	8 h'r	8 h'r	sli't	w.	misty.
S. S. Lord Gough, N. 51° 30′, W. 12° 27′	29.91	759 7	53	11.7		se.			5		8		se.	3 h'r	3 h'r	long	w.	cloudy.
S. S. Ohio, N. 52° 45′, W. 5° 48′†	29.90	759.4	46	7.8	92	e.			2		8		e.			mod.	e.	squally.
S. S. Pennsylvania. N. 42° 02′, W. 63° 55′ †	30.04	763.0	35	1.7		nnw.			4		10		n.			sm'h	n.	cloudy
S. S. Castor, N. 44° 50′, W. 42° 30′*	29.95	760.6	50.0	10		nw.			3		6		nw.	0	0	4	w.	cloudy.
S. S. Jason, N. 49° 29′, W. 28° 37′	30.03	762.7	49.1	9.5		w.			6	3 c	0					7	wnw.	clear.
S. S. Anchoria, N. 41° 32′, W. 65° 24′†	30.07	763.8				n.			2		1		nw.	0	0	sm'h		clear.
S. S. Bolivia, N. 53° 30′, W 26° 05′*†	29.76	755.9	50	10.0	93	wsw.			5		10		wsw.	driz'l	driz'l	r'gh	w.	overcast.
S. S. Dorian, N. 49° 44′, W. 7° 26′ *	29.90	759.4	50	10.0		calm			0		0			0	0	mod.	w.	clear.
S. S. Elysia, N. 51° 00′, W. 19° 00′ †	29.97	761.2	53	11.7		ssw.			3		10		s.	8 h'r	8 h'r	light	w.	raining.
S. S. Galatia, N. 34° 12′, E. 21° 13′†	30.12	765.0	69.3	20.7	?	w.			2		2		sse.	0	0	r'gh	n.	fair.
S. S. Ailsa, N. 10° 19′, W. 75° 35′†	30.00	762 0	84	28.9	91	e.			2		10		e.	0	0	sm'h		fair.
S. S. Alvo, N. 33° 00′, W. 74° 23′	30.21	767.3	54	12.2		n.			6		4 k		wnw.	4 h'r	4 h'r	long	n.	fine.
S. S. Ambrose, N. 28° 37′, W. 58° 27′†	29.96	761.0	71	21.7		w.			4		3		wsw.	0	0	3	nw.	fine.
S. S. Carroll, N 43° 16′, W. 65° 52′*†	30.24	768.1	32	0.0		n.			4		2		n.	0	0	short	n.	clear.
S. S. City of Agra, S. 49° 00′, E. 164° 05′	29.54	756.3	50.8	10.4	93	nne.			4		1							blue sky'
S. S. Commewyne, N 23° 34′, W. 55° 08′	29.96	761 0	76.2	24.6	75	se.			3		9							showery.
S. S. Gordon Castle, N. 5° 53′, E. 80° 42′	29.92	760.0	80.5	26.9	78	ne.			3-5		6							d. clouds.
Inchkeith, S. 14° 53′, E. 90° 49′	30.08	764 0	77	25.0	82	se.			5		3							d. clouds.
Mertola, N. 51° 45′, W. 60 15′	30.00	762.0	49.5	9.7	100	se.			1		10							misty.
Ptolmey, N. 47° 48′ W 16° 10′	29.94	760.5	52.5	11.4		sse.			2		6							d. clouds.
S. S. Mexico, La Paz, Lower Cal †	30.03	762.7	68	20.0	65	sse.			1		10		s.					cloudy.
S. S. Bothnia, N. 40° 53′, W. 65° 34′	30.09	764.3	40	4.4	100	ne.			4		7		ne.	0	0	sm'h		misty.
S. S. Marathon, Malaga, Spain	29.66	753.4	57	13.9		wnw.			5		4		wnw.	1 h'r	1 h'r	mod.	wnw.	stormy.
S. S. Pavonia, Liverpool, Eng*	29.99	761.7	43	6.1	92	ese.			1		10		ese.	0	0	sli't		foggy.
S. S. Colina, St. John's, N. F						nnw.			4		8		n.	0	0			cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Labradore, N. 50° 25′, W. 21° 01′	.....	.....	51.8	11.0	.....	wnw.	.....	.....	3	.....	6	.....	w.	.....	.....	sm'h	.....	fair.
S. S. Abyssinia, N. 50° 28′, W. 25° 11′ *...	29.82	757.4	51	10.6	?	sw.	.....	.....	4	.....	0	.....	.....	3 h'r	3 h'r	mod.	w.	fine.
S. S. Wyoming, N. 51° 29′, W. 24° 30′	29.85	758.2	49	9.4	.....	sw.	.....	.....	5	.....	3	.....	wsw.	o	o	long	wsw.	fair.
S. S. Bohemia, N. 40° 57′, W. 63° 16′†	30.11	764.8	.....	.....	.....	n.	.....	.....	5	.....	4	.....	n.	o	o	mod.	n.	foggy.
S. S. Cimbria, N. 41° 46′, W. 64° 03′	30.10	764.5	36.7	2.6	.....	n.	.....	.....	6	.....	5	.....	nw.	o	o	mod.	n.	fair.
S. S. Gellert Hamburg, Germany	30.24	768.1	35	1.7	.....	ese.	.....	.....	3	.....	8	.....	se.	.....	.....	.....	.....	covered.
S. S. Rugia, N. 45° 43′, W. 42° 09′ *	29.94	760.5	44.6	7	.....	wsw.	.....	.....	0	.....	5?	.....	w.	o	o	5–6	w.	cloudy.*
S. S. Silesia, N. 49° 43′, W. 16° 25′†	29.95	760.7	53.5	11.9	90	sw.	.....	.....	3	.....	5	.....	sw.	o	o	4	w.	d clouds.
S. S. Vandalia, N. 41° 00′, W. 68° 10′	30.29	769.4	41.4	5.2	83	n.	.....	.....	5–6	.....	5?	.....	n.	o	o	mod.	n.	cloudy.†
S. S. Wieland, N. 52° 48′, E. 4° 06′	30.17	766.3	.....	.....	.....	ese.	.....	.....	2	.....	4	.....	.....	o	o	sm'h	ese.	hazy.
S. S. City of Berlin, N. 40° 30′, W. 68° 30′	30.21	767.3	39	3.9	?	n.	.....	.....	3	.....	10	.....	ne.	o	o	sli't	n.	fair.
S. S. Hevelius, N. 52° 30′, W. 5° —′ *†	30.03	762.7	48	8.9	.....	se.	.....	.....	4	.....	9	.....	se.	2 h'r	2 h'r	.....	.....	overcast.
S. S. Sirius, N. 20° 20′, W. 39° 20′*	29.91	759.7	.....	.....	.....	ssw.	.....	.....	4	.....	8	.....	ssw.	o	o	sli't	s.	fine.
S. S. Colorado, N. 30° 26′, W. 80° 33′†	30.25	768.3	58	14.4	.....	ne.	.....	.....	2	.....	3	.....	ne.	o	o	small	ne.	fair.
S. S. Archimede, N. 37° 49′ W. 57° 33′†	29.53	750.0	58	14.4	76	n.	.....	.....	8	.....	9	.....	ne.	6 h'r	6 h'r	h'vy	ne.	covered.
S. S. John Hopkins, Norfolk, Va *†	30.44	773.2	28	—2.2	.....	nne.	.....	.....	2	.....	4	.....	e.	o	o	.....	.....	fair.
S. S. Glenapp, N. 19° 40, W. 19° 30′†	29.97	761.2	.....	.....	.....	ene.	.....	.....	3	.....	2	.....	ne.	o	o	high	ne.	clear.
S. S. Glenfyne, Pernambuco, Brazil *†	29.62	752.3	.....	.....	.....	n.	.....	.....	3	.....	10	.....	n.	snow	snow	.....	.....	rainy.
S. S. Chalmette, Algiers, La	29.95	760.7	58	14.4	.....	s.	.....	.....	5	.....	.....	.....	.....	2 h'r	2 h'r	.....	.....	hazy.
S. S. New York, N. 26° 00′, W. 85° 00′†	30.13	765.3	70	21.1	.....	se.	.....	.....	6	.....	7	.....	s.	.....	.....	r'gh	se.	cloudy.
S. S. Denmark, N. 49° 49′, W. 14° 45′ †	29.99	761.7	51	10.6	.....	var.	.....	.....	2	.....	2	.....	w.	o	o	r'gh	w.	clear.
S. S. England, N. 49° 20′ W. 33° 17′	29.79	756.7	.....	.....	.....	wsw.	.....	.....	6	.....	2?	.....	sw.	sh'rs	sh'rs	mod.	wsw.	cloudy.†
S. S. Erin, N. 41° 00, W. 62° 56′	30.03	762.7	34	1.1	.....	nne.	.....	.....	7	.....	6?	.....	ne.	2 h'r	2 h'r	sm'h	.....	clear.†
S. S. Helvetia, Liverpool, Eng	29.95	760.7	49	9.4	.....	s.	.....	.....	1	.....	10	.....	ssw.	3 h'r	3 h'r	.....	.....	hazy.
S. S. Holland, N. 48° 25′, W. 17° 35′	29.83	757.7	55	12.8	.....	se.	.....	.....	3	.....	8	.....	se.	4 h'r	4 h'r	sm'h	nw.	cloudy.
S. S. City of Merida, N. 21° 17′, W. 89° 40′ *†	29.96	761.0	73.4	23.0	.....	ene.	.....	.....	3	.....	.....	.....	ene.	o	o	.....	ene.	cloudy.
S. S. Amsterdam, N. 40° 22′, W. 70° 22′ *	30.41	772.4	36	2.2	.....	nnw.	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	clear.
S. S. Alene, N. 29° 44′, W. 74° 20′	.....	.....	60	15.6	.....	n.	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	n.	fair.
S. S. America, Start Point, Eng*..	29.97	761.2	52.0	11.1	90	sse.	.....	.....	2	.....	2	.....	sse.	o	o	sm'h	w.	fair.
S. S. Braunschweig, N. 19° 53′, W. 23° 38′	30.15	765.8	76.0	24.4	82	ene.	.....	.....	4	.....	3?	.....	ene.	o	o	light	ne.	cloudy.†
S. S. Hohenstaufen, S. 23° 48′, W. 41° 12′	29.99	761.7	77.0	25.0	.....	se.	.....	.....	4	.....	4	.....	se.	sh'rs	sh'rs	light	var.	fair.
S. S. Oder, N. 50° 44′, E. 00° 34′	30.10	764.5	48.2	9.0	.....	ese.	.....	.....	3	.....	4?	.....	ese.	o	o	mod.	ese.	cloudy.†
S. S. Ohio, N. 49° 43′, W. 8° 09′	29.98	761.5	.....	.....	.....	ese.	.....	.....	3	.....	0	.....	.....	9 h'r	9 h'r	mod.	w.	clear.
S. S. Rhein, N. 40° 33′, W. 72° 40′	30.36	771.1	.....	.....	.....	n.	.....	.....	4	.....	5	.....	nnw.	o	o	sm'h	n.	fair.
S. S. Saller, N. 42° 20′, W. 62° 26′	30.08	764.0	35.6	2.0	.....	n.	.....	.....	5	.....	10	.....	nne.	o	o	r'gh	n.	cloudy.
S. S. Werra, N. 42° 53′, W. 59° 02′*†	30.00	762.0	35.6	2.0	.....	n.	.....	.....	4–5	.....	10	.....	n.	snow	snow	r'gh	nne.	covered.
S. S. Belgic, San Francisco, Cal†	29.97	761.2	58	14.4	88	calm	.....	.....	0	.....	10	.....	se.	4 h'r	4 h'r	.....	.....	overcast.
S. S. Coptic, N. 29° 18′, E. 127° 34′	30.46	773.7	50.5	10.3	.....	nnw.	.....	.....	5	.....	3	.....	nnw.	o	o	mod	nw.	clear.
S. S. Gaelic, N. 37° 57′, W. 133° 26′ *	29.95	760.7	57	13.9	100	w.	.....	.....	5	.....	8	.....	w.	.....	.....	con.	w.	raining.
S. S. Oceanic, Hong Kong, China *	30.29	769.4	56	13.3	57	n.	.....	.....	5	.....	3	.....	ne.	.....	.....	.....	.....	clear.
S. S. Mississippi, Portland, Oregon *†	29.83	757.7	47	8.3	85	se.	.....	.....	1	.....	10	.....	se.	.....	.....	.....	.....	cloudy.
S. S. Oregon, San Francisco, Cal†	30.01	762.2	47	8.3	92	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	threatening.
S. S. Ancon, San Pedro Bay, Cal †	29.93	760.2	54	12.2	80	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	mod.	wnw.	clear.
S. S. City of Chester, San Francisco, Cal*†	30.01	762.2	48	8.9	85	sw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear.
S. S. State of California, Portland, Oregon*†	29.82	757.4	39	3.9	.....	sw.	.....	.....	2	.....	8	.....	sw.	o	o	.....	.....	cloudy.
S. S. Australia, N. 23° 35′, W. 154° 37′	30.16	766.1	73	22.8	72	ne.	.....	.....	5	.....	8	.....	ene.	o	o	r'gh	ne.	cloudy.
S. S. City of New York, Sydney, N. S. W†	29.65	753.1	86	30.0	52	w.	.....	.....	3	.....	5	.....	w.	o	o	.....	.....	fair.
S. S. City of Pekin, N. 44° 05′, E. 175° 35′ †	29.29	744.0	37	2.8	81	nnw.	.....	.....	6	.....	8	.....	n.	o	o	r'gh	ne.	cloudy.
S. S. City of Rio de Janeiro, N. 16° 48′, W. 99° 48′†	30.00	762.0	78	25.6	86	w.	.....	.....	2	.....	5	.....	w.	e	o	light	sw.	fair.
S. S. City of Sydney, N. 37° 10′ W. 124° 27′ †	29.92	760 0	57	13.9	81	wsw.	.....	.....	4	.....	5?	.....	nw.	o	o	h'vy	nw.	cloudy.†
S. S. City of Tokei, N. 29° 40′, E. 1180 42′ †	30.20	767.1	69	20.6	.....	sw.	.....	.....	1	.....	.....	.....	nw.	o	o	mod	nw.	.....
S. S. Colima, N. 7° 42′, W 82° 42′ †	29.93	760.2	78	25.6	86	var.	.....	.....	2	.....	10	.....	s.	o.10	2.5	sm'h	sw.	cloudy.
S. S. San José, N. 24° 40′, W. 112° 40′	.....	.....	.....	.....	.....	ne.	.....	.....	2	.....	2 k	.....	wnw.	o	o	long	nw.	clear.
S. S. Zealandia, Sydney, N. S. W	29.58	751.3	82	27.8	87	nw.	.....	.....	2	.....	1	.....	nw.	.....	.....	mod.	e.	clear.
S. S Muriel, N. 31° 05′, W. 68° 36′	30.10	764.5	61	16.1	.....	nnw.	.....	.....	4	.....	10	.....	.....	shr's	shr's	r'gh	nnw.	drizzling.
S. S. Caracas, N. 14° 33′, W. 68° 21′†	30.02	762.5	82.5	28.1	77	ene.	.....	.....	4	.....	2	.....	ene.	1½h'r	1½h'r	mod.	e.	fine.
S. S. Chandius, N. 10° 10′, W. 83° —′ †	30.07	763.8	.....	.....	.....	wnw.	.....	.....	4	.....	2	.....	.....	8 h'r	8 h'r	long	ne.	rainy.
S. S. Valencia, N. 29° 45′, W., 70° 41′†	30.17	766.3	67	19.4	71	nnw.	.....	.....	5	.....	3	.....	w.	2 h'r	2 h'r	long	nnw.	fine.
S. S. Belgenland, Jersey City, N. J.	30.57	776.5	22	—5.6	.....	n.	.....	.....	3	.....	.....	.....	.....	o	o	.....	.....	clear.
S. S. Pennland, N. 44° 05′, W 56° 49	29.98	761.5	33	0.6	89	nnw.	.....	.....	5	.....	10	.....	n.	snow	snow	sm'h	nnw.	overcast.
S. S. Rhynland, Antwerp, Belgium	30.20	767.1	48	8.9	70	calm	.....	.....	0	.....	0	.....	.....	o	o	.....	.....	fair.
S. S. Switzerland, N. 44° 18′, W. 56° 41′†	29.91	759.7	.....	.....	.....	nnw.	.....	.....	3	.....	10	.....	nnw.	snow	snow	mod.	nnw.	cloudy.
S. S. Waesland, N. 50° 11′ W. 11° 00′	30.05	763.3	54	12.2	80	se.	.....	.....	4	.....	2	.....	nnw.	o	o	long	w.	clear.
S. S. Leerdam, N. 49° 55′, W. 4° 55′ †	30.05	763.3	57	13.9	87	e.	.....	.....	3	.....	4	.....	w.	o	o	sm'h	w.	fair.
S. S. P. Caland, New York, N. Y	30.36	771.1	28.2	— 2.1	98	n.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	clear.
S. S. W. A. Scholten, Rotterdam, Holland	30.30	769.6	38.4	3.6	95	sse.	.....	.....	2	.....	4	.....	sse.	o	o	.....	.....	
S. S. Zaandam, N. 46° 40′, W. 43° 00′	29.93	760.2	49.6	9.8	76	w.	.....	.....	5	.....	6 k	.....	w.	½ h'r	½ h'r	4	w.	
S. S. State of Florida, N. 46° 45′, W. 44° 19′	.....	.....	44	6.7	.....	wsw.	.....	.....	3	.....	9	.....	wsw.	o	o	mod.	wsw.	cloudy.
S. S. State of Georgia, N. 41° 41′, W. 63° 15′†	30.04	763.0	36	2.2	.....	n.	.....	.....	5	.....	8	.....	nnw.	o	o	sm'h	.....	cloudy.
S. S. State of Indiana, N. 54° 22′, W. 21° 00′†	29.79	756.7	47	8.3	.....	w.	.....	.....	2	.....	7	.....	w.	o	o	mod.	w.	misty.
S. S. Hekla, N. 57° 30′, W. 19° 00′*	29.57	751.0	50.5	10.3	.....	sw.	.....	.....	4	.....	10	.....	wsw.	.....	.....	long	sw.	light rain.
S. S. Plantyn, N. 50° 02′, W. 16° 45′	29.92	760,0	.....	.....	.....	.....	.....	.....	4	.....	5	.....	sw.	o	o	mod.	sw.	fair.
S. S. Baltic, N. 49° 26′ W. 36° 06′	29.74	755.4	45	7.2	76	wnw.	.....	.....	6	.....	4	.....	wnw.	o	o	rg'h	wnw.	squally.
S. S. Celtic, New York, N. Y†	30.36	771.1	35	1.7	.....	nnw.	.....	.....	2	.....	0	.....	.....	o	o	.....	.....	fine.
S. S. Germanic, N. 42° 00′, W. 52° 22′†	29.96	761.0	44	6.7	.....	nne.	.....	.....	4	.....	6	.....	ne.	snow	snow	mod.	nne.	d. clouds.
S. S. Lepanto, N. 45° 30′, W. 32° 17′*	29.96	761.0	56	13.3	.....	sw.	.....	.....	6	.....	8	.....	sw.	o	o	h'vy	var.	cloudy.
S. S. Marengo, N. 41° 32′, W. 51° 15′	29.81	757.2	.....	.....	.....	wnw.	.....	.....	6	.....	10	.....	wnw.	18 h'r	18 h'r	rg'h	wnw.	rainy.
S. S. Salerno, Hull, Eng.	.....	.....	.....	.....	.....	sw.	.....	.....	3	.....	8	.....	.....	3 h'r	3 h'r	.....	.....	raining.
S. S. Catherine Whiting, Philadelphia, Pa †....	30.40	772.1	34	1.1	.....	nnw.	.....	.....	1	.....	0	.....	.....	o	o	.....	.....	
S. S. Saxon, Philadelphia, Pa†	30.43	772.9	27	— 2.8	.....	nnw.	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	fine.
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 30° 00′, W. 72° 09′ †	30.21	767.3	56	13.3	.....	n.	.....	.....	4	.....	9	.....	n.	sh'rs	sh'rs	mod.	nnw.	cloudy.
Bk. Adelaide, N. 34° 01′, W. 71 46′*†	30.30	769.6	56	13.3	.....	n.	.....	.....	6	.....	4	.....	nne.	snow	snow	short	n.	clearing.
Bg. Alcira, N. 31° 53′, W. 71° 03′	30.13	765.3	64	17.8	.....	nnw.	.....	.....	6	.....	9?	.....	nw.	o	o	r'gh	nnw.	clear.†
Bk. Alpha, N. 37° 50′, W. 14° 40′ †	30.09	764.3	62	16.7	.....	n.	.....	.....	6	.....	8	.....	nw.	2 h'r	2 h'r	long	nw.	cloudy.
Schr. Annie Lewis, N. 27° 10′, W. 90° 55′†	30.05	763.3	74	23.3	.....	se.	.....	.....	4	.....	8	.....	s.	4 h'r	4 h'r	long	s.	cloudy.
S. Annie M. Law, Manila Bay, Luzon*†	29.80	756.9	74	23.3	.....	ne.	.....	.....	1	.....	0	.....	.....	2 h'r	2 h'r	.....	.....	fine
Bk. Anna Thormann, S. 30° 13′ E. 38° 11′*	29.97	761.2	77.2	25.1	49	ne.	.....	.....	2	.....	3 k	.....	n.	o	o	light	se.	fair.
B. S. Antonio Lopez, N. 35° 04′, W. 22° 26′ *	30.35	770.9	64	17.8	73	n.	.....	.....	1	.....	10	.....	.....	o	o	long	nnw.	cloudy.
Bk. Aquidneck, S. 14° 12′, W. 34° 00′ *†	30.10	764.5	82	27.8	.....	ssw.	.....	.....	2	.....	.....	.....	sw.	½h'r	½h'r	light	ssw.	cloudy.
Bgt. Arthur, N. 21° 30′, W. 27° 03′ *†	30.25	768.3	.....	.....	.....	ene.	.....	.....	.....	.....	.....	.....	.....	o	o	high	e.	
Schr. Anna Holton, N. 26° 51′, W. 75° 58′†	30.15	765.8	68	20.0	.....	n.	.....	.....	4	.....	0	.....	.....	o	o	mod.	n.	clear.
Bg. Belle of the Bay, N. 24° 10′, W. 80° 59′ *†	30.03	762.7	.....	.....	.....	ene.	.....	.....	6	.....	4	.....	ene.	o	o	long	ene.	clear.
Bk. Champion, N. 25° 06′, W. 70° 40′	.....	.....	71.0	21.7	.....	n.	.....	.....	4	.....	5	.....	nnw.	o	o	mod.	nnw.	fair.
Bg. Clara M. Goodrich, Key Francis, W. I.*†...	30.00	762.0	.....	.....	.....	ene.	.....	.....	5	.....	5?	.....	ene.	o	o	.....	.....	clear.†
Schr. C. R. Flint, N. 24° 11′, W. 81° 48′	.....	.....	71	21.7	.....	ene.	.....	.....	4	.....	5	.....	ene.	o	o	mod.	ene.	fair.
Bkt. David Preston, Pensacola, Fla	.....	.....	68.0	20.0	.....	s.	.....	.....	.....	.....	2	.....	sw.	12 h'r	12 h'r	.....	.....	
Bk. E. L. Pettingill, N. 3° 37′, W. 119° 41′*†	30.00	762.0	80	26.7	.....	sse.	.....	.....	3	.....	2	.....	sse.	o	o	sm'h	sse.	
Schr. Edith R. Seward, Baltimore, Md	.....	.....	25	—3.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	o	o	.....	.....	
S. E. J. Spicer, N. 51° 53′, W. 7° 10′ *	29.98	761.5	53	11.7	.....	nne.	.....	.....	4	.....	1	.....	ne.	.....	.....	mod.	sw.	foggy.
Bk. Essex, N. 8° 30′ E. 56° 00′ *†	29.96	761.0	86	30.0	.....	nne.	.....	.....	7	.....	.....	.....	.....	o	o	5	nne.	
Schr. F. E. McDonald, Rockland, Maine †	30.34	770.6	20	— 6.7	.....	n.	.....	.....	1	.....	0	.....	.....	o	o	.....	.....	fine.
S. S. Foscolia, N. 40° 15′, W. 67° 11′	.....	.....	.....	.....	.....	nne.	.....	.....	6	.....	5?	.....	nne.	snow	snow	r'gh	nne.	cloudy?
Bk. Freya, N. 23° 09′, W. 85° 21′	.....	.....	70	21.1	.....	ese.	.....	.....	4	.....	0	.....	.....	o	o	mod.	ene.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
										Upper.	Lower.	Upper.	Lower.					
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
S. J. W. Gildemeister, N. 49° 43′, W. 5° 21′*	29.93	760.2	54.5	12.5	54	n.			1	c	4 ks		nw.	0	0	4	nw.	misty.
Bg. George, N. 30° 14′, W. 56° 00′*†	29.94	760.5				wnw.			4		8		w.	light	light	mod.	wnw.	clearing.
S. Geo. Stetson, N. 41° —′ W. 74° —′			50	10.0	86	n.			5		3		nne.	0	0	sm'h	ne.	clear.
Bk. Gronsvaer, S. 39° 39′, E. 177° 42′†	29.67	753.6	71.8	22.1		nnw.			4		5		nw.	0	0	mod.		fine.
Bk. Godeffroy, S. 58° 55′, W. 69° 10′†	28.86	733.0	38.8	3.8	87	wsw.			6		6		wsw.	8 h'r	8 h'r	r'gh	var.	squally.
Bk. Great Surgeon, S. 24° 53′, E. 66° 16′*†	30.14	765 5	82	27.8		nw.			4		2		w.	2 h'r	2 h'r	mod.	sw.	clear.
Bk. Grey Eagle, S 15° 29′, W. 34° 08′*†	29.80	756.9				ne.			4		10		nne.	6 h'r	6 h'r	long	sw.	clearing.
Bk. Hattie G. McFarland, N. 38° 22′, W. 73° 15′†..	30.46	773.7	30	— 1.1		n.			1		8		ne.	0	0	long	ne.	threatening.
Schr. Isabel Alberto, N. 35° 30′, W. 74° 19′ †	30.31	769.9				n.			6		10		n.	rain	rain	sharp	n.	squally.
Schr. Jennie N. Huddell, N. 34° 20′, W. 72° 40′†.....	30.26	768.6	58	14.4		n.			4		10		ne.	light	light	chop	nne.	squally.
Bk. Joseph A. Ropes, S. 8° 02′, E. 50° 02′ *†	29.90	759.4	83	28.3	87	wsw.			3		7		nw.	0	0	mod.	nw.	cloudy.
Bkt. Josephine, N. 23° 51′, W. 35° 17′†	30.16	766.1	77	25.0	61	e.			4		1		ese.	0	0	mod.	ese.	clear.
Bk. Julia H., N. 48° 19′, W 17° 02′	29.94	760.5	52.1	11.2	93	se.			3		10			2 h'r	2 h'r	5	var.	misty.
S. S. J. W. Wilson, Pensacola, Fla †	30.01	762.2				se.			6		10			1 h'r	1 h'r	cross	s;se.	cloudy.
Light House Tender, Laurel, Pensacola, Fla†	30.06	763.5	65	18.3		ese.			4		10		se.	4 h'r	4 h'r	h'vy	se.	cloudy.
Bk. Louise Adelaide, N. 26° 40′, W. 76° 31′†	30.03	762.7	65	18.3		nne.			2		5		n.	0	0	sm'h	nne.	fine.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.00	762 0							1		1		ene.	0	0	sm'h		clear.
S. S. Madrid, N. 43° 38′, W. 30° 12′*†	30.10	764.5	58	14.4		var.			0–2		8			12 h'r	12 h'r	mod.	wnw.	foggy.
S. S. Malabar, Marseilles, France†	30.07	763.8				nnw			1		0			0	0			clear.
Bk. Matilda C. Smith, N. 37° 17′, W. 73° 52′*†	30.25	768.3				n.			5		5		n.	0	0	mod.	n.	fine.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.26	768.6	56	13.3		nnw.			1		2		nw.					clear.
S. Minnie N. Gerow, N. 34° 05′, W. 51° 49′*†	29.76	755.9				s.			4		5		sw.			long	sw.	fair.
S. M. P. Grace, S. 38° 34′, W. 122° 45′ *†	30.05	763.3	58	14.4		w to se			2		10		se.	rain	rain	r'gh	n.	raining.
Bg. Myrtle, Clements Port, Nova Scotia *†	30.11	764.8				ne.			2		1		ne.	0	0			clear.
Bg. O. C. Clary, N 18° 40′, W. 66° 04′*†	29.98	761.5	84	28.9	96	calm			0		4			0	0	long	nnw.	
Bk. Ottawa, N. 41° 03′, W. 35° 00′*	29.95	760.7	64	17.8		sw.			4		10		sw.	18 h'r	18 h'r	mod	wsw.	drizzling.
S. Paramita, San Francisco, Cal			50	10.0		nw.			3					1 h'r	1 h'r			cloudy.
Bk. Pilgrim, N. 24° 28′, W. 63° 20′*†	30.00	762.0				nw.			5		2		nw.	2 h'r	2 h'r	long	nnw.	fair.
S. S. Radnorshire, N. 22° 17′, E. 114° 47′*†	30.29	769.4				ne.			1		5		ene.	0	0	h'vy	ne.	cloudy.
S. S. Raleigh, Hunter's Point, Long Island*†	30.20	767.1	25	— 3.9										0	0			
Bk. Rebus, N. 47° 36′, W. 14° 52′*	29.78	756.4	55	12.8		se.			2		3		ese.	0	0	long	nnw.	fair.
S. St. Francis, N. 37° 35′, W. 123° 00′†..	30.20	767.1	58	14.4		w.			2		7		sw.	3 h'r	3 h'r	h'vy	wnw.	cloudy.
Schr. S. B. Hubbard, N. 39° 20′, W. 74° 15′†	30.51	774.9	25	— 3.9		n.			5		8		ne.	0	0	long	n.	threatening.
Bk. Scud, N. 32° 33′, W. 71° 09′ *†	30.18	766.6				nnw.			7		4		nnw.	0	0	mod.	nnw.	
Bk. Southern Belle, N. 49° 03′, W. 11° 40′*†	29.90	759.4	52	11.1		s.			2		0			light	light	long	nw.	clear.
Bk. Sunbeam, N. 38° 58′, W. 64° 02′	29.97	761.2	50	10.0	79	nne.			7		8		nne.	6 h'r	6 h'r	h'vy	nne.	cloudy.
Schr. T. S. McLellan, N. 26° 00′, W. 65° 00′			67	19.4		ene.							ne.				ene.	
U. S. F. C. S. S. Fish Hawk, Washington, D. C†	30.49	774.4	31	— 0.6		calm			0		2		calm	0	0			clear.
Bk. Vincenzo Accame, N. 37° 30′, W. 53° 03′†	29.70	754.3	66.2	19.0		se.			4		9		se.	0	0		var.	
Schr. Walter L. Plummer, Providence, R. I.*†	30.20	767.1				nnw.			3		0			0	0			fine.
Bk. Wandering Jew, Montevideo, Uruguay †	29.75	755.6	73	22.8		n.			3		5		n.	0	0			fair
Bk. Warden Law, Tocapilla, Peru, S. A*	30.06	763.5				s.			3		8		w.			sm'h	ssw.	fair.
S. Wm. Woodbury, N. 49° 48′, W. 4° 11′ *	29.97	761.2	52	11.1		se.			2		4?		se.			long	sw.	cloudy.?

International Chart I. December 19, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.

W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 20, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.06	763.5	59.7	15.4	81	n.	.....	.....	2	.....	3	.....	.....	0.409	10.4	pretty fair...	Malaterre.
Algiers	.....	.....	30.02	762.6	58.6	14.8	81	w.	.....	.....	2	.....	4	.....	.....	0	0	cloudy.....	Thève.
La Calle	.....	.....	30.03	762.7	62.2	16.8	72	e.	.....	.....	3	.....	4	.....	.....	0	0	cloudy.....	Fonfrède.
Tunis	.....	.....	30.06	763.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.06	763.5	48.9	9.4	95	n.	.....	.....	2	.....	8	.....	.....	0	0	very cloudy	Pérès.
Tebessa	.....	.....	30.10	764.6	49.3	9.6	71	n.	.....	.....	1	.....	4	.....	.....	0	0	cloudy	Dognon.
Geriville	.....	.....	.....	.....	43.2	6.2	82	ne.	.....	.....	2	.....	5	.....	.....	0.551	14.0	cloudy.....	Louchamp.
Laghouat	.....	.....	30.06	763.5	53.2	11.8	26	sw.	.....	.....	2	.....	5	.....	.....	0	0	cloudy.....	Abraham.
Biskra	.....	.....	30.08	763.9	63.7	17.6	56	nw.	.....	.....	2	.....	5	.....	.....	0.008	0.2	cloudy.....	Malau.
Australian.																			
Melbourne, Victoria	29.72	754.9	29.81	757.2	55.9	13.3	76	s.	4	1.8	.....	.....	2	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.92	760.0	30.56	774.8	36.3	2.4	76	ne.	.....	.....	3	.....	4	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.74	755.4	30.56	776.3	28.0	— 2.2	92	e.	3.1	1.4	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.60	751.7	30.53	775.4	34.3	1.3	85	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	29.19	741.5	30.47	774.0	36.3	2.4	78	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	29.03	737.4	30.55	776.0	33.1	0.6	57	se.	.....	.....	3	.....	0	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	29.00	736.6	30.43	773.0	28.6	— 1.9	98	sw.	.....	.....	1	.....	10	.....	.....	0	0	foggy.....	The Staff.
Lemberg	29.57	751.0	30.64	778.2	24.1	— 4.4	56	se.	.....	.....	1	.....	1	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	30.23	767.8	30.35	770.8	45.9	7.7	63	e.	.....	.....	2	.....	0	.....	.....	0	0	.....	I. R Hydrographic Office.
Szathmar	30.04	762.9	30.59	774.7	37.8	3.2	59	e.	.....	.....	2	.....	0	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	30.24	768 0	30.54	775.6	32.9	0.5	70	s.	.....	.....	1	.....	5	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.27	768 8	30.37	771.4	45.3	7.4	50	ne.	.....	.....	5	.....	0	.....	.....	0	0	.....	Royal Academy.
Vienna	29.71	754.7	30.47	773.9	36.3	2.4	75	se.	.....	.....	2	.....	0	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.90	759.4	30.00	762.0	44.1	6.7	94	s.	11	4.9	.....	.....	10	.....	.....	0	0	misty.....	W. Boswell
Armagh, Observatory	29.78	756.4	30.02	762.5	44.3	6.8	90	s.	20	8.9	.....	.....	10	.....	.....	.....	.....	squally.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.10	766.8	46.3	7.9	86	sse.	10	4.5	.....	.....	10	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	29.64	752.8	30.18	766.6	45.0	7.2	85	ssw.	12	5.4	.....	.....	10	.....	.....	.....	.....	overcast.....	Thomas Mackereth.
Bradford, Yorkshire	29.78	756.4	30.17	766.3	47.5	8.6	87	sw.	.....	.....	2	.....	7	.....	.....	0.22	5.6	d. clouds	McLandsborough&Preston
Bridgetown, Barbadoes	29.88	758.9	29.91	759.7	82.0	27.8	75	se.	.....	.....	2	.....	2	.....	.....	.....	.....	d. clouds.....	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	43.0	6.1	92	sw.	.....	.....	0.4	.....	2	.....	.....	.....	.....	blue sky.....	John McLaren.
Chatham, School M. E	30.20	767.1	30.33	770.4	45.1	7.3	86	sw.	.....	.....	1	.....	4	.....	.....	.....	.....	misty.....	Corpl. G. A. Pickles.
Falmouth, Observatory	30.05	763 3	30.28	769.1	45.7	7.6	97	ssw.	.....	.....	1	.....	.....	.....	.....	.....	.....	foggy.....	The Staff.
Fort Napier, Natal	27.49	698.2	29.70	754.4	79.4	26.3	53	e	.....	.....	1	.....	5	.....	.....	.....	.....	blue sky.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.74	755.4	29.97	761.2	85.0	29.4	92	n.	.....	.....	2	.....	2	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.21	767.3	30.26	768.6	57.8	14.3	89	sw.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky.....	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.80	756 9	30.01	762.2	46.8	8.2	77	s.	.....	.....	4	.....	10	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.13	765.3	30.31	769 9	39.5	4.2	92	w.	.....	.....	1	.....	0	.....	.....	.....	.....	foggy.....	The Staff.
Guernsey	29.98	761.5	30.29	769.4	49.0	9.4	90	se.	.....	.....	1	.....	10	.....	.....	.....	.....	rain & snow	A. Collenette, F. M. S.
Kew, Observatory	30.28	769.1	30.32	770.1	35.7	2.1	97	se.	1	0.4	.....	.....	.....	.....	.....	.....	.....	foggy.....	The Staff.
Leicester, Museum	29.99	761.7	30.26	768.6	46.7	8.2	94	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	29.92	760.0	29.98	761.5	61.8	16.6	97	no.	.....	.....	2	.....	9	.....	.....	blank	blank	overcast.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.00	762.0	30.05	763 3	69.0	20.6	69	no.	.....	.....	3	.....	7	.....	.....	.....	.....	d. clouds.....	C. S. Duncombe
Oscott, St. Mary's College	29.70	754.4	30.23	767 8	46.0	7.8	99	s.	.....	.....	4	.....	10	.....	.....	.....	.....	misty.....	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	30.06	763.5	30.29	769 4	44.0	6.7	84	sse.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast.....	The Staff.
Plymouth	30.20	767.1	30.28	769.1	45.8	7.7	98	calm	.....	.....	0	.....	10	.....	.....	.....	.....	foggy.....	John Merrifield.
Sandwick Manse, Orkneys	29.74	755.4	29.84	757.9	43.3	6.3	86	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	raining.....	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	30.35	770.9	30.41	772 4	43.2	6.2	77	ne.	.....	.....	3	.....	9	.....	.....	.....	.....	showery.....	W. B. Lyne.
Sheffield	29.92	760.0	30.20	767.1	48.0	8.9	92	sw.	.....	.....	1	.....	10	.....	.....	0.16	4.1	overcast.....	W. F. Cooper.
Silloth Rectory	30.08	764.0	30.11	764.8	47.0	8.3	87	ssw.	.....	.....	3	.....	10	.....	.....	0.225	5 7	overcast.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.19	766.8	46.0	7.8	88	sw.	12	5.4	.....	.....	10	.....	.....	.....	.....	misty.....	t. New.
Stratfield Turgiss	30.09	764.3	30.31	769.9	43.2	6.2	97	sw.	.....	.....	0–1	.....	8	.....	.....	.....	.....	d. clouds	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.24	768.1	30.28	769.1	50	10.0	80	s.	.....	.....	2	.....	5	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	30.02	762.5	30.05	763.3	49.8	9.9	87	s.	36	16.1	.....	.....	10	.....	.....	.....	.....	threatening.	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.32	770.1	30.36	771.1	29	— 1.7	76	n.	12	5.4	.....	.....	10 n	.....	ne.	inap.	inap.	cloudy.....	H. J. Cundall, C E
Chatham, N, B*	30.42	772.7	30.49	774.4	17	— 8.3	80	n.	13	5.8	.....	0	0	.....	.....	0	0	clear.....	G. A. Blair.
Father Point, Quebec*	30.58	776.7	30.60	777.2	0	—17.8	83	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	J. McWilliams.
Fort Garry, Manitoba*	29.09	738.9	29.98	761.5	17	— 8.3	100	nw.	8	3.6	.....	.....	10 n	.....	.....	0	0	foggy.....	James Stewart.
Halifax, N. S*	30.16	766.1	30.30	769 6	29	— 1.7	77	nw.	16	7.2	.....	8 k	0	n.	.....	0	0	cloudy.....	A. Allison.
Kingston, Ontario*	30.05	763 3	30.42	772.7	6	—14.4	90	no.	8	3.6	.....	.....	hz.	.....	.....	0	0	hazy..	A. P. Knight, M. A
Montreal, Quebec*	30.31	769.9	30.54	775.7	4	—15.6	96	calm	0	0	.....	.....	10 n	.....	.....	0.02	0.5	hazy.....	C. H. McLeod, C E.
Parry Sound, Ontario*	29.50	749 3	30.26	768.6	13	—10.0	80	se.	9	4.0	.....	2 k	2 ks	se.	se.	0	0	fair.....	Rev. R. Mosley.
Port Dover, Ontario	29.44	747.8	30.20	767.1	15	— 9.4	100	ne.	7	3.1	.....	8 cs	0	sw.	.....	0	0	fair.....	H. Morgan.
Port Stanley, Ontario	29.45	748.0	30.14	765.5	21	— 6.1	87	e.	10	4.5	.....	5 cs	0	sw.	.....	0	0	cloudy	M. Payne.
Quebec, Quebec*	30.23	767 8	30.59	777.0	8	—13.3	100	ne.	.....	.....	3	.....	10 n	.....	ne.	.....	.....	light snow ..	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.95	760.7	30.47	773.9	1	—17.2	79	se.	4	1.8	.....	0	5 s	.....	ne.	0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.38	746.2	30.16	766.1	15	— 9.4	87	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	
St. Andrews, N. B	29.39	746.5	30.44	773.2	17	— 8.3	77	n.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	
Sydney, C. B*	30.15	765.8	30.22	767.6	32	0.0	88	n.	18	8.0	.....	.....	10 ks	.....	.....	0	0	cloudy.....	T. C. Hill, C. E
Toronto, Ontario*	29.85	758.2	30.26	768 6	30	— 1.1	88	e.	22	9.8	.....	0	8 ks	.....	e.	0	0	cloudy.....	Magnetic Observatory.
Yarmouth, N. S*	30.28	769.1	30.35	770.9	30	— 1.1	88	n.	3	1.3	.....	.....	10 s	.....	n.	0	0	cloudy	L. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.68	728.5	30.17	766.3	20.0	— 6.7	85	se.	.....	.....	4	.....	10 ks	.....	se.	0	0	stormy.....	Wm. Wylie
St. Johns, Newfoundland	.....	.....	.....	.....	32	0.0	100	ne.	4	1.8	.....	.....	10	.....	.....	0	0	threatening.	John Delacy.
Cape Colony.																			
Cape St. Francis Lt. House	29.83	757.7	29.86	758.4	67.0	19.4	94	e.	8.0	3.6	.....	.....	10 n	.....	.....	0.100	2.5	showery.....	John Duthie.
Cape Town, C G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	25.04	636.0	.....	.....	6.3	—14.3	.....	calm			0	.....	0	.....	.....			.....	
Tchang-kia-tchouang	30.58	776.8	30.69	779.6	16.7	— 8.5	57	calm	10.7	4.8	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.65	778.4	30.67	779.0	30.9	— 0.6	72	nnw.	2.2	1.0	.....	10 ck	0	W.	.....	0	0	covered	M. Marc Hechevrens, S.J.
DANISH.																			
Copenhagen	30.37	771.5	30.42	772.7	32.5	0.3	90	s.	9	4	.....	.....	10	..	.....	.....	.....	foggy	Oversergent Fischer.
Fanoe	30.40	772.1	30.42	772.6	31.8	— 0.1	100	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy	Overloerer Lauridsen.
Godthaab, Greenland	29.86	758.5	29.91	759.6	19.6	— 6.9	89	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.82	757.3	29.84	757.8	19.4	— 7.0	.....	calm	.....	.....	0	.....	1	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.76	755.9	29.81	757.1	11.5	—11.4	.....	e.	.....	.....	4	.....	10	.....	.....	.....	.....	snowing	
Stykkisholm, Iceland	29.35	745.5	29.39	746.6	35.2	1.8	88	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	A. O. Thoriacius.
Thorshavn	29.58	751.2	29.61	752.1	46.9	8.3	86	ssw.	22	10	.....	.....	10	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	30.28	769.2	30.38	771.6	29.7	— 1.3	98	ese.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy	Loearer Oesterbol.
Upernavik, Greenland	29.64	752.9	29.69	754.1	11.1	—11.6	.....	ssw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.69	754.2	30.35	770.8	55.8	13.2	98	calm	.....	.....	0	0	2 k	.....	.....	0	0	slightly cl'dy	M. Labroue, Director.
Alençon, Normal School	29.87	758.7	30.42	772.7	40.6	4.8	87	n.	.....	.....	1	0	0	.....	.....	0	0	.....	M. Nicot, Director.
Arras, Engineer School	30.22	767.5	30.49	774.4	35.6	2.0	95	se.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Fénéon, Command't.
Avignon, Normal School	30.23	767.9	30.31	769.9	47.1	8.4	70	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.83	757.6	30.42	772.7	31.5	— 0.3	95	ene.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.15	765.8	30.43	773.0	35.2	1.8	93	e.	.....	.....	1	.....	10	.....	.....	0.008	0.2	covered	M. Frère Eugène Marie.
Besançon, Normal School	29.39	746.5	30.32	770.1	30.6	— 0.8	96	ne.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.07	763.7	30.34	770.5	50.5	10.3	87	se.	.....	.....	1	.....	8	.....	.....	0.134	3.4	foggy	M. Rayet, Director.
Bourges, Normal School	29.74	755.5	30.31	769.9	47.7	8.7	76	e.	.....	.....	1	.....	1	.....	e.	0	0	clear	M. Malet, Director.
Brest, Naval Observatory	30.07	763.7	30.31	769 8	46.0	7.8	97	calm	.....	.....	0	.....	10	.....	.....	0.020	0.5	foggy	M. de Kermaingé, Dir.
Caen, Normal School	30.22	767.7	30.30	769.6	43.9	6.6	80	.....	.....	.....	.....	.....	0	.....	.....	0	0	clear	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.07	763.7	30.40	772.2	32.9	0.5	94	ne.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.86	758.5	30.41	772 4	29.8	— 1.2	79	e.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Grimard, Director.
Clermont-Ferraud Obs'y	28.95	735.4	30.34	770.5	51.1	10.6	70	se.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.50	749.3	30.38	771.7	31.1	— 0.5	96	calm	.....	.....	0	.....	9	.....	.....	0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.53	750.0	30.44	773.1	30.4	— 0.9	98	e.	.....	.....	1	.....	n	e.	e.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	27.74	704.5	30.35	770.9	43.5	6.4	67	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	29.16	740.7	30.30	769 6	55.9	13.3	66	n.	.....	.....	2	.....	1	.....	sw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.58	751.2	30.39	771.8	38.5	3.6	87	ese.	.....	.....	1	0	0	.....	.....	0	0	clear	M. Ablard, Director.
Guéret	28.76	730.4	30.37	771.3	52.5	11.4	83	ne.	.....	.....	1	.....	cn	.....	s.	0	0	.....	M. Delorme, Dir.
Lamballe, Normal School	30.04	762.9	30.31	769.9	49.3	9.6	89	sse.	.....	.....	2	.....	5	.....	sse.	0.04	1.	hazy	M. Ollitrault, Director.
Lescar, Normal School	29.71	754.6	30.28	769.1	53.2	11.8	72	ne.	.....	.....	1	.....	8 n	..	....	0.374	9.5	very cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	30.26	768.5	30.36	771.1	50.7	10.4	90	ese.	.....	.....	1	.....	10	.....	.....	0.004	0.1	hazy	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.30	744.1	30.41	772.5	31.3	— 0.4	100	n.	.....	.....	1	.....	fg	.....	.....	0	0	dense fog	M. André, Director.
Mans, Normal School	30.08	764.1	30.41	772.3	41.5	5.3	86	ne.	.....	.....	1	.....	0	.....	.....	0.20	5.	clear	M. Piboëu, Director.
Marseille, Observatory	30.02	762.6	30.30	769.5	58.8	14.9	57	wsw.	.....	.....	1	.....	.....	.....	.....	0	0	hazy	M. Stephan, Director.
Montlouis	25.01	635.3	29.85	758.3	41.9	5.5	88	w.	3.8	1.7	.....	.....	0	.....	.....	0	0	.....	M Caré for Dr. Fines.
Montpellier, Normal School	30.16	766.0	30.35	770.8	59.0	15	78	n.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Galzin, Director.
Nancy, Normal School	29 41	746 9	30.23	767.8	30.2	— 1.0	96	nw.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Hasse, Director.
Nantes, Observatory	30.18	766.5	30.34	770.6	56.7	13.7	80	se.	.....	.....	1–2	.....	0	.....	.....	0.854	21.7	hazy	M. Larocque, Director.
Perpignan, Observatory	30.22	767.6	30.34	770.5	56.5	13.6	74	e.	3.8	1.7	.....	.....	7	.....	se.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.34	541.9	.....	.....	27.7	— 2.4	.....	sw.	.....	.....	1	.....	1	.....	sw.	0	0	clear	M. Vaussenat.
Privas, Normal School	29.26	743.3	30.39	772.0	55.9	13.3	86	e.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.40	645.2	.....	.....	38.7	3.7	64	nne.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.26	768.6	30.29	769.4	50.4	10.2	93	sse.	.....	.....	1	.....	10	.....	s.	0.08	2.	covered	Lt. E. Decuste, Director.
Roche-sur-Yon, N. School	30.08	764.1	30.30	769.6	51.4	10.8	85	e.	.....	.....	1	.....	0	.....	.....	0.406	10.3	clear	M. Brotier, Director.
Rodez, Normal School	28.15	714.9	30.33	770.4	48.2	9	73	e.	.....	.....	4	.....	0	.....	.....	0	0	clear	M. Seger, Director.
Rouen, Normal School	30.36	771.2	30.41	772.4	35.2	1.8	89	se.	.....	.....	1	.....	10	se.	.....	0	0	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	52.9	11.6	77	ssw.	.....	.....	1	.....	0	.....	.....	0.012	0.3	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.23	767.9	30.40	772.1	34.2	1.2	99	ese.	.....	.....	1	.....	10	.....	.....	0	0	.....	M. Renou, Director.
Toulouse, Observatory	28.37	720.5	30.36	771.1	56.1	13.4	73	n.	.....	.....	1	.....	2	e.	.....	0	0	slightly cl'dy	M. Baillaud, Director.
Tours	30.20	767.1	30.38	771.6	38.5	3.6	97	ene.	.....	.....	1	.....	hz	.....	.....	0.146	3.7	hazy	M. de Tastes.
Versailles, Observatory	29.89	759.2	30.38	771.7	34.2	1.2	100	se.	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	30.19	766.7	30.34	770.5	52.3	11.3	93	e.	4.0	1.8	.....	.....	10 k	.....	e.	0.409	10.4	covered	M. Cartier, Director.
GERMAN.																			
Ansbach	28.90	734.1	30.45	773.3	30.2	— 1.0	95	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Prof. Jnedt.
Bamberg	29.40	746.7	30.33	770.3	32.0	0	80	calm	.....	.....	0	.....	7	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	30.21	767.3	30.39	772.0	35.1	1.7	85	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.94	760 4	30.48	774.1	31.3	— 0.4	96	se.	.....	.....	3	.....	10	.....	.....	0	0	foggy	Royal University Obs'y.
Carlsruhe	29.95	760.7	30.42	772.6	33.6	0.9	90	s.	.....	.....	1	.....	10	.....	.....	0	0	foggy	Albert Senz.
Cassel	29.60	751.9	30.32	770.0	33.1	0.6	92	n.	.....	.....	2	.....	10	.....	.....	0	0	.....	Dr. H. Mötil.
Frankfort-on-the-Main	30.03	762.7	30.42	772.6	34.0	1.1	90	n.	.....	.....	1	.....	10	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.91	734.3	30.44	773.1	29.7	— 1.3	100	nnw.	.....	.....	1	.....	10	.....	.....	0	0	foggy	Wilhelm, Chief Tel.
Hamburg	30.34	770.7	30.43	773 0	33.4	0.8	96	e.	.....	.....	1	.....	10	.....	.....	0	0	foggy	E. Preller.
Kiel	30.40	772.2	30.42	772.6	34.9	1.6	90	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.99	761.8	30.44	773.2	30.2	— 1.0	100	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	30.22	767.5	30.42	772.7	31.3	— 0.4	100	e.	.....	.....	1	.....	10	.....	.....	0	0	dense fog	Weather Observatory.
Memel	30.65	778.4	30.69	779.6	18.5	— 7.5	64	sse.	.....	.....	4	1 c	0	.....	.....	.....	.....	.....	Iassermann.
Munich	28.50	723.9	30.39	771.8	22.8	— 5.1	97	calm	.....	.....	0	.....	0	.....	.....	0	0	foggy	Central Station.
Neufahrwasser	30.56	776.3	30.58	776.7	20.8	— 6.2	72	se.	.....	.....	1	.....	2	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	29.84	758.0	30.38	771.6	33.4	0.8	96	e.	.....	.....	1	.....	10	.....	.....	0	0	dense fog	Dicknether.
Stuttgart	29.42	747.2	30.38	771.5	27.0	— 2.8	92	n.	.....	.....	1	.....	10	.....	.....	0	0	foggy	Prof. Dr. Schoder.
Wustrow	30.40	772.1	30.42	772.7	32.0	0.0	96	se.	.....	.....	2	.....	10	.....	.....	0.039	1.0	foggy	Profs. Brandes & Reimer
GREEK.																			
Athens	29.89	759.1	30.28	769.1	51.4	10.8	.....	n.	.....	.....	6.0	0	4 k	.....	.....	0	0	.....	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	30.12	764.9	30.17	766.2	81.6	27.6	36	sw.	8.0	3.6	.....	.....	6	.....	wsw.	0	0	d. clouds	
Deesa	29.59	751.6	30.06	763.6	84.2	29.0	28	nw.	5.0	2.2	.....	.....	2	.....	nw.	0	0	d. clouds	
Bombay	29.96	761.0	30.00	762.0	81.2	27.3	62	nnw.	20.0	8.9	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.15	714 9	29.99	761.7	84.6	29.2	16	ene.	10.0	4.5	.....	.....	0	.....	.....	0	0	blue sky	
Trichinopoly	29 71	754.7	30.00	761.9	80.7	27.1	59	ene.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.45	697.1	29.99	761.8	77.0	25.0	29	e.	10.0	4.5	.....	.....	4	sw.	.....	0	0	d. clouds	
Lahore	29.35	745.6	30.13	765.3	63.6	17.6	39	calm	0	0	.....	.....	5	.....	.....	0	0	gloomy	
Roorkee	29.15	740.3	30.08	763.9	67.2	19.6	50	n.	.....	.....	.....	.....	6	w.	.....	0	0	.....	
Agra	29.54	750 4	30.13	765 3	69.2	20.7	32	w.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	29.01	736.8	30.06	764 6	76.5	24.7	32	calm	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28 73	729.7	30.12	765.1	69.2	20.7	53	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.70	754.3	30.09	764.2	68.3	20.2	45	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.76	755.9	30.09	764 2	60.0	15.6	67	sw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.89	759 1	30.08	764.0	66.2	19.0	64	w.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	28.01	711.5	30.11	764.7	60.2	15.7	57	nw.	6.4	2.9	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.96	761.0	30.04	763.1	74.7	23.7	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	30.04	763.0	30.06	763.5	67.7	19.8	74	nw.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.91	759.6	30.03	762.8	70.2	21.2	75	calm	0	0	.....	.....	4	.....	e.	0	0	d. clouds	
Chittagong	29.96	760.9	30.05	763 3	69.1	20.6	70	w.	1.8	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.71	754.5	30.06	763.4	64.9	18.3	85	ene.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jeypore	28.64	727.6	30.12	765.3	69.7	20.9	45	nw.	4.2	1.9	.....	.....	2	nw.	.....	0	0	d. clouds	
ITALIAN.																			
Udine	29.97	761.1	30.38	771.7	47.8	8.7	48	e.	3.8	1.7	.....	.....	0	.....	.....	0	0	.....	Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	WEATHER.	OBSERVERS.
ITALIAN.—Continued.																			
Milan	29.89	759 3	30.43	772.9	44.2	6.8	71	ne.	3.8	1.7			10	nne.		0	0		Prof. Schiapparelli.
Padua	30.29	769.3	30.40	772.2	46.9	8.3	48	ne.	6.3	2.8			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.47	748.5	30.41	772.4	44.8	7.1	88	nnw.	0.7	0.3			10			0	0		Prof. F. F. Denza.
Genoa	30.15	765.8	30.35	770.8	49.3	9.6	52	ne.	10.5	4.7			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.43	722.1	30.41	772.4	39.9	4.4	93	sw.			2		10			0.102	2.6		Prof. D. G. Bruno.
Pesaro	30.35	770.9	30.40	772.2	47.8	8.8	78	n.					10			0	0		Prof. Luigi Guidi.
Florence	30.08	764.0	30.34	770.6	49.6	9.8	50	ne.			4		6			0	0		Prof. Costantino Pittei.
Leghorn	30.18	766.5	30.26	768.7	51.6	10.9	52	ene.	12.5	5.6			3	w.		0	0		Prof. P. Monte.
Rome	30.05	763.3	30.23	767.8	55.4	13.0	58	n.	4.3	1.9			0			0	0		Prof. P. Tachini.
Lecce	29.99	761.8	30.25	768.3	53.5	12.0	75	wnw.	9.4	4.2			3			0	0		Prof. C. de Giorgi.
Cosenza	29.32	744.8	30.23	767.8	51.8	11.0	75	wsw.	2.5	1.1			9	sw.		0	0		Prof. D. Conti.
Cagliari	29.91	759.6	30.10	764.5	63.1	17.3	67	se.			2		4	e.		0.039	1.0		Prof. A. Pacinotti.
Palermo	29.85	758.2	30.10	764.6	59.7	15.4	66	ne.	3.8	1.7			8			0	0		Prof. G. Cacciatore
Syracuse	30.04	763.0	30.08	764.1	59.4	15.2	87	ne.	24.8	11.1			10	ene.		0.083	2.1		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.69	754.0	30.22	767.6	56.1	13.4	56	ne.	3.1	1.4			0			0	0		Prof. F. Brioschi.
Stelvio	22.32	567.0			22.8	— 5.1	59	ene.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.34	567.3			26.6	— 3.0	67	ne.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.10	764.4	30.13	765.2	27.1	— 2.7	97	calm			0		10 ck		sw.	0.287	7.3	cloudy	Hattori.
Awomori	30.13	765.3	30.17	766.3	22.3	— 5.4	92	ese.	1.5	0.7			10 n			0.190	4.8	light snow	K. Ogawa.
Hakodate	30.18	766.5	30.19	766.8	17.0	— 8.3	86	n.	1.2	0.5		0	0			0	0	fair	
Hamamatsu	30.26	768.6	30.29	769.3	33.5	0.8	74	calm			0	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					33.7	0.9	84	ne.	3.5	1.5		0	6 ck		w.	0	0	cloudy	
Kanazawa	30.14	765.6	30.25	768.4	33.9	1.1	91	ssw.	11.3	5.0			10		w.	1.200	31.5	snowing	S. Endo.
Kioto	30.13	765.3	30.32	770.1	28.2	— 2.1	75	w.	0.5	0.2		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.22	767.5	30.43	773.0	39.1	3.9	74	n.	3.0	1.3			10 s;n			0.070	1.8	light rain	S. Takehayashi.
Niigata	30.14	765.5	30.18	766.6	33.5	0.8	96	w.	7.8	3.5			10 n			0.385	9.8	snowing	M. Morita.
Nobiru	30.10	764.6	30.12	765.0	26.0	— 3.3	100	nnw.	7.4	3.3		6 ck	2 s	w.		0	0	cloudy	H. Midzushima.
Numazu	30.17	766.3	30.20	767.2	38.0	3.3	56	nnw.			2	0	0			c	0	clear	R. Kaneda.
Osaka	30.32	770.1	30.33	770.5	34.8	1.0	64	wnw.	7.4	3.3		0	0			0	0	clear	H. Omura.
Sapporo					14.0	—10.0	78	se.	4.2	1.9		0	2			0	0	clear	
Tokei Obs'y, Yeddo	30.08	764.1	30.17	766.2	34.9	1.6	58	nnw.	4.9	2.1		0	0			0	0	clear	The Staff.
Wakayama	30.28	769.2	30.34	770.7	38.9	3.8	60	nw.	6.7	3.0		0	2 ck;ks		w.	0.006	0.2	fair	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.80	756.9	29.99	761.7	80.4	26.9	70	nnw.	13.0	5.8		6 cs;c	4 k;ks	wnw.	nnw.	0.11	2.8	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.61	599.0	29.83	757.6	48.2	9.0	83	calm	0	0		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.26	616.2	30.08	764.0	43.3	6.3	81	n.			1	0	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.69	754.0	29.95	760.7	65.5	18.6	81	nnw.	5.3	2.3		0	0			0.158	4.0	hazy	F. Quijano, C. E.
Mexico, Central Obs'y	23.66	585.8	30.22	767.6	43.7	6.5	73	calm	0	0		0	0			0	0	fine	The Staff.
Morelia	24.08	611.6	29.97	761.3	46.9	8.3	72	s.			3	0	0			0	0	blue sky	M. Tena, M. D.
Pabellon, Aguascallentes	23.87	606.2	30.00	762.1	42.3	5.7	80	wsw.			1	0	0			0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23 37	593.2	30.13	765.4	51.4	10.8	43	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.45	570.2	30.16	766.2	40.5	5.0	73	sw.	5.3	2.4		0	0			0	0	blue sky	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	30.39	772.0	30.39	772.0	34.9	1.6		se.			3					0.008	0.2		
Groningen	30.37	771.4	30.43	772.8	37.4	3.0		s.			1					0	0		
Helder	30.38	771.6	30.38	771.6	35.4	1.9		se.			2					0.043	1.1		
Hellevoetsluis	30.39	771.9	30.39	771.9	33.4	0.8	98	se.			1					0	0		
Utrecht	30.37	771 3	30.41	772.5	30.1	2.3	91	e.			2		10			0	0	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	30.13	765.4	30.20	767.0	34.5	1.4	93	s.	18	8			10			0.087	2.2		
Brono	30.07	763.7	30.11	764.7	37.0	2.8	88	s.	18	8			10			0.138	3.5	raining	
Christiania	30.24	768.2	30.40	772.2	20.4	— 3.1	98	ese.	5	2			10			0	0	foggy	
Gjesvær	29.72	754 9	29.74	755.5	33.8	1.0		s.			6		8						
Lodingen	29.87	758.6	29.91	759 8	37.9	3.3	86	wsw.			6		10			1.697	43.1	raining	
PORTUGUESE.																			
Angra, Azores	30.21	767.4	30.37	771.3	64.4	18.0	84	ssw.	3.1	1.4			5			0	0'		Dr. J. A. Sampaio.
Campo Major	29.13	740.0	30.15	765.7	55.9	13.3	71	ne.	7.4	3 3			5			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.19	766.8	30.28	769.1	67.5	19.7	68	sw.	3.8	1.7			8	ne.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.83	757.6	30.20	767.0	53.1	11.7	69	ne.	11.9	5.3			1			0	0		The Staff.
Ponta Delgada, Azores	30.30	771.1	30.43	772.9	68.0	20.0	65	calm	0	0			4			0	0		
Saint Paul de Loando	29.08	753.9	29.88	759.0	78.6	25.9	85	w.	1.8	0.8			4	sse.		0	0		
Serra da Estrella	25 34	643.7	30.24	768.2	33.8	1.0	100	sse.	16.8	7.5			10			0.118	3.0	foggy	
RUSSIAN.																			
Akmollinski	29.26	743 2	30.42	772.6	22.3	— 5.4	80	ssw.	11	5			10 n						Major K. Lasarew.
Archangel	30.70	781.3	30.78	781.8	—14.4	—25.8	84	ese.	9	4		0	4 ks			0.177	4.5	light snow	Capt. Sselliwerstow.
Astrakhan	30.53	775.5	30.45	773.4	15.4	— 9.2	69	wsw.	9	4			2 s			blank	blank		Capt. Wisganow.
Barnaul	30.19	766.8	30.77	781.6	— 9.0	—22.8	80	calm	0	0			0			0	0		Meteorological Obs'y.
Bielosersk	30.35	770.8	30.88	784.4	— 1.1	—18.4	94	ne.	0	0		0	1 s			0	0		
Dorpat	30.50	776.1	30.83	783.1	2.1	—16.6	100	calm	0	0		0	0			0	0		Observatory.
Ekaterinburg	29.51	749.6	30.59	776.9	4.5	—15.3	91	nne.	9	4			10			blank	blank		Meteorological Obs'y.
Elisawetgrad	30.20	767.1	30.71	779.9	9.9	—12.3	67	nnw.	9	4		0	0			0	0		
Kasan	30.15	765.7	30.45	773 3	8.1	—13.3	76	ne.	20	9			10						Observatory.
Kem	30.54	775.7			3.2	—10.0	90	ssw.	13	6		0	3 s			0	0		
Kertch	30.47	774.0	30.49	774.5	21.6	— 5.8	90	nw.	7	3		0	8 n			0	0		Lagorio & Sustyrez.
Kieff	29.99	761 7	30.70	779.8	10.4	—12.0	78	nnw.	7	3		0	0						Observatory.
Libau	30.01	777.6	30.64	778.2	19.9	— 6.7	63	se.			1		0			0	0		E. Quaas.
Lugan	30.19	766.8	30.42	772.6	8.1	—13.2	72	wnw.	13	6			6			0	0		Meteorological Obs'y.
Moscow	30.11	764.9	30.67	778.9	1.0	—17.2	79	nnw.	11.2	5.0		0	2 s			0	0		
Nikolaiev	30.02	777.8	30.70	779.7	15.6	— 9.1	85	nne.	4	2		5 c	0			0	0		Capt. Kurdakow.
Pekin, China	30.01	777 4	30.75	781.0	13.3	—10.4	29	nw.	7	3		0	1 k						Physical Observatory.
Petrozavodsk	30.58	776.6	30.80	782.4	— 0.8	—18.2	83	sw.	0	0		0	3 ks			0	0		Dr. Bergmann.
Pinsk	30.20	768.6			15.1	— 9.4	72	e.	4	2		0	0			0	0		
St. Petersburg	30.81	782.5	30.82	782.9	— 9.2	—22.9	92	se.	4	2		0	0			0	0		Central Physical Obs'y.
Sevastopol	30.32	770.0	30.48	774.2	20.1	— 3.2	61	nne.	10	7		0	2 s			0	0		
Semipalatinsk	30.04	762.9	30.77	781 6	9.3	—12.6	65	e.	16	7			0			0	0		Major Lasarew.
Staroi Bykhov	30.33	770 4	30.85	783.5	9.7	—12.4	66	ne.	7	3						0	0		
Tashkend, Laboratory	28.87	733 3	30.50	774.7	44.2	6.8	74	calm	0	0			1			blank	blank		Teich, A. M.
Tiflis	28.91	734.3	30.39	771.9	39.6	4.2	82	nw.	18	8			10					light rain	Physical Observatory.
Tomsk	30.30	771.2	30.69	779.4	— 7.6	—22.0	85	calm	0	0		0	0						
Vladivostock	30.35	771.0	30.42	772 7	— 2.9	—19.4	40	n.	7	3		0	0			0	0		
Warsaw	30.17	766 2	30.63	778.0	20.3	— 6.5	65	s.	13	6		ck	1 s					light clouds	Astronomical Obs'y.
Wilna	30.36	771.1	30.82	782.9	10.5	— 8.6	70	se.	4	2			5					light clouds	Berg, Assistant.
Yeniseisk	30.58	776.8	30.92	785.3	— 9.6	—23.1	88	e.	4	2			0						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.70	754 4	47	8.3	85	s.			6		10			0.5	13.	overcast	J. Youngclause.
North Unst			29.89	759.2				s.			4		10			blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.16	766 0	30.27	766.8	58.6	14.8	76	e.	3.8	1.7		0	6			0.059	1.5		Antonio Reve, Director.
Bilbao, Met. Obs'y	30.24	768.2	30.30	769.7	54.7	12.6	75	se.	0.7	0.3		2	1	e.		1.571	39.9	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.26	692.3	30.34	770.5	42.8	6.0	86	n.	5.8	2.6			0			1.291	32.8	clear	Domingo Martin.
Madrid, Royal Obs'y	27.97	710.4	30.24	768.2	50.7	10.4	79	ne.	12.5	5.6		0	7			0.101	4.1	very cloudy	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	29.99	761.1	30.10	764.5	56.8	13.8	88	e.	5.4	2.4	.....	4	5	w.	.....	0.169	4.3	raining	Olayo Diaz, Director.
Oviedo	29.42	747.2	30.30	769.7	41.9	5.5	92	n.	5.8	2.6	.....	2 k	2 k	e.	w.	0	0	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.31	744.4	30.22	767.7	49.8	9.9	76	ne.	6.9	3.1	.....	.....	1	.....	.....	0.008	0.2	almost clear	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.99	761.7	30.05	763.2	76.5	24.7	84	ne.	1.0	0.4	.....	.....	10 kn	.....	e.	0	0	threatening.	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.04	763.0	30.14	765.5	54.7	12.6	82	ne.	2.4	1.1	.....	.....	10	.....	e.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.80	756.9	29.89	759.2	74.5	23.6	95	ne.	13.6	6.1	.....	2 k	10 kn	ne.	ne.	0.098	2.5	overcast	Manuel Maese.
Tuguegarao, Philippine Id's	30.02	762.6	30.16	766.0	72.4	22.4	90	nnw.	0	0	.....	0	8 ks	.....	ene.	0	0	.....	José L. Yrastorza.
SWEDISH.																			
Hapsranda	30.23	767.8	30.27	768.8	29.1	— 1.6	96	s.	.....	.....	4	.....	10	.....	.....	0.110	2.8	....	.....
Umea	30.30	769.6	30.35	770.9	29.5	— 1.4	96	sw.	.....	.....	6	.....	10	.....	.....	0.067	1.7	.....	.....
Hernosand	30.33	770.3	30.38	771.6	27.3	— 2.6	87	s.	.....	.....	6	.....	10	.....	.....	0	0	.....	.....
Stockholm	30.32	77c.2	30.50	774.7	29.7	— 1.3	82	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	.....
Wisby	30.47	774.0	30.53	775.5	29.1	— 1.6	88	ssw.	.....	.....	4	.....	10	.....	.....	0	0	.....	.....
Sub-series.																			
Upsala	30.37	771.4	30.46	773.6	29.3	— 1.5	90	sse.	10.7	4.8	.....	.....	10	.....	.....	0	0	.....	S. G. Fineman.
SWISS.																			
Geneva	28.93	734.8	30.43	772.9	29.8	— 1.2	100	se.	.....	.....	2	.....	10	.....	.....	0	0	foggy	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.47	773 8	43.3	6.3	75	nne.	25	11.2	.....	.....	10	.....	n.	0.059	1.5	.....	The Observatory.
Valona	.....	.....	30.22	767 7	60.1	15.6	.....	se.	.....	.....	1	.....	2	.....	.....	0	0	lightly cl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.13	765.4	70.7	21.5	50	ne.	.....	.....	2	10 cs	.....	sw.	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.46	773.7	30.55	776.0	18	— 7.8	76	n.	4	1.8	.....	.....	10 n	.....	.....	0.01	0.3	light snow	J. O. Barnes.
Alpena, Michigan	29.39	746.5	30.10	764.5	33	0.6	68	se.	15	6.7	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.96	634.0	30.04	763.0	31	— 0.6	74	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	26.94	684.3	29.97	761.2	10	—12.2	61	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	28.80	731.5	30.03	762 7	34.0	1.1	94	e.	5	2.2	.....	.....	10 n	.....	e.	1.02	25.9	light rain	H. C. Smith.
Atlantic City, New Jersey	30.38	771.6	30.39	771.9	25	— 3.9	73	n.	6	2.7	.....	5 c	0	.....	.....	0	0	fair	Jas. M. Watson.
Augusta, Georgia	29.88	758.9	30.08	764.0	40	4.4	73	e.	6	2.7	.....	.....	10 s	.....	e.	0.04	1.0	cloudy	John Healy.
Baltimore, Maryland	30.39	771.9	30.44	773.2	26	— 3.3	77	s.	4	1.8	.....	sk.	sk.	.....	.....	0	0	light smoke	Geo W Felger.
Barnegat, New Jersey	30.40	772.1	30.42	772.7	21.5	— 5.8	80	n.	10	4.5	.....	6 c	0	.....	.....	0	0	fair	G. A. Hill.
Behring Id., Behring Sea	29.66	753.4	29.68	753.9	21.5	— 5.8	.....	nw.	14	6.3	.....	0	1 k	.....	nw.	0.03	0.8	clear	Leonard Stejneger.
Bennett, Fort, Dakota	28.29	718.6	30.05	763.3	28	— 2.2	88	nw.	3	1.3	.....	0	4 s	.....	.....	0.03	0.8	fair	A. Pritchard.
Benton, Fort, Montana	26.98	685.3	29.98	761.5	11	—11.7	64	calm	0	0	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.09	713.5	30.10	764.5	7	—13.9	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	Cyrus Cramor.
Block Island, Rhode Island	30.43	772.9	30.46	773.7	28	— 2.2	77	n.	16	7.2	.....	0	0	.....	.....	0	0	clear	J. T. Elker.
Boise City, Idaho	27.16	689.9	30.14	765.5	16	— 8.9	100	s.	2	0.9	.....	.....	fg.	.....	.....	0	0	dense fog	B. E. Light.
Boston, Massachusetts	30.30	769.6	30.46	773.7	24.0	— 4.4	73	nw.	8	3.6	.....	0	fg.	.....	.....	0	0	clear	O. B. Cole.
Brownsville, Texas	29.71	754.6	29.76	755.9	58.2	14.6	80	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.42	747 3	30.22	767.6	23.3	— 4.8	73	ne.	4	1.8	.....	0	sk.	.....	.....	0	0	clear	W. Finn.
Buford, Fort, Dakota	27.93	709.4	30.17	766.3	3	—16.1	76	s.	0.5	0.2	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	30.22	767.6	30.53	775.4	7.0	—13.9	91	e.	1	0.4	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	G. C. Schaeffer.
Cairo, Illinois	29.12	739.6	29.54	750.3	42.8	6.0	94	se.	12	5.4	.....	.....	10 n	.....	se.	0.41	10.4	light rain	W. H. Ray.
Cape Henry, Virginia	30.31	769.9	30.33	770.4	41	5.0	73	ne.	16	7.2	.....	3 c	2 s	.....	.....	0	0	fair	A. K. Alderson.
Cape May, New Jersey	30.36	771.1	30.39	771.9	26	— 3.3	88	ne.	12	5.4	.....	6 cs	0	nw.	.....	0	0	fair	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	29.94	760 5	29.96	761.0	57	13.9	80	ne.	12	5.4	.....	.....	10ks	.....	e.	0	0	cloudy	F. W. Mixer.
Champaign, Illinois	28.81	731.8	29.08	753.9	38.5	3.6	71	se.	16	7.2	.....	.....	10 n	.....	se.	0.62	15.7	light rain	L. A. Welsh.
Charleston, S. Carolina	30.05	763.3	30.11	764.8	46	7.8	93	e.	20	8.9	.....	.....	10 s	.....	e.	0	0	threatening.	J. H. Smith.
Charlotte, N. Carolina	29.28	743.7	30.17	766.3	30.0	— 1.1	88	ne.	11	4.9	.....	.....	10 s	.....	ne.	0.02	0.5	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.02	737.1	29.88	758.9	41.0	5.0	82	s.	28	12.5	.....	.....	10 n	.....	s.	1.02	25.9	light rain	B. L. Goulding.
Cheyenne, Wyoming	23.71	602.2	29.99	761.7	18.8	— 7.3	67	n.	1	0.4	.....	0	hz.	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.05	737.9	29.81	757.2	38.1	3.4	86	se.	8	3.6	.....	.....	10 s	.....	.....	0.65	16.5	cloudy	J. Mitchell.
Chincoteague, Virginia	30.34	770.6	30.36	771.1	31	— 0.6	88	ne.	14	6.3	.....	3 c	6 ks	.....	se.	0	0	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.19	741.4	29.89	759.2	41	5.0	92	ne.	4	1.8	.....	.....	10 n	.....	e.	0.03	0.8	light rain	R. B. Watkins.
Cleveland, Ohio	29.29	744.0	30.08	764.0	28.6	— 1.9	77	se.	16	7.2	.....	.....	10 s	.....	.....	0	0	cloudy	J. B. Newlin.
Coleman City, Texas	27.94	709 7	29.84	757.9	43	6.1	53	nw.	22	9.8	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.07	738.4	29.98	761 5	30	2.2	69	e.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	27.79	705.9	29.81	757.2	45.0	7.2	56	w.	16	7.2	.....	0	0	.....	.....	inap.	inap.	clear	J. McGlone.
Custer, Fort, Montana	26.66	677.2	30.06	763.5	7	—13.9	80	e.	7	3.1	.....	0	0	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	28.95	735.3	29.66	753.4	39	3.9	82	se.	12	5.4	.....	.....	10 n	.....	.....	0.29	7.4	light rain	R. R. Martin.
Davis, Fort, Texas	24.95	633.7	29.88	758.9	34	1.1	50	nw.	8	3.6	.....	0	0	.....	.....	0.02	0.5	clear	J. Williams.
Dayton, Washington T'y	28 07	713 0	29.90	759.4	33.4	0.8	94	s.	16	7.2	.....	.....	10 s	.....	sw.	0.02	0.5	cloudy	D. Moore.
Deadwood, Dakota	25.13	638.3	30.12	765.0	17	— 8.3	87	e.	1	0.4	.....	4 c	0	.....	.....	0.08	2.0	fair	F. Willson.
Delaware Breakwater, Del	30.37	771.4	30.39	771.9	31	— 0.6	78	ne.	17	7.6	.....	0	8 ks	.....	n.	0	0	cloudy	T. S. Townsend.
Denison, Texas	28.62	726.9	29.40	748.3	48.0	8.9	77	w.	8	3.6	.....	0	0	.....	.....	1.12	28.4	clear	J. W. Byram.
Denver, Colorado	24 45	621.0	29.97	761.2	25.0	— 3.9	76	calm	0	0	.....	0	0	.....	.....	inap.	inap.	clear	F. M. Neal.
Des Moines, Iowa	28.65	727.7	29.03	752.6	38	3.3	89	ne.	7	3.1	.....	.....	10 n	.....	ne.	0.48	12.2	light rain	F. W. Conrad.
Detroit, Michigan	29.32	744.7	30.08	764.0	31.0	— 0.6	88	e.	14	6.3	.....	.....	10 s	.....	w.	0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	26 99	685.5	29.79	756.7	34	1.1	88	n.	12	5.4	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	V. P. Temple.
Dubuque, Iowa	28.95	735.3	29.72	754.9	38.5	3.6	89	e.	4	1.8	.....	.....	10 n	.....	.....	0.32	8.1	light rain	J. Harvey Smith.
Duluth, Minnesota	29.14	740.1	29.95	760.7	32	0.0	88	n.	10	4.5	.....	.....	10 s	.....	n.	0.07	1.8	cloudy	N. B. Conger.
Eagle Pass, Texas	29.04	737.6	29.88	758.9	40.2	4.6	65	calm	0	0	.....	0	0	.....	.....	inap.	inap.	clear	F. Belford.
Eagle Rock, Idaho	25.06	636.5	29.98	761.5	7	—13.9	80	n.	3	1.3	.....	0	0	.....	.....	0.16	4.1	clear	J. M. Clifford.
Eastport, Maine	30.37	771.4	30.44	773.2	21.0	— 6.1	76	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	D. C. Murphy.
Elliott, Fort, Texas	26.81	681.0	29.77	756.1	33	0.6	81	nw.	24	10.7	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.06	661.9	29.92	760.0	34.0	1.1	66	w.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.37	746.0	30.14	765.5	28	— 2.2	64	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	Peter Wood.
Escanaba, Michigan	29.26	743.2	29.98	761.5	34.0	1.1	88	e.	4	1.8	.....	.....	10 n	.....	.....	0.27	6.9	sleeting	George Heathcote.
Fredericksburg, Texas	28.07	713.0	29.89	759 2	52	11.1	43	w.	21	9.4	.....	0	0	.....	.....	0.10	2.5	clear	Frank Halwegler.
Galveston, Texas	29.61	752.1	29.60	753 4	60	15.6	54	w.	20	8.9	.....	0	hz.	.....	.....	0.99	25.1	clear	E. O'C. MacIlhenny.
Grand Haven, Michigan	29.20	741 7	29.91	759.7	34.0	1.1	82	ne.	13	5.8	.....	.....	10 s	.....	.....	0.15	3.8	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.01	635 2	29.89	759.2	33	0.6	81	w.	8	3.6	.....	0	2 s	.....	.....	0.02	0.5	clear	Robert C. Lord.
Hatteras, North Carolina	30.21	767.3	30.23	767.8	42	5.6	69	ne	16	7.2	.....	4 cs	5 ks	w.	e.	0	0	cloudy	R. M. Crawford.
Helena, Montana	25.54	648.7	29.92	760.0	12	—11.1	83	calm	0	0	.....	0	0	.....	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	28.54	724.9	29.02	752 3	40	4.4	82	nw.	21	9.4	.....	0	0	.....	.....	inap.	inap.	clear	J. P. Sherry.
Huron, Dakota	28 42	721.9	29.96	761.0	27.8	— 2.3	59	n.	9	4.0	.....	.....	10 s	.....	.....	0	0	cloudy	S. W. Glenn.
Indianapolis, Indiana	28.91	734.3	29.76	755.9	39	3.9	82	se.	11	4.9	.....	.....	10 n	.....	se.	0.30	7.6	light rain	O. Schutze.
Indianola, Texas	29.69	754.1	29.72	754.9	55.8	13.2	61	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	I. A. Reed.
Jacksboro, Texas	28 38	720.8	29.02	752.3	44	6.7	68	sw.	18	8.0	.....	0	0	.....	.....	inap	inap.	clear	D. J. Carr.
Jacksonville, Florida	29.95	760 7	30.00	762 0	61	16.1	84	se.	12	5.4	.....	3 cs	0	.....	.....	inap	inap.	clear	J. W. Smith.
Keogh, Fort, Montana	27.33	694 2	30.03	762.7	3	—16.1	76	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Schneider.
Keokuk, Iowa	28.85	732.8	29.56	750.8	38.0	3.3	95	e.	17	7.6	.....	.....	10 n	.....	e.	0.74	18.8	light rain	F. Z. Gosewisch.
Key West, Florida	29.91	759.7	29.93	760.2	71.0	21.7	82	se.	12	5.4	.....	.....	10 s	.....	se.	0	0	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	30 28	769.1	30.30	769.6	44	6.7	76	ne.	18	8.0	.....	2 c	4 s	w.	ne.	0	0	fair	H. Mc P. Baldwin.
Knoxville, Tennessee	28.84	732.5	29.92	760.0	35	1.7	89	ne.	11	4.9	.....	.....	10 n	.....	.....	0.05	1.3	light rain	J. A. Cody.
La Crosse, Wisconsin	28.91	734 3	29.76	755.9	35	1.7	79	e.	6	2.7	.....	.....	10 n	.....	.....	0.06	1.5	light rain	S. C. Emery.
Leavenworth, Kansas	28.55	725 2	29.51	749 5	42	5.6	92	n.	7	3.1	.....	.....	10 n	.....	.....	0.27	6.9	light rain	A. W. Browne.
Lewiston, Idaho	29.01	736.8	29.89	759.2	37.0	2.8	77	e.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	W. Bell.
Little Rock, Arkansas	29.08	738.6	29.11	747.0	51	10.6	93	s	5	2.2	.....	.....	10 s	.....	.....	0.62	15.7	cloudy	W. U. Simons.
Los Angeles, California	29.60	751.8	30.00	762.0	50	10.0	93	w.	5	2.2	.....	.....	10 s	.....	.....	0.05	1.3	cloudy	T. S. Collins.
Louisville, Kentucky	29.13	739.9	29.73	755.1	41	5.0	82	e.	8	3.6	.....	.....	10 n	.....	.....	0.42	10.7	light rain	L. M. Dey.

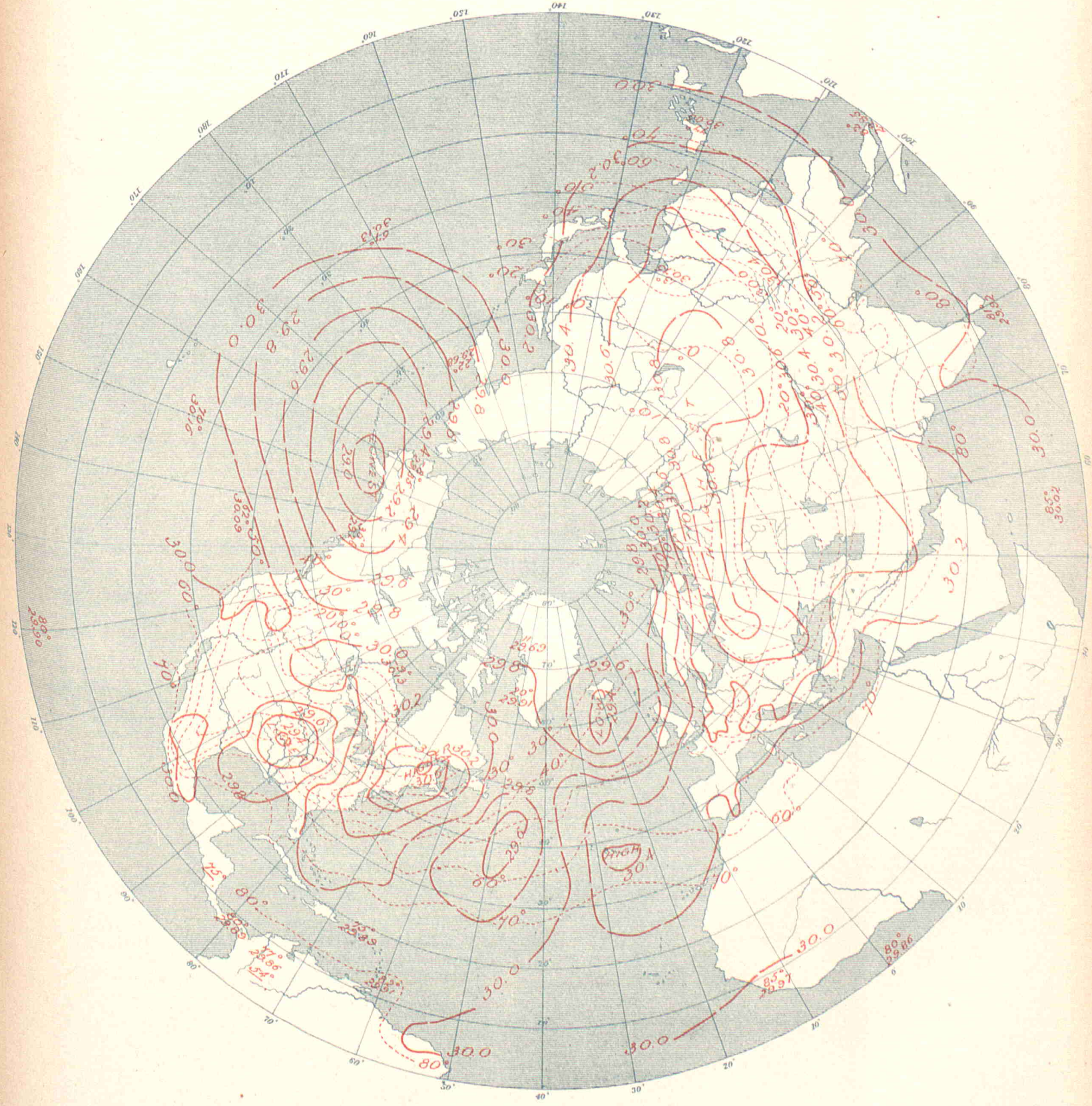
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.62	752.3	30.35	770.9	26	— 3.3	76	e.	1	0.4			10 s		e.	0	0	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.36	745.7	30.06	763.5	32.0	0.0	94	e.	13	5.8			10 n		e.	0.12	3.0	light rain	F. R. Day.
Macon, Fort, North Carolina	30.21	767.3	30.22	767.6	41.0	5.0	30	n.	24	10.7		0	9 s		n.	0	0	cloudy	C. A. Shaw.
Madison, Wisconsin	28.71	729.2	29.81	757.2	38	3.3	89	e.	10	4.5			10 n			0.33	8.4	light rain	F. P. Chaffee.
Macinnis, Fort, Montana	25.29	642.4	29.83	757.7	15	— 9.4	51	w.	5	2.2		0	0			0	0	clear	F. Burke.
McKavett, Fort, Texas	27.43	696.7	29.81	757.2	46	7.8	76	w.	12	5.4		0	0			0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.20	741.7	29.98	761.5	34	1.1	88	e.	7	3.1			10 n			0.12	3.0	light rain	J. Gilligan.
Memphis, Tennessee	29.16	740.7	29.52	749.8	45	7.2	100	se.	4	1.8			10 s			0.58	14.7	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.06	738.1	29.87	758.7	39	3.9	89	e.	14	6.3			10 n			0.28	7.1	light rain	W. Line.
Missoula, Fort, Montana	26.50	673.1	29.96	761.0	13	—10.6	66	calm	0	0			8 s			0.01	0.3	cloudy	I. H. Young.
Mobile, Alabama	29.63	752.6	29.67	753 6	67	19.4	93	sw.	12	5.4			10 s		sw.	1.92	48.8	cloudy	C. A. Read.
Montgomery, Alabama	29.53	750.0	29.77	756.1	48.7	9.3	94	e.	18	8.0			10 n		w; e	1.46	37.1	light rain	J. B. McLaughlin.
Moorhead, Minnesota	28.92	734.6	30.03	762.7	26	— 3.3	88	n.	4	1.8			10 s			0.07	1.8	cloudy	H. Bessant.
Morgantown, W. Virginia	29.08	738.6	30.15	765 8	35.0	1.7	58	se.	2	0.9		0	fg.			0	0	clear	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.94	608.1	30.57	776.5	19.0	— 7.2	48	ne.	10	4.5		0	0			0	0	clear	B. S. Pague.
Nashville, Tennessee	29.03	737.3	29.64	752.8	45.0	7.2	83	se.	13	5.8			10 ks		se.	0.42	10.7	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.36	771.1	30.48	774.2	13	—10.6	80	ne.	17	7.6		0	0			0	0	clear	J. H. Sherman.
New London, Connecticut	30.47	773.9	30.52	775.2	20	— 6.7	70	n.	5	2.2		0	0			0	0	clear	J. G. Lynch.
New Orleans, Louisiana	29.60	751.8	29.66	753.4	68.0	20.0	93	sw.	12	5.4			10 s		sw.	0.68	17.3	threatening	L. Dunne.
Newport, Rhode Island	30.42	772.7	30.47	773.9	23.0	— 5.0	80	n.	7	3.1		0	0			0	0	clear	W. McGillivray.
New York, New York	30.28	769.1	30.47	773.9	23	— 5.0	88	ne.	4	1.8		4 cs	fg.			0	0	fair	J. B. Merrill.
Norfolk, Virginia	30.29	769 4	30.32	770.1	36	2.2	79	ne.	8	3.6		3 cs	0			0	0	clear	Wm. Davis.
North Platte, Nebraska	26.76	679.7	29.92	760.0	30.6	— 0.8	80	nw.	10	4.5			10 s			0	0	cloudy	E. F. Brady.
Olympia, Washington T'y.	29.76	755.9	29.82	756.9	40.0	4.4	89	s.	5	2.2			10 s			0 19	4.8	cloudy	J. Dascomb.
Omaha, Nebraska	28.40	721.3	29.69	754.1	35.0	1.7	89	n.	18	8.0			10 s			0.22	5.6	cloudy	A. Pollak.
Oswego, New York	30.02	762.5	30.37	771.4	14.0	—10.0	64	se.	11	4.9		hz.	2 s			0	0	clear	J. G. Linsley.
Palestine, Texas	29.00	736.6	29.58	751.3	53.5	11.9	48	w.	12	5.4		0	0			0.34	8.6	clear	L. M. Pindell.
Pensacola, Florida	29.69	754.1	29.72	754.9	64.3	17.9	96	sw.	12	5.4		0	9 s		sw.	1.47	37.3	cloudy	M. McGauran.
Philadelphia, Pa	30.34	770.6	30.45	773.4	23	— 5.0	73	ne.	12	5.4		2 c	0	sw.		0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.31	439.7	29.97	761.2	— 4	—20.0	79	nw.			1	0	0			0.01	0.3	clear	H. Hall.
Ploche, Nevada	23.70	602.0	29.87	758.7	26	— 3.3	92	n.	1	0.4			10 n			0.02	0.5	light snow	C. N. Kitchel.
Pittsburg, Pennsylvania	29.31	744.5	30.17	766.3	30.0	— 1.1	60	ne.	4	1.8			10 s			0	0	cloudy	W. A. Reid.
Poplar River, Montana	27.73	704.3	30.09	764.3				w			1	0	0			0.05	1.3	clear	W. D. Maxwell.
Port Eads, Louisiana	29.70	754.4	29.71	754.6	68.1	20.1	93	sw.	20	8.9		0	9 s		sw.	0.29	7.4	cloudy	H. B. Boyer.
Port Huron, Michigan	29.38	746.2	30.10	764.5	22.6	— 5.2	76	e.	8	3.6		10 cs	0			0	0	cloudy	W. O. Bailey.
Portland, Maine	30.43	772.9	30.48	774.2	21.0	— 6.1	84	n.	13	5.8		0	0			0	0	clear	W. W. Elchelberger.
Portland, Oregon	29.80	756.9	29.87	758.7	42.0	5.6	92	s.	8	3.6			10 n		s.	0.21	5.3	light rain	M. L. Hearne.
Portsmouth, N. O.					45	7.2	93	ne.			7		10 s		ne.	c	0	cloudy	F. S. Coburn.
Prescott, Arizona	24.44	620.8	29.82	757.4	36	2.2	61	s.	12	5.4			10 s		s.	0	0	cloudy	W. H. Clendenon.
Provincetown, Mass.	30.38	771.6	30.41	772.4	33	0.6	78	ne.	10	4.5		1 k	2 s	nw.		0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	29.94	760.5	29.95	760.7	62	16.7	84	e.	12	5.4			10 s		s.	0	0	cloudy	W. J. Evans.
Red Bluff, California	29.66	753 4	30.04	763.0	36	2.2	100	nw.	6	2.7		0	0			0.62	15.7	clear	J. R. Williams.
Rochester, New York	29.59	751.6	30.30	769.6	18	— 7.8	100	se.	11	4.9		5 k	fg.			inap.	inap.	fair	E. W. McGann
Roseburg, Oregon	29.43	747.5	30.00	762.0	39.8	4.3	86	s.	4	1.8		0	8 s		w.	0.27	6.9	cloudy	J. J. Nanry.
Sacramento, California	29.97	761.2	30.05	763.3	41.4	5.2	98	nw.	4	1.8			fg.			0.35	8.9	dense fog	J. A. Barwick.
St. Louis, Missouri	28.92	734.6	29.57	751.1	39.5	4.2	100	e.	11	4.9			10 n			0.50	12.7	light rain	J. H. Weber.
St. Michael, Fort, Alaska	29.32	744.7	29.35	745.5	— 8	—22.2	100	ne.	30	13.4		0	6 s		ne.	0	0	fair	A. P. Leavitt.
St. Paul, Minnesota	28.89	733 8	29.85	758.2	33.0	0.6	88	n.	11	4.9			10 s		n	0.02	0.5	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.05	737.9	30.04	763.0	17	— 8.9	91	calm	0	0		0	fg.			inap.	inap.	clear	C. B Dilley.
Salt Lake City, Utah	25.38	644.6	29.02	760.0	30	— 1.1	59	calm	0	0			10 s			0.08	2.0	cloudy	J. Craig.
San Antonio, Texas	29.06	738.1	29.78	756.4	50.5	10.3	59	sw.	4	1.8		0	0			0	0	clear	T. J. Kenan.
San Diego, California	29.91	759.7	29.98	761.5	52.2	11.2	96	e.	6	2.7			10 n			0.08	2.0	light rain	A. C. Dobbins.
Sandusky, Ohio	29.31	744.5	30.04	763.0	31	— 0.6	78	se.	12	5.4			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.43	772.9	30.46	773.7	25.0	— 3.9	73	n.	13	5.8			0			0	0	clear	B. A. Blundon.
San Francisco, California	29.99	761.7	30.06	763.5	49	9.4	81	w.	10	4.5		0	1 s		nw.	0.56	14.2	clear	N. Gorom.
Santa Fé, New Mexico	22.88	581.1	29.87	758.7	26	— 3.3	70	s.	1	0.4			10 s			0.12	3.0	cloudy	H. U. Jones.
Savannah, Georgia	29.95	760.7	30.05	763.3	50	10.0	86	e.	16	7.2			10 s		e.	0	0	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.11	663.2	29.94	760.5	17	— 8.3	70	w.	2	0.9		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	29.23	742.4	29.48	748.8	52	11.1	86	sw.	10	4.5		0	0			1.25	31.7	clear	E. N. Meekins.
Sill, Fort, Indian Territory	28.20	717.8	29.59	751.6	42.5	5.8	88	nw.	18	8.0			10 ks		nw.	0	0	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.09	611.9	29.93	760.2	33.0	0.6	78	w.	2	0.9		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.19	741.4	29.26	743.2	36.1	2.3	79	e.	8	3.6		0	5 ks		e.	0.25	6.3	fair	F. W. Fickett.
Smith, Fort, Arkansas	28.87	733.3	29.37	746 0	52.0	11.1	93	calm	0	0			10 s			1.29	32.8	cloudy	J. B. Campbell.
Smithville, North Carolina	30.15	765.8	30.19	766.8	42	5.6	82	ne.	15	6.7			10 s			0	0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	27.74	704.6	29.87	758.7	31.5	— 0.3	100	e.	4	1.8			10 n			0.06	1.5	light snow	H. Clifford.
Springfield, Illinois	28.89	733.8	29.62	752 3	40	4.4	89	se.	15	6.7			10 n		se.	0.66	16.8	light rain	T. B. Jennings.
Springfield, Massachusetts	30.38	771.6	30.52	775.2	10	—12.2	76	n.			1	0	0			0	0	clear	Charles Mayr.
Springfield, Mo.	27.91	708.9	29.44	747 8	47	8.3	96	se.	13	5.8			10 n		se.	0.97	24.6	light rain	J. B. Marbury.
Starkville, Miss.	29.13	739.9	29.63	752 6	49	9.4	93	se.	17	7.6			10 s		se.	1.29	32.8	cloudy	O. Dill.
Stevenson, Fort, Dakota	28.03	711.9	30.09	764.3	— 1	—18.3	72	nw.	2	0.9		0	0			0	0	clear	W. Burrows.
Stockton, Fort, Texas	26.77	679.9	29.91	759.7	36	2.2	82	sw.	6	2.7		0	0			0.05	1.3	clear	J. F. Marshall.
Thatcher's Island, Mass.	30.40	772.1	30.46	773.7	32.5	0.3	74	n.	17	7.6		5 k	0	w.		0	0	fair	G. Liebmann.
Thomas, Camp, Arizona	27.06	687.3	29.88	758.9	32	0.0	85	sw.			1	2 ok	hz.			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.27	743.4	30.01	762.2	32	0.0	78	ne.	7	3.1			10 s			0	0	cloudy	A. Buell.
Tucson, Arizona	27.42	696.5	29.92	760.0	39	3.9	82	se.	2	0.9		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.54	750.3	29.93	760.2	32	0.0	88	e.	4	1.8		2 ck	1 s			0.06	1.5	clear	J. Daly.
Verde, Fort, Arizona					43.8	6.6	68	se.			4		10 s		se.	0	0	cloudy	D. Brooks.
Vicksburg, Mississippi	29.28	743.7	29.56	750.8	55.0	12.8	89	s.	15	6.7		6 ck	0	sw.		3.73	94.7	fair	James Kenealy.
Visalia, California	29.65	753.1	30.03	762.7	43.0	6.1	96	calm	0	0		0	2 s			0.13	3.3	clear	O. D. Stewart.
Washakie, Fort, Wyoming	24.18	614.2	29.95	760.7	14.3	— 9.8	75	nw.	2	0.9		0	2 s			0.01	0.3	clear	T. M. Ambler.
Washington, D. C.	30.31	769.9	30.43	772 9	24.3	— 4.3	86	calm	0	0			10 s		se.	0	0	cloudy	B. M. Pursell.
West Las Animas, Colorado	25.73	653.5	29.89	759.2	26.5	— 3.1	61	n.	10	4.5		0	3 k		nw.	0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.75	755.6	30.38	771.6	16.5	— 8.6	83	e.	1	0.4		hz.	0			0	0	clear	B. F. Hough.
Wilmington, N. Carolina	30.15	765.8	30.21	767.3	38	3.3	82	ne.	7	3.1			10 s		ne.	0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.46	646 7	29.98	761.5	22.5	— 5.3	76	s.	6	2.7		0	4 s		w.	0.10	2.5	fair	J. Grover.
Yankton, Dakota	28.47	723.1	29.90	759.4	28	— 2.2	77	n.	12	5.4			10 ks			0.01	0.3	cloudy	J. H. Atfield.
Yuma, Arizona	29.67	753.6	29.82	757.4	52.3	11.3	68	w.	8	3.6		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	21.97	558.0			54.0	12.2	88	w.	2	0.9		3 c	2 ks	nw.	w.	0.11	2.8	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.85	758.2	29.91	759.7	66.7	19.3	88	se.	6	2.7		7 c	0	w.		0	0	fair	Benito Vines, S. J.
Kingston, Jamaica, W. I.	29.91	759.7	29.92	760.0	76	24.4	87	n.	2	0.9		0	7 s		e.	0	0	fair	Robert Johnston.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	76	24.4	91	e.			3		10 n	e.		0.240	6.1	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.30	744.2	29.86	758.4	77	25.0	89	calm			0	4 ck	4 ks	calm	calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75	23.9	94	ne.			1		10 ks		ne.	0.13	3.3	cloudy	Earl Flint.
St. Paul, Kodiak Id., Alaska	28.75	730.2	28.81	731.8	33	0.6	100	ne.			4		8 ks			0.06	1.5	light rain	W. J. Fisher.
St. Thomas, W. I.	29.82	757.4	29.94	760.5	70	24.4	85	ne.					8 kn		ne.	0.01	0.3	cloudy	Aug. Wallee.
York Factory B. A.	30.06	763.5	30.13	765.3	— 8.5	—22.5	78	w.	9	4.0		0	0			0	0	clear	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay	29.77	756.1	75	23.9	76	n.			3		8							misty.
H. M. S. Audacious, N. 1° 21′ E. 103° 15′	29.81	757.2	83	28.3	87	calm			0									d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			70	21.1	69	nnw.			1		0					1	nnw.	blue sky.
H. M. S. Boadecia, Saldanha Bay, Cape Colony	29.85	758.2				var.			1–2		3							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.03	762.7	72	22.2	71	sse.			1		0							blue sky.
H. M. S. Champion, N. 10° 30′, E. 110° 00′	29.91	759.7	76	24.4	100	nne.			6		10					6	nne.	showery.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.67	779.0	33	0.6		nnw.			1		9							d. clouds.
H. M. S. Comus, N. 47° 08′ W. 125° 08′	29.82	757.4	41	5.0	91	nw.			3		7	wnw.				4	wnw.	d. clouds.
H. M. S. Constance, N. 48° 26′, W. 7° 03′	30.29	769.4	57	13.9		ssw.			2–3							4	w.	d. clouds.
H. M. S. Curacoa, Yokohama, Japan			46.5	8.1	69	wnw.			1		0							blue sky.
H. M. S. Diamond, Sydney, N. S. W*†	29.56	750.8	69	20.6	75	se.			2		6	se:						d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	29.95	760.7	57	13.9	75	nne.			2–3		5	nne.						squally.
H. M. M. Eclipse, N. 6° 20′ E. 78° 38′	29.82	757.4	81	27.2		ene.			4–6		4					5	ne.	d. clouds
H. M. S. Fawn, S. 34° 00′, E. 27° 36′	29.78	756.4	70.5	21.4	49	se.			2		10					3	se.	overcast.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.98	761.5	63	17.2	83	calm			0		7							misty.
H. M. S. Iron Duke, N. 1° 14′, E. 103° 45′	29.85	758.2	82	27.8	83	nw.			2		3	n.						d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	29.83	757.7	76.3	24.6	74	se			3		3							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.95	760.7	63	17.2		calm			0									d. clouds.
H. M. S. Magpie, N. 32° 44′ E. 129° 51′	30.47	773.9	42.1	5.6	78	n.			1–2		10							showery.
H. M. S. Monarch N. 31° 50′ E. 31° 10′			70	21.1		ese.			2		1	ene.				1	ese.	blue sky.
H. M. S. Rambler, Port Belgrano, La Plata, S. A	29.71	754.6	64	17.8	89	se.			2		3	se.						d. clouds.
H. M. S. Rocket, S. 29° 40′, W. 71° 20	30.02	762.5	64	17.8	94	s.			3		2					2-3	sw.	d. clouds.
H. M. S. Starling, N. 1° 15′, E. 0° 33′	29.86	758.4	79.7	26.5	83	s.			2-3		6					2	ssw.	d. clouds.
H. M. S. Superb, N. 34° 40′, E. 33° 03′*	30.15	765.8	66	18.9	68	e.			4-5		7	ese.				4	e.	squally.
H. M. S. Swiftsure, Callao Bay, Peru	29.99	761.7	64	17.8	100	sse.			1-2		8							d. clouds
H. M. S. Sylvia, Borge Bay, Patagonia	29.64	752.8	40.7	4.8	89	nw.			3-5		10							misty.
H. M. S. Thetis, S. 32° 48′ W. 71° 47	30.05	763.3	55	12.8	87	ssw.			4		2					4	sw.	d. clouds.
H. M. S. Woodlark, Shat-el Arab river	30.32	770.1	59.5	15.3	70	wwn.			2		7	nw.						blue sky.
H. M. S. Zephyr, Chee-foo, China	30.62	777.7	19.5	— 6.9		w.			3–5		2	nw.				1	nw.	d. clouds.
Portuguese Naval.																		
Tamega, Macao, China	30.35	770.8	60.8	16.0	50	n.			4		10		n.					overcast.
United States Naval.																		
Navy Yard, Pensacola, Fla	29.72	754.9	67	19.4	90	sw.	10	4.5			8		sw.	0.22	5.6			fair.
Navy Yard, Portsmouth, N. H.	30.53	775.4	17	— 8.3	?	n.	4	1.8			0			0	0			clear.
Naval Hospital, Yokohama, Japan.*	30.00	762 0	38	3.3	34	calm			0		0			0	0			clear.
Adams, Sitka, Alaska*†	29.33	745.0	34	1.1	90	ene.			1		10							cloudy.
Alaska, Mare Island, Cal.	29.95	760.7	46	7.8	92	w.			1		2			0.625	15.9			fair.
Alliance, N. 30° 10′, W. 69° 10′	30.06	763.5	63	17.2	88	ne.			3-4		8			light	light	sm'h		cloudy.
Ashuelot, N. 32° 36, E. 128° 40′	30.47	773.9	43	6.1	83	nw.			2		8		nw.					cloudy.
Brooklyn, S. 42° 10′, W. 59° 10′	29.74	755.4	51	10.6	100	ese.	18	8.0			10		ese.	0	0	sm'h		cloudy.
Colorado, New York, N. Y.	30.52	775.2	22	— 5.6	100	nnw.	8	3.6			0			0	0			misty
Enterprise, Norfolk, Va	30.36	771.1	37	2.8	90	nw.			2		5							fair.
Essex, Callao, Peru	29.96	761.0	66	18.9	90	sse.			1		8		se.			sm'h		cloudy.
Franklin, Norfolk, Va	30.28	769.1	37	2.8	80	ne.	8	3.6			8		calm	0	0			fair.
Galena, Montevideo, Uruguay	29.64	752.8	74	23.3	95	n.			3		8		n.			sm'h		hazy.
Hartford, S. 49° 55′ W. 79° 38′*	29.76	755 9	46	7.8	85	nw.			3		5		wnw.	0	0	mod.	wnw.	squally.
Independence, Mare Island, Cal.	30.03	762.7	45	7.2	92	w.			1		2		w.	1.3	33.			clear.
Iroquois, Callao, Peru	29.97	761.2	65	18.3	94	sse.			2		10							cloudy.
Jamestown, Boston, Mass.	30.42	772.7	18	— 7.8	84	nw.			1		0			0	0			clear.
Juniata, Fayal, Azores Islands*	30.44	773.2	64	17.8	83	s-w.			4		8		sw.			sm'h		cloudy.
Kearsarge, N. 30° 07′, W. 69° 09′	30.08	764.0	64	17.8	83	nne.			4		5					mod.		fair.
Lackawanna, S. 9° 20′ W. 86° 57′*	29.91	759.7	71	21.7	80	s.			2		10					sm'h	sw.	cloudy.
Lancaster, Genoa, Italy*	29.93	760.2	52	11.1	72	nne.			6		2		calm			mod.	nne	fair.
Michigan, Erie, Pa.	29.93	760.2	35	1.7	100	sse.			6		10		e.					cloudy.
Minnesota, New York, N. Y.	30.49	774.4	21	— 6.1	100	ne.	1	0.4										foggy.
Monocacy, Nagasaki, Japan	30.39	771.9	44	6.7	84	n.			2		10		calm					hailing,
New Hampshire, Newport, R. I.	30.50	774.7	26	— 3.3	100	n.			2		0					sm'h		clear.
Nipsic, Lisbon, Portugal*	30.15	765.8	59	15.0	64	ene.			2		0					sm'h		hazy.
Onward, Callao, Peru	30.09	764.3	65	18.3	94	sse.			3		8		n.			long	w.	cloudy.
Palos, Pientsin, China*	30.64	778.2	14	—10.0	100	nnw.			3		0							clear.
Pensacola, S. 6° 09′, W. 81° 44′*	29.89	759.2	68	20.0	90	sse.			2		8			0	0	sm'h		cloudy.
Powhatan, Boston, Mass.	30.45	773.4	16	— 8.9	100	nw.			1		0							hazy.
Quinnebaug, Villefranche, France*	30.29	769.4	57	13.9	87	calm			0		8		sw.			sm'h		fair.
Ranger, Acapulco, Mexico	29.86	758.4	76	24.4	80	calm			0		5		calm			sm'h		fair.
Richmond, Nagasaki, Japan*	30.37	771.4	44	6.7	75	wnw.			1		10		w.	0.14	3.6			cloudy.
Saratoga, Newport, R. I.	30.38	771.6	23	— 5.0	60	nnw.			4		2		calm	0	0	sm'h		clear.
St. Louis, League Island, Pa.	30.09	779.5	19	— 7.2	84	n.			1		2			0	0			clear.
Tennessee, N. 30° 17′ W. 68° 58′	30.04	763.0	64	17.8	92	ne.	20	8.9			5?			sll't	sll't	mod.	nne.	cloudy.?
Vandalia, N. 30° 13′, W. 69° 04′*	30.04	763.0	62	16.7	100	ne.			4		5		ne.			mod.	ne.	fair.
Wabash, Boston, Mass.	30.46	773.7	14	—10.0	64	nne.	5	2.2			2		e.	0	0			clear.
Wachusetts, Mare Island, Cal*	29.95	760.7	44	6.7	100	var.			1		2		calm			sm'h		clear.
Wyandotte, Washington, D. C	30.55	776.0	36	2.2	70	ne.			1		10		e.	0	0			cloudy.
Yantic, N. 30° 19′, W. 68° 50′	30.18	766.6	63	17.2	67	ne			4		5		w.			mod.	nw.	fair.
Merchant Marine.																		
S. S. Grecian, N. 45° 55′, W. 7° 51′*	30.33	770.4	53	11.7	86	sse.			1		0			0	0	sm'h		clear.
S. S. Polynesian, N. 50° 57′, W., 13° 54′ *	29.90	759.4	52	11.1		s.			2		8		ssw.	0	0	sm'h	ssw.	cloudy.
S. S. Scandinavian, N. 44° 54′, W. 51° 48	29.70	754.4	36	2.2		ne.			7		10		ne.	4 h'r	4 h'r	high	ne.	drizzling.
S. S. Indiana, Philadelphia, Pa			28	— 2.2	77	ne.			3		2		ne.					fine.
S. S. Lord Clive, N. 51° 15′, W. 12° 30′*†	29.90	759.4				ssw.			5		10					sll't	w.	misty.
S. S. Lord Gough, N. 51° 40′, W. 19° 33′	29.88	758.9	49	9.4		wsw.			6		8		w.	4 h'r	4 h'r	long	w.	cloudy
S. S. Ohio, Liverpool, Engl	30.23	767.8	47	8.3	92	se.			2		8		se.					fair.
S. S. Pennsylvania, N. 43° 41′ W. 57° 54′†	29.92	760.0	37	2.8		nne.			5		10		nne.			r'gh	ne.	cloudy.
S. S. Castor, N. 45° 37′ W. 37° 15′			30.0	10		n.			4		10		nnw.			4	w.	raining.
S. S. Jason, N. 49° 00′, W. 33° 10′	29.95	760.7	53.6	12.0		sw.			5		9 n					5	w.	foggy.
S. S. Anchoria, N. 40° 15′ W. 72° 15′†	30.36	771.1				n.			1		1		n.	0	0	sm'h		fine.
S. S. Bolivia, N. 52° 06′, W. 30° 50′†	29.98	761.5	48	8.9	78	w.			6		10		w.	0	0	r'gh	w.	overcast.
S. S. Dorian, N. 46° 40′, W. 9° 25′*	30.17	766.3	55	12.8		s.			4		6		s.	0	0	mod.	w.	fine.
S. S. Elysia, N. 52° 00′, W. 13° 20′ †	30.03	762.7	52	11.1		s.			4		10		s.	12 h'r	12 h'r	sm'h		cloudy
S. S. Galatia, N. 35° 34′, E. 17° 06′†	30.20	767.1	62.3	16.8	?	ne.			4		3		nw.	0	0	r'gh	ne.	fair.
S. S. Ailsa, N. 10° 20′, W. 75° 37′†	30.01	762.2	82	27.8	100	e.			2		10		e.	0	0	sm'h		fair.
S. S. Alvo, N 36° 50′ W. 74° 29′	30.39	771.9	52	11.1		nne.			5-6		9ks		ene.	0	0	small	nne.	overcast.
S. S. Ambrose, N. 25° 32′, W. 50° 13′†	29.95	760.7	76	24.4		nnw.			4		3		nnw.	6 h'r	6 h'r	3	nw.	fine.
S. S. City of Agra, S. 51° 04′, E. 169° 02′	29.34	745.2	50.8	10.4	100	nne.			6		10							raining.
Bk. Commewyne, N. 25° 04′ W. 53° 21′	29.83	757.7	74.3	23.5	72	nw.			4		9							d. clouds.
S. S. Gordon Castle, N. 7° 05′, E. 76° 36′	29.92	760.0	80.5	26.9	78	nne.			5		6					high		d. clouds.
S. S. Inchkeith, S. 11° 41′, E. 91° 07′	29.89	759.2	79.2	26.2	82	se.			5		4							d. clouds.
Mertola, N. 53° 18′, W. 4° 46′	30.15	765.8	48.2	9.0	100	sse.			6		10							overcast
Ptolmey, N. 49° 07′, W. 10° 50′	30.24	768.1	53.7	12.1		ssw.			5		9							d. clouds.
S. S. Mexico, N. 24° 34′, W. 110° 28′ †	29.90	761.0	70	21.1	70	calm			0		0					sm'h		clear.
S. S. Bothnia, N. 40° 28′, W. 73° 00′	30.41	772.4	38	3.3	100	ne.			4		3		ne.	0	0	sm'h		clear.
S. S. Marathon, N. 36° 30′, W. 7° 16′	30.09	764.3	67	19.4		nnw.			2		6		nnw.	0	0	mod.	nw.	fine.
S. S. Scythia, New York, N. Y	30.46	773.7	22	— 5.6		n.			1		0			0	0			clear.
S. S. Colina, St John's, N. F.						n.			6		7		ne.	0	0			cloudy.
S. S. Labradore, N. 50° 08′, W. 29° 13′			48.2	9.0		w.			6		7		w.			hv'y	sw.	

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE—Continued.																	
S. S. Abyssinia, N. 51° 30′, W. 16° 37′*	29.84	757.9	56	13.3	81	sw.			6		9		wsw.	2 h'r	2 h'r	r'gh	sw.	squally.
S. S. Wyoming, N. 51° 06′, W. 30° 36′	30.04	763.0	47	8.3		w.			6		7		wnw.	0	0	h'vy	wnw.	clearing.
S. S. Bohemia, N. 41° 32′, W. 57° 40′†	29.90	759.4	30	—1.1		nne.			6		10		nne.	rain	rain	rg'h	n.;ne.	squally.
S. S. Cimbria, N. 40° 56′, W. 70° 29′	30.35	770.9	35.6	2.0		nnw.			5		8		n.	0	0	sm'h	n.	cloudy.
S. S. Gellert, Hamburg, Germany	30.45	773.4	37	2.8		sse.			3		8		se.					covered.
S. S. Rugia, N. 47° 09′, W. 35° 31′*	30.03	762.7	50.0	10.0		se.			5		10		sw.	0	0	5	w.	
S. S. Silesia, N. 49° 37′, W. 23° 29′†	30.12	765.0	53	11.7	83	w.			6		6		w.	1 h'r	1 h'r	6–7	w.	d. clouds.
S. S. Vandalia, Sandy Hook, N. J	30.45	773.4	41.0	5.0	92	n.			3		2		n.	0	0			fair.
S. S. Hevelius, Liverpool, Eng *†	30.17	766.3	48	8.9		sse.			5		9		ssw.	1 h'r	1 h'r			foggy.
S. S. Sirius, off Cape Frio, Brazil *	29.95	760.7				e.			1		1		e.	0	0	sm'h		clear.
S. S. Colorado, N. 26° 00′, W. 80° 03′†	30.00	762.0	68	20.0		ese.			5		4		ese.	0	0	high	se	clear.
S. S. Rio Grande, N. 38° 00′, W. 74° 20′†	30.45	773.4	44	6.7		ene.			2		3		e.	0	0	mod.	ene.	fair.
S. S. Archimede, N. 37° 50′, W. 53° 01′†	29.54	750.3	56	13.3	75	n.			6		5?		nne.	3 h'r	3 h'r	h'vy	n	cloudy.?
S. S. John Hopkins, N. 38° 46′, W. 74° 30′ *†	30.52	775.2	40	4.4		ene.			5		4		e.	0	0	mod.	se.	fair.
S. S. Glenapp, N. 24° 20′, W. 18° 15′†	30.17	766.3				ne.			3		6		ne	0	0	high	cross	cloudy.
S. S. Glenfyne, Pernambuco, Brazil *†	29.62	752.3				n.			2		2?		nne.	0	0			cloudy.?
S. S. Chalmette, Algiers, La†	29.67	753.6	68	20.0		wsw.			4		0		sw.	3 h'r	3 h'r	r'gh	se.	cloudy.
S. S. New York, N. 24° 20′, W. 82° 15′ †	30.01	762.2	75	23.9		se.			6		6		se.			r'gh	ese.	cloudy.
S. S. Denmark, N. 49° 49′, W. 20° 31′†	30.08	764.0	53	11.7		w.			4		2		wnw.	0	0	sm'h		clear.
S. S. England, N. 48° 14′, W. 38° 09′	30.01	762.2				ssw.			4		2?		ssw.	0	0	h'vy	n.	cloudy.?
S. S. Erin, N. 41° 31′, W. 57° 12′.*	30.00	762.0	39	3.9		n			8		10		ne.	12 h'r	12 h'r	mod.	nne.	squally.
S. S. Helvetia, Liverpool, Eng			47	8.3		s.			1		10		s.	0	0			misty.
S. S. Holland, N. 49° 13′, W. 10° 54′	30.11	764.8	52	11.1		ssw.			5		8		sw.	2 h'r	2 h'r	sm'h	sw.	cloudy.
S. S. City of Merida, N. 22° 23′, W. 87° 25′*†	29.78	756.4	84.2	29.0		ese.			3				ese.	0	0	cross	var.	cloudy.
S. S. Alene, N. 33° 39′ W. 74° 05†	30.12	765.0	59	15.0		ne.			5							con.		squally.
S. S. America, N. 51° 55′ E. 2° 36′	30.39	771.9	45.0	7.2	76	s.			1							sm'h	s.	foggy.
S. S. Braunschweig, Porto Grande, Cape Verde Isl'ds	30.09	764.3	75.0	23.9	81	ene.			4		8		nne.	0	0	light	n.	cloudy.
S. S. Hohenstaufen, S. 27° 19′, W. 44° 28′	29.98	761.5	77.0	25.0		se.			4		2		se.	0	0	mod.	se.	fair.
S. S. Oder, N. 50° 44′ W. 1° 28′	30.31	769.9	53.6	12.0		ese.			2		3		se.	0	0			hazy.
S. S. Ohio, N. 50° 28′, W. 2° 17′	30.30	769.6				se.			3					0	0	sm'h	se.	hazy.
S. S. Sallier, N. 43° 50′, W. 56° 14′	29.90	759.4	37.4	3.0		nne.			6		10		nne.	rain	rain	h'vy	nne.	light snow.
S. S. Werra, N. 40° 42′, W. 67° 01′*†	30.34	770.6	36.5	2.5		nne.			4–5		7		nne.	snow	snow	mod.	n.	cloudy.
S. S. Belgic, San Francisco, Cal†	29.97	761.2	49	9.4	85	calm			0		8		w.	4 h'r	4 h'r			cloudy.
S. S. Coptic, N. 26° 43′ E. 122° 46′	30.49	774.4	50.5	10.3	86	nne.			5		8		ne.	0	0	mod.	n.	cloudy.
S. S. Gaelic, N 37° 54′, W. 136° 49′*	30.19	766.8	62	16.7	100	wsw.			5		2		w.			con.	w.	d. clouds.
S. S. Oceanic, Hong-Kong, China*	30.31	769.9	55	12.8	50	ne.			4		4		ne.					fine.
S. S. Mississippi, Portland, Oregon *†	29.95	760.7	44	6.7	84	sse.			1		5		sse.					fair.
S. S. Oregon, San Francisco, Cal†	30.03	762.7	45	7.2	61	calm			0		5		s.					fair.
S. S. Ancon, N. 34° 23′, W. 120° 20′†	29.99	761.7	55	12.8	80	nw.			5		0					mod.	wnw.	clear.
S. S. City of Chester, San Francisco, Cal *†	30.04	763.0	49	9.4	78	w.			3		0							clear.
S. S. State of California, Portland, Oregon*†	29.80	756.9	42	5.6		sw.			2		10		sw.					raining.
S. S. Australia, N. 26° 33′, W. 150° 46′	30.16	766.1	70	21.1	90	se.			4		1		se.	3 h'r	3 h'r	mod.	sse.	clear.
S. S. City of New York, Sydney, N. S. W †	29.85	758.2	71	21.7	80	se.			2		5		se.	0	0			fair.
S. S. City of Pekin, N. 45° 41′ W. 179° 30′†	29.35	745.5	33	0.6	89	nne.			3		5		nw.	0	0	mod.	n.	fair.
S. S. City of Rio de Janeiro Acapulco, Mexico†	29.88	758.9	75	23.9	90	calm			3		0			0	0	sm'h		clear.
S. S. City of Sydney, N. 34° 56′, W. 129° 37′†	30.28	769.1	59	15.0	70	nw.			4		5?		nw.	0	0	h'vy	nw.	cloudy.?
S. S. City of Tokei, N. 29° 40′, E. 163° 40′†	30.23	767.8	67	19.4		s.			1		8		sw.	0	0	h'vy	w.	
S. S. Colima, N. 8° 25′, W. 79° 50′†	29.89	759.2	80	26.7	78	n.			4		3		n.	0	0	sm'h	con	clear.
S. S. San José, N. 23° 00′ W. 108° 28′†	29.93	760.2				nne.			2		2 k		nne.	0	0	long	wnw.	clear.
S. S. Zealandia, Sydney, N. S. W	29.81	757.2	79	24.4	73	n.			2		1		nw.			mod.	e.	fine.
S. S. Muriel, N. 32° 56′, W. 69° 46′	30.18	766.6	60	15.6		n			5		2			0	0	r'gh	n.	fair.
S. S. Caracas, N. 18° 42′, W. 67° 51′†	29.93	760.2	77	25.0	86	nne.			6		8		nne.	½h'r	½h'r	r'gh	n	cloudy.
S. S. Claudius, Porto Limon river, Costa Rica†	29.02	737.1				sw.			1		3			8 h'r	8 h'r	long	ne.	rainy.
S. S. Valencia, N. 25° 45′, W. 69° 38′†	30.10	764.5	72	22.2	76	nne.			3		7		e.	sh'rs	sh'rs	long	nne.	cloudy.
S. S. Belgenland, Jersey City, N. J	30.63	778.0	20	—6.7		n.			2		0			0	0			clear.
S. S. Pennland, N. 45° 22′, W. 52° 37′	29.85	758.2	36.5	2.5	100	nne.			6		10		rain	rain	h'vy	var.	raining.
S. S. Rhyuland, Antwerp, Belgium	30.46	773.7	36	2.2	70	se.			3		10			0				dense fog.
S. S. Switzerland, N. 41° 58′, W. 62° 50′†	30.11	764.8				n.			5		10		n.	snow	snow	mod.	n.	cloudy.
S. S. Waesland, N. 50° 35′ W. 180 41′	30.03	762.7	53	11.7	86	wsw.			6		5		wsw.	shr's	shr's	r'gh	sw.	clearing.
S. S. Leerdam, N. 50° 59′ E. 1° 10′†	30.43	772.9	57	13.9	82	sse.			2		5		s.	0	0			fair.
S. S. P. Caland, New York, N. Y	30.38	771.6	25.3	—3.7	100	ne.			4		0							clear.
S. S. W. A. Scholten, Rotterdam, Holland	30.53	775.4	36.0	2.2	100	sw.			3		10							foggy.
S. S. Zaandam, N. 48° 14′, W. 37° 29′	30.00	762.0	54.3	12.4	78	e.			4		6 k		e.	0	0	2	w.	cloudy.
S. S. State of Florida, N. 48° 49′, W. 37° 15′	29.98	761.5	44	6.7		ene.			2		10			sleet	sleet	sm'h	w.	overcast.
S. S. State of Georgia, N. 40° 16′, W 69° 53′†	30.35	770.9	37	2.8		nne.			5		3		nne.	0	0	sm'h		clear.
S. S. State of Indiana, N. 53° 46′, W. 25° 45′†	29.64	752.8	45	7.2		wnw.			8		6		w.	4 h'r	4 h'r	high	wnw.	threatening.
S. S. Hekla, N. 56° 30′, W. 25° 10′ *	29.48	748.8	47.3	8.5		w.			6		5		w.	shr's	sh'rs	h'vy	wsw.	squally.
S. S. Plantyn, N. 50° 07′, W. 22° 49′	29.94	760.5							5		4		nw.	4 h'r	4 h'r	mod.	nw.	squally.
S. S. Baltic, N. 48° 14′, W. 41° 56′	29.98	761.5	46	7.8	84	se.			4		10			18 h'r	18 h'r	r'gh	wnw.	drizzling.
S. S. Celtic, New York, N. Y†	30.40	772.1	35	1.7		n.			1		0			0	0			fine.
S. S. Ge manic, N. 43° 48′, W. 46° 19′†	29.53	750.0	60	15.6		ene.			3		10		e.	sh'rs	sh'rs	high	ene.	overcast.
S. S. Lepanto, N. 44° 29′, W. 37° 15′*	29.94	760.5	60	15.6		sse.			5		9		sw.	4 h'r	4 h'r	h'vy	w.	cloudy.
S. S. Marengo, N. 42° 20′, W. 47° 30′	29.43	747.5				s.			6		10		se.;s.	10 h'r	10 h'r	con	s;sw.	overcast.
S. S. Salerno, Hull, Eng						sw.			4		10			4 h'r	4 h'r			raining.
S. S. Aries, N. 39° 45′, W. 72° 50′*†	30.34	770.6				ne.			4		2		ene.	0	0	mod.	ene.	
S. S. Catherine Whiting, Philadelphia, Pa†	30.40	772.1	32	0.0		ne.			5		0			0	0			
S. S. Saxon, Philadelphia, Pa †	30.49	774.4	22	—5.6		ne.			4		5							
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 28° 16′, W. 72° 56′†	30.02	762.5	64	17.8		ne.			3		8		n.	¾h'r	¾h'r	mod.	n.	fair.
Bk. Adelaide, N 32° 53′, W. 68° 57′*†	30.25	768.3	62	16.7		nne.			6		2		nne.	0	0	r'gh	nne.	threatening.
Bg. Alcira, N. 32° 16′, W. 72° 11′	30.20	767.1	65	18.3		ne.			4		6?		ne.	0	0	r'gh	ne.	clear.?
Bk. Alpha, N. 35° 10′ W. 16° 40′†	30.21	767.3	60	18.9		nne.			5		8		nne.	0	0	long	n.	cloudy.
Schr. Annie Lewis, N. 28° 12′ W. 89° 20′†	29.87	758.7	72	22.2		s.			4		8		sw.	8 h'r	8 h'r	h'vy	se.	cloudy.
S. Annie M. Law, Manila Bay, Luzon*†	29.75	755.6	73	22.8		n.			1		0			2 h'r	2 h'r			fine.
Bk. Anna Thormann, S. 31° 30′, E. 360° 51′*	29.90	759.5	74.7	23.7	81	wnw.			4		8 k		nw.	0	0	light	e.	misty.
S. S. Antonio Lopez, N. 35° 51′, W. 16° 15′*	30.29	769.4	62.5	16.9	88	nnw.			5		3			0	0	mod.	nnw.	fair.
Bk. Aquidneck, S. 12° 18′, W. 34° 42′*†	30.10	764.5	84	28.9		s.			2				s.	½h'r	½h'r	light	ssw.	cloudy.
Bgt. Arthur, N. 19° 15′, W. 27° 00′ *†	30.18	766.6				ene.			4				ene.	0	0	mod.	ene.	cloudy.
Schr. Anna Holton, N. 25° 24′, W. 78° 31′†	29.95	760.7	70	21.1		ese.			5		2		e.	0	0	sm'h	e.	clear.
Bg. Belle of the Bay, N. 24° 59′, W. 84° 02′*†	30.02	762.5				se.			6		2		sse.	0	0	long	ene.	clear.
Bk. Champion, N. 26° 06′, W. 72° 55′			69.0	20.6		ne.			4		8		nnw.	0	0	mod.	n.	cloudy.
Bg. Clara M. Goodrich, Key Francis, W.I*†	30.00	762.0				ene.			1		5?		ene.	0	0			clear.?
Schr. C. R. Flint, N. 24° 23′, W. 80° 20′			73	22.8		ese.			3		10		se.	0	0	r'gh	ene.	cloudy.
S. S. D. J. Foley, N. 19° 19′, W. 76° 14′*†	29.95	760.7	79	26.1		ne.			6		2		ene.	0	0	r'gh	ne.	clear.
Bkt. David Preston, Pensacola, Fla			66.0	18.9		n.					5		s.	0	0			
Bk. E. L. Pettingill, N. 3° 48′, W. 121° 01′*†	29.90	759.4	80	26.7		sse.			1		5		se.	0	0	sm'h	sse.	
Schr. Edith R. Seward, Baltimore, Md			25	—3.9		ne.			1		9			0	0			cloudy.
S. E. J. Spicer, N. 52° 35′, W. 5° 30′*	30.18	766.6	53	11.7		sw.			5		fg.		sw.	rain	rain	mod.	sw.	hazy.
Bk. E. D. Bigelow, Verdon roads, France †*	30.20	767.1				so.			3									misty.
Bk. Essex, N. 6° 05′, E. 54° 32′*†	29.92	760.0	85	29.4		ne.			6					rain	rain	4	ne.	threatening.
Schr. F. E. McDonald, Rockland, Maine †	30.41	772.4	20	—6.7		ne.			1		0			0	0			fine.
S. S. Foscolia, N. 40° 23′, W. 63° 50′						ne.			10		8		ne.	0	0	h'vy	ne.	cloudy.
Bk. Freya, N. 23° 31′, W. 83° 21′			72	22.2		ese.			3		8		se.	0	0	cross	ne.	fair.
S. J. W. Glidemeister, N. 49° 55′, W. 4° 52′			50.9	10.5		w.			1		9 k		w.			2–3	w.	foggy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bg. George. N. 27° 52′, W. 56° 15′ *†	29.94	760.5	.....	.....	.....	wnw.	.....	.....	5	.....	2	.....	nw.	sq 'lls	sq 'lls	mod	wnw.	clearing.
S. Geo. Stetson, N. 39° —′, W. 71° —′ *†	30.50	774.7	51	10.6	86	nne.	.....	.....	6	.....	6?	.....	ne.	light	light	short	ene.	clear ?
Bk. Godeffroy, S. 57° 19′, W. 69° 23′†	29.11	739.4	41.0	5.0	93	wsw.	.....	.....	6–7	.....	10	.....	wsw.	light	light	r'gh	wsw.	squally.
Bk. Great Surgeon, S. 25° 25′, E. 65° 05′ *†	30.12	765.0	82	27.8	.....	nw.	.....	.....	4	.....	3	.....	n.	o	o	mod.	sw.	fair.
Bk. Grey Eagle, S. 15° 52′, W. 35° 20′ *†	29.85	758.2	.....	.....	.....	ssw.	.....	.....	4	.....	3	.....	se.	o	o	long	sw.	fine.
Bk. Hattie G. McFarland, N. 35° 40′, W. 72° 30′†	30.41	772.4	42	5.6	.....	ne.	.....	.....	5	.....	5	.....	ne.	o	o	long	e.	
Schr. Isabel Alberto, N. 35° 23′, W. 74° 38′ †	30.31	769.9	.....	.....	.....	ne.	.....	.....	4	.....	3	.....	ne.	sli't	sli't	mod.	n.	fair.
Schr. Jennie N. Huddell, N. 34° 50′, W. 76° 00′†	30.21	767.3	57	13.9	.....	ne.	.....	.....	6	.....	10	.....	ne.	o	o	chop	ne.	squally.
Bk. Joseph A. Ropes, S. 8° 33′, E. 50° 00′ *†	29.97	761.2	86	30.0	76	w.	.....	.....	1	.....	5	.....	w.	o	o	mod.	n.	fair.
Bkt. Josephine, N. 24° 30′, W. 34° 22′†	30.15	765.8	78	25.6	61	ese.	.....	.....	4	.....	0	.....	.....	o	o	mod.	ese.	clear.
Bk. Julia H, N. 49° 11′, W. 14° 08′	30.11	764.8	52.9	11.6	94	s.	.....	.....	6	.....	10	.....	.....	8 h'r	8 h'r	5	sw.	misty.
S. S. J. W. Wilson, Pensacola, Fla†	29.70	754.4	64	17.8	.....	wsw.	.....	.....	6	.....	10	.....	wsw.	10 h'r	10 h'r	.....	.....	cloudy.
Light House Tender, Laurel, Pensacola, Fla †	29.69	754.1	65	18.3	.....	s.	.....	.....	3–4	.....	9	.....	ssw.	2 h'r	2 h'r	hv'y	ssw.	cloudy.
Bk. Louise Adelaide, off Great Isaac, W. I. *†	30.03	762.7	68	20.0	.....	e.	.....	.....	3	.....	7	.....	se.	o	o	sm'h	.....	fine.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	29.96	761.0	.....	.....	.....	calm	.....	.....	0	.....	1	.....	ene.	o	o	sm'h	.....	clear.
S. S. Madrid, N. 44° 23′, W. 26° 24′*†	30.42	772.7	58	14.4	.....	calm	.....	.....	0	.....	fg.	.....	.....	driz	driz	sm'h	wnw.	foggy.
S. S. Malabar, Marseilles, France	.....	.....	.....	.....	.....	ne.	.....	.....	2	.....	0	.....	.....	o	o	sm'h	.....	clear.
Bk. Matilda C. Smith, N. 38° 17′, W. 74° 42′ *†	30.50	774.7	.....	.....	.....	ene.	.....	.....	5	.....	5	.....	e.	o	o	mod.	ese.	fine.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.02	762.5	64	17.8	.....	ese.	.....	.....	5	.....	2	.....	se.	.....	.....	.....	.....	
S. Minnie N. Gerow, N. 33° 36′, W. 52° 52′*†	29.62	752.3	.....	.....	.....	nnw.	.....	.....	3	.....	5	.....	nw.	.....	.....	h'vy	nw.	fair.
S. M. P. Grace, S. 40° 38′, W. 121° 27′ *†	29.98	761.5	59	15.0	.....	e. to ne.	.....	.....	5	.....	10	.....	ne.	rain	rain	sm'h	sw.	raining.
Bg. Myrtle, Clements Port, Nova Scotia *†	30.36	771.1	.....	.....	.....	ne.	.....	.....	2	.....	10	.....	ne.	o	o	.....	.....	cloudy.
Bg. O. C. Clary, N. 19° 20′, W. 67° 46′*†	29.90	759.4	80	26.7	91	n.	.....	.....	4	.....	10	.....	nne.	o	o	r'gh	n.	cloudy.
Bk. Ottawa, N. 41° 24′, W. 30° 35′*	30.24	768.1	65	18.3	.....	ssw.	.....	.....	4	.....	2	.....	sw.	7 h'r	7 h'r	sm'h	wsw.	clearing.
S. Paramita, San Francisco, Cal†	30.00	762.0	48	8.9	.....	sse.	.....	.....	3	.....	0	.....	.....	o	o	.....	.....	
Bk. Pilgrim, N. 23° 41′, W. 65° 40′*†	29.95	760.7	.....	.....	.....	nnw.	.....	.....	5	.....	2	.....	nnw.	o	o	long	n.	fair.
S. S. Radnorshire, N. 22° 58′, E. 116° 54′*†	30.30	769.6	.....	.....	.....	ne.	.....	.....	9	.....	10	.....	ne.	o	o	long	ne.	cloudy.
S. S. Raleigh, Hunter's Point, Long Island*†	30.20	767.1	20	— 6.7	.....	.....	.....	.....	.....	.....	0	.....	.....	o	o	.....	.....	
Bk. Rebus, N. 48° 31′, W. 11° 19′ *	30.03	762.7	53	11.7	.....	s.	.....	.....	3	.....	6	.....	s.	o	o	sm'h	wnw.	fair.
Schr. S. B. Hubbard, N. 37° 10′, W. 75° 09′†	30.39	771.9	38	3.3	.....	ene.	.....	.....	5	.....	5	.....	ne.	o	o	long	ne.	fine.
Bk. Scud, N. 33° 39′, W. 72° 24′ *†	30.25	768.3	.....	.....	.....	ne.	.....	.....	6	.....	6	.....	ne.	sq 'lls	sq 'lls	short	nnw.	rainy.
Bk. Southern Belle, N. 49° 52′, W. 14° 45′*†	29.95	760.7	50	10.0	.....	sw.	.....	.....	4	.....	10	.....	.....	light	light	long	nw.	foggy.
S. S. Strathleven, N. 1° 19′, E. 104° 10′	29.87	758.7	80.0	26.7	96	nne.	.....	.....	4	.....	3	.....	n.	o	o	.....	.....	d. clouds.
Bk. Sunbeam, N. 38° 49′, W. 61° 48′	29.92	760.0	50	10.0	86	nne.	.....	.....	7	.....	10	.....	nne.	2 h'r	2 h'r	hv'y	nne.	cloudy.
Schr. T. S. McLellan, N. 25° 51′, W. 64° 00′	.....	.....	68	20.0	.....	ene.	.....	.....	.....	.....	.....	.....	ne.	.....	.....	.....	ene.	
U.S. F. C. S. S. Fish Hawk, Washington, D. C †	30.47	773.9	30	— 1.1	.....	calm	.....	.....	0	.....	6	.....	calm	.....	.....	.....	.....	raining.
Bk. Vincenzo Accame, N. 38° 16′. W. 53° 14′†	29.50	749.3	62.6	17.0	.....	nw.	.....	.....	6	.....	5	.....	nnw.	1½h'r	1½h'r	.....	.....	
Bk. Wandering Jew, Montevideo, Uruguay†	29.65	753.1	72	22.2	.....	ne.	.....	.....	2	.....	6	.....	ne.	o	o	.....	.....	fair.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.05	763.3	.....	.....	.....	calm	.....	.....	0	.....	2	.....	s.	.....	.....	sm'h	s.	fair.
S. Wm. Woodbury, N. 50° 12′, W. 2° 47′*	30.30	769.6	52	11.1	.....	sse.	.....	.....	4	.....	2	.....	s.	.....	.....	sm'h	w.	clear.

International Chart I. December 20, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 21, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.31	769.9	58.0	14.8	79	n.	.....	.....	1	.....	4	.....	.....	0	0	cloudy	Malaterre.
Algiers	.....	.....	30.26	768.5	59.0	15.0	85	n.	.....	.....	4	.....	6	.....	.....	0.091	2.3	cloudy	Thève.
La Calle	.....	.....	30.14	765.5	57.6	14.2	96	n.	.....	.....	2	.....	5	.....	.....	0.563	14.3	cloudy	Foufréde.
Tunis	.....	.....	30.13	765.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.26	768.5	50.7	10.4	60	sw.	.....	.....	1	.....	10	.....	.....	0.106	2.7	covered	Pérés.
Tebessa	.....	.....	30.15	765.9	48.9	9.4	84	ne.	.....	.....	2	.....	4	.....	.....	0.079	2.0	cloudy	Dognon.
Geriville	.....	.....	.....	.....	41.7	5.4	66	ne.	.....	.....	3	.....	5	.....	.....	0.157	4.0	cloudy	Lonchamp.
Laghouat	.....	.....	30.13	765 2	54.3	12.4	64	n.	.....	.....	5	.....	2	.....	.....	0	0	fair	Abraham.
Biskra	.....	.....	30.14	765.5	68.0	20.0	35	nw.	.....	.....	3	.....	4	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	29.69	754.1	29.78	756.4	60.7	15.9	79	s.	7	3.1	.....	.....	2	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.82	757.5	30.41	772.4	31.3	— 0.4	96	ne.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.52	749.9	30.34	770.6	29.8	— 1.2	90	e.	5.6	2.5	.....	.....	5	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.49	749 0	30.42	772.6	33.1	0.6	82	s.	.....	.....	2	.....	4 8	.....	s.	0	0	.....	Julius Mikolik.
Gratz	29.10	739 0	30.43	772.8	30.7	— 0.7	84	nw.	.....	.....	3	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.96	735.6	30.49	774.5	29.1	— 1.6	68	sse.	.....	.....	3	.....	0	.....	.....	0	0	foggy	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.89	733.8	30.32	770.2	27.0	— 2.8	97	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	The Staff.
Lemberg	29.42	747.3	30.48	774 3	24.3	— 4.3	45	s.	.....	.....	3	.....	1	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	30.24	768 0	30.35	771.0	45.1	7.3	72	se.	.....	.....	1	.....	3	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	30.00	761.9	30.46	773 6	25.5	— 3.6	91	ne.	.....	.....	1	.....	10	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	30.17	766.3	30.47	773 9	30.9	— 0.6	88	se.	.....	.....	1	.....	0	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.24	768.1	30.34	770.7	42.1	5.6	58	e.	.....	.....	2	.....	2	.....	.....	0	0	.....	Royal Academy.
Vienna	29.63	752.5	30.39	771.9	29.5	— 1.4	90	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.30	744.2	29.40	746.7	41.6	5.3	80	sw.	11	4.9	.....	.....	6	.....	.....	0.005	0.1	misty	W. Roswell
Armagh, Observatory	29.55	750.6	29.79	756.7	41.4	5.2	85	wsw.	16	7.2	.....	.....	7	.....	.....	.....	.....	d. clouds	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.75	755.6	44.1	6.7	75	wsw.	43	19.2	.....	.....	10	.....	.....	.....	.....	overcast	John Hartnup.
Bolton, Sharples	29.20	741.7	29.75	755.6	42.2	5.7	84	wsw.	12	5.4	.....	.....	10	.....	.....	.....	.....	overcast	Thomas Mackereth.
Bradford, Yorkshire	29.30	744.2	29.69	754.1	43.6	6.4	76	sw.	.....	.....	4	.....	5	.....	.....	0.16	4.1	raining	McLandsborough&Preston
Bridgetown, Barbadoes	29.93	760.2	29.96	761.0	82.0	27.8	75	e.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl.J.Surgenor, A.H.C.
Cardington	.....	.....	.....	.....	47.0	8.3	70	nw.	.....	.....	3.0	.....	1	.....	.....	.....	.....	blue sky	John McLaren.
Chatham, School M. E.	29.78	756.4	29.91	759 7	46.9	8.3	80	w.	.....	.....	1	.....	7	.....	.....	.....	.....	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.86	758.4	30.10	764.5	48.1	8.9	86	wnw.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	The Staff.
Fort Napier, Natal	27.25	692.1	29.46	748.3	85.0	29.4	61	nw.	.....	.....	1	.....	9	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.71	754.6	29.94	760.5	85.0	29.4	87	nw.	.....	.....	2	.....	2	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H.C.
Gibraltar, Mediterranean	30.19	766.8	30.25	768.3	66.5	15.8	91	se.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Glasgow, Observatory	29.32	744 7	29.53	750.0	43.0	6.1	83	wsw.	.....	.....	4	.....	.....	.....	.....	.....	.....	raining	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.73	755.1	29.91	759.7	46.4	8.0	77	w.	.....	.....	2	.....	6	.....	.....	.....	.....	d. clouds	The Staff.
Guernsey	29.79	756.7	30.10	764.5	50.0	10.0	79	w.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	A. Collenette, F. M. S.
Kew, Observatory	29.89	759.2	29.93	760 2	47.0	8.3	69	w.	17	7.6	.....	.....	2	.....	.....	.....	.....	blue sky	The Staff.
Leicester, Museum	29.58	751.3	29.83	757.7	46.6	8.1	67	sw.	.....	.....	1	.....	.....	.....	.....	.....	.....	blue sky	J. C. Smith.
Malta, Mediterranean	29.89	759 2	29.95	760 7	60.8	16.0	97	ne.	.....	.....	2	.....	9	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.05	763.3	30.10	764.5	71.8	22.1	73	ne.	.....	.....	1	.....	8	.....	.....	.....	.....	overcast	C. S. Duncombe
Oscott, St. Mary's College	29.29	744.0	29.82	757.4	46.2	7.9	73	w.	.....	.....	6	.....	5	.....	.....	.....	.....	d. clouds	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.68	753.9	29.91	759.7	46.7	8.2	71	sw.	.....	.....	3	.....	1	.....	.....	.....	.....	blue sky	The Staff.
Plymouth	29.98	761.5	30.06	763.5	47.8	8.8	92	w.	.....	.....	3	.....	10	.....	.....	.....	.....	gloomy	John Merrifield.
Sandwick Manse, Orkneys	29.18	741.2	29.28	743.7	39.8	4.3	92	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	showery	Rev. C. Clouston, L.L.D.
Scutari Cemetery, Turkey	30.39	771.9	30.46	773.7	41.6	5.3	78	ne.	.....	.....	2	.....	9	.....	.....	.....	.....	drizzling	W. H. Lyne.
Sheffield	29.44	747.8	29.70	754 4	45.0	7.2	96	wsw.	.....	.....	5	.....	1	.....	.....	0.17	4.3	blue sky	W. F. Cooper.
Silloth Rectory	29.57	751 1	29.60	751.8	41.2	5.1	86	w.	.....	.....	4	.....	5	.....	.....	0.310	7.9	squally	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.73	755.1	42.8	6.0	81	w.	22	9.8	.....	.....	10	.....	.....	.....	.....	raining	1. New.
Stratfield Turgiss	29.72	751.9	29.94	760.5	46.5	8.1	73	w.	.....	.....	3-4	.....	3	.....	.....	.....	.....	d. clouds	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.04	763.0	30.08	764.0	50	10.0	65	nw.	.....	.....	0	.....	4	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	30.06	763.5	30.09	764.3	48.9	9.4	69	w.	23	10.3	.....	.....	10	.....	.....	blank	blank	misty	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.23	767 8	30.28	769.1	27	— 2.8	76	n.	22	9.8	.....	0	8 8	.....	n.	0	0	cloudy	R. J. Cundall, C. E
Chatham, N. B*	30.30	771.1	30.43	772.9	14	—10.0	91	n.	7	3.1	.....	0	0	.....	.....	0	0	clear	G. A. Blair.
Father Point, Quebec*	30.44	773.2	30.47	773.9	8	—13.3	100	s.	5	2.2	.....	.....	10 8	.....	calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.26	743.2	30.19	766 8	— 3	—19.4	100	ne.	2	0.9	.....	.....	fg.	.....	.....	0	0	foggy	James Stewart.
Halifax, N.S*	30.12	765.0	30.26	768.6	25	— 3.9	88	nw.	14	6.3	.....	5 k	0	n.	.....	0	0	fair	A. Allison.
Kingston, Ontario*	29.81	757 2	30.17	766.3	20	— 6.7	100	ne.	4	1.8	.....	.....	10 n	.....	.....	0.30	7.6	heavy snow	A. P. Knight, M. A
Montreal, Quebec*	30.12	765 0	30.35	770.9	7	—13.9	91	n.	1	0.4	.....	8 ck	2 8	n.	.....	0.01	0.3	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.23	742.4	29.95	760 7	30	— 1.1	88	se.	21	9.4	.....	.....	10 n	.....	se.	0.08	2.0	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.20	741.7	29.91	759.7	37	2.8	100	se.	8	3.6	.....	.....	10 n	.....	.....	0.45	11.4	threatening	H. Morgan.
Port Stanley, Ontario	29.18	741.2	29.85	758.2	37	2.8	79	e.	30	13.4	.....	.....	10 n	.....	e.	0.40	10.2	light rain	M. Payne.
Quebec, Quebec*	30.08	764.0	30.43	772 9	18	— 7.8	84	ne.	.....	.....	1	.....	10 k	.....	ne.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.67	753.6	30.17	766.3	16	— 8.9	83	e.	12	5.4	.....	.....	10 n	.....	.....	0.06	1.5	light snow	W. B. McIntyre.
Saugeen, Ontario*	29.08	738.6	29.81	757.2	36	2.2	85	se.	25	11.2	.....	.....	10 k-	.....	.....	0.07	1.8	cloudy	
St. Andrews, N .B	30.34	770.6	30.39	771 9	15	— 9.4	93	n.	6	2.7	.....	0	2 k	.....	n.	0	0	clear	
Sydney, C. B*	30.00	763.5	30.12	765.0	28	— 2.2	84	ne.	25	11.2	.....	.....	10 ks	.....	ne.	0	0	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.59	751.6	29.59	761.7	36	2.2	85	e.	21	9.4	.....	.....	10 s	.....	e.	0.32	8.1	cloudy	Magnetic Observatory.
Yarmouth, N.S*	30.23	767.8	30.30	769.6	23	— 5.0	76	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	Lt. F. E. Wilmot, R.N.
Sub-series.																			
Mount Forest	28.44	722.4	29.89	759.2	35.0	1.7	100	se.	.....	.....	5	.....	10	.....	se.	0.144	3.7	.....	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	34	1.1	100	ne.	3	1.3	.....	.....	10	.....	.....	0.48	12.2	threatening	John Delany.
Cape Colony.																			
Cape St.Francis Lt.House	29.80	756.9	29.83	757.7	59.0	15.0	94	w.	11.8	5.1	.....	.....	10 n	.....	.....	1.030	26.2	showery	John Duthie.
Cape Town, C G.H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction Upper.	Clouds. Direction Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	25.01	635.3	.....	.....	5.6	—14.6	.....	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	**Mission, S. J.**
Tchang-kia-tchouang	30.78	781.8	30.89	784.6	16.7	— 8.5	51	nw.	5.8	2.6	.....	0	0	.....	.....	0	0	clear	**Mission, S. J.**
Zi-Ka-Wei, near Shanghai	30.83	783.1	30.85	783.7	25.2	— 3.8	55	nw.	8.9	4.0	.....	0	2 k	.....	.....	0	0	fair	**M. Marc Dechevrens, S.J.**
DANISH.																			
Copenhagen	29.95	760.6	29.99	761.8	31.1	— 0.5	92	sse.	27	12	.....	.....	10	.....	.....	.....	.....	hazy	Oversergent Fischer.
Fanoe	29.82	757.3	29.84	757.8	30.9	— 0.6	100	sse.	.....	.....	6	.....	10	.....	.....	.....	.....	hazy	Overloerer Lauridsen.
Godthaab, Greenland	30.13	765.4	30.18	766.5	16.5	— 8.6	79	ene.	.....	.....	4	.....	5	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	30.01	762.3	30.03	762.8	15.1	— 9.4	.....	calm	.....	.....	0	.....	1	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	30.23	767.9	30.28	769.1	6.4	—14.1	.....	e.	.....	.....	2	.....	5	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.46	748.3	29.50	749.4	26.6	— 3.0	94	calm	.....	.....	0	.....	8	.....	.....	.....	.....	foggy	A. O. Thorlacius.
Thorshavn	29.18	741.1	29.21	742.0	37.0	2.8	94	calm	0	0	.....	.....	4	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.70	754.4	29.80	756.8	30.7	— 0.7	98	sse.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	Loerer Oesterboi.
Upernavik, Greenland	30.29	769.3	30.34	770.5	—11.9	—24.4	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.74	755.5	30.41	772.4	47.8	8.8	97	calm	.....	.....	0	.....	fg	.....	.....	0.16	4.	dense fog	M. Labroue, Director.
Alençon, Normal School	29.57	751.1	30.12	765.1	46.4	8	97	sw.	.....	.....	1	.....	km	sw.	n.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.82	757.3	30.09	764.2	36.5	2.5	95	sw.	.....	.....	1	.....	k	.....	sw.	0	0	.....	M. Fénéon, Command't.
Avignon, Normal School	30.25	768.3	30.33	770.3	41.7	5.4	84	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.63	752.7	30.22	767.5	39.2	4.0	93	s.	.....	.....	1	.....	10	.....	ssw.	0	c	covered	M. Saillard, Director.
Beauvais, Normal School	29.82	757.4	30.10	764.4	44.2	6.8	94	wsw.	.....	.....	2	.....	10	.....	wsw.	.....	.....	raining	M. Frère Eugène Marie.
Besançon, Normal School	29.32	744.6	30.23	767.8	32.7	0.4	89	ne.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.06	763.5	30.33	770.4	45.7	7.6	93	se.	.....	.....	1	.....	10	.....	.....	0.004	0.1	foggy	M. Rayet, Director.
Bourges, Normal School	29.68	753.9	30.25	768.4	44.2	6.8	94	w.	.....	.....	1	.....	8	.....	w.	0	0	.....	M. Malet, Director.
Brest, Naval Observatory	29.95	760.8	30.20	767.0	50.0	10.0	97	w.	.....	.....	2	.....	10	.....	w.	0.189	4.8	.....	M. de Kermarec, Dir.
Caen, Normal School	29.99	761.7	30.06	763.6	48.4	9.1	81	.....	.....	.....	.....	.....	10	.....	.....	0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.83	757.7	30.16	766.0	38.3	3.5	95	s.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.60	751.7	30.13	765.4	32.7	0.4	81	s.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.94	735.0	30.34	770.5	45.0	7.2	69	se.	.....	.....	1	.....	8	.....	.....	0	0	foggy	M. Allnard, Director.
Cluny, Normal School	29.41	746.9	30.28	769.2	42.8	6	51	ne.	.....	.....	1	.....	5	.....	nw.	.....	.....	raining	M. de Villemontée, Dir.
Commercy, Normal School	29.34	745.2	30.24	768 2	34.3	1.3	96	s.	.....	.....	1	.....	n	s.	s.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	27.72	704.2	30.34	770.6	43.2	6.2	77	ne.	.....	.....	1	.....	1	.....	.....	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	29.16	740.6	30.27	768.8	49.1	9.5	76	n.	.....	.....	1	.....	3	.....	sw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.56	750.9	30.38	771.7	30.2	— 1	96	ese.	.....	.....	1	.....	n	.....	.....	0	0	.....	M. Ablard, Director.
Guéret	28.66	728.1	30.31	769 8	44.6	7	85	sw.	.....	.....	2	.....	n	.....	ne.	0.173	4.4	.....	**M. Delorme, Dir.**
Lamballe, Normal School	29.97	761.3	30.25	768.3	47.7	8.8	92	s.	.....	.....	3	.....	5	.....	s.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.84	757.8	30.41	772.3	54.0	12.2	74	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.11	764.8	30.21	767.4	51.8	11.0	90	w.	.....	.....	3	.....	10	.....	.....	0.150	3.8	raining	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.25	742.9	30.36	771.2	31.5	— 0.3	100	se.	.....	.....	1	.....	fg	.....	.....	0	0	dense fog	M. André, Director.
Mans, Normal School	29.91	759 6	30.22	767.7	48.0	8.9	93	sw.	.....	.....	3	.....	8	.....	sw.	0	0	very cloudy	M. Piboën, Director.
Marseille, Observatory	30.03	762.7	30.30	769.6	53.4	11.9	77	w.	.....	.....	2	.....	3	.....	w.	0	0	.....	M. Stephan, Director.
Montlouis	25.05	636.2	29.89	759 2	39.7	4.3	58	w.	7.4	3.3	.....	.....	4	w.	.....	0	0	.....	**M. Caré for Dr. Fines.**
Montpellier, Normal School	30.16	766.0	30.35	770.8	51.8	11	95	s.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Gaizin, Director.
Nancy, Normal School	29.37	746.1	30.20	767.0	33.8	1.0	96	ssw.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Hasse, Director.
Nantes, Observatory	30.10	764.4	30.26	768.5	52.5	11.4	89	sw.	.....	.....	1–2	.....	10 km/h	.....	sw.	0.024	0.6	.....	M. Lecroeque, Director.
Perpignan, Observatory	30.21	767.4	30.33	770.3	52.9	11.6	93	s.	1.8	0.8	.....	.....	10	.....	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.39	543.3	.....	.....	25.2	— 3.8	.....	nw.	.....	.....	2	.....	5	.....	nw.	0	0	cloudy	**M. Vaussenat.**
Privas, Normal School	29.28	743.6	30.40	772.1	35.1	1.7	71	e.	.....	.....	1	.....	fg	.....	.....	0	0	foggy	M. Tallien.
Puy de Dôme Obs'y, Summit	25.30	642.7	.....	.....	35.2	1.8	90	wsw.	.....	.....	4	.....	10	.....	.....	0	0	cloudy	M. Allnard, Director.
Rochefort, Naval Obs'y	30.28	769.1	30.31	769.9	48.6	9.2	97	ssw.	.....	.....	2	.....	10	.....	ssw.	0.71	18.	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.02	762.5	30.24	768.0	53.1	11.7	87	sw.	.....	.....	1	.....	8	.....	e.	0.055	1.4	very cloudy	M. Brotier, Director.
Rodez, Normal School	28.11	714.0	30.31	769.9	45.0	7.2	71	ne.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Seger, Director.
Rouen, Normal School	30.03	762.7	30.08	763.9	46.8	8.2	97	e.	.....	.....	1	.....	10	se.	.....	.....	.....	raining	M. Moullot.
Saint Lô	.....	.....	.....	.....	47.8	8.8	99	w.	.....	.....	1	.....	5	.....	w.	0.008	0.2	cloudy	**M. Delaplanche, Dir.**
Saint Maur, Observatory	29.97	761.3	30.14	765.5	42.1	5.6	99	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.69	754.1	30.42	772 7	42.6	5.9	98	se.	.....	.....	1	.....	10	w.	.....	0	0	foggy	M. Baillaud, Director.
Tours	30.07	763.8	30.25	768.3	47.5	8.6	92	ssw	.....	.....	1	.....	10	.....	wsw.	0	0	covered	M. de Tastes.
Versailles, Observatory	29.61	752.0	30.10	764.5	43.9	6.6	100	sw.	.....	.....	2	.....	.....	.....	.....	0.039	1.0	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	30.24	768.1	30.39	771.9	55.0	12.8	87	w.	21.7	9.7	.....	0	7 k	.....	w.	0	0	.....	**M. Cartier, Director.**
GERMAN.																			
Ansbach	28.72	729.4	30.26	768.6	28.8	— 1.8	85	calm	.....	.....	0	.....	2	.....	.....	0	0	.....	**Prof. Jnedt.**
Bamberg	29.24	742.8	30.09	764.3	31.5	— 0.3	93	calm	.....	.....	0	.....	7	.....	.....	.....	.....	snowing	Prof. Dr. Hoh.
Berlin	29.85	758.3	30.04	763.0	35.2	1.8	78	sw.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.68	753.9	30.22	767.5	34.5	1.4	67	sse.	.....	.....	3	.....	0	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.75	755.6	30.21	767.4	33.4	0.8	80	sw.	.....	.....	2	.....	10	sw.	.....	0.370	9.4	.....	Albert Senz.
Cassel	29.32	744.6	30.03	762.7	30.2	— 1.0	92	s.	.....	.....	6	.....	10	s.	.....	0.012	0.3	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.77	756.1	30.12	765.0	32.4	0.2	85	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.81	731.7	30.33	770.3	30.6	— 0.8	100	w.	.....	.....	1	.....	10	.....	.....	0.598	15.2	foggy	Wilhelm, Chief Tel.
Hamburg	29.87	758.6	29.96	760.9	32.2	0.1	94	sse.	.....	.....	4	.....	10	.....	.....	0	0	light fog	E. Preller.
Kiel	29.93	760.3	29.95	760.7	32.5	0.3	90	sse.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.64	752.8	30.08	763.9	35.4	1.9	80	sse.	.....	.....	2	.....	2	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.83	757.6	30.03	762.7	33.4	0.8	83	sse.	.....	.....	2	.....	10 ks	.....	sw.	0.008	0.2	.....	**Weather Observatory.**
Memel	30.36	771.2	30.41	772.4	18.7	— 7.4	69	sse.	.....	.....	4	1 c	0	.....	.....	.....	.....	.....	Issermann.
Munich	28.35	720.0	30.22	767.6	30.4	— 0.9	85	calm	.....	.....	0	.....	2	.....	.....	0	0	.....	**Central Station.**
Neufahrwasser	30.29	769.3	30.30	769.7	23.5	— 4.7	93	se.	.....	.....	3	.....	10	.....	.....	0	0	.....	**A. Lothes.**
Neustadt, Palatinate	29.61	752.1	30.14	765.5	35.2	1.8	95	calm	.....	.....	0	.....	10	.....	.....	0.079	2.0	.....	Dicknethier.
Stuttgart	29.20	741.6	30.14	765.6	30.2	— 1.0	90	n.	.....	.....	1	.....	10	.....	.....	0.126	3.2	raining	**Prof. Dr. Schoder.**
Wustrow	30.03	762.8	30.06	763.5	31.1	— 0.5	92	sse.	.....	.....	5	.....	10	.....	.....	0	0	foggy	**Profs. Brandes & Reimer**
GREEK.																			
Athens	29.94	760.5	30.34	770.5	49.3	9.6	.....	n.	.....	.....	5.0	.....	8	.....	.....	0	0	covered	**Schmidt & Wourlisch.**
INDIAN.																			
Kurrachee	30.00	762.0	30.05	763.3	76.0	24.4	68	sw.	14.0	6.3	.....	.....	6	ssw.	.....	0	0	d. clouds	
Deesa	29.49	749.1	29.97	761.2	82.2	27.9	30	wsw.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.94	760.5	29.98	761.4	80.3	26.8	64	wnw.	11.0	4.9	.....	.....	4	w.	.....	0	0	d. clouds	
Poona, Yarrowda	28.10	713.8	29.95	760.6	83.7	28 7	17	e.	9.0	4.0	.....	.....	5	e.	.....	0	0	d. clouds	
Trichinopoly	29.71	754.6	29.99	761.8	77.1	25.1	77	ne.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.42	696.5	29.96	761.0	77.8	25.4	31	ene.	7.0	3.1	.....	.....	4	sw.	.....	0	0	d. clouds	
Lahore	29.26	743.2	30.05	763.2	56.6	13.7	66	calm	0	0	.....	.....	10	w.	.....	0	0	gloomy	
Roorkee	29.10	739.2	30.05	763.2	59.8	15.4	71	calm	0	0	.....	.....	9	w.	.....	0	0	.....	
Agra	29.48	748.7	30.06	763.4	71.2	21.8	30	w.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.97	735.8	30.03	762.8	73.6	23.1	30	calm	2.0	0.9	.....	.....	6	ne.	.....	0	0	d. clouds	
Jubbulpore	28.67	728 2	30.08	763.9	64.8	18.2	58	calm	2.0	0.9	.....	.....	2	ne.	.....	0	0	d. clouds	
Lucknow	29.67	753.6	30.06	763.6	60.3	15.7	57	calm	0	0	.....	.....	1	.....	.....	0	0	blue sky	
Allahabad	29.74	755.4	30.07	763.7	59.4	15.2	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.88	758.9	30.07	763.8	64.4	18.0	70	w.	3.4	1.5	.....	.....	3	w.	w.	0	0	.....	
Hazaribagh	27.98	710.6	30.06	763.6	61.7	16 5	48	nw.	5.9	2.6	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.96	761.0	30.04	763.1	73.4	23.0	72	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	30.03	762.7	30.05	763.3	66.2	19.0	66	nnw.	0.5	0.2	.....	.....	1	.....	.....	0	0	d. clouds	
Dhubri	29.92	759.9	30.04	763.0	69.5	20.8	78	calm	0.1	0.04	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.95	760.6	30.04	763.0	69.1	20.6	67	calm	1.8	0.8	.....	.....	2	.....	.....	0	0	blue sky	
Sibsagar	29.71	754.6	30.06	763.5	66.1	18.9	89	ne.	2.0	0 9	.....	.....	0	.....	.....	0	0	blue sky	
Jeypore	28.55	725.2	30.02	762.6	71.9	22.2	46	calm	0.6	0.3	.....	.....	2	.....	.....	0	0	d. clouds	
ITALIAN.																			
Udine	29.93	760.1	30.35	770.8	41.2	5.1	59	se.	2.5	1.1	.....	.....	0	.....	.....	0	0	.....	**Prof. Giovanni Clodig.**

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	29.82	757.3	30.35	770.9	35.6	2.0	93	s.	1.8	0.8			3			0	0		Prof. Schiaparelli.
Padua	30.24	768.1	30.35	771.0	40.6	4.8	64	calm	0	0			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.39	746.6	30.34	770.5	37.2	2.9	95	nw.	0.7	0.3			10			0	0		Prof. F. F. Denza.
Genoa	30.11	764.8	30.31	769.8	48.7	9.3	52	ne.	3.8	1.7			1	sw.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.33	719.6	30.30	769.6	38.3	3.5	69	e.			2		2			0	0		Prof. D. C. Bruno.
Pesaro	30.28	769.1	30.33	770.4	43.5	6.4	76	nw.	8.7	3.9			10			0	0		Prof. Luigi Guidi.
Florence	30.03	762.8	30.29	769.4	48.2	9.0	60	ne.			2		7	se.		0	0		Prof. Costantino Pittei.
Leghorn	30.13	765.2	30.21	767.4	49.5	9.7	59	ne.	8.7	3.9			2			0	0		Prof. P. Monte.
Rome	30.08	764.1	30.26	768.6	53.6	12.0	60	n.	1.8	0.8			10			0	0		Prof. P. Tachini.
Lecce	30.02	762.4	30.28	769.0	54.0	12.2	70	nnw	6.3	2.8			2			0	0		Prof. C. de Giorgi.
Cosenza	29.36	745.7	30.27	768.8	51.1	10.6	75	wsw.	2.5	1.1			9	sw.		0	0		Prof. D. Conti.
Cagliari	29.99	761.8	30.19	766.8	57.9	14.4	65	nw.			2		0			0	0		Prof. A. Pacinotti.
Palermo	29.92	760.0	30.18	766.5	59.0	15.0	66	ene.	4.9	2.2			9	nne.		0	0		Prof. G. Caccintore
Syracuse	30.05	763.2	30.09	764.3	58.5	14.7	68	ne.	37.4	16.7			10	ne.		0.315	8.0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.69	754.1	30.22	767.7	54.3	12.4	57	ne.	0.7	0.3			0			0	0		Prof. F. Brioschi.
Stelvio	22.21	564.1			22.6	— 5.2	32	se.			2		1			0	0	misty	Prof. F. F. Denza.
Valdobbia	22.29	566.1			25.5	— 3.6	62	n.			2		1			0	0	misty	Prof. F. F. Denza.
JAPANESE.																			
Akita	30.06	763.6	30.09	764.4	29.0	— 1.7	78	calm			0		10 ck		nw.	0.083	2.1	cloudy	Hattori.
Awomori	30.04	763.0	30.08	764.0	24.7	— 4.1	82	sse.	4.4	2.0			10 s			0.271	6.9	overcast	K. Ogawa.
Hakodate	30.06	763.5	30.07	763.8	25.5	— 3.6	86	n.	9.0	4.0			10			0	0	overcast	
Hamamatsu	30.16	766.0	30.19	766.7	39.1	3.9	56	nw.			8	3 ck	0			0	0	fair	Y. Miwa.
Hiroshima, I. M. Obs'y					30.0	— 1.1	69	n.	3.0	1.3		0	1 ck		nw.	0	0	clear	
Kanazawa	30.05	763.4	30.16	766.1	32.6	0.3	97	sw.	16.1	7.1			10			1.546	39.3	snowing	S. Endo.
Kioto	30.07	763.8	30.25	768.3	33.4	0.8	85	wnw.	5.2	2.3		4cs;ck	0	w.		0	0	fair	M. Tojima.
Nagasaki, I. M. Obs'y	30.20	767.2	30.42	772.7	34.5	1.4	87	n.	3.9	1.7			10 n			0.090	2.3	light snow	S. Takehayashi.
Niigata	29.99	761.7	30.03	762.7	33.3	0.7	85	n.	8.5	3.8			10ck;8		n.	1.080	27.4	covered	M. Morita.
Nobiru	29.99	761.7	30.00	762.1	30.2	— 1.0	73	nnw.	15.6	7.0		2 ck	8 s	sw.		0.020	0.5	overcast	H. Midzushima.
Numazu	30.06	763.6	30.10	764.5	43.0	6.1	51	wsw.			7	5cs;ck	0	w.		0	0	clear	R. Kaneda.
Osaka	30.27	768 9	30.29	769.3	34.7	1.5	57	w.	18.4	8.2		7cs;ck	0	w.		0	0	fair	H. Omura.
Sapporo					17.5	— 8.1	92	e.	1.2	0.5			10			0	0	covered	
Tokei Obs'y, Yeddo	29.97	761.3	30.06	763.4	34 4	1.3	76	wnw.	4.4	2.0		6cs;ck	0			0	0	fair	The Staff.
Wakayama	30.22	767.6	30.28	769.1	37.4	3.0	55	nw.	18.0	8.0		10 ck	0	w.		0	0	cloudy	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.76	756.4	29.97	761.2	81.8	27.7	74	w.	12.5	5.6		1 cs	4 k;n			0.16	4.1	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.58	598.8	29.80	756.8	46.6	8.1	94	calm	0	0		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.23	615.4	30.08	764.0	42.4	5.8	85	nnw.			1	0	1 s			0	0	clear	Prof. M. Leal.
Mazatlan	29.67	753.6	29.93	760.3	65.0	18.3	86	n.	0.9	0.4		0	1 k			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	22.98	583.7	30.07	763.8	48.7	9.3	65	calm	0	0		0	0			0	0	fine	The Staff.
Morelia	24.21	615.0	30.06	763.4	47.1	8.4	74	e.			1	0	0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascallentes	23.82	605.1	29.95	760.7	42.4	5.8	66	calm	0	0		0	0			0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.33	592.6	30.06	763.6	51.8	11.0	63	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.40	569.0	30.10	764.6	40.3	4.8	56	sw.	4.1	1.8		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.89	759.3	29.89	759.3	40.1	4.5		ssw.			5					0.020	0.5		
Groningen	29.84	757.8	29.89	759.2				s.			2					0.047	1.2		
Helder	29.82	757.3	29.82	757.3	38.1	3.4		s.			4					0.106	2.7		
Hellevoetsluis	29.90	759.5	29.90	759.5	38.1	3.4	99	ssw.			4					0.150	3.8		
Utrecht	29.86	758.4	29.91	759.6	37.8	3.2	95	s.			4		10			0.142	3.6	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.49	749.0	29.55	750.6	42.8	6.0	70	s.	18	8			10			0.260	6.6	raining	
Brono	29.02	752 3	29.66	753.3	37.2	2.9	51	calm	0	0			8			0	0		
Christiania	29.82	757.3	29.97	761.2	32.7	0.4	96	e.	0	0			10			0.067	1.7	snowing	
Gjæsvær	29.83	757.7	29.85	758.3	32.9	0.5		se.			4		8						
Lodingen	29.66	753.3	29.71	754.5	37.6	3.1	72	calm			0		5			0	0		
PORTUGUESE.																			
Angra, Azores	30.30	769.7	30.46	773.7	62.6	17.0	90	s.	3.1	1.4			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.45	747.9	30.47	773.8	56.7	13.7	67	nne.	3.8	1.7			4			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.19	766.8	30.28	769.0	64.4	18.0	54	e.					5	nw.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.11	764.8	30.48	774.2	53.1	11.7	78	ne.	9.4	4.2			5			0	0		The Staff.
Ponta Delgada, Azores	30.44	773.1	30.51	774.9	63.0	17.2	70	se.	3.1	1.4			3	se.		0	0		
Saint Paul de Loando	29.66	753.5	29.87	758.6	77.7	25.4	86	nw.	1.3	0.6			3			0	0		
Serra da Estrella	25 61	650.5	30.46	773.6	43.2	6.2	66	nw.	8.7	3.9			8			0.035	0.9		
RUSSIAN.																			
Akmolinski	29.25	742.9	30.41	772.4	21.0	— 6.1	93	sw.	2	1			10 n						Major K. Lasarew.
Archangel	30.29	769.4	30.31	769 9	12.7	—10.7	90	ssw.	18	8			10			0.177	4.5	snowing	Capt. Sselliwerstow.
Astrakhan	30.52	775.2	30.44	773 1	14.4	— 9.8	61	wsw.	9	4			0			0	0		Capt. Wisganow.
Barnaul	30.00	701.9	30.56	776.1	3.7	—15.7	62	calm	0	0			8			0.063	1.6	light clouds	Meteorological Obs'y.
Bielosersk	30.11	764.9	30.65	778.4	— 1.5	—18.6	93	se.	0	0			10 s			0.012	0.3	light clouds	
Dorpat	30.27	768.9	30.54	775.8	4.5	—15.3	90	calm	0	0		4 c	0			0	0		Observatory.
Ekaterinburg	29.54	750.3	30.64	778.2	— 5.6	—20.9	91	n.	0	4			10			0	0		Meteorological Obs'y.
Elissawetgrad	30.21	767.2	30.71	780.0	11.8	—11.2	69	nnw.	2	1		0	0			0	0		
Kasan	30.11	764.8	30.41	772.5	4.1	—15.5	75	ne.	20	9			10					snowing	Observatory.
Kem	30.20	767.1			18.3	— 7.6	86	sw.	22	10			10 ks			0	0	heavy cld's.	
Kertch	30.52	775 3	30.54	775.8	18.3	— 7.6	89	nw.	4	2			9 n			0	0		Lagorio & Snatyrew.
Kieff	29.95	760.6	30.66	778.7	9.5	—12.5	77	nne.	9	4		0	0						Observatory.
Libau	30.34	770 6	30.36	771.2	19.2	— 7.1	67	se.			1		0			0	0		E. Quass.
Lugan	30.25	768.3	30.48	774.1	7.7	—13.5	67	wnw.	9	4			0			0	0		Meteorological Obs'y.
Moscow	30.10	764.6	30.67	778.9	— 0.9	—21.0	79	nw.	3.4	1.5			0			0	0		
Nikolaiev	30.66	777.1	30.67	779.0	16.7	— 8.5	79	ne	4	2		0	0			0	0		Capt. Kurdukow.
Pekin, China	30.71	780.1	30.85	783.7	22.5	— 5.3	32	nw.	13	6			0						Physical Observatory.
Petrozavodsk	30.28	769 0	30.59	774.6	11.1	—11.6	71	w.	9	4		0	9 ks			0	0		Dr. Bergmann.
Pinsk	30.10	764 5			19.4	— 7.0	62	se.	18	8		0	0			0	0		
St. Petersburg	30.55	776.0	30.57	776 4	— 2.7	—19.3	94	sse.	11	5		0	1			0	0		Central Physical Obs'y.
Sevastopol	30.22	770.1	30.48	774.3	25.9	— 3.4	65	nne.	16	7		0	3 s			0	0		
Semipalatinsk	29.87	758 8	30.60	777.2	13.3	—10.4	70	se.	9	4			0			0	0		Major Lasarew.
Staroi Bykhov	30.22	767.7	30.74	780.8	0.4	—14.2	74						0			0	0		
Tashkend, Laboratory	28.74	730 0	30.37	771.4	42.4	5.8	60	calm	0	0			1			0	0		Telch, A. M.
Tiflis	28 67	733.4	30.35	770.8	41 7	5.4	52	nw.	18	8		0	4 ks			blank	blank		Physical Observatory.
Tomsk	30.14	765.6	30.46	773.6	4.1	—15.5	70	s.	4	2			10						
Vladivostok	30.24	768 0	30.30	769.7	2.5	—16.4	34	nne.	9	4		0	0			0	0	heavy cld's.	Astronomical Obs'y.
Warsaw	29.94	760.4	30.39	772.0	23.0	— 5.0	88	sse.	13	6			10						Berg, Assistant.
Wilna	30.14	765.5	30.66	777.2	17.2	— 8.2	56	sse.	2	1			0						M. O. Marks.
Yeniseisk	30.31	769.9	30.64	778.3	— 8.5	—22.5	90	ese.	2	1			10					snowing	
SCOTTISH.																			
Monach Ll			29.43	747 5	46	7.8	85	nw.			7	5	5	nw.		0.3	8.	heavy rain	J. Youngehause.
North Unst			29.31	744.5				s.			4	3	4	sw.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.22	767.6	30.32	770.2	54.7	12.6	73	s.	2.9	1.3		0	0			0.043	1.1	clear	Antonio Rieve, Director.
Bilbao, Met. Obs'y	30.37	771 4	30.43	772.9	55 8	13.2	70	se.	1.6	0.7		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27 44	697 0	30.59	777 0	35.8	2.1	98	n.	1.3	0.6			10			0	0	foggy	Domingo Martin.
Madrid, Royal Obs'y	28.18	715.8	30.46	774.1	50.4	10.2	78	ne.	1.6	0.7		0	0			0	0	clear	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	30.08	763.9	30.24	768.0	59.7	15.4	78	w.	2.7	1.2	.....	1	2	ne.	.....	0	0	almost clear	Olayo Diaz, Director.
Oviedo	29.59	751.6	30.47	773.9	42.8	6.0	86	se.	5.8	2.6	.....	4 k	1 k	ne.	e.	0	0	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.50	749.4	30.42	772.7	53.1	11.7	77	calm	0	0	.....	.....	2	.....	.....	0	0	light clouds	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.99	761.7	30.05	763.2	75.0	23.9	87	n.	5.5	2.5	.....	.....	10 n	.....	n.	0.445	11.3	misty	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.30	769.6	30.40	772.2	60.6	15.9	71	ese.	3.6	1.6	.....	0	3	.....	n.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.88	758.9	29.97	761.2	75.2	24.0	69	ne.	11.9	5.3	.....	2 c	2 k	ne.	ne.	0.020	0.5	.....	Manuel Maese.
Tuguegarao, Philippine Id's	30.02	762.5	30.15	765.8	70.5	21.4	94	nnw.	17.3	7.7	.....	.....	10 kn	.....	ne.	0.02	0.5	rainy	José L. Ynsotorza.
SWEDISH.																			
Haparanda	30.06	763.6	30.10	764.6	27.7	— 2.4	100	s.	.....	.....	4	.....	10	.....	.....	0.039	1.0	.....	
Umea	30.00	761.9	30.05	763.2	32.7	0.4	89	sw.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Hernosand	29.99	761.8	30.04	763.1	32.7	0.4	89	sw.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Stockholm	30.02	762.6	30.20	767.1	32.4	0.2	96	sse.	.....	.....	2	.....	10	.....	.....	0.008	0.2	.....	
Wisby	30.14	765.6	30.20	767.1	31.3	— 0.4	92	ssw.	.....	.....	4	.....	10	.....	.....	0.008	0.2	.....	
Sub-series.																			
Upsala	30.08	763.9	30.16	766.1	29.3	— 1.5	94	sse.	8.3	3.7	.....	.....	10	.....	.....	0.012	0.3	.....	S. G. Fineman.
SWISS.																			
Geneva	28.86	733.1	30.37	771.4	28.0	— 2.2	100	sse.	.....	.....	1	.....	10	.....	.....	0	0	foggy	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.51	774.9	40.8	4.9	74	ene.	20	8.9	.....	.....	10	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.26	768.6	56.8	13.8	.....	w.	.....	.....	1	.....	2	.....	.....	0	0	slightlycl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.13	765.4	69.8	21.0	74	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.29	769.4	30.38	771.6	18	— 7.8	76	n.	3	1.3	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. C. Barnes.
Alpena, Michigan	29.04	737.6	29.75	755 6	35	1.7	100	se.	18	8.0	.....	.....	10 n	.....	.....	0.14	3.6	light rain	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.98	634 5	30.06	763.5	24	— 4.4	67	ne.	2	0.9	.....	c	0	.....	.....	0.07	1.8	clear	W. U. Barnes.
Assiniaboine, Ft., Montana	26 97	685.0	30.00	762.0	29	— 1.7	59	sw.	23	10.3	.....	0	0	.....	.....	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	28.79	731.3	30.02	762.5	40.0	4.4	100	e.	6	2.7	.....	.....	10n;fog	.....	.....	0.54	13.7	light rain	H. C. Smith.
Atlantic City, New Jersey	30.22	767.6	30.23	767.8	39	3.9	89	ne.	12	5.4	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	Jas. M. Watson.
Augusta, Georgia	29.83	757 7	30.03	762.7	45	7.2	88	nw.	2	0.9	.....	.....	10 s	.....	nw.	1.07	27.2	cloudy	John Healy.
Baltimore, Maryland	30.14	765.5	30.18	766.6	39	3.9	89	e.	5	2.2	.....	.....	10 n	.....	ne.	0.11	2.8	light rain	Geo W Felger.
Barnegat, New Jersey	30.23	767.8	30.25	768.3	41.0	5.0	88	n.	14	6.3	.....	.....	10 s	.....	.....	0	0	cloudy	G. A. Hill.
Behring Id., Behring Sea	29.66	753.4	29.68	753.9	9.9	—12.3	.....	calm	0	0	.....	0	6 n	.....	calm	0.05	1.3	fair	Leonard Steineger.
Bennett, Fort, Dakota	28.45	722.6	30.21	767.3	13	—10.6	83	nw.	1	0.4	.....	0	1 s	.....	nw.	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.04	686.8	30.04	763.0	28	— 2.2	67	sw.	8	3.6	.....	0	1 s	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.22	716.8	30.24	768.1	1	—17.2	72	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	30.34	770.6	30.38	771.6	32	0.0	88	ne.	11	4.9	.....	.....	10 s	.....	e.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.33	694.2	30.31	769.9	18	— 7.8	96	se.	6	2.7	.....	.....	10 n	.....	.....	0.13	3.3	night snow	B. E. Light.
Boston, Massachusetts	30.23	767.8	30.39	771.9	31.0	— 0.6	78	nw.	7	3.1	.....	.....	10s;fg	.....	.....	0	0	cloudy	O. B. Cole.
Brownsville, Texas	29.63	752.6	29.68	753.9	62.4	16.9	93	calm	0	0	.....	0	0	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.18	741.2	29.98	761.5	38.8	3.8	77	se.	14	6.3	.....	3 ck	4 ks	w.	sw.	0.79	20.1	fair	W. Finn.
Buford, Fort, Dakota	28.03	711 9	30.27	768.8	— 1	—18.3	72	e.	1	0.4	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	30.03	762.7	30.34	770.6	22.0	5.6	58	s.	11	4.9	.....	7 cs	0	n.	.....	0	0	fair	G. C. Schaeffer.
Cairo, Illinois	29.42	747.3	29.84	757.9	49.2	9.6	84	w.	10	4.5	.....	.....	10 s	.....	w.	0.24	6.1	cloudy	W. H. Ray.
Cape Henry, Virginia	30.09	764.3	30.11	764.8	48	8.9	100	e.	20	8.9	.....	.....	10 n	.....	.....	0.27	6.8	heavy rain	A. K. Alderson.
Cape May, New Jersey	30.16	766.1	30.19	766.8	46.0	7.8	83	e.	19	8.5	.....	.....	10 s	.....	e.	0.42	10.7	cloudy	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	29.98	761.5	30.00	762.0	60	15.6	87	se.	6	3.6	.....	.....	10 s	.....	s.	0	0	cloudy	F. W. Mixer.
Champaign, Illinois	28.85	732.8	29.72	754.9	37.3	2.9	72	sw.	12	5.4	.....	.....	10 s	.....	sw.	0.72	18.3	cloudy	L. A. Welsh.
Charleston, S. Carolina	29.92	760.0	29.98	761.5	55	12.8	100	sw.	4	1.8	.....	.....	fg.	.....	.....	0.64	16.3	dense fog	J. H. Smith.
Charlotte, N. Carolina	29.12	739.6	30.01	762.2	37.0	2.8	100	n.	5	2.2	.....	.....	10s;fg	.....	ne.	1.91	48.5	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.13	739.9	29.99	761 7	45.0	7.2	93	s.	4	1.8	.....	.....	fg.	.....	.....	0.16	4.1	dense fog	B. L. Goulding.
Cheyenne, Wyoming	23.92	607.6	30.20	767.1	15.1	— 9.4	70	nw.	6	2.7	.....	0	0	.....	.....	inap.	inap.	clear	E. McGovern.
Chicago, Illinois	28.79	731.3	29.55	750.6	38.1	3.4	92	sw.	12	5.4	.....	.....	10 s	.....	.....	0.52	13.2	cloudy	J. Mitchell.
Chincoteague, Virginia	30.13	765.3	30.15	765.8	46	7.8	100	se.	17	7.6	.....	.....	10 n	.....	s.	0.12	3.0	light rain	C. F. Dickens.
Cincinnati, Ohio	29.12	739.6	29.82	757.4	48	8.9	86	se.	6	2.7	.....	.....	10 s	.....	se.	0.63	16.0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.07	738 4	29.86	758.4	41	5.0	73	se.	19	8.5	.....	.....	10 s	.....	sw.	0.06	1.5	cloudy	J. B. Newlin.
Coleman City, Texas	28.06	712.7	29.96	761.0	41	5.0	76	ne.	12	5.4	.....	.....	10 s	.....	ne.	0	0	cloudy	L. Dorman.
Columbus, Ohio	28.92	734.6	29.82	757.4	44	6.7	93	s.	10	4.5	.....	.....	10 n	.....	sw.	0.43	10.9	light rain	D. Cuthbertson.
Concho, Fort, Texas	27.87	707 9	29.89	759.2	43.2	6.2	68	n.	13	5.8	.....	.....	10 s	.....	.....	0	0	cloudy	J. McGlone.
Custer, Fort, Montana	26.78	680.2	30.18	766.6	11	—11.7	64	e.	12	5.4	.....	0	0	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	28.95	735.3	29.66	753.4	37	2.8	82	w.	4	1.8	.....	.....	10 n	.....	.....	0.51	13.0	light snow	R. R. Martin.
Davis, Fort, Texas	24.87	631.7	29.81	757.2	34	1.1	81	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.08	713 2	29.92	760.0	43.0	6.1	76	sw.	14	6.3	.....	.....	10 s	.....	sw.	0	0	cloudy	D. Moore.
Deadwood, Dakota	25.30	642.6	30.29	769.4	13	—10.6	83	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. Willson.
Delaware Breakwater, Del	30.16	766.1	30.18	766.6	40	4.4	82	e.	24	10.7	.....	.....	10 s	.....	e.	0.03	0.8	cloudy	T. S. Townsend.
Denison, Texas	29.11	739.4	29.96	761.0	38.0	3.3	89	nw.	5	2.2	.....	0	4 s	.....	.....	0	0	fair	J. W. Byram.
Denver, Colorado	24.68	626.9	30.20	767.1	28.0	— 2.2	80	sw.	2	0.9	.....	0	0	.....	.....	0.08	2.0	clear	F. M. Neal.
Des Moines, Iowa	28.79	731.3	29.77	756.1	36	2.2	89	n.	4	1.8	.....	.....	10 n	.....	n.	0.63	16.0	light snow	F. W. Conrad.
Detroit, Michigan	29.00	736.6	29.76	755.9	45.5	7.5	80	se.	23	10.3	.....	.....	10 n	.....	.....	0.42	10.7	light rain	O. F. R. Wappenhans.
Dodge City, Kansas	27.33	694.2	30.13	765.3	30	— 1.1	100	n.	15	6.7	.....	0	8 s	.....	w.	0.08	2.0	cloudy	V. P. Temple.
Dubuque, Iowa	28.89	733.8	29.66	753.4	36.2	2.3	79	w.	4	1.8	.....	.....	10 s	.....	.....	0.36	9.1	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.05	737.9	29.86	758.4	32	0.0	88	nw.	23	10.3	.....	.....	10 s	.....	nw.	0.27	6.9	cloudy	N. B. Conger.
Eagle Pass, Texas	28.92	734.6	29.76	755.9	46.2	7.9	54	e.	5	2.2	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.29	642.4	30.21	767.3	18	— 7.8	87	sw.	6	2.7	.....	.....	10 s	.....	sw.	0	0	cloudy	J. M. Clifford.
Eastport, Maine	30.31	769 9	30.38	771.6	22.0	— 5.6	80	ne.	12	5.4	.....	.....	10s	.....	ne.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.11	688.6	30.07	763.8	27	— 2.8	67	nw.	16	7.2	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.05	661.7	29.91	759.7	36.0	2.2	72	w.	10	4.5	.....	0	7 s	.....	w.	0	0	fair	J. O'Dowd.
Erie, Pennsylvania	29.08	738.6	29.84	757.9	39	3.9	73	se.	32	14.3	.....	.....	10 s	.....	.....	0.08	2.0	cloudy	Peter Wood.
Escanaba, Michigan	28.96	735.6	29.08	753.9	32.0	0.0	100	n.	12	5.4	.....	.....	10 n	.....	n.	0.35	8.9	light snow	George Heathcote.
Fredericksburg, Texas	28.04	712.2	29.86	758.4	42	5.6	75	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	29.76	755.9	29.81	757.2	60	15.6	70	e.	12	5.4	.....	0	hz.	.....	.....	0	0	clear	E. O'C. Macinerney.
Grand Haven, Michigan	28 89	733.8	29.60	751.8	38.0	3.3	100	s.	17	7.6	.....	.....	10 n	.....	s.	0.86	21.8	light rain	J. E. Mueller.
Grant, Fort, Arizona	25.16	639.1	30.04	763.0	29	— 1.7	92	calm	0	0	.....	0	0	.....	.....	0.12	3.0	clear	Robert C. Lord.
Hatteras, North Carolina	30.05	763.3	30.07	763 8	54	12.2	86	se.	18	8.0	.....	9 k	0	se.	.....	0.17	4.3	threatening	R. M. Crawford.
Helena, Montana	25.65	651.5	30.03	762.7	21	— 6.1	96	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	N. C. Smith.
Henrietta, Texas	28.95	735.3	30.03	762.7	36	2.2	89	n.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	J. P. Sherry.
Huron, Dakota	28.56	725 4	30.10	764.5	13.2	—10.4	61	nw.	11	4.9	.....	.....	10 s	.....	.....	0	0	cloudy	S. W. Glenn.
Indianapolis, Indiana	28.90	734 0	29.75	755.6	46	7.8	89	s.	6	2.7	.....	.....	10n;fog	.....	.....	0.72	18.3	light rain	O. Schultze.
Indianola, Texas	29.71	754.6	29.74	755.4	60.0	15.6	87	e.	7	3.1	.....	0	0	.....	.....	0	0	clear	I. A. Reed.
Jacksboro, Texas	28.74	730.0	29.98	761.5	44	6.7	68	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	29.97	761 2	30.02	762.5	61	16.1	87	calm	0	0	.....	0	fg.	.....	.....	0.07	1.8	clear	J. W. Smith.
Keogh, Fort, Montana	27.46	697.5	30.16	766.1	6	—14.4	76	calm	0	0	.....	0	2 s	.....	.....	0	0	clear	A. Schneider.
Keokuk, Iowa	29.02	737.1	29.72	754.9	36.5	2.5	89	w.	6	2.7	.....	.....	10 s	.....	w.	0.28	7.1	cloudy	F. Z. Gosewisch.
Key West, Florida	29.96	761 0	29.98	761.5	72.0	22.2	90	e.	7	3.1	.....	0	0	.....	.....	0.01	0.3	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.09	764.3	30.11	764.8	47	8.3	93	se.	13	5.8	.....	.....	10 ks	.....	se.	0.12	3.0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.03	737.3	30.11	764.8	39	3.9	89	e.	1	0.4	.....	0	8 s	.....	s.	0.23	5.8	cloudy	J. A. Cody.
La Crosse, Wisconsin	28.82	732.0	29.67	753.6	33	0.6	78	n.	8	3.6	.....	.....	10 n	.....	.....	0.45	11.4	light snow	S. C. Emery.
Leavenworth, Kansas	28.90	734.0	29.86	758 4	32	0.0	78	nw.	8	3.6	.....	.....	10 s	.....	nw.	0.06	1.5	cloudy	A. W. Browne.
Lewiston, Idaho	29.12	739.6	30.00	762 0	35.0	1.7	88	ne.	8	3.6	.....	10 cs	0	.....	.....	0	0	cloudy	W. Bell.
Little Rock, Arkansas	29.55	750.6	29.88	758.9	47	8.3	93	w.	4	1.8	.....	.....	10 s	.....	w.	0	0	cloudy	W. U. Simons.
Los Angeles, California	29.76	755.9	30.16	766.1	47	8.3	63	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.18	741.2	29.78	756.4	51	10.6	80	s.	10	4.5	.....	.....	10 s	.....	s.	0.19	4.8	cloudy	L. M. Dey.

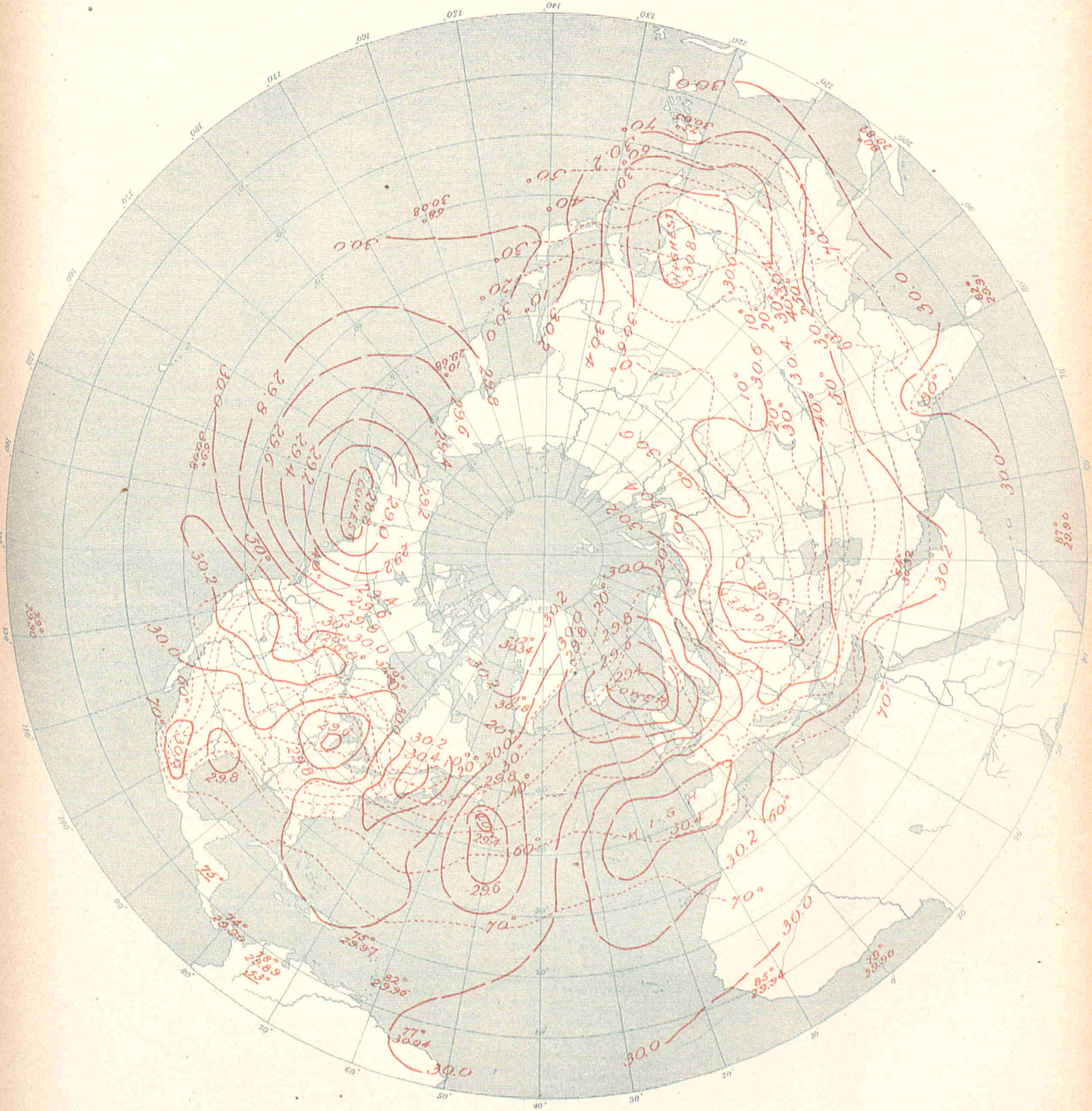
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec.	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.35	745.5	30.08	764.0	37.5	3.1	87	ne.	3	1.3	.....	.....	10 n	.....	.....	1.26	32.0	light rain	Lewis Duane.
Mackinaw City, Michigan	29.01	736.8	29.71	754.6	37.0	2.8	89	e.	21	9.4	.....	.....	10 n	.....	e.	0.18	4.6	light rain	F. R. Day.
Macon, Fort, North Carolina	30.03	762.7	30.04	763.0	54	12.2	93	s.	16	7.2	.....	0	9 k	.....	s.	0.09	2.3	cloudy	C. A. Shaw.
Madison, Wisconsin	28.52	724.4	29.62	752.3	33	0.6	88	n.	5	2.2	.....	.....	10 n	.....	.....	0.63	16.0	light snow	F. P. Chaffee.
Maginnis, Fort, Montana	25.37	644.4	29.91	759.7	22	— 5.6	61	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. Burke.
McKavett, Fort, Texas	27.58	700 5	29.96	761.0	39	3.9	82	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. E. Thatcher.
Marquette, Michigan	28.95	735.3	29.73	755.1	34	1.1	88	e.	14	6.3	.....	.....	10 n	.....	.....	0.22	5.6	light snow	J. Gilligan.
Memphis, Tennessee	29.53	750.0	29.89	759.2	50	10.0	86	sw.	4	1.8	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	D. T. Flannery
Milwaukee, Wisconsin	28.75	730.2	29.56	750.8	42	5.6	82	sw.	7	3.1	.....	.....	10s;fg	.....	.....	0.40	10.2	light rain	W. Line.
Missoula, Fort, Montana	26.00	675.6	30.06	763.5	19	— 7.2	70	w.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	I. H. Young.
Mobile, Alabama	29.91	759.7	29.95	760.7	52	11.1	93	calm	0	0	.....	5 ck	0	sw.	.....	0	0	fair	C. A. Read.
Montgomery, Alabama	29.70	754 4	29.94	760.5	44.7	7.1	100	nw.	3	1.3	.....	.....	fg.	.....	.....	0.32	8.1	dense fog	J. B. McLaughlin.
Moorhead, Minnesota	29.00	736.6	30.11	764.8	10	—12.2	80	n.	20	8.9	.....	.....	10 s	.....	n.	0.03	0.8	cloudy	H. Bessant.
Morgantown, W. Virginia	28.92	734.6	29.99	761.7	46.0	7.8	74	se.	10	4.5	.....	0	5 s	.....	sw.	0.22	5.6	fair	J. C. Sprigg, jr.
Mt. Washington, N. H	23.92	607.6	30.55	776.0	25.0	— 3.9	67	calm	0	0	.....	0	0	.....	.....	0	0	clear	B. S. Pague.
Nashville, Tennessee	29.25	742 9	29.86	758.4	47.0	8.3	93	s.	6	2.7	.....	.....	10 ks	.....	s.	0.13	3.3	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.25	768.3	30.37	771.4	23	— 5.0	67	ne.	10	4.5	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. H. Sherman.
New London, Connecticut	30.30	771.1	30.41	772.4	27	— 2.8	88	ne.	8	3.6	.....	.....	10 s	.....	ne.	0	0	threatening	J. G. Lynch.
New Orleans, Louisiana	29.85	758.2	29.91	759.7	54.5	12.5	75	s.	1	0.4	.....	0	8 s	.....	s.	0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.34	770.6	30.39	771.9	30.0	— 1.1	88	n.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	W. McGillivray.
New York, New York	30.10	766.1	30.35	770.9	32	0.0	88	ne.	12	5.4	.....	.....	fg.	.....	.....	0	0	dense fog	J. B. Merrill.
Norfolk, Virginia	30.06	763.5	30.09	764.3	51	10.6	100	e.	8	3.6	.....	.....	10 n	.....	.....	0.80	20.3	heavy rain	Wm. Davis.
North Platte, Nebraska	29.99	685.5	30.15	765.8	27.6	— 2.4	78	nw.	10	4.5	.....	0	5 s	.....	.....	0.13	3.3	fair	E. F. Brady.
Olympia, Washington T'y	29.73	755.1	29.77	756.1	44.0	6.7	93	s.	4	1.8	.....	.....	10 n	.....	.....	0.55	14.0	light rain	J. Dascomb.
Omaha, Nebraska	28.02	726.9	29.91	759.7	28.8	— 1.8	89	n.	12	5.4	.....	.....	10 n	.....	.....	0.29	7.4	light snow	A. Pollak.
Oswego, New York	29.77	756.1	30.12	765.0	34.0	1.1	71	se.	12	5.4	.....	hz.	5 s	.....	s.	0.29	7.4	fair	J. G. Linsley.
Palestine, Texas	29.30	745.7	29.94	760.5	45.0	7.2	68	n.	10	4.5	.....	1 cs	0	.....	.....	0	0	clear	L. M. Pindell.
Pensacola, Florida	29.91	759 7	29.94	760.5	53.0	11.7	86	calm	0	0	.....	0	5 s	.....	sw.	0.01	0.3	fair	M. McGauran.
Philadelphia, Pa	30.15	765.8	30.26	768.6	36	2.2	89	ne.	12	5.4	.....	.....	10s;fg	.....	ne.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.43	442.7	30.09	764.3	— 8	—22.2	100	w.	4	1.8	.....	0	1 s	.....	.....	0.04	1.0	clear	H. Hall.
Pioche, Nevada	24.04	610.6	30.21	767.3	17	— 8.3	64	nw.	5	2.2	.....	0	0	.....	.....	inap.	inap.	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.12	719.6	29.98	761.5	43.0	6.1	74	se.	8	3.6	.....	.....	10 s	.....	se.	0.23	5.8	cloudy	W. A. Reid.
Poplar River, Montana	27.87	707.9	30.23	767.8	.....	.....	.....	nw.	.....	.....	4	0	0	.....	.....	0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	29.91	759.7	29.92	760.0	57.5	14.2	88	n.	7	3.1	.....	.....	8 ks	.....	.....	0.01	0.3	cloudy	H. B. Boyer.
Port Huron, Michigan	29.07	738.4	29.80	756.9	38.0	3.3	100	se.	10	4.5	.....	.....	10 n	.....	.....	0.57	14.5	light rain	W. O. Bailey.
Portland, Maine	30.30	771.1	30.42	772.7	23.5	— 4.7	73	n.	8	3.6	.....	2 0	0	nw.	.....	0	0	clear	W. W. Elchelberger.
Portland, Oregon	29.79	756.7	29.86	758.4	47.0	8.3	93	s.	12	5.4	.....	0	4 s	.....	s.	0.60	15.2	fair	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	60	15.6	87	se	.....	.....	7	.....	10 s	.....	se.	0.25	6.3	cloudy	F. S. Coburn.
Prescott, Arizona	24.70	627.4	30.07	763.8	20.7	— 6.3	87	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.34	770.6	30.37	771.4	36.5	2.5	72	ne.	3	1.3	.....	0	8 s	.....	ne.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	29.99	761 7	30.00	762.0	64	17.8	92	e.	9	4.0	.....	hz.	0	.....	.....	0	0	clear	W. J. Evans.
Red Bluff, California	29.92	760.0	30.29	769.4	43	6.1	93	n.	3	1.3	.....	.....	10 s	.....	w.	0	0	cloudy	J. R. Williams.
Rochester, New York	29.36	745.7	30.07	763 8	37	2.8	89	s.	20	8.9	.....	3 k	6 k	.....	sw.	0.10	2.5	cloudy	E. W. McGann
Roseburg, Oregon	29.48	748.8	30.05	763.3	46	7.8	93	sw.	1	0.4	.....	.....	10 n	.....	.....	0.76	19.3	heavy rain	J. J. Nanry.
Sacramento, California	30.20	767.1	30.28	769.1	43.4	6.3	93	se.	4	1.8	.....	.....	9 s	.....	se.	0.01	0.3	cloudy	J. A. Barwick.
St. Louis, Missouri	29.14	740.1	29.79	756.7	40.4	4.7	98	sw.	12	5.4	.....	.....	10 s	.....	sw.	0.58	14.7	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.14	740.1	29.17	740.9	— 9	—22.8	100	ne.	.....	.....	2	0	5 s	.....	.....	0	0	fair	A. P. Leavitt.
St. Paul, Minnesota	28.83	732.3	29.79	756.7	33.0	0.6	88	n.	17	7.6	.....	.....	10 s	.....	n.	0.30	7.6	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.20	741.7	30.19	766.8	16	— 8.9	91	n.	1	0.4	.....	0	fz.	.....	.....	0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.73	653 5	30.27	768.8	20	— 6.7	58	ne.	2	0.9	.....	0	0	.....	.....	0.05	1.3	clear	J. Craig.
San Antonio, Texas	29.08	738.6	29.80	756.9	46.0	7.8	54	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	T. J. Kenan.
San Diego, California	30.04	763.0	30.11	764.8	45.0	7.2	86	ne.	7	3.1	.....	0	0	.....	.....	0.03	0.8	clear	A. C. Dobbins.
Sandusky, Ohio	29.06	738.1	29.79	756.7	43	6.1	83	s.	20	8.9	.....	.....	10 n	.....	s.	0.42	10.7	light rain	M. H. Perry.
Sandy Hook, New Jersey	30.29	769.4	30.32	770.1	38.0	3.3	72	ne.	24	10.7	.....	.....	10 s	.....	.....	0	0	threatening	B. A. Blundon.
San Francisco, California	30.23	767.8	30.30	769.6	51	10.6	86	s.	2	0.9	.....	.....	10 s	.....	nw.	0	0	cloudy	N. Gorom.
Santa Fé, New Mexico	23 02	584.7	30.00	762.0	26	— 3.3	74	nw.	3	1.3	.....	.....	10 n	.....	.....	0.18	4.6	light snow	H. U. Jones.
Savannah, Georgia	29.89	759.2	29.99	761.7	58.5	14.7	86	sw.	5	2.2	.....	.....	fg.	.....	.....	0.21	5.3	dense fog	H. W. Ford.
Shaw, Fort, Montana	26.13	663.7	29.96	761.0	31	— 0.6	62	sw.	25	11.2	.....	6 cs	0	.....	.....	0	0	fair	A. L. Mathews.
Shreveport, Louisiana	29.05	753.1	29.90	759.4	43	6.1	93	calm	0	0	.....	0	1 s	.....	.....	0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	28.68	728 5	30.01	762.2	33.5	0.8	87	n.	7	3.1	.....	0	3 s	.....	n.	0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.09	611.9	29.93	760.2	20.5	— 6.4	82	nw.	1	0.4	.....	0	2 s	.....	.....	0.14	3.6	clear	N. D. Lane.
Sitka, Alaska	28.58	725.9	28.05	727.7	41.2	5.1	59	se.	20	8.9	.....	.....	10 ks	.....	se.	0.04	1.0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.44	747.8	29.94	760.5	40.5	4.7	82	w.	8	3.6	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	J. B. Campbell.
Smithville, North Carolina	29.97	761 2	30.01	762.2	57	13.9	93	s.	21	9.4	.....	.....	9 ks	.....	sw.	0.57	14.5	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	27.83	706.9	29.96	761 0	33.5	0.8	94	se.	10	4.5	.....	.....	10 n	.....	.....	0.08	2.0	light snow	H. Clifford.
Springfield, Illinois	29.01	736.8	29.74	755.4	42.5	5.8	74	w.	3	1.3	.....	.....	10 s	.....	.....	0.55	14.0	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.30	769.6	30.44	773.2	18.5	— 7.5	78	n.	.....	.....	1	.....	10 n	.....	.....	0	0	cloudy	Charles Mayr.
Springfield, Mo	28.36	720.3	29.90	759.4	36.5	2.5	82	w.	11	4.9	.....	.....	10 s	.....	w.	0.38	9.6	cloudy	J. B. Marbury.
Starkville, Miss	29.42	747.3	29.92	760.0	47	8.3	86	sw.	9	4.0	.....	0	0	.....	.....	0	0	clear	C. Dill.
Stevenson, Fort, Dakota	28.20	716.3	30.26	768.6	— 2	—18.9	100	calm	0	0	.....	0	0	.....	.....	0	0	clear	W. Burrows.
Stockton, Fort, Texas	26.74	679.2	29.88	758.9	41	5.0	59	sw.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	30.33	770.4	30.39	771.9	37.0	2.8	72	ne.	13	5.8	.....	5 k	0	w.	.....	0	0	fair	G. Liebmann.
Thomas, Camp, Arizona	27.16	689.9	29.98	761.5	34.5	1.4	94	sw.	.....	.....	1	0	0	.....	.....	0.27	6.9	clear	J. T. Fitzgerald.
Toledo, Ohio	29.01	736.8	29.75	755.6	45	7.2	76	s.	14	6.3	.....	.....	10 n	.....	s.	0.28	7.1	light rain	A. Buell.
Tucson, Arizona	27.53	699.2	30.03	762.7	37	2.8	82	calm	0	0	.....	0	0	.....	.....	0.03	0.8	clear	J. L. Whiteside.
Umatilla, Oregon	29.58	751.3	29.97	761.2	37	2.8	89	s.	3	1.3	.....	.....	10 s	.....	.....	0.04	1.0	cloudy	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	29.3	— 1.5	80	n.	.....	.....	1	0	0	.....	.....	0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.64	752.8	29.91	759.7	49.0	9.4	76	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	James Kennedy.
Visalia, California	29.93	760.2	30.31	769.9	41.0	5.0	96	s.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	O. D. Stewart.
Washakie, Fort, Wyoming	24.40	619.7	30.17	766.3	7.0	—13.9	83	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	T. M. Ambler.
Washington, D. C.	30.03	762.7	30.15	765.8	39.0	3.9	95	ne.	8	3.6	.....	.....	10 n	.....	ne.	0.31	7.9	light rain	B. M. Purssell.
West Las Animas, Colorado	26.00	660.4	30.16	766.1	15	— 9.4	83	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.56	750.8	30.19	766.8	37	2.8	89	e.	9	4.0	.....	.....	10 n	.....	.....	0.31	7.9	light snow	B. F. Hough.
Wilmington, N. Carolina	29.96	761.0	30.02	762.5	61	16.1	93	s.	13	5.8	.....	.....	10 ks	.....	sw.	0.99	25.1	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.71	653.0	30.24	768.1	28.5	— 1.9	79	sw.	8	3.6	.....	.....	10 n	.....	w.	0.01	0.3	light snow	J. Grover.
Yankton, Dakota	28.56	725.4	30.00	762.0	18	— 7.8	83	nw.	11	4.9	.....	.....	10 n	.....	.....	0.08	2.0	light snow	J. H. Atfield.
Yuma, Arizona	29.93	760 2	30.08	764.0	52.0	11.1	28	n.	11	4.9	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.01	559.0	.....	.....	53.0	11.7	76	nw.	2	0.9	.....	0	2 ks	.....	w.	0	0	fair	Joaquin Gomez.
Havana, Cuba, W. I.	29.87	758.7	29.94	760.5	69.7	20.9	79	se.	5	2.2	.....	9 ck	0	s.	.....	0	0	fair	Benito Vines, S. J.
Kingston, Jamaica, W. I.	29.96	761.0	29.97	761.2	72	22.2	86	calm	0	0	.....	3 cs	0	.....	.....	0	0	fair	Robert Johnston.
Paramaribo, S. A.	30.04	763.0	30.04	763 0	77	25.0	91	ne.	.....	.....	3	.....	8 ks	e.	.....	0.340	8.6	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Colombia	29.33	745.0	29.89	759.2	78	25.0	89	calm	.....	.....	0	0	1 k	.....	calm	0	0	clear	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	75	23.9	90	ne.	.....	.....	1	0	1 ks	.....	n.	0.62	15.7	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	28.65	727.7	28.71	729.2	35	1.7	89	ne.	.....	.....	3	.....	9 n	.....	.....	0.96	24.4	light snow	W. J. Fisher.
St. Thomas, W. I.	29.91	759.7	30.03	762.7	76	24.4	64	n.	.....	.....	.....	.....	6 k	.....	n.	0	0	cloudy	Aug. Walloe.
York Factory, B. A.	30.02	762.5	30.08	764.0	— 9.5	—23.1	78	w.	13	5.8	.....	0	0	.....	.....	0	0	clear	Forbes ne & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	29.95	760.7	64	17.8	73	wsw.			6		0					5	wsw.	blue sky.
H. M. S. Audacious, N. 1° 21′, E. 103° 15′	29.80	756.9	86	30.0	79	nnw.			1									d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			72	22.2	75	calm			0		0							blue sky.
H. M. S. Boadicea, Table Bay, Cape Colony	29.82	757.4				w.			1-3		3							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.13	765 3	76	24.4	72	s.			2		0							blue sky.
H. M. S. Champion, N. 8° 00′, E. 108° 30′	29.88	758.9	79	26.1	90	nne.			3		7					2	sw.	d. clouds.
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.80	782.3	27	— 2.8		nnw.			1		1							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	29.67	753.6	45	7.2	92	sw.			4		10					3	ese.	showery.
H. M. S. Constance, N. 46° 20′, W. 8° 23′	30.33	770.4	54	12.2		w.			2-3							4		overcast.
H. M. S. Curacoa, Yokohama, Japan	30.05	763.3	44.5	6.9	76	wsw.			2		1							blue sky.
H. M. S. Diamond, Sydney, N. S. W*†	29.60	751.8	72	22.2	63	nne.			3-5		3							squally.
H. M. Dock Yard, Bermuda, W. I	30.07	763.8	59	15.0	70	nnw.			1-2		4	nnw.						d. clouds.
H. M. S. Eclipse, N. 5° 46′ E. 81° 00′	29.81	757.2	82	27.8		ene.			1-3		3					2	ne.	d. clouds.
H. M. S. Fawn, S. 35° 09′, E. 23° 10′	29.69	754.1	66.5	19.2	76	calm			0		3	e.				3	se.	d. clouds.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.97	761.2	63	17.2	83	nnw.			1		0							misty.
H. M. S. Iron Duke, N. 2° 25′, E. 101° 57′	29.87	758.7	80	26.7	86	nnw.			1		4	nnw.						d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	29.88	758.9	71.3	21.8	82	ene.			1		0					1	ne.	blue sky.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.91	759.7	67	19.4		nw.			2									d. clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.45	773 4	38.5	3.6	90	n.			1		10							misty.
H. M. S. Rambler, Port Belgrano, La Plata, S. A	29.74	755.4	56	13.3	100	wsw.			3		2	wsw.						squally.
H. M. S. Starling, N. 0° 45′, W. 1° 30′	29.90	759.4	78.5	25.8	86	ssw.			3		1	ssw.				2	ssw.	blue sky
H. M. S. Superb N. 34° 40′, E. 33° 03′	30.20	767.1	68	20.0	74	e.			4-5							4	e.	
H. M. S. Swiftsure, Callao Bay, Peru	29.96	761.0	65	18.3	100	se.			3		10							foggy.
H. M. S. Sylvia, Syl ia Cove, Patagonia	29.23	742 4	44	6.7	92	nnw.			3-6		10							raining.
H. M. S. Thetis, S. 30° 10′, W. 71° 50′	29.98	761.5	59	15.0	87	sse.			5		0					4	ssw.	misty.
H. M. S. Woodlark, Shat-el Arab river	30.22	767.6	63.5	17.5	62	nw.			1		1	n.						blue sky.
H. M. S. Zephyr, Chee-foo, China			19.5	— 6.9		w.			3-5		2	nw.				1	nw.	d clouds.
Portuguese Naval.																		
Tamega, Macao, China	30.54	775.6	47.8	8.8	84	n.			8		10			4 h'r	4 h'r			raining.
United States Naval.																		
Navy Yard, Pensacola, Fla	29.76	755.9	56	13.3	87	n.	2	0.9			8		nw.	0.34	8.6			fair.
Navy Yard, Portsmouth, N. H	30.40	772.1	21	— 6.1	?	ne.	7	3.1			8		w.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	29.96	761.0	40	4.4	45	wsw.			3		2		w.	0	0			clear.
Adams, Sitka, Alaska *†	28.72	729.5	40	4.4	63	ne.			4		10							cloudy.
Alaska, Mare Island, Cal	30.22	767.6	49	9.4	85	sw.			1		0			0	0			clear.
Alliance, N. 28° 40′, W. 67° 35′	30.09	764.3	63	17.2	89	ne.			2-3		8			0	0	sm'h		cloudy.
Ashuelot, N. 32° 36′, E. 128° 40′	30.45	773.4	40	4.4	82	nw.			6		10		nw.					snowing.
Brooklyn, S. 39° 35′, W. 57° 23′	29.57	751.1	57	13.9	93	s.	18	8.0			10		s.	1.04	26.4	mod.	s.	cloudy.
Colorado, New York, N. Y	30.45	773.4	32	0.0	100	ne.	3	1.3			10			0	0			misty.
Enterprise, Norfolk, Va	30.10	764.5	52	11.1	86	e.			1		10							light rain.
Essex, Callao, Peru	29.93	760.2	63	17.2	94	se.			2		10					sm'h		foggy.
Franklin, Norfolk, Va	30.08	764.0	52	11.1	86	se.	10	4.5			10			0.23	5.8			rainy.
Galena, Montevideo, Uruguay	29.77	756 1	66	18.9	78	wsw.			6		2		w.			r'gh	wnw.	clear.
Hartford, S. 47° 18′, W. 79° 57′*	29.63	752.6	51	10.6	86	w.			6-7		2		w.	light	light	mod	s;w.	clear.
Independence, Mare Island, Cal	30.30	769.6	47	8.3	92	calm			0		10			0	0			cloudy.
Iroquois, Callao, Peru	29.95	760.7	63	17.2	94	sse.			2		10							foggy.
Jamestown, Boston, Mass	30.36	771.1	27	— 2.8	100	nw.			1		10			0	0			hazy.
Juniata, Fayal, Azores Islands *†	30.46	773 7	63	17.2	88	sse.			3		10		calm	sli't	sli't	sm'h		threatening
Kearsarge, N. 28° 32′ W. 67° 25′	30.12	765.0	64	17.8	89	ne.			3		5		ne.			mod.	ne.	fair.
Lackawanna, S. 8° 40′, W. 88° 55′*	29.90	759.4	72	22.2	75	se.			2		10		s.			sm'h	s.	cloudy.
Lancaster, Genoa, Italy*	30.20	767.1	51	10.6	64	n.			2		2		calm			sm'h		fair.
Michigan, Erie, Pennsylvania	29.77	756.1	43	6.1	75	se.			6		10		n.					cloudy.
Minnesota, New York, N. Y	30.41	772.4	32	0.0	100	ne.	1	0.4										overcast.
Monocacy, Nagasaki, Japan	30.36	771.1	38	3.3	100	n.			2		10		calm					cloudy.
New Hampshire, Newport, R. I	30.41	772.4	31	— 0.6	79	nw.			3		10		calm			sm'h		overcast
Nipsic, Lisbon, Portugal*	30.42	772.7	62	16.7	71	ne.			2		2					sm'h		clear.
Onward, Callao, Peru†	30.06	763.5	62	16.7	100	se.			3		10		n.			long	w.	misty.
Palos, Tientsin, China*	30.74	780.8	18	— 7.8	100	nw.			1		0							clear.
Pensacola, S. 4° 27′, W. 81° 31′*	29.82	757.4	62	16.7	100	sse.			3		10			0	0	sm'h		foggy.
Powhatan, Boston, Mass	30.38	771.6	25	— 3.9	88	wnw.			2		10							overcast.
Quinnebaug, Villafranche, France*	30.29	769.4	58	14.4	81	ssw.			1		2		ssw.					clear.
Ranger, Acapulco, Mexico	29.90	759.4	75	23.9	95	calm			0		2		calm			sm'h		fair.
Richmond, Nagasaki, Japan *	30.33	770.4	40	4.4	82	nne.			2		10		n.	0.16	4.1			cloudy.
Saratoga, N. 41° 01′, W. 73° 23′	30.29	769.4	25	— 3.9	100	ne.			3		10		ne.	0	0	sm'h		overcast.
St. Louis, League Island, Pa	30.53	775.4	34	1.1	79	nne.			3		10			0.4	10.			cloudy.
Tennessee, N. 28° 37′, W. 67° 19′	30.14	765.5	66	18.9	90	ne.	6	2.7			57			0	0	mod.	ne.	clear?
Vandalia, N. 28° 35′, W. 67° 20′*	30.13	765.3	64	17.8	73	ne.			2		8		nne.			long	ne.	fair.
Wabash, Boston, Mass	30.39	771.9	27	— 2.8	77	nw.	3	1.3			10		nw.	0	0			cloudy.
Wachusetts, Mare Island, Cal*	30.20	767.1	47	8.3	92	var.			1		10		calm	0	0	sm'h		cloudy.
Wyandotte, Washington, D. C	30.22	767.6	46	7.8	92	ne.			2		10		e.	0.4	10.			raining.
Yantic, N. 28° 39′, W. 67° 19′	30.24	768.1	64	17.8	67	ene.			2-3		5		ne.			mod.	n.	fair.
Merchant Marine.																		
S. S. Grecian, N. 49° 47′ W. 3° 15′*	30.09	764.3	51	10.6	79	wnw.			6		10		wnw.	4 h'r	4 h'r	sm'h		cloudy.
S. S. Polynesian, N. 52° 26′, W. 5° 50			50	10.0		wnw.			6		0			0	0	mod.	wnw.	clear.
S. S. Scandinavian, N. 45° 55′, W. 49° 23′	29.65	753.1	43	6.1		ese.			3		2		wsw.	rain	rain	high	e.	d. clouds.
S. S. Indiana, Philadelphia, Pa			32	0.0	79	nne.			4		10		ne.					rainy.
S. S. Lord Clive, off Bardsey Island, Wales*†	29.90	759 4				w.			5		0							
S. S. Lord Gough, N. 51° 33′, W. 25° 10′	30.08	764.0	47	8.3		s.			2		10					mod	w.	drizzling.
S. S. Ohio, Liverpool, Engl	29.66	753.4	45	7.2	92	wsw.			6		8		w.					hazy.
S. S. Pennsylvania, N. 43° 56′ W. 54° 26′†	29.35	745.5	41	5.6		nw.			5		10		nw.			h'vy	nnw.	overcast.
S. S. Castor, N. 46° 59′, W. 32° 45′*	30.01	762.2	50.0	10		n.			4		10		n.			4	n.	misty.
S. S. Jason, N. 48° 20′, W. 38° 32′	29.90	759.4	54.5	12.5					3		10 n					5	w.	foggy.
S. S. Bolivia, N. 50° 30′, W. 37° 00′*†	29.82	757.4	57	13.9	94	sw.			2		10			light	light	mod.		threatening.
S. S. Dorian, N. 43° 11′, W. 9 41′*	30.31	769.9	55	12.8		ssw.			3		2		s.	0	0	mod.	nw.	clear.
S. S. Elysia, N. 51° 40′, W. 8° 05′†	30.15	765.8	48	8.9		wsw.			4		8		w.	0	0	light	w.	cloudy.
S. S. Galatia, N. 36° 49′, E. 12° 47′†	30.21	767.3	64	17.8	?	e.			7		3		e.	1 h'r	1 h'r	r'gh	e.	showery.
S. S. Ailsa, N. 10° 36′, W. 77° 48′†	30.01	762.2	81	27.2	96	nne.			3		5		nne.	0	0	mod.		fair.
S. S. Alvo, off Sandy Hook, N. J	30.37	771.4	33	0.6		e.			0		10 k		e.	0	0	small	ene.	hazy.
S. S. Ambrose, N. 22° 32′ W. 53° 59′†	30.04	763.0	79	26.1		var.			2		6		ne.	5 h'r	5 h'r	3	nw.	showery.
S. S. City of Agra, S. 52° 40′, E. 174° 35′	29.40	748.3	47.5	8.6	100	nnw.			6		1							blue sky.
S. S. Commewyne, N. 26° 51′, W. 51° 42′	29.87	758.7	67.9	19.9	82	nw.			5		9							d. clouds.
S. S. Gordon Castle, N. 8° 40′, E. 72° 10′	29.92	760.0	82.5	28.1	75	n.			2		6							d. clouds.
Inchkeith, S. 8° 42′, E. 91° 01′	29.87	758.7	75.5	24.2	93	se.			5		8							d. clouds.
Ptolmey, N. 49° 58′, W. 4° 50′	30.12	765.0	50	10.0		w.			4		9							overcast
S. S. Mexico, Mazatlan, Mexico†	29.90	759.4	68	20.0	84	calm			0		0					sm'h		clear.
S. S. Marathon, N. 39° 33′, W. 9° 25′†	30.46	773.7	65	18.3		nne.			3		3		nne.	0	0	mod.	nw.	clear.
S. S. Scythia, N. 40° 34′, W. 69° 47′	30.31	769 9	39.5	4.2		ne.			2		8		ne.	0	0	sli't	ne.	cloudy.
S. S. Colima, St. Johns, N. F						nne.			5		10		e.	0	0			cloudy.
France N. 49° 34′, W. 72° 00′†	30.26	768 7	39.2	4		sw.			3	c	0	nne.				sm'h	se.	clear.
S. S. Labradore, N. 49° 16′, W. 36° 51′			48.2	9.0		wsw.			6		7		w.	rain	rain	h'vy	sw.	
S. S. Abyssinia, N. 51° 30′, W. 8° 28 *	30.00	762.0	53	11.7	80	w			4		5		w.	0	0	sm'h		fine.
S. S. Wyoming, N. 49° 50′, W. 37° 38′	29.76	755.9	50	13.3		var.			4		6		w.			hv'y	var.	drizzling.
S. S. Bohemia, N. 41° 39′, W. 54° 34′			30	— 1.1		n.			4		10			0	0	r'gh	n;ne	squally.
S. S. Gellert, Hamburg, Germany			32	0.0		e.			2		9		e.					covered

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-Swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																	
S. S. Rugia, N. 48° 29′, W. 27° 57′ *	30.26	768.6	61	16	.....	se.	.....	.....	5	.....	4	.....	sw.		1 h'r	1 h'r	4	var.	misty.
S. S. Silesia, N. 49° 14′, W. 29° 57′†	30.10	764.5	55.5	13.1	90	wsw.	.....	.....	7	.....	10	.....	wsw.		0	0	6–7	w.	overcast.
S. S. Vandalia, New York, N. Y	30.41	772.4	40.3	4.6	97	w.	.....	.....	3	.....	5	.....	w.		.....	.....	.....	.....	fair.
S. S. Mentmore, Liverpool, Eng*	29.65	753.1	.....	.....	.....	nw.	.....	.....	4	.....	2	.....	nw.		0	0	.....	.....	fine.
S. S. Heveling, Liverpool, Eng *†	29.72	754.9	49	9.4	.....	ssw.	.....	.....	4	.....	9	.....	sw.		1 h'r	1 h'r	.....	.....	overcast.
S. S. Sirius, Rio de Janeiro, Brazil*	29.92	760.0	.....	.....	.....	se.	.....	.....	1	.....	0	.....	.....		0	0	.....	.....	clear.
S. S. Colorado, N. 24° 34′, W. 82° 31′†	29.95	760.7	73	22.8	.....	se.	.....	.....	2	.....	0	.....	sw.		0	0	small	se.	clear.
S. S. Rio Grande, N. 34° 03′, W. 74° 50′ †	30.09	764.3	68	20.0	.....	se.	.....	.....	4	.....	9	.....	sse.		0	0	long	s.	overcast.
S. S. Archimede, N. 37° 37′, W. 49° 52′†	29.38	746.2	63	17.2	67	nnw.	.....	.....	2	.....	6	.....	nnw.		2 h'r	2 h'r	long	nw.	cloudy.
S. S. John Hopkins, Vineyard Sound, Mass	.....	.....	36	2.2	.....	ne.	.....	.....	4	.....	5	.....	e.		0	0	.....	.....	fair.
S. S. Glenapp, N. 26° 30′, W. 17° 00′†	30.20	767.1	.....	.....	.....	ne.	.....	.....	3	.....	5	.....	ne.		1 h'r	1 h'r	high	cross	showery.
S. S. Glenfyne, Pernambuco, Brazil*†	29.62	752.3	.....	.....	.....	calm	.....	.....	0	.....	10	.....	n.		2 h'r	2 h'r	.....	.....	showery.
S. S. Chalmette, N. 27° 43′, W. 87° 18′†	29.93	760.2	71	21.7	.....	se.	.....	.....	6	.....	8	.....	se.		0	0	mod.	se.	cloudy.
S. S. Lone Star, N. 38° 00′, W. 74° 46′ †	30.12	765.0	51	10.6	.....	e.	.....	.....	5	.....	10	.....	.....		rain	rain	r'gh	e.	drizzling.
S. S. New York, N. 27° 08′ W. 79° 45′†	30.11	764.8	74	23.3	.....	se.	.....	.....	3	.....	4	.....	se.		.....	.....	sm'h	ese.	clear.
S. S Denmark, N. 49° 40′, W. 25° 50′ †	30.12	765.0	54	12.2	.....	wsw.	.....	.....	5	.....	8	.....	wsw.		.....	.....	mod.	wsw.	showery.
S. S. England, N. 46° 34′, W. 44° 29′	29.80	756.9	.....	.....	.....	sw.	.....	.....	2	.....	10	.....	sw.		.....	.....	high	ne.	foggy
S. S. Erin, N. 41° 52′, W. 54° 45′	29.62	752.3	40	4.4	.....	nnw.	.....	.....	8	.....	6	.....	nw.		10 h'r	10 h'r	h'vy	nne.	clearing.
S. S. Helvetia, off Mine Head, Ireland	29.97	761.2	47	8.3	.....	wnw.	.....	.....	6	.....	8	.....	w.		snow	snow	short	w.	cloudy.
S. S. Holland, N. 50° 05′, W. 3° 57′	29.99	761.7	50	10.0	.....	nw.	.....	.....	6	.....	8	.....	nw.		4 h'r	4 h'r	sm'h	nw.	fine.
S. S. City of Merida, N. 23° 09′, W. 82° 22′*†	29.88	758.9	73.4	23.0	.....	se.	.....	.....	3	.....	10	.....	ese.		0	0	light	ese.	cloudy.
S. S. Alene, N. 37° 50′, W. 74° —′ †	30.10	764.5	48	8.9	.....	e.	.....	.....	5	.....	.....	.....	.....		.....	.....	.....	.....	drizzling.
S. S. Hohenstaufen, S. 30° 51′, W. 48° 18′	29.84	757.9	71.6	22.0	.....	n.	.....	.....	6	.....	10	.....	sw.		0	0	light	n	covered.
S. S. Neckar, N. 51° 48′, E. 2° 22′	29.85	758.2	49.0	9.4	93	wsw.	.....	.....	6	.....	7	.....	wsw.		3 h'r	3 h'r	r'gh	sw.	fair.
S. S. Oder, N. 49° 49′, W. 8° 06′	30.20	767.1	50.9	10.5	.....	nnw.	.....	.....	4	.....	5?	.....	nnw.		4 h'r	4 h'r	r'gh	nw.	cloudy.?
S. S. Ohio, off Texel Island, North Sea	29.73	755.1	.....	.....	.....	ssw.	.....	.....	5	.....	9	.....	sw.		5 h'r	5 h'r	mod.	sw.	misty.
S. S. Salier, N. 44° 30′, W. 53° 03′	29.25	742.9	41.0	5.0	.....	nne.	.....	.....	4	.....	10	.....	ne.		1 h'r	1 h'r	hv'y	ne.	cloudy.
S. S. Belgic, San Francisco, Cal †	30.19	766.8	49	9.4	85	calm	.....	.....	0	.....	3	.....	w.		0	0	.....	.....	clear.
S. S. Coptic, N. 23° 32′, E. 117° 42′	30.49	774.4	52.5	11.4	73	ne.	.....	.....	0	.....	8	.....	ne.		4 h'r	4 h'r	mod.	ne.	cloudy.
S. S. Gaelic, N. 37° 54′, W. 140° 45′ *	29.83	757.7	68	20.0	100	ssw.	.....	.....	7	.....	9	.....	ssw.		.....	.....	.....	w.	raining.
S. S. Oceanic, Hong Kong, China	.....	.....	51	10.6	72	n.	.....	.....	4	.....	5	.....	ne.		.....	.....	.....	.....	fine.
S. S. Mississippi, Portland, Oregon *†	29.95	760.7	49	9.4	85	sw.	.....	.....	2	.....	10	.....	sw.		.....	.....	.....	.....	light rain.
S. S. Columbia, N. 40° 58′, W. 124° 43′ †	30.18	766.6	50.5	10.3	96	sse.	.....	.....	4	.....	10	.....	s.		.....	.....	mod.	s.	raining.
S. S. Oregon, San Francisco, Cal†	30.25	768.3	50	10.0	93	calm	.....	.....	0	.....	.....	.....	.....		.....	.....	.....	.....	misty
S. S. Ancon, N. 36° 34′, W. 122° 02′†	30.21	767.3	50	10.0	79	ne.	.....	.....	4	.....	8	.....	nw.		.....	.....	long	nw.	cloudy.
S. S. City of Chester, off Mendocino, Cal *†	30.16	766.1	50	10.0	100	se.	.....	.....	4	.....	10	.....	.....		.....	.....	long	sw.	raining.
S. S. Dakota, N. 40° 17′, W. 124° 35′†	30.22	767.6	58	14.4	74	nw.	.....	.....	4	.....	5?	.....	s.		0	0	mod.	nw.	clear ?
S. S. Orizaba, N. 35° 10′, W. 120° 43′ *†	30.20	767.1	45	7.2	61	nw.	.....	.....	2	.....	0	.....	.....		.....	.....	r'gh	nw.	clear.
S. S. State of California, Portland, Oregon *†	29.84	757.9	47	8.3	.....	s.	.....	.....	2	.....	10	.....	sw.		0	0	.....	.....	cloudy.
S. S. Australia, N. 29° 40′, W. 146° 12′	30.18	766.6	69	20.6	80	se.	.....	.....	4	.....	1	.....	se.		0	0	long	se.	clear.
S. S. City of New York, Sydney, N. S. W †	29.85	758.2	71	21.7	85	wnw.	.....	.....	2	.....	0	.....	.....		0	0	.....	.....	clear.
S. S. City of Pekin, N. 46° 04′, W. 173° 54′†	29.68	753.9	34	1.1	90	wnw.	.....	.....	6	.....	1	.....	nw.		0	0	mod.	w.	fair.
S. S. City of Rio de Janeiro, N. 17° 27′, W. 101° 23′ †	29.90	759.4	78	25.6	86	nne.	.....	.....	2	.....	2	.....	w.		0	0	light	w.	fair.
S. S. City of Sydney, N. 31° 52′, W. 134° 15′†	30.35	770.9	64	17.8	68	s.	.....	.....	2	.....	8	.....	sw.		0	0	h'vy	nw.	cloudy.
S. S. City of Tokei, N. 29° 41′, E. 158° 16′ †	30.18	766.6	68	20.0	.....	s.	.....	.....	5	.....	8	.....	s.		light	light	h'vy	w.	
S. S. Colima, Panama Panamat	29.90	759.4	74	23.3	95	nw.	.....	.....	2–3	.....	6	.....	nw.		0	0	.....	.....	cloudy.
S. S. San José, Mazatlan, Mexico †	29.93	760.2	.....	.....	.....	nw.	.....	.....	2	.....	2 k	.....	.....		0	0	long	wnw.	clear.
S. S. Zealandia, Sydney, N. S. W	29.76	755.9	73	22.8	76	calm	.....	.....	0	.....	1	.....	nw		.....	.....	mod.	e.	fine.
S. S. Muriel, N. 35° 46′ W. 71° 12′	30.20	767.1	62	10.7	.....	nne.	.....	.....	3	.....	0	.....	.....		0	0	mod.	ne.	fair.
S. S. Caracas, N. 22° 20′, W. 68° 41′†	30.12	765.0	74	23.3	68	nne.	.....	.....	5	.....	2	.....	nne.		0	0	h'vy	nne.	fine.
S. S. Claudius, Port Limon, Porto Rica†	29.97	761.2	.....	.....	.....	wsw.	.....	.....	1	.....	3	.....	.....		0	0	long	ne.	fair.
S. S. Valencia, N. 21° 39′ W. 080° 38′†	30.12	765.0	77	25.0	73	ne.	.....	.....	3	.....	4	.....	ese.		0	0	long	ne.	fine.
S. S. Belgenland, Jersey City, N. J	30.41	772.1	36	2.2	90	ene.	.....	.....	3	.....	10	.....	.....		.....	.....	.....	.....	sprinkling.
S. S. Pennland, N. 46° 24′, W. 48° 56′	29.79	756.7	41	5.0	91	e.	.....	.....	1	.....	0	.....	.....		12 h'r	12 h'r	r'gh	se.	clear.
S. S. Rhynland, Antwerp, Belgium	29.94	760.5	40	4.4	91	wnw.	.....	.....	6	.....	10	.....	w.		4 h'r	4 h'r	.....	.....	drizzling.
S. S. Switzerland, N. 40° 30′ W. 69° 25′†	30.32	770.1	.....	.....	.....	nnw.	.....	.....	2	.....	10	.....	nnw.		0	0	sm'h	.....	cloudy.
S. S. Waesland, N. 50° 25′, W. 25° 02′	30.21	767.3	51	10.6	93	s.	.....	.....	5	.....	10	.....	ssw.		2½h'r	2½h'r	long	w.	light rain.
S. S. P. Ouland, 40° 19′, W. 70° 48′	30.31	769.9	31.3	3.5	89	ene.	.....	.....	2	.....	8	.....	e.		.....	.....	.....	.....	cloudy.
S. S. W. A. Scholten, Rotterdam, Holland	.....	.....	27.5	3.1	100	sw.	.....	.....	6	.....	10	.....	sw.		5 h'r	5 h'r	.....	.....	rainy.
S. S. Zaandam, N. 49° 14′, W. 32° 00′	30.01	762.2	57.2	14.0	93	sw.	.....	.....	4	.....	10 n	.....	sw.		16 h'r	10 h'r	3	sw.	
S. S. State of Florida, N. 50° 30′, W. 30° 45′	29.91	759.7	55	12.8	.....	s.	.....	.....	4	.....	10	.....	.....		12 h'r	12 h'r	mod.	s.	foggy.
S. S. State of Indiana, N. 52° 36′ W. 31° 03′†	30.04	763.0	42	5.6	.....	e.	.....	.....	2	.....	10	.....	se.		4 h'r	4 h'r	sm'h	.....	heavy rain.
S. S. Hekla, N. 55° 00′, W. 30° 20′*	30.01	762.2	45.5	7.5	.....	w.	.....	.....	3	.....	10	.....	w.		0	0	mod.	w.	overcast.
S. S. Plantyn, N. 50° 10′, W. 14° 30′	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	4	.....	w.		0	0	mod.	w.	
S. S. Baltic, N. 46° 11′, W. 49° 25′	29.67	753.6	42	5.6	91	ese.	.....	.....	3	.....	4	.....	se.		0	0	r'gh	e.	d. clouds.
S. S. Celtic, New York, N. Y.†	30.31	769.9	46	7.8	.....	e.	.....	.....	1	.....	10	.....	.....		0	0	.....	.....	overcast.
S. S. Germanic, N. 46° 33′, W. 39° 44′†	29.94	760.5	63	17.2	.....	sw.	.....	.....	3	.....	7	.....	sw.		shr's	shr's	mod.	ssw.	showery.
S. S. Lepanto, N. 43° 35′, W. 39° 55′*	29.92	760 0	58	14.4	.....	ssw.	.....	.....	7	.....	9	.....	sw.		0	0	h'vy	s;w.	cloudy.
S. S. Marengo, N. 44° 00′, W. 42° 30′	29.81	757.2	.....	.....	.....	sw.	.....	.....	6	.....	10	.....	sw.		12 h'r	12 h'r	r'gh	s.	rainy.
S. S. Salerno, Hull, Eng *	29.71	754.6	.....	.....	.....	nw.	.....	.....	4	.....	10	.....	.....		2 h'r	2 h'r	.....	.....	cloudy.
S. S. Catherine Whiting, Barnegat, N. J†	30.32	770.1	72	22.2	.....	ese.	.....	.....	5	.....	.....	.....	e.		0	0	light	e.	
S. S. Saxon, Philadelphia, Pa†	30.25	768.3	36	2.2	.....	ene.	.....	.....	5	.....	10	.....	.....		.....	.....	.....	.....	
MISCELLANEOUS																	
Bg. Abbie Clifford, N. 26° 49′, W. 74° 34′†	30.02	762.5	69	20.6	.....	ene.	.....	.....	3	.....	9	.....	.....		0	0	mod.	ne.	cloudy.
Bk. Adelaide, N. 31° 07′, W. 66° 24′*†	30.27	768.8	62	16.7	.....	nne.	.....	.....	5	.....	1	.....	nne.		0	0	long	n.	fair.
Bg. Alcira, N. 34° 06′, W. 73° 06′	30.17	766.3	67	19.4	.....	sse.	.....	.....	4	.....	10	.....	se.		0	0	.....	.....	cloudy.
Bk. Alpha, N. 32° 30′, W. 18° 40′ †	30.21	767.3	70	21.1	.....	ne.	.....	.....	5	.....	4	.....	ne.		1 h'r	1 h'r	long	ne.	fair.
Schr. Annie Lewis, N. 28° 40′, W. 88° 23′ †	30.05	763.3	71	21.7	.....	ne.	.....	.....	2	.....	10	.....	se.		4 h'r	4 h'r	long	se.	raining.
S. Annie M. Law, Manila Bay, Luzon I'd*†	29.85	758.2	72	22.2	.....	ne.	.....	.....	1	.....	10	.....	ne.		4 h'r	4 h'r	.....	.....	fine.
Bk Anna Thormann, S. 32° 49′, E. 35° 06′*	29.58	751.3	71.1	21.7	92	n.	.....	.....	6	.....	10 n	.....	n.		3 h'r	3 h'r	cross	sw;n.	rainy.
S. S. Antonio Lopez, N. 36° 46′. W. 10° 24′*	30.40	772.1	61.5	16.4	74	e.	.....	.....	4	.....	1	.....	.....		0	0	mod.	e.	clear.
Bk. Aquidneck, S. 12° 07′ W. 35° 00′ *†	30.20	767.1	86	30.0	.....	s.	.....	.....	1	.....	.....	.....	s.		½ h'r	½h'r	light	s.	clear.
Bgt. Arthur, N. 16° 46′, W. 26° 10′*†	30.10	764.5	.....	.....	.....	ne.	.....	.....	4	.....	.....	.....	ne.		0	0	mod.	ne.	fair.
Schr. Anna A. Holton, N. 23° 40′, W. 81° 08′†	30.05	763.3	76	24.4	.....	se.	.....	.....	6	.....	2?	.....	se.		10 minutes		r'gh	se.	cloudy.?
Bg. Belle of the Bay, N. 25° 40′, W. 86° 40′ *†	30.02	762.5	.....	.....	.....	s.	.....	.....	6	.....	4	.....	sse.		0	0	cross	sse.	clear.
Bk. Champion, N. 27° 43′, W. 73° 32′	.....	.....	66.0	18.9	.....	ene.	.....	.....	3	.....	2	.....	ne.		0	0	mod.	ne.	fair.
Bg. Clara M. Goodrich, Key Francis, W. I *†	29.09	738.9	.....	.....	.....	e.	.....	.....	5	.....	7?	.....	e.		0	0	.....	.....	clear.?
Schr. C. R. Flint, N. 26° 35′, W. 79° 50′	.....	.....	76	24.4	.....	se.	.....	.....	3	.....	5	.....	sse.		0	0	mod.	ese.	fair.
S. S. D. J. Foley, N. 21° 40′, W. 74° 21′ *†	30.02	762.5	77	25.0	.....	e.	.....	.....	4	.....	8	.....	e.		0	0	sm'h	ene.	cloudy.
Bkt. David Preston, Pensacola, Fla	.....	.....	66.0	18.9	.....	e.	.....	.....	.....	.....	5	.....	w.		12 h'r	12 h'r	.....	.....	
Bk. E. L. Pettingill, N. 4° 15′, W. 121° 34′ *†	29.90	759.4	79	26.1	.....	sw.	.....	.....	1	.....	8	.....	e.		.....	.....	sm'h	n.	
Schr. Edith R. Seward, N. 37° 36′, W. 76° 10′*†	30.10	764.5	30	—1.1	.....	ese.	.....	.....	2	.....	10	.....	.....		4 h'r	4 h'r	.....	.....	rainy.
S. E. J. Spicer, Liverpool, Eng *	29.84	757.9	52	11.1	.....	nw.	.....	.....	7	.....	10	.....	sw.;nw		12 h'r	12 h'r	.....	.....	rainy.
Bk. E. D. Bigelow, Verdon Roads, France*†	30.20	767.1	.....	.....	.....	ssw.	.....	.....	2	.....	.....	.....	.....		.....	.....	.....	.....	gloomy.
Bk. Essex, N. 4° 01′, E. 52° 14′*†	29.90	759.4	87	30.6	.....	ne.	.....	.....	6	.....	.....	.....	.....		0	0	3	nne.	
Schr. F. E. McDonald, Camden, Maine†	30.43	772.9	13	—10.6	.....	nw.	.....	.....	1	.....	0	.....	.....		0	0	.....	.....	fine.
S. S. Foscolia, N. 40° 04′ W. 61° 39′	.....	.....	.....	.....	.....	n.	.....	.....	10	.....	10	.....	n.		rain	rain	h'vy	n.	overcast.
Bk. Freyu, N. 23° 20′, W. 82° 26′	.....	.....	73	22.8	.....	e.	.....	.....	3	.....	hz.	.....	e		0	0	sm'h	.....	overcast.
S. J. W. Glidemeister, N. 50° 42′, E. 0° 27′ *	29.92	760.0	49.1	9.5	49	w.	.....	.....	6	.....	8 k	.....	w.		rain	rain	.....	.....	fine.
Bg. George, N. 25° 23′, W. 57° 03′ *†	30.09	764.3	.....	.....	.....	nnw.	.....	.....	4	.....	2	.....	nw.		light	light	mod	nw.	fair.
S. George Stetson, N. 37° —′, W. 69° —′ *†	30.10	764.5	50	10.0	86	e	.....	.....	6	.....	8	.....	sse.		.....	.....	short	ese.	cloudy.
Bk. Gronsvaer, S. 38° 40′, E. 178° 20′ †	29.85	758.1	71.0	21.7	.....	n.	.....	.....	4	.....	2	.....	n.		0	0	mod.	ne.	fine.
Bk. Godeffroy, S. 57° 00′, W. 71° 09′†	28.78	731.0	41.5	5.3	93	ene.	.....	.....	5–6	.....	10	.....	ene.		4 h'r	4 h'r	r'gh	nw.	rainy.
Bk. Great Surgeon, S. 25° 45′, E. 63° 05′ *†	30.10	764.5	78	25.6	.....	s.	.....	.....	4	.....	3	.....	sw.		4 h'r	4 h'r	long	sw.	fair.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Grey Eagle, S. 16° 25′, W. 35° 32′*†..	29.85	758.2	.....	.....	.....	ene.	.....	.....	3	.....	3	....	ne.	0	0	light	e.	fine.
Bk Hattie G. McFarland, N. 33° 00′, W. 73° 00′†.....	30.28	769.1	62	16.7	.....	se.	.....	.....	4	.....	3	.....	se.	0	0	long	e.	
Schr. Isabel Alberto, N. 36° 32′, W. 74° 40′ †.....	30.29	769.4	... .	.....	.....	ese.	.....	.....	3	.....	10	.....	w.	sli't	sli't	cross	var.	showery.
Schr. Jennie N. Huddell, N. 34° 20′, W. 76° 25′†.....	30.06	763.5	57	13.9	.....	se.	.....	.....	6	.....	10	.....	s.	h'vy	h'vy	h'vy	se.	threatening.
Bk. Joseph A. Ropes, S. 8° 45′, E. 50° 00′ *†.....	29.96	761.0	85	29.4	79	ssw.	.....	.....	3	.....	5	.....	ssw.	1 h'r	1 h'r	mod.	n.	fair.
Bkt. Josephine, N. 24° 20′, W. 33° 47′†.....	30.18	766.6	77	25.0	61	ese.	.....	.....	3	.....	0	.....	.....	0	0	mod.	ese.	clear.
Bk. Julia H, N. 49° 48′, W 9° 55′	30.20	767.1	52.2	11.2	79	w.	.....	.....	6	.....	6	.....	.....	2 h'r	2 h'r	6	nw.	d. clouds.
S. S. J. W. Wilson, Pensacola, Fla.†.....	29.87	758.7	.....	.....	.....	n.	.....	.....	2	.....	10	.....	wsw.	0	0	.....	.....	cloudy.
Light House Tender, Laurel, Pensacola, Fla†.....	29.92	760.0	58	14.4	.....	nw.	.....	.....	0–1	.....	8	w.	s.	5 h'r	5 h'r	h'vy	ssw.	cloudy.
Bk. Louise Adelaide, off Sâlt Key Bank, W. I.*†.....	30.25	768.3	70	21.1	.....	e.	.....	.....	4	.....	6	.....	se.	0	0	. .....	.....	fine.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	29.98	761.5	.....	.....	.....	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
S. S. Madrid, N. 45° 32′, W. 21° 54′*†.....	30.56	776.2	55	12.8	.....	calm	.....	.....	0	.....	8	.....	w.	6 h'r	6 h'r	sm'h	wnw.	fine.
S. S. Malabar, N. 42° 32′, E. 9° 30′ †..	30.27	768.8	.....	.....	.....	n.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bk. Matilda C. Smith, Bombay Hook, Del.*†	30.30	769.6	.....	.....	.....	e.	.....	.....	5	.....	8	.....	se.	1 h'r	1 h'r	mod.	.....	raining.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.05	763.3	58	14.4	.....	s.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
S. Minnie N. Gerow, N. 32° 16′, W. 53° 28′ *†.....	29.71	754.6	.....	.....	.....	nw.	.....	.....	5	.....	2	.....	nw.	.....	.....	r'gh	wnw.	squally.
S. M. P. Grace. S. 42° 55′, W. 118° 12′ *†.....	30.15	765.8	57	13.9	.....	n.	.....	.....	4	.....	10	.....	n.	.....	.....	sm'h	sw.	dense fog.
Bg. Myrtle, Clements Port, Nova Scotia*†.....	30.20	767.1	.....	.....	.....	ne.	.....	.....	1	.....	10	.....	ne.	0	0	.....	.....	cloudy.
Bg. O. C. Clary, N. 19° 45′, W. 69° 44′*†.....	30.04	763.0	82	27.8	91	nne.	.....	.....	3	.....	1	.....	ne.	0	0	sm'h	n.	clear.
Bk. Ottawa, N. 41° 12′, W. 27° 30′*.....	30.39	771.9	62	16.7	.....	s.	.....	.....	3	.....	7	.....	ssw.	0	0	sm'h	w.	hazy.
S Paramita, San Francisco, Cal.....	.....	.....	50	10.0	.....	se.	.....	.....	2	.....	.....	....	....	0	0	.....	.....	
Bk. Pilgrim, N. 24° 31′, W. 67° 40′*†.....	30.10	764.5	.....	.....	.....	nne.	.....	.....	6	.....	0	.....	.....	1 h'r	1 h'r	chop	n.	fine.
S. S. Radnorshire, N. 23° 53′. E. 118° 13′*†.....	30.35	770.9	.....	.....	.....	nne.	.....	.....	9	.....	10	.....	ne.; sw.	1 h'r	1 h'r	long	ne.	cloudy.
Bk. Rebus, N. 49° 28′, W. 6° 35′ *.....	30.03	762.7	50	10.0	.....	w.	.....	.....	5	.....	8	.....	w.	light	light	sm'h	wnw.	cloudy.
Schr. S. B. Hubbard, Hampton Roads, Va.†.....	30.15	765.8	45	7.2	.....	e.	.....	.....	5	.....	10	.....	.....	12 h'r	12 h'r	long	e.	stormy.
Bk. Scud, N. 36° 30′, W. 72° 56′*†.....	30.25	768.3	.....	.....	.....	se.	.....	.....	6	.....	7	.....	se.	0	0	short	e.	cloudy.
Bk. Southern Belle, N. 48° 35′, W. 16° 20′*†.....	30.25	768.3	50	10.0	.....	sw.	.....	.....	2	.....	.....	.....	.....	0	0	long	.....	foggy.
S. S. Strathleven, N. 3° 56′, E. 105° 58′.....	29.86	758.4	77.8	25.4	98	nne.	.....	.....	5	.....	7	.....	nne.	light	light	5	nne.	showery
Bk. Sunbeam, N. 38° 40′, W. 60° 34′	29.98	761.5	50	10.0	86	n.	.....	.....	6	.....	10	.....	n.	1 h'r	1 n'r	h'vy	nne.	cloudy.
Schr. T. S. McLellan, N. 24° 27′, W. 61° 41′ *†.....	30.00	762.0	67	19.4	.....	ene	.....	.....	.....	.....	.....	.....	ne.	.....	.....	.....	ene.	
U.S. F. C. S. S. FishHawk, Washington, D. C†..	30.29	769.4	41	5.0	100	ene.	.....	.....	3	.....	10	.....	ne.	0.88	22.4	.....	.....	raining.
Bk. Vincenzo Accame, N. 37° 10′, W. 55° 00′†.....	29.74	755.3	59.0	15.0	.....	nnw.	.....	.....	1	.....	6	.....	nnw.	2¼ h'r	2¼ h'r	.....	nnw.	
Bk. Wandering Jew, Montevideo, Uruguay†.....	29.79	756.7	68	20.0	.....	sw.	.....	.....	8	....	2	.....	sw.	4 h'r	4 h'r	short	sw.	clear.
Bk. Warden Law, Tocapilla, Peru, S. A*.....	30.04	763.0	.....	.....	.....	nnw.	.....	.....	1	.....	8	.....	w.	.....	.....	sm'h	s.	cloudy.
S. Wm. Woodbury, N. 50° 52′, E. 1° 01′ *.....	29.97	761.2	49	9.4	.....	sw.	.....	.....	7	.....	10	.....	sw.	.....	.....	long	sw.	foggy.

International Chart I. December 21, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 22, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.42	772.6	58.6	14.8	81	n.	.....	.....	1	.....	0	.....	.....	0.067	1.7	clear	Malaterre.
Algiers	.....	.....	30.30	769.6	59.0	15.0	70	wsw.	.....	.....	5	.....	8	.....	.....	0.315	8.0	very cloudy	Thève.
La Calle	.....	.....	30.20	767.1	61.2	16.2	75	nw.	.....	.....	3	.....	4	.....	.....	0	0	cloudy	Fonfréde.
Tunis	.....	.....	30.12	765.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.37	771.5	51.1	10.6	56	n.	.....	.....	2	.....	5	.....	.....	0	0	cloudy	Pérès.
Tebessa	.....	.....	30.20	767.0	47.8	8.8	68	nw.	.....	.....	2	.....	3	.....	.....	0.079	2.0	pretty fair	Dognon.
Geriville	.....	.....	.....	.....	44.2	6.8	63	ne.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair	Lonchamp.
Laghouat	.....	.....	30.32	770.0	52.2	11.2	54	nw.	.....	.....	2	.....	2	.....	.....	0	0	fair	Abraham.
Biskra	.....	.....	30.24	768.1	66.6	19.2	29	nnw.	.....	.....	2	.....	4	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	29.64	752.8	29.74	755.4	61.8	16.6	85	sse.	4	1.8	.....	.....	3	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.47	748.4	30.04	763.1	32.2	0.1	96	e.	.....	.....	2	.....	10	.....	.....	0.012	0.3	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.21	742.0	30.03	762.7	30.2	— 1.0	92	wnw.	0	0	.....	.....	10	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	29.13	739.8	30.05	763.2	32.0	0.0	78	s.	.....	.....	4	6 cs	.....	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.76	730 5	30.08	763.9	30.6	— 0.8	85	w.	.....	.....	1	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.56	725.4	30.06	763.6	30.0	— 1.1	80	s.	.....	.....	3	.....	0	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.62	726.9	30.03	762.7	30.4	— 0.9	92	calm	.....	.....	0	.....	10	.....	.....	0.177	4.5	snowing	The Staff.
Lemberg	29.03	737 4	30.08	764.0	26.2	— 3.2	70	s.	.....	.....	3	.....	2	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.83	757 7	29.95	760.6	46.9	8.3	84	e.	.....	.....	1	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.60	751.7	30.06	763.4	30.2	— 1.0	76	e.	.....	.....	1	.....	0	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.79	756.6	30.08	764.1	32.0	0.0	.....	se.	.....	.....	2	.....	4	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.90	759.4	30.00	762.0	46.0	7.8	78	se.	.....	.....	1	.....	10	.....	.....	0	0	foggy	Royal Academy.
Vienna	29.32	744.7	30.08	764.1	27.7	— 2.4	96	se.	.....	.....	1	.....	10	.....	.....	0.094	2.4	snowing	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.31	744.5	29.41	747.0	40.4	4.7	64	sw.	8	3.6	.....	.....	2	.....	.....	0.090	2.3	blue sky	W. Boswell
Armagh, Observatory	29.36	745 7	29.60	751.8	39.6	4.2	94	ssw.	16	7.2	.....	.....	8	.....	.....	.....	.....	squally	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.64	752.8	43.3	6.3	73	wsw.	13	5.8	.....	.....	4	.....	.....	.....	.....	d. clouds	John Hartnup.
Bolton, Sharples	29.10	739.1	29.63	752.6	42.0	5.6	91	wsw.	12	5.4	.....	.....	9	.....	.....	.....	.....	d. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.20	741.7	29.59	751.6	42.4	5.8	81	sw.	.....	.....	4	.....	2	.....	.....	0.13	3.3	blue sky	McLandsborough&Preston
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	81.0	27.2	70	e.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	43.0	6.1	75	nw.	.....	.....	0.6	.....	2	.....	.....	.....	.....	blue sky	John McLaren.
Chatham, School M. E.	29.60	751.8	29.73	755.1	48.1	8.9	70	calm	.....	.....	0	.....	3	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.47	748.5	29.70	754.4	44.3	6.8	93	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	The Staff.
Fort Napier, Natal	27.42	696.5	29.63	752.6	79.0	26.1	37	s.	.....	.....	1	.....	4	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.66	753.4	29.89	759.2	81.0	27.2	87	calm	.....	.....	0	.....	2	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.31	769.9	30.36	771.1	65.0	18.3	89	w.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.27	743.4	29.47	748.5	41.2	5.1	84	sw.	.....	.....	5	.....	6	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.55	750.6	29.72	754.9	43.2	6.2	82	wsw.	.....	.....	1	.....	0	.....	.....	.....	.....	blue sky	The Staff.
Guernsey	29.45	748.0	29.76	755.9	44.0	6.7	92	s.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	A. Collenette, F. M. S.
Kew, Observatory	29.69	754.1	29.73	755.1	42.4	5.8	82	sw.	8	3.6	.....	.....	5	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.42	747.3	29.68	753.9	41.8	5.4	85	sw.	.....	.....	1	.....	8	.....	.....	.....	.....	d. clouds	J. C. Smith.
Malta, Mediterranean	29.92	760.0	29.99	761.7	61.8	16.6	95	n.	.....	.....	2	.....	9	.....	.....	blank	blank	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.04	763.0	30.09	764.3	72.0	22.2	85	se.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	29.18	741.2	29.71	754.6	42.6	5.9	79	ssw.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.49	749.0	29.72	754.9	43.2	6.2	81	ssw.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds	The Staff.
Plymouth	29.63	752.6	29.71	754.6	45.0	7.2	92	calm	.....	.....	0	.....	10	.....	.....	.....	.....	drizzling	John Merrifield.
Sandwick Manse, Orkneys	29.19	741.4	29.29	744.0	40.2	4.6	88	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	d. clouds	Rev. C. Clouston, L.L.D.
Scutari Cemetery, Turkey	30.10	764.5	30.17	766.3	48.0	8.9	96	ene.	.....	.....	2	.....	1	.....	.....	blank	blank	blue sky	W. H. Lyne.
Sheffield	29.35	745.5	29.64	752.8	44.0	6.7	78	sw.	.....	.....	1	.....	7	.....	.....	0.11	2.8	overcast	W. F. Cooper.
Silloth Rectory	29 52	749.8	29.54	750.3	43.0	6.1	86	w.	.....	.....	2	.....	6	.....	.....	0.026	0.7	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.62	752.3	42.0	5.6	91	sw.	11	4.9	.....	.....	10	.....	.....	.....	.....	gloomy	I. New.
Stratfield Turgiss	29.52	749.8	29.74	755.4	42.6	5.9	89	sw.	.....	.....	1	.....	2	.....	.....	.....	.....	blue sky	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.56	750.8	29.66	751.8	46	7.8	92	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.68	753.9	29.71	754.6	44.2	6.8	96	n.	6	2.7	.....	.....	10	.....	.....	.....	.....	drizzling	The Met'g'l Office.
Canadian.																			
Bathurst, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.09	764.3	30.13	765.3	29	— 1.7	82	n.	18	8.0	.....	.....	10 n	.....	calm	0	0	cloudy	H. J. Cundall, C. E
Chatham, N. B*	30.21	767.3	30.28	769.1	— 1	—18.3	100	calm	0	0	.....	0	0	.....	.....	0	0	clear	G. A Blair.
Father Point, Quebec*	30.28	769.1	30.30	769.6	8	—13.3	.....	se.	3	1.3	.....	.....	10s;fg	.....	.....	0	0	foggy	J. McWilliams.
Fort Garry, Manitoba*	29.18	741.2	30.14	765.5	—16	—26.7	41	ne.	1	0.4	.....	.....	fg	.....	.....	0	0	foggy	James Stewart.
Halifax, N. S*	29.97	761 2	30.11	764.8	27	— 2.8	88	nw.	12	5.4	.....	5 k	0	n.	.....	0	0	fair	A. Allison.
Kingston, Ontario*	29.68	753.9	30.03	762.7	36	2.2	89	s.	7	3.1	.....	.....	10 s	.....	.....	0.18	4.6	cloudy	A. P. Knight, M. A
Montreal, Quebec*	29.91	759.7	30.13	765.3	22	— 5.6	100	calm	0	0	.....	.....	10 s	.....	calm	0.02	0.5	light rain	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.20	741.7	29.92	760.0	35	1.7	92	se.	10	4.5	.....	.....	10 n	.....	se.	0.46	11.7	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.24	742.7	29.95	760.7	36	2.2	100	sw.	2	0.9	.....	.....	10 n	.....	.....	0.26	6.6	threatening	H. Morgan.
Port Stanley, Ontario	29.28	743.7	29.95	760.7	35	1.7	96	se.	2	0.9	.....	.....	fg	.....	.....	0.22	5.6	foggy	M. Payne.
Quebec, Quebec*	29.93	760.2	30.27	768.8	19	— 7.2	100	ne.	.....	.....	1	.....	10 n	.....	ne.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.51	749.5	29.98	761.5	29	— 1.7	84	e.	6	2.7	.....	.....	10 n	.....	.....	0.47	11.9	light snow	W. H. McIntyre.
Saugeen, Ontario*	29.14	740.1	29.87	758.7	36	2.2	89	s.	12	5.4	.....	.....	10 s	.....	.....	0.15	3.8	cloudy	
St. Andrews, N. B	30.17	766.3	30.22	767.6	22	— 5.6	76	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Sydney, C. B*	29.89	759.2	29.96	761.0	32	0.0	96	n.	24	10.7	.....	.....	10 n	.....	.....	0.21	5.3	light snow	T. C. Hill, C. E
Toronto, Ontario*	29.58	751.3	29.98	761.5	37	2.8	96	e.	3	1.3	.....	.....	fg	.....	.....	0.22	5.6	foggy	Magnetic Observatory.
Yarmouth, N. S*	30.10	764.5	30.18	766.6	20	— 3.3	77	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.54	724.9	29.98	761.5	35.0	1.7	95	sw.	.....	.....	2	.....	10	.....	sw.	0	0	overcast	Wm. Wylie.
St. Johns, Newfoundland	29.42	747.3	29.68	753 9	34	1.1	100	ne.	2	0.9	.....	.....	10 n	.....	.....	1.00	25.4	raining	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.66	753.4	29.69	754.1	67.0	19.4	88	wsw.	9.6	4.3	.....	0	8 ks	.....	.....	0	0	threatening	John Duthie.
Cape Town, C. G. H. Obs'y.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper 0–10	Clouds. Amount and kind. Lower 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
Chinese (*Sub-series*).																			
Sung-shu-chwang	24.81	630.1	.....	.....	6.1	—14.4	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.59	776.9	30.70	779.7	26.6	— 3.0	90	calm	0.2	0.1	.....	0	0	.....	.....	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.73	780.6	30.76	781.2	25.0	— 3.9	63	nw.	4.0	1.8	.....	0	4 k	.....	.....	0	0	cloudy	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.53	750.1	29.58	751.3	36.9	2.7	93	sw.	16	7	.....	10	.....	.....	.....	.....	.....	foggy	Oversergent Fischer.
Fanoe	29.44	747.8	29.46	748.3	36.1	2.3	94	sw.	.....	.....	4	10	.....	.....	.....	.....	.....	raining	Overloerer Lauridsen.
Godthaab, Greenland	29.94	760.4	29.98	761.5	25.7	— 3.5	.....	s.	.....	.....	6	10	.....	.....	.....	.....	.....	snowing	S. Kleinschmidt.
Ivigtut, Greenland	30.09	764.2	30.11	764.7	21.6	— 5.8	.....	calm	.....	.....	0	9	.....	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	30.00	762.1	30.05	763.3	2.5	—16.4	.....	calm	.....	.....	0	2	.....	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.71	754.7	29.76	755.8	23.2	— 4.9	93	ne.	.....	.....	8	8	.....	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.27	743.5	29.31	744.4	31.6	— 0.2	94	calm	0	0	.....	3	.....	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.25	743 0	29.35	745.4	34.9	1.6	98	s.	.....	.....	6	9	.....	.....	.....	.....	.....	.....	Loearer Oesterboi.
Upernavik, Greenland	30.11	764.9	30.16	766.1	— 1.7	—18.7	.....	e.	.....	.....	2	0	.....	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.48	748.8	30.14	765.6	48.2	9	100	w.	.....	.....	1	8	.....	.....	.....	0.532	13.5	light rain	M. Labroue, Director.
Alençon, Normal School	29.33	744.9	29.88	758.9	42.8	6	100	ssw.	.....	.....	1	.....	kn	n.	n.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.63	752.7	29.90	759.5	37.6	3.1	96	sw.	.....	.....	1	.....	k	.....	sw.	0	0	.....	M. Fénéon, Command't.
Avignon, Normal School	29.96	761.0	30.04	763.0	50.4	10.2	56	nw.	.....	.....	1	10	.....	.....	.....	0.059	1.5	covered	M. Giraud, Director.
Bar-sur-Seine	29.38	746.2	29.95	760.6	42.6	5.9	87	s.	.....	.....	1	10	.....	.....	sw.	0.315	8.0	covered	M. Saillard, Director.
Beauvais, Normal School	29.60	751.9	29.88	758.9	42.3	5.7	91	s.	.....	.....	1	8	nw.	ssw.	0.055	1.4	very cloudy	M. Frère Eugène Marie.	
Besançon, Normal School	29.24	742.7	30.01	762.2	42.4	5.8	88	ssw.	.....	.....	1	n	.....	.....	ese.	0.94	24.	.....	M. Gobin, Director.
Bordeaux, Observatory	29.75	755.7	30.02	762.4	52.9	11.6	86	w.	.....	.....	4	10	.....	.....	w.	0.106	2.7	covered	M. Rayet, Director.
Bourges, Normal School	29.41	746.9	29.97	761.2	44.6	7	91	sw.	.....	.....	1	10 n	.....	.....	sw.	0.228	5.8	raining	M. Malat, Director.
Brest, Naval Observatory	29.53	750.1	29.77	756.2	52.5	11.4	97	w.	.....	.....	3	10	.....	.....	w	1.102	28.0	raining	M. de Kermarec, Dir.
Caen, Normal School	29.80	756.8	29.87	758.7	45.7	7.6	75	se.	.....	.....	1	5	.....	.....	se.	0.04	1.	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.58	751.3	29.91	759.6	39.0	3.9	95	sw.	.....	.....	1	8	.....	.....	wsw.	0.157	4.0	very cloudy	M. Judot, Director.
Charleville, Normal School	29.32	744.7	29.85	758.2	34.5	1.4	89	s.	.....	.....	1	10	.....	.....	.....	0.16	4.	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.63	727.1	30.00	762.1	46.0	7.8	66	wsw.	.....	.....	2	10	.....	.....	.....	0.110	2.8	raining	M. Allnard, Director.
Cluny, Normal School	29.10	739.2	29.97	761.3	45.5	7.5	66	sw	.....	.....	2	4	ne.	n.	0.335	8.5	raining	M. de Villemontée, Dir.	
Commercy, Normal School	29.08	738.6	29.99	761.7	37.0	2.8	97	sw.	.....	.....	1	n	sw.	sw.	0.402	10.2	..	Dr. Coulet, Director.	
Gap, Normal School	27.45	697.2	30.04	763.1	42.1	5.6	75	nw.	.....	.....	1	3	.....	.....	.....	0	0	.....	M. Jeangirard, Director.
Grésque, du Rhone	28.88	733.6	30.02	762.5	49.5	9.7	61	nw.	.....	.....	2	4	.....	.....	nw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.28	743.6	30.08	764 0	38.5	3.6	100	se.	.....	.....	1	cn	.....	.....	nw.	0	0	.....	M. Ablard, Director.
Guéret	28.41	721.6	30.03	762.7	41.0	5	84	sw.	.....	.....	2	n	.....	.....	sw.	1.42	36.	.....	M. Delorme, Dir.
Lamballe, Normal School	29.57	751.0	29.84	758.0	44.2	6.8	100	se.	.....	.....	2	10	.....	.....	se.	0	0	covered	M. Ollitrault, Director.
Lescar, Normal School	29.60	751.7	30.17	766.2	49.6	9.8	95	sw.	.....	.....	1	8 n	.....	.....	.....	0.354	9.0	very cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.69	754.0	29.79	756.6	51.1	10.6	97	sse.	.....	.....	4	10	.....	.....	.....	0.906	23.0	raining	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.97	735.7	30.04	763.1	44.4	6.9	88	se.	.....	.....	1	10	.....	.....	.....	0.201	5.1	foggy	M. André, Director.
Mans, Normal School	29.78	756.5	30.10	764.6	42.8	6	94	e	.....	.....	1	10	.....	.....	.....	0.071	1.8	raining	M. Piboën, Director.
Marseille, Observatory	29.77	756.1	30.04	763.0	51.8	11.0	63	wnw.	.....	.....	2	8	.....	.....	wnw.	0.016	0.4	.....	M. Stephan, Director.
Montlouis	24.82	630.4	29.66	753.4	41.0	5.0	71	sw.	5.6	2.5	.....	8	w.	.....	.....	0	0	.....	M Carê for Dr. Fines.
Montpellier, Normal School	29.91	759.8	30.10	764.6	53.1	11.7	80	wnw.	.....	.....	2	5	nw.	.....	.....	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	29.11	739.4	29.91	759.8	41.0	5.0	78	s.	.....	.....	1	ck	0	.....	.....	0.213	5.4	.....	M. Hasse, Director.
Nantes, Observatory	29.72	754.9	29.88	759.0	52.7	11.5	94	wsw.	.....	.....	1–3	10	.....	.....	.....	0.110	2.8	rainy	M. Larocque, Director.
Perpignan, Observatory	30.01	762.2	30.12	765.0	55.4	13.0	68	n.	15.0	6.7	.....	.....	9	n.	nw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.22	539.1	.....	.....	26.2	— 3.2	.....	w.	.....	.....	3–4	10	.....	.....	w.	0.709	18.0	snowy	M. Vaussenat.
Privas, Normal School	28.97	735.8	30.06	763.6	43.2	6.2	85	e.	.....	.....	1	.....	2	e.	e.	0.031	0.8	slightly cl'dy	M. Taillen. .
Puy de Dôme Obs'y, Summit	25.02	635.5	.....	.....	29.5	— 1.4	100	wsw.	.....	.....	4	10	.....	.....	.....	0.433	11.0	snowing	M. Allnard, Director.
Rochefort, Naval Obs'y	29.89	759.3	29.93	760.1	50.7	10.4	97	wsw.	.....	.....	3	10	.....	.....	w.	2.01	51.	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.63	752.7	29.85	758.2	52.3	11.3	97	wsw.	.....	.....	2	10	.....	.....	.....	0.240	6.1	raining	M. Brotier, Director.
Rodez, Normal School	27.94	709.6	30.14	765.5	42.4	5.8	81	.....	.....	.....	1	10	.....	.....	nw.	0.220	5.6	covered	M. Seger, Director.
Rouen, Normal School	29.80	757.0	29.85	758.2	43.2	6.2	94	sw.	.....	.....	1	8	sw.	.....	.....	0.173	4.4	very cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	43.0	6.1	96	sw.	.....	.....	1	5	.....	.....	sw.	0.154	3.9	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.72	754.8	29.88	759.0	42.1	5.6	97	ssw.	.....	.....	1	10	.....	.....	sw.	0.028	0.7	.....	M. Renou, Director.
Toulouse, Observatory	29.45	747.9	30.17	766.4	48.2	9.0	100	wsw.	.....	.....	3	10	w.	.....	.....	0.272	6.9	covered	M. Baillaud, Director.
Tours	29.74	755.3	29.91	759.8	45.7	7.6	91	sw.	.....	.....	1	10	.....	.....	wsw.	0.059	1.5	raining	M. de Tastes.
Versailles, Observatory	29.32	744.8	29.82	757.3	42.4	5.8	94	sw.	.....	.....	1	.....	.....	.....	.....	0.165	4.2	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	30.05	763.2	30.20	767.0	53.2	11.8	85	w.	25.5	11.4	.....	.....	10 kn	.....	w.	0.756	19.2	covered	M. Cartier, Director.
German.																			
Ansbach	28.48	723.3	29.98	761.5	36.0	2.2	80	sw.	.....	.....	2	2	sw.	.....	.....	0.197	5.0	.....	Prof. Jnedt.
Bamberg	29.05	737.8	29.89	759.1	37.9	3.3	77	nw.	.....	.....	1	6	.....	.....	.....	0.270	7.0	.....	Prof. Dr. Hoh.
Berlin	29.60	751.7	29.78	756.3	39.2	4.0	80	sw.	.....	.....	2	4	.....	.....	.....	0.067	1.7	.....	Prof. Dr. Arndt.
Breslau	29.41	747.0	29.94	760.4	34.7	1.5	72	sw.	.....	.....	2	10	.....	.....	.....	0.016	0.4	.....	Royal University Obs'y.
Carlsruhe	29.49	749.1	29.94	760.5	43.5	6.4	65	sw.	.....	.....	2	0	.....	.....	.....	0.402	10.2	.....	Albert Senz.
Cassel	29.07	738.3	29.78	756.4	38.3	3.5	85	s.	.....	.....	4	8	s.	.....	.....	0	0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.54	750.3	29.91	759 8	40.1	4.5	82	sw.	.....	.....	1	2	.....	.....	.....	0.154	3.9	.....	Physical Society.
Friedrichshafen	28.53	724.7	30.01	762.2	39.6	4.2	93	w.	.....	.....	3	8	w.	.....	.....	0.504	12.8	.....	Wilhelm, Chief Tel.
Hamburg	29.59	751.5	29.68	753.8	37.8	3.2	97	sw.	.....	.....	5	10	.....	.....	.....	0.114	2.9	.....	E. Preller.
Kiel	29.59	751.6	29.61	752.0	38.5	3.6	93	sw.	.....	.....	2	10	.....	.....	.....	0.236	6.0	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.42	747.2	29.85	758.2	39.0	3.9	80	sw.	.....	.....	2	7	sw.	.....	.....	0.094	2.4	.....	H. Leppig, Asst.
Magdeburg	29.59	751.6	29.78	756.5	39.4	4.1	84	ssw.	.....	.....	3	10 ks	.....	.....	sw.	0.110	2.8	sprinkling	Weather Observatory.
Memel	29.86	758.5	29.91	759.7	21.6	— 5.8	93	sse.	.....	.....	4	10	.....	.....	.....	.....	.....	snowing	Issermann.
Munich	28.13	714.5	29.99	761.7	36.9	2.7	89	calm	.....	.....	0	9	w.	.....	.....	0.224	5.7	.....	Central Station.
Neufahrwasser	.....	.....	.....	.....	34.5	1.4	87	sw.	.....	.....	2	10	sw.	.....	.....	0.008	0.2	.....	A. Lothes.
Neustadt, Palatinate	29.38	746.2	29.90	759.5	41.0	5.0	78	sw.	.....	.....	2	5	sw.	.....	.....	0	0	.....	Dicknether.
Stuttgart	28.97	735.8	29.89	759.1	40.1	4.5	73	sw.	.....	.....	1	4	w.	.....	.....	0.343	8.7	snowing	Prof. Dr. Schoder.
Wustrow	29.65	753.2	29.68	753.9	36.5	2.5	93	ssw.	.....	.....	4	10	.....	.....	.....	0.118	3.0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.69	754.0	30.08	764.0	49.6	9.8	.....	n.	.....	.....	3.0	.....	10	.....	.....	0.201	5.1	covered	Schmidt & Wourlisch.
Indian.																			
Kurrachee	29.99	761.7	30.04	763 0	75.3	24.0	77	sw.	15.0	6.7	.....	0	.....	.....	.....	0	0	blue sky	
Deesa	29.48	748 7	29.95	760.7	82.4	28.0	32	wsw.	5.0	2.2	.....	0	.....	.....	.....	0	0	hazy	
Bombay	29.91	759.8	29.95	760.8	79.9	26.6	67	wnw.	12.0	5.4	.....	0	.....	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.09	713.5	29.93	760.2	84.7	29.3	17	ese.	9.0	4.0	.....	.....	.....	.....	.....	0	0	d. clouds	
Trichinopoly	29.70	754.3	29.98	761.5	80.0	26.7	70	ene.	1.0	0.4	.....	.....	1	s.	.....	0	0	d. clouds	
Belgaum	27.40	696.0	29.92	760.0	80.9	27.2	34	ese.	9.0	4.0	.....	.....	8	.....	.....	0	0	d. clouds	
Lahore	29.33	744.9	30.11	764.8	57.6	14.2	64	calm	0	0	.....	.....	1	ne.	.....	0	0	d. clouds	
Roorkee	29.15	740.4	30.08	764.2	63.8	17.7	60	w.	.....	.....	.....	.....	8	.....	.....	0	0	gloomy	
Agra	29.48	748 7	30.06	763.5	70.7	21.5	31	e.	2.0	0.9	.....	.....	9	w.	.....	0	0	.....	
Nagpur	28.96	735.6	30.02	762.4	76.7	24.8	34	calm	0	0	.....	.....	3	.....	e.	0	0	d. clouds	
Jubbulpore	28.68	728.5	30.07	763.7	71.8	22.1	50	calm	0	0	.....	.....	2	e.	.....	0	0	d. clouds	
Lucknow	29.68	753.8	30.07	763.7	67.3	19.6	40	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.74	755.4	30.07	763.7	59.7	15.4	65	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.89	759.1	30.08	764.0	63.6	17.6	68	wnw.	2.2	1.0	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	28.00	711.2	30.09	764.2	62.5	16.9	41	nnw.	3.8	1.7	.....	.....	2	wnw.	wnw.	0	0	.....	
Cuttack	29.96	760.9	30.04	763.0	73.5	23.1	70	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Allpore	30.04	763.0	30.06	763.6	65.9	18.8	66	nnw.	1.0	0.4	.....	.....	3	.....	.....	0	0	d. clouds	
Dhubri	29.92	759.8	30.04	763.0	70.6	21.4	77	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.95	760 7	30.04	763.1	68.6	20.3	61	wsw.	1.3	0.6	.....	.....	8	sw.	.....	0	0	d. clouds	
Sibsagar	29.71	754.6	30.06	763.5	65.8	18.8	88	ne.	2.0	0.9	.....	.....	3	.....	.....	0	0	blue sky	
Jeypore	28.54	724.9	30.01	762.1	73.4	23.0	44	sse.	3.7	1.6	.....	.....	2	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.58	751.3	30.00	762.0	39.7	4.3	77	.....	.....	.....	.....	.....	5	.....	s.	0	0	d. clouds	
													10						Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	29.50	749.2	30.03	762.8	37.4	3.0	86	nw.	3.1	1.4			0	n.		0.020	0.5		Prof. Schiapparelli.
Padua	29.89	759.2	30.00	762.1	37.9	3.3	88	nnw.	1.8	0.8			2			0.083	2.1		Prof. Dott. Lorenzoni.
Moncalieri	29.09	738.9	30.03	762.8	38.3	3.5	97	nw.	0.7	0.3			10			0	0		Prof. F. F. Denza.
Genoa	29.80	756.9	30.00	761.9	44.6	7.0	71	ne.	2.5	1.1			10	se.		0.063	1.6		Prof. G. M. Garibaldi.
Mondovi	28.06	712.7	30.03	762.7	38.7	3.7	70	sw.			2		10			0	0		Prof. D. O. Bruno.
Pesaro	29.91	759.7	29.96	761.0	42.8	6.0	96	nw.	8.7	3.9			10			0	0		Prof. Luigi Guidi.
Florence	29.73	755.1	29.99	761.7	46.8	8.2	83	ne.			2		10	nw.		0	0		Prof. Costantino Pittei.
Leghorn	29.83	757.6	29.91	759.8	45.3	7.4	91	ne.	1.8	0.8			10			0	0		Prof. P. Monte.
Rome	29.81	757.2	29.99	761.7	46.9	8.3	87	ne.	0.7	0.3			10			0.001	2.3		Prof. P. Tachini.
Lecce	29.74	755.5	30.00	762.1	48.2	9.0	92	se.	1.3	0.6			10			0.181	4.6		Prof. C. de Giorgi.
Cosenza	29.14	740.2	30.05	763.3	50.7	10.4	75	sw.	1.8	0.8			10	w.		0.224	5.7		Prof. D. Conti.
Cagliari	29.81	757.2	30.01	762.2	57.4	14.1	66	nw.			4		9	n.		0	0		Prof. A. Pacinotti.
Palermo	29.76	755.8	30.01	762.3	55.0	12.8	61	ne.	1.8	0.8			10			0.031	0.8		Prof. G. Cacciatore
Syracuse	29.87	758.6	29.91	759.7	56.5	13.6	87	ne.	28.6	12.8			10	ne.		0.433	11.0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.44	747.8	29.97	761.3	53.1	11.7	63	ssw.	0	0			10			0	0		Prof. F. Brioschi.
Stelvio	21.95	557.5			16.0	— 8.9	66	se.			2		0			0	0	misty.	Prof. P. F. Denza.
Valdobbia	21.99	558.5			22.6	— 5.2	67	ne.			2		7			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.16	765.9	30.18	766.7	37.2	2.9	97	calm			0		10 ck;n		nw.	0.185	4.7	snowing	Hattori.
Awomori	30.11	764.8	30.14	765.5	22.2	— 5.4	89	sw.	11.9	5.3			10 n		w.	0.199	5.1	light snow	K. Ogawa.
Hakodate	30.10	764.6	30.11	764.9	19.0	— 7.2	78	w.	6.0	2.7		0	6		wnw.	0	0	fair	
Hamamatsu	30.28	769.1	30.31	769.9	32.8	0.4	63	calm			0	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					30.6	— 0.8	96	nne.	9.1	4.0		1 cs	3ck;ks		nw.	0	0		
Kanazawa	30.25	768.4	30.36	771.1	32.1	0.1	81	nw.	6.1	2.7		0	5			0.321	8.2	cloudy	S. Endo.
Kioto	30.20	767.1	30.39	771.9	26.8	— 2.9	93	wsw.	0.5	0.2		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.32	770.2	30.54	775.8	31.3	— 0.4	89	calm	0	0			0			0	0	cloudy	S. Takehayashi.
Niigata	30.21	767.3	30.25	768.3	32.9	0.5	71	wnw.	11.7	5.2		0	9 s			0	0	cloudy	M. Morita.
Nobiru	30.14	765.5	30.15	765.9	29.4	— 1.4	86	nw.	10.8	4.8		0	6 ck;s		wnw.	0.045	1.1	cloudy	H. Midzushima.
Numazu	30.18	766.6	30.22	767.5	32.0	0.0	50	ene.			2	0	0			0	0	clear	R. Kaneda.
Osaka	30.38	771.7	30.40	772.1	29.6	— 1.3	74	w.	3.7	1.6		0	0			0	0	clear	H. Omura.
Sapporo					18.4	— 5.6	57	sw.	0.2	0.1		2	3	n.	n.	0	0	fair	
Tokei Obs'y, Yeddo	30.15	765.9	30.24	768.0	34.0	1.1	79	nnw.	8.7	3.8		0	0			0	0	clear	The Staff.
Wakayama	30.34	770.7	30.40	772.2	35.6	2.0	68	n.	2.5	1.1			9ck;ks		nw.	0	0	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.78	756.4	29.97	761.2	80.3	26.8	71	e.	15.0	6.7		0	6 ks;kn		ese.	0.14	3.6	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.62	600.0	29.84	758.0	50.0	10.0	94	calm	0	0		3 c	0	w.		0	0	foggy	Prof. Vicente Fernandez.
Leon	24.29	617.0	30.16	766.1	42.8	6.0	73	nnw.			1	9 c	0			0	0	cloudy	Prof. M. Lesl.
Mazatlan	29.71	754.6	29.97	761.3	62.5	16.9	67	nnw.	5.3	2.3		0	0			0	0	light haze	F. Quijano, C. E.
Mexico, Central Obs'y	23.06	585.6	30.19	766.9	45.9	7.7	63	nw.	0.2	0.1		5 ck	4 ks			0	0	cloudy	The Staff.
Morelia	24.18	614.2	30.03	762.7	46.8	8.2	71	e.			1	1 c	2 k	s.	e.	0	0	½ cloudy	M. Tena, M. D.
Pabellon, Aguascallentes	23.93	607.7	30.08	764.1	37.0	2.8	60	w.			1	0	1 s		sw.	0	0	clear	M. V.de Leon, M. E.
Puebla, Catholic Institute	23.34	592.9	30.07?	764.0?	51.8	11.0	82	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.41	569.2	30.17	766.4	38.0?	2.9?	53	sw.	4.6	2.1		2 c	0	e.		0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.76	755.9	29.76	755.9	42.1	5.6		sw.			4					0.039	1.0		
Groningen	29.59	751.6	29.65	753.0	40.1	4.5		sw.			3					0.066	1.7		
Helder	29.66	753.3	29.66	753.3	42.8	6.0		wsw.			4					0	0		
Hellevoetsluis	29.75	755.7	29.75	755.7	41.2	5.1	90	sw.			4					0	0		
Utrecht	29.69	754.1	29.74	755.3	42.3	5.7	88	sw.			2		2			0.004	0.1	lightly cl'dy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.16	740.6	29.22	742.2	35.6	2.0	82	sse.	2	1			10			0	0		
Brono	29.38	746.3	29.42	747.3	34.1	1.2	62	se.	18	8			7			0	0		
Christiania	29.28	743.8	29.43	747.0	30.6	— 0.8	92	e.	9	4			10			0.528	13.4		
Gjæsvær	29.56	750.9	29.59	751.5	29.7	— 1.3		calm			0		10						
Lodingen	29.47	748.4	29.51	749.6	32.5	0.3	75	calm			0		4			0	0		
PORTUGUESE.																			
Angra, Azores	30.28	769.1	30.44	773.1	61.9	16.6	83	sse.	1.8	0.8			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.35	745.5	30.37	771.4	55.6	13.1	73	wnw.	7.4	3.3			7			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.30	771.1	30.45	773.3	60.2	19.0	63	se.	11.2	5.0			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.10	764.6	30.47	773.9	57.9	14.4	61	n.	7.4	3.3			7	n.		0	0		The Staff.
Ponta Delgada, Azores	30.40	772.1	30.47	773.9	62.6	17.0	83	ese.	1.3	0.6			3			0	0		
Saint Paul de Loando	29.68	753.9	29.88	758.9	82.0	27.8	73	wsw.	1.8	0.8			3			0	0		
Serra da Estrella	25.52	648.2	30.33	770.4	45.0	7.2	37	nw.	26.2	11.7			7						
RUSSIAN.																			
Akmolinski	29.13	740.0	30.28	769.2	24.3	— 4.3	93	sse.	9	4			10 n						Major K. Lasarew.
Archangel	30.17	766.4	30.19	766.9	11.5	—11.4	89	s.	4	2			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.42	772.6	30.34	770.5	6.8	—14.0	71	w.	16	7			0			blank	blank		Capt. Wisganow.
Barnaul	29.97	761.1	30.51	775.0	13.8	—10.1	85	sw.	4	2			10			0.087	2.2		Meteorological Obs'y.
Bielosersk	29.87	758.7	30.39	771.9	6.4	—14.2	94	sse.	0	0		8 cs	0			0	0	light clouds	Observatory.
Dorpat	29.81	757.1	30.08	764.0	5.0	—15.0	91	ese.	4	2		8 c	0			0	0	light clouds	Meteorological Obs'y.
Ekaterinburg	29.32	744.8	30.44	773.1	—14.1	—25.6	90	calm	0	0			0			0.039	1.0		
Elisawetgrad	29.99	761.8	30.49	774.4	15.4	— 9.2	69	calm	0	0		0	0			0	0		Observatory.
Kasan	29.98	761.6	30.29	769.4	— 2.2	—19.0	75	n.	9	4			10					heavy clouds	
Kem	30.03	762.7			18.0	— 7.8	92	sw.	4	2			10 ks			0	0		Lagorio & Sastyrez.
Kertch	30.34	770.5	30.35	771.0	27.0	— 2.8	85	calm	0	0		0	4 ks						Observatory.
Kieff	29.65	753.2	30.30	771.2	8.6	—13.0	84	se.	9	4		1 c	0						E. Quass.
Libau	29.81	757.2	29.84	757.8	22.5	— 5.3	79	se.			2		10			0	0		Meteorological Obs'y.
Lugan	30.20	767.0	30.43	772.8	3.2	—16.0	71	wnw.	9	4			10			0	0		
Moscow	29.93	760.2	30.49	774.5	— 8.7	—22.6	76	calm	0	0		0	4 s			0	0		Capt. Kurdakow.
Nikolaiev	30.37	771.5	30.45	773.4	18.9	— 7.3	81	ese.	4	2		0	0						Physical Observatory.
Pekin, China	30.40	773.0	30.60	777.2	24.1	— 4.4	38	calm	0	0		0	0			0	0		Dr. Bergmann.
Petrozavodsk	30.02	762.6	30.25	768.3	— 2.6	—19.2	76	ssw.	0	0		0	3 ks			0	0	light clouds	
Pinsk	29.63	752.7			17.6	— 8.0	68	sse.	18	8		0	8 s			0	0		Central Physical Obs'y.
St. Petersburg	30.22	767.5	30.23	767.9	— 4.4	—20.2	93	sse.	11	5		0	0			0	0		
Sevastopol	30.13	765.4	30.31	769.8	39.6	4.2	51	n.	4	2		0	2 s			0	0		Major Lasarew.
Semipalatinsk	29.84	757.8	30.50	770.1	17.2	— 8.2	76	calm	0	0			9			0	0	light clouds	
Staroi Bykhov	29.88	758.9	30.39	772.0	3.6	—15.8	81	se.	9	4		10 cs	0			0	0	light clouds	Teich, A. M.
Tashkend, Laboratory	28.53	724 0	30.14	765.6	44.2	6.8	69	calm	0	0			4			0	0		Physical Observatory.
Tiflis	28.85	732 7	30.37	771.5	37.2	2.9	50	nnw.	22	10		0	2 k					snowing	
Tomsk	30.11	764.7	30.41	772.5	9.0	—12.8	89	calm	0	0			10			0	0		
Vladivostock	30.24	768.1	30.31	769.8	5.2	—14.9	48	calm	0	0		0	0					heavy clouds	Astronomical Obs'y.
Warsaw	29.52	749 9	29.97	761.2	29.3	— 1.5	82	sw.	9	4			10					light clouds	Berg, Assistant.
Wilna	29.03	752 7	30.09	764.3	15.1	— 9.4	66	se.	4	2			3						M. O. Marks.
Yeniseisk	30.20	767.0	30.52	775.3	— 5.3	—20.7	89	calm	0	0			1						
SCOTTISH.																			
Monach Lt			29.37	746.0	44	6.7	91	w.			6		10			0.2	5.	showery	J. Youngclause.
North Unst			29.21	741.9				n.			4		10			blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.04	763.0	30.15	765.8	55.9	13.3	64	w.	1.8	0.8		0	7			0	0	almost cov'd	Antonio Reve, Director.
Bilbao, Met. Obs'y	30.19	766.9	30.25	768.4	58.6	14.8	67	nw.	1.1	0.5		2	7	w.		0	0	almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.29	693.2	30.36	771.2	44.2	6.8	84	s.	1.3	0.6			8			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.07	712.9	30.39	771.8	43.9	6.6	96	e.	0.7	0.3		0	0			0.020	0.5	misty	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
Spanish.																			
Murcia, Met. Obs'y	30.10	764.4	30.24	768.1	60.1	15.6	69	ssw.	3.4	1.5	.....	4	4	w.	.....	0	0	cloudy	Olayo Diaz, Director.
Oviedo	29.48	748.8	30.36	771.2	51.4	10.8	75	s.	23.9	10.7	.....	6 k	2 n	ne.	e.	0.126	3.2	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.43	747.6	30.35	771.0	48.4	9.1	98	sw.	4.9	2.2	.....	.....	10	.....	.....	0	0	foggy	R. Gil Villanueva, Dir.
Spanish.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.98	761.4	30.04	762.9	75.0	23.9	86	n.	6.6	3.0	.....	.....	9 n	.....	ne.	c	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.32	770 0	30.42	772.6	55.9	13.3	82	nw.	15.9	7.1	.....	0	3	.....	n.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.96	760 9	30.05	763.2	77.4	25.2	70	ne.	13.4	6.0	.....	3 c	3 k	ne.	ne.	0	0	.....	Manuel Maese.
Tuguegarao, Philippine Id's	30.03	762.8	30.16	766.1	68.7	20.4	94	nnw.	16.8	7.5	.....	.....	10 ks	.....	ne.	0.17	4.3	overcast	José L. Yrastorza.
Swedish.																			
Haparanda	29.91	759.7	29.95	760.7	22.3	— 5.4	100	s.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Umea	29.80	756.8	29.85	758.1	24.4	— 4.2	95	s.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Hernosand	29.65	753.0	29.70	754.3	31.6	— 0.2	92	ese.	.....	.....	6	.....	10	.....	.....	0.028	0.7	.....	
Stockholm	29.47	748.4	29.64	752 9	32.7	0.4	92	sse.	.....	.....	4	.....	10	.....	.....	0.004	0.1	snowing	
Wisby	29.60	751.7	29.65	753.2	34.2	1.2	92	sse.	.....	.....	4	.....	10	.....	.....	.....	.....	snow & rain	
Sub-series.																			
Upsala	29 53	750.0	29.61	752.2	30.4	— 0.9	100	se.	10.5	4.7	.....	.....	10	.....	.....	0.098	2.5	snowing	S. G. Fineman.
Swiss.																			
Geneva	28.57	727.5	30.03	762.7	44.4	6.9	75	ssw.	.....	.....	2	.....	9	.....	.....	0.252	6.4	covered	The Observatory.
Turkish.																			
Constantinople	.....	.....	30.19	766.7	46.4	8.0	59	ene.	15	8.0	.....	.....	1	.....	ne.	0	0	.....	The Observatory.
Valona	.....	.....	30.01	762.3	50.2	10.1	.....	nw.	.....	.....	1	.....	10	.....	.....	0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.05	763.2	68.5	20.3	69	ne.	.....	.....	1	7 cs	.....	w.	.....	0	0	.....	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.11	764.8	30.20	767.1	37	2.8	82	s.	3	1.3	.....	.....	10 s	.....	.....	0.61	15.5	cloudy	J. O. Barnes.
Alpena, Michigan	29.16	740.7	29.67	758.7	33	0.6	88	s.	6	2.7	.....	.....	10 s	.....	.....	0.16	4.1	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.12	638.0	30.20	767.1	22	— 5.6	76	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	26.89	683.0	29.92	760.0	38	3.3	47	sw.	24	10.7	.....	0	0	.....	.....	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	28.67	728.2	29.90	759.4	47.5	8.6	100	e.	18	8.0	.....	.....	10 n	.....	.....	0.36	9.1	light rain	H. C. Smith.
Atlantic City, New Jersey	29.99	761.7	30.00	762.0	42	5.6	96	ne.	4	1.8	.....	.....	10n; fg	.....	.....	0.72	18.3	light rain	Jas. M. Watson.
Augusta, Georgia	29.73	755.1	29.93	760.2	52	11.1	93	ne.	1	0.4	.....	.....	10 n	.....	ne.	1.20	30.5	light rain	John Healy.
Baltimore, Maryland	30.04	763 0	30.08	764.0	42	5.6	93	n.	4	1.8	.....	.....	10s; fg	.....	n.	0.79	20.1	cloudy	Geo W Felger.
Barnegat, New Jersey	29.99	761.7	30.01	762.2	43.0	6.1	100	e.	14	6.3	.....	.....	10 n	.....	.....	0.74	18.8	light rain	G. A. Hill.
Behring Id., Behring Sea	29.70	754.4	29.72	754.9	17.1	— 8.3	.....	se.	12	5.4	.....	0	5 k	.....	sw.	0	0	fair	Leonard Steineger.
Bennett, Fort, Dakota	28.43	722.1	30.19	766.8	6	—14.4	46	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Pritchard.
Benton, Fort, Montana	26.92	683.8	29.92	760.0	41	5.0	68	sw.	16	7.2	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.14	714.7	30.15	765.8	— 7	—21.7	61	calm	0	0	.....	0	0	.....	.....	0	0	clear	Cyrus Cramor.
Block Island, Rhode Island	30.14	765.5	30.17	766.3	39	3.9	89	e.	14	6.3	.....	.....	10 s	.....	e.	inap.	inap.	cloudy	J. T. Elker.
Boise City, Idaho	27.26	692.4	30.24	768.1	20	— 6.7	87	se.	1	0.4	.....	.....	10 s	.....	.....	0.30	7.6	cloudy	B. E. Light.
Boston, Massachusetts	30.04	763.0	30.20	767.1	31.0	— 0.6	78	ne.	8	3.6	.....	.....	10s; fg	.....	ne.	0	0	cloudy	O. B. Cole.
Brownsville, Texas	30.08	764.0	30.14	765.5	46.7	8.2	28	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.22	742.2	30.02	762.5	40.7	4.8	88	se.	4	1.8	.....	.....	10 s	.....	.....	0.16	4.1	cloudy	W. Finn.
Buford, Fort, Dakota	27 91	708.9	30.15	765.8	11	—11.7	80	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.85	758.2	30.16	766.1	35.0	1.7	75	s.	11	4.9	.....	.....	10 s	.....	w.	0.17	4.3	cloudy	G. C. Schaeffer.
Cairo, Illinois	29.59	751.6	30.01	762.2	37.8	3.2	91	n.	6	2.7	.....	.....	10 n	.....	.....	0.09	2.3	light rain	W. H. Ray.
Cape Henry, Virginia	30.04	763.0	30.06	763.5	41	5.0	100	w.	4	1.8	.....	.....	fg.	.....	.....	0.55	14.0	dense fog	A. K. Alderson.
Cape May, New Jersey	29.99	761.7	30.02	762.5	42.0	5.6	92	w.	7	3.1	.....	.....	10s; fg	.....	.....	0.83	21.1	cloudy	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	29.88	758 9	29.90	759.4	62	16.7	87	se.	16	7.2	.....	0	5 k	.....	s.	0	0	fair	F. W. Mixer.
Champaign, Illinois	29.90	738 9	29.96	761.0	34.5	1.4	73	w.	4	1.8	.....	.....	10 s	.....	w.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	29.90	759.4	29.96	761.0	60	15.6	100	sw.	5	2.2	.....	0	8 s; fg	.....	sw.	0.02	0.5	cloudy	J. H. Smith.
Charlotte, N. Carolina	29.06	738.1	29.95	760.7	42.0	5.6	100	e.	8	3.6	.....	.....	10 n	.....	e.	0.72	18.3	light rain	D. O'Donoghue.
Chattanooga, Tennessee	29.03	737.3	29.89	759.2	47.0	8.3	93	ne.	6	2.7	.....	.....	10n; fg	.....	w.	0.49	12.4	light rain	B. L. Goulding.
Cheyenne, Wyoming	23.92	607.6	30.20	767.1	19.3	— 7.1	67	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.15	740.4	29.91	759.7	36.8	2.7	83	sw.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	J. Mitchell.
Chincoteague, Virginia	30.04	763.0	30.06	763.5	40	4.4	100	w.	6	2.7	.....	.....	10s; fg	.....	nw.	0.68	17.3	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.28	743 7	29.98	761.5	43	6.1	83	n.	5	2.2	.....	.....	10 s	.....	sw.	0.02	0.5	cloudy	R. B. Watkins.
Cleveland, Ohio	29.22	742.2	30.01	762.2	41.3	5.2	77	sw.	5	2.2	.....	.....	10 s	.....	w.	0.13	3.3	cloudy	J. B. Newlin.
Coleman City, Texas	28.29	718.6	30.19	766.8	33	0.6	100	nw.	8	3.6	.....	0	6 s	.....	.....	0.38	9.7	fair	L. Dorman.
Columbus, Ohio	29.08	738.6	29.99	761.7	42	5.6	92	sw.	1	0.4	.....	.....	10 s	.....	w.	0.02	0.5	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.18	715.8	30.20	767.1	32.0	0.0	88	w.	7	3.1	.....	0	0	.....	.....	0.15	3.8	clear	J. McGlone.
Custer, Fort, Montana	26.73	678.9	30.13	765 3	14	—10.0	83	e.	10	4.5	.....	0	2 s	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.21	741.9	29.92	760.0	37	2.8	72	w.	8	3.6	.....	.....	10 ks	.....	w.	0.02	0.5	cloudy	R. R. Martin.
Davis, Fort, Texas	25.19	739.8	30.13	765 3	28	— 2.2	80	nw.	4	1.8	.....	0	0	.....	.....	inap.	inap.	clear	J. Williams.
Dayton, Washington Ty	28.06	712.7	29.89	759.2	54	12.2	93	sw.	18	8.0	.....	.....	10 n	.....	sw.	0.22	5.6	light rain	D. Moore.
Deadwood, Dakota	25.23	640.8	30.22	767 6	21	— 6.1	87	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. Willson.
Delaware Breakwater, Del	30.00	762.0	30.02	762.5	39	3.9	100	w.	12	5.4	.....	.....	fg.	.....	.....	1.02	25.9	dense fog	T. S. Townsend.
Denison, Texas	29.25	742.9	30.10	764.5	38.0	3.3	100	nw.	6	2.7	.....	.....	10 s	.....	.....	0.66	16.8	cloudy	J. W. Byram.
Denver, Colorado	24.67	626.6	30.19	766.8	32.0	0.0	60	w.	11	4.9	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.04	737.6	30.02	762.5	28	— 2.2	77	nw.	4	1.8	.....	0	7 s	.....	nw.	0.05	1.3	fair	F. W. Conrad.
Detroit, Michigan	29.22	742.2	29.98	761.5	42.0	5.6	86	s.	9	4.0	.....	.....	10 s	.....	.....	0.09	2.3	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.41	696.2	30.21	767.3	15	— 9.4	67	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	Y. P. Temple.
Dubuque, Iowa	29.15	740.4	29.92	760 0	34.3	1.3	78	w.	6	2.7	.....	.....	10 s	.....	w.	0.05	1.3	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.09	738 9	29.90	759 4	24	— 4.4	88	nw.	20	8.9	.....	.....	10 s	.....	nw.	0.02	0.5	cloudy	N. B. Conger.
Eagle Pass, Texas	29.40	746.7	30.24	768.1	41.0	5.0	65	nw.	9	4.0	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.36	644.1	30.28	769.1	27	— 2.8	80	sw.	5	2.2	.....	0	6 s	.....	w.	0	0	fair	J. M. Clifford.
Eastport, Maine	30.16	766.1	30.23	767.8	24.0	— 4.4	73	ne.	14	6.3	.....	0	0	.....	.....	0	0	clear	D. C. Murphy.
Elliott, Fort, Texas	27.25	692.1	30.21	767.3	20	— 6.7	58	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.39	670.3	30.25	768.3	23.0	— 5.0	88	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.21	741.9	29.98	761.5	41	5.0	82	s.	12	5.4	.....	.....	10 s	.....	.....	0.14	3.6	cloudy	Peter Wood.
Escanaba, Michigan	29.05	737.9	29.77	756.1	33.5	0.8	94	s.	4	1.8	.....	.....	10 n	.....	s.	0.24	6.1	light snow	George Heathcote.
Fredericksburg, Texas	28.32	719.3	30.14	765.5	40	4.4	100	n.	14	6.3	.....	.....	10 s	.....	.....	0.04	1.0	cloudy	Frank Halwegler.
Galveston, Texas	29.94	760 5	30.00	762.0	51	10.6	86	n.	28	12.5	.....	0	8 ks	.....	.....	0.11	2.8	clouny	E. O'C. Macinernoy.
Grand Haven, Michigan	29.16	740.7	29.87	758.7	37.0	2.8	82	s.	19	8.5	.....	.....	10 s	.....	s.	0.04	1.0	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.32	643.1	30.20	767.1	25	— 3.9	81	calm	0	0	.....	0	0	.....	.....	0	0	clear	Robert O. Lord.
Hatteras, North Carolina	30.07	763 8	30.09	764.3	48	8.9	100	ne.	10	4.5	.....	.....	10 n	.....	e.	0.50	12.7	heavy rain	R. M. Crawford.
Helena, Montana	25.65	651.5	30.03	762.7	32	0.0	81	calm	0	0	.....	9 ck	0	calm	.....	0	0	cloudy	N. C. Smith.
Henrietta, Texas	29.07	738.4	30.15	765.8	34	1.1	88	nw.	3	1.3	.....	0	0	.....	.....	0.05	1.3	clear	J. P. Sherry.
Huron, Dakota	28.61	726.7	30.15	765.8	7.8	—13.4	55	nw.	6	2.7	.....	3 cs	0	.....	.....	0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.10	739 1	29.95	760 7	39	3.9	82	sw.	2	0.9	.....	.....	10s; fg	.....	sw.	0.01	0.3	cloudy	O. Schutze.
Indianola, Texas	30.03	762.7	30.06	763.5	43.6	6.4	87	nw.	12	5.4	.....	.. ..	10 k	.....	nw.	0.15	3.8	cloudy	I. A. Reed.
Jacksboro, Texas	28 90	734.0	30.14	765.5	36	2.2	69	n.	10	4.5	.....	0	0	.....	.....	0.09	2.3	clear	D. J. Carr.
Jacksonville, Florida	29.91	759.7	29.96	761.0	65	18.3	90	s.	8	3.6	.....	3 cs	7 s	.....	sw.	0	0	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.37	695.2	30.07	763.8	12	—11.1	83	calm	0	0	.....	0	0	.....	.....	inap.	inap.	clear	A. Schneider.
Keokuk, Iowa	29.26	743.2	29.97	761.2	33.0	0.6	88	w.	4	1.8	.....	.....	10 s	.....	w.	0.04	1.0	cloudy	F. Z. Gosewisch.
Key West, Florida	29.96	761.0	29.98	761.5	73.0	22.8	84	se.	13	5.8	.....	0	0	.....	.....	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.08	764.0	30.10	764 5	43	6.1	100	ne.	9	4.0	.....	.....	10 s	.....	ne.	0.30	7.6	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	28.87	733.3	29.95	760.7	44	6.7	93	ne.	3	1.3	.....	.....	10 n	.....	sw.	0.27	6.9	light rain	J. A. Cody.
La Crosse, Wisconsin	29.04	737.6	29.98	758.9	32	0.0	78	w.	5	2.2	.....	.....	10 s	.....	.....	0.07	1.8	cloudy	S. C. Emery.
Leavenworth, Kansas	29.11	739.4	30.07	763.8	32	0.0	78	nw.	6	2.7	.....	5 k	0	nw.	.....	0	0	fair	A. W. Browne.
Lewiston, Idaho	29.09	738.9	29.97	761.2	42.5	5.8	78	e.	7	3.1	.....	.....	10 s	.....	w.	0.08	2.0	cloudy	W. Bell.
Little Rock, Arkansas	29.65	753.1	29.98	761.5	43	6.1	93	n.	5	2.2	.....	.....	10 n	.....	w.	0.30	7.6	light rain	W. U. Simons.
Los Angeles, California	29.84	757.9	30.24	768.1	47	8.3	63	ne.	8	3.6	.....	2 c	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.33	745.0	29.93	760.2	40	4.4	82	n.	6	2.7	.....	.....	10 n	.....	.....	0.03	0.8	light rain	L. M Dey.

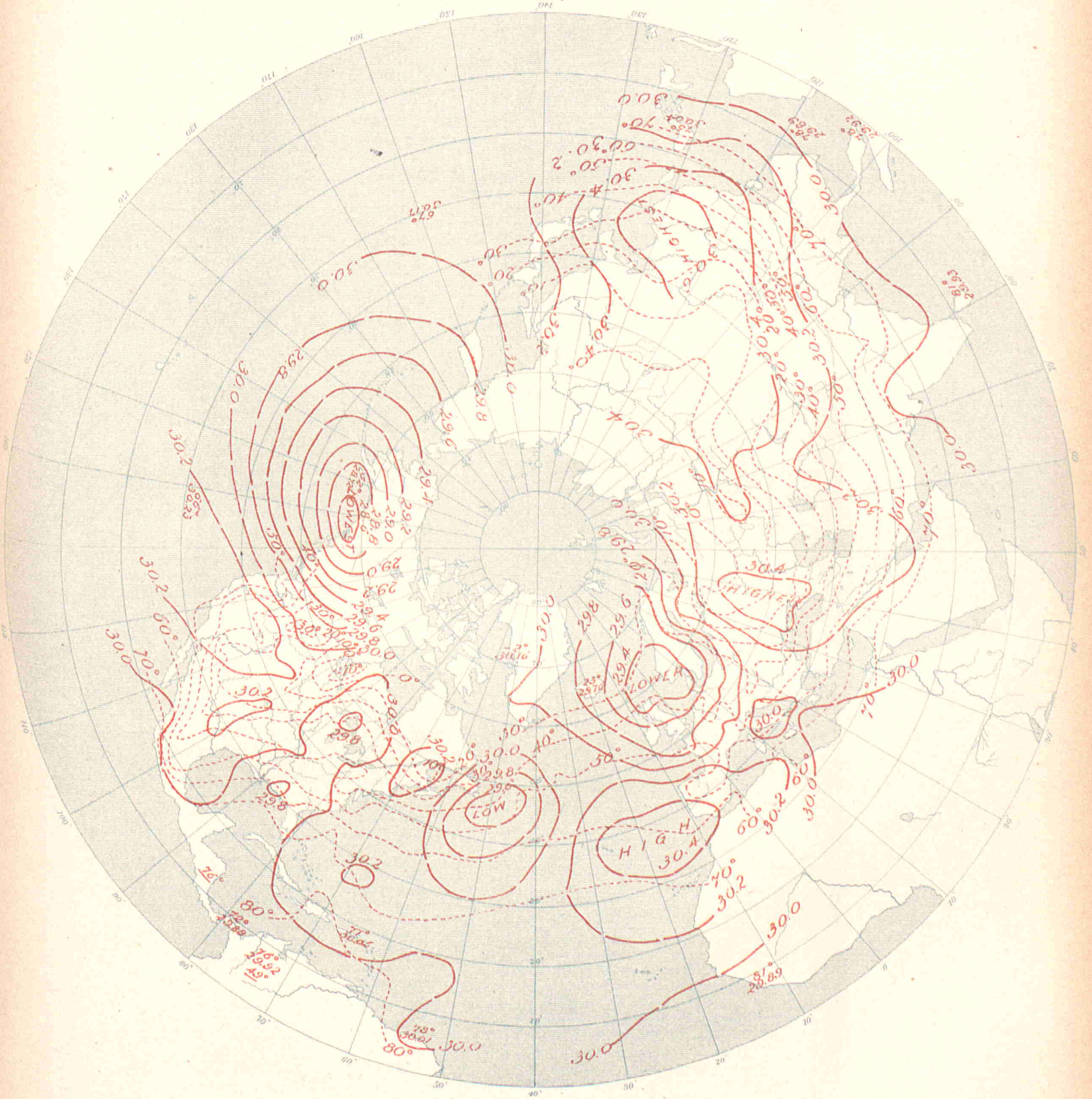
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.34	745.2	30.07	763.8	39	3.9	89	ne.	1	0.4	.....	.....	10 n	.....	.....	0.08	2.0	light rain	Lewis Duane.
Mackinaw City, Michigan	29.15	740.4	29.85	758.2	36.5	2.5	83	se.	7	3.1	.....	.....	10 s	.....	s.	0.18	4.6	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.03	762.7	30.04	763.0	53.0	11.7	100	ne.	5	2.2	.....	.....	10 n	.....	.....	0.45	11.4	light rain	C. A. Shaw.
Madison, Wisconsin	28.79	731.3	29.89	759.2	33	0.6	78	w.	6	2.7	.....	.....	10 s	.....	w.	0.11	2.8	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.37	644.4	29.91	759.7	25	— 3.9	53	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. Burke.
McKavett, Fort, Texas	27.81	706.4	30.19	766.8	31	— 0.6	88	w.	2	0.9	.....	0	0	.....	.....	0.09	2.3	clear	J. E. Thatcher.
Marquette, Michigan	28.92	734.6	29.70	754.4	35	1.7	89	nw.	3	1.3	.....	.....	10 n	.....	.....	0.36	9.1	light snow	J. Gilligan.
Memphis, Tennessee	29.62	752.3	29.98	761.5	40	4.4	100	nw.	12	5.4	.....	.....	10 n	.....	.....	0.34	8.6	light rain	D. T. Flanuery.
Milwaukee, Wisconsin	29.07	738.4	29.88	758.9	39	3.9	73	sw.	10	4.5	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	W. Line.
Missoula, Fort, Montana	26.60	675.6	30.06	763.5	28	— 2.2	77	nw.	1	0.4	.....	.....	9 s	.....	.....	0.05	1.3	cloudy	J. H. Young.
Mobile, Alabama	29.75	755.6	29.79	759.7	55	12.8	93	n.	4	1.8	.....	.....	10 s	.....	n.	2.11	53.6	cloudy	C. A. Read.
Montgomery, Alabama	29.54	750.3	29.78	756.4	51.8	11.0	94	ne.	4	1.8	.....	.....	10 s	.....	ne.	1.01	25.7	threatening	J. B. McLaughlin.
Moorhead, Minnesota	29.00	736.6	30.11	764.8	— 3	—19.4	65	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	H. Bessant.
Morgantown, W. Virginia	28.95	735.3	30.02	762.5	37.0	2.8	89	se.	1	0.4	.....	.....	fg.	.....	.....	0	0	dense fog	J. C. Sprigg, jr.
Mt. Washington, N. H	23.79	604.3	30.42	772.7	25.0	— 3.9	67	s.	36	16.1	.....	.....	10 s	.....	s.	0	0	cloudy	B. S. Pague.
Nashville, Tennessee	29.30	744.2	29.91	759.7	46.5	8.1	93	n.	8	3.6	.....	0	5 n	.....	s.	0.11	2.8	light rain	L. N. Jesunofsky.
New Haven, Connecticut	30.06	763.5	30.18	766.6	32	0.0	100	ne.	10	4.5	.....	.....	10 n	.....	.....	0.28	7.1	light rain	J. H. Sherman.
New London, Connecticut	30.16	766.1	30.21	767.3	35	1.7	100	ne.	8	3.6	.....	.....	10 n	.....	ne.	0.10	2.5	light rain	J. G. Lynch.
New Orleans, Louisiana	29.79	756.7	29.85	758.2	56.5	13.6	88	nw.	6	2.7	.....	.....	10 s	.....	nw.	1.42	36.1	cloudy	L. Dunne.
Newport, Rhode Island	30.14	765.5	30.19	766.8	36.0	2.2	79	ne.	4	1.8	.....	.....	10 n	.....	.....	inap.	inap.	light rain	W. McGillivray.
New York, New York	29.96	761.0	30.15	765.8	36	2.2	89	ne.	6	2.7	.....	.....	10n;fg	.....	ne.	0.64	16.3	light rain	J. B. Merrill.
Norfolk, Virginia	30.01	762.2	30.04	763.0	43	6.1	93	n.	8	3.6	.....	.....	fg.	.....	.....	0.33	8.4	dense fog	Wm. Davis.
North Platte, Nebraska	27.02	686.3	30.18	766.6	8.6	—13.0	70	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y.	29.77	756.1	29.81	757.2	47.0	8.3	93	s.	4	1.8	.....	.....	10 n	.....	.....	1.62	41.1	light rain	J. Dascomb.
Omaha, Nebraska	28 83	732.3	30.12	765.0	19.1	— 7.2	76	nw.	4	1.8	.....	0	0	.....	.....	0.03	0.8	clear	A. Pollak.
Oswego, New York	29.70	754.4	30.04	763.0	38.5	3.6	77	se.	12	5.4	.....	hz.	8 s	.....	sw.	0.04	1.0	cloudy	J. G. Linsley.
Palestine, Texas	29.52	749.8	30.10	764.5	42.0	5.6	92	n.	9	4.0	.....	.....	10 n	.....	ne.	0.61	15.5	light rain	L. M. Pindell.
Pensacola, Florida	29.75	755.6	29.78	756.4	61.8	16.6	96	nw.	1	0.4	.....	0	6 s	.....	nw.	2.30	58.4	fair	M. McGauran.
Philadelphia, Pa	29.96	761.0	30.07	763.8	40	4.4	100	ne.	14	6.3	.....	.....	10n;fg	.....	ne.	0.71	18.0	light rain	T. T. Townsend.
Pike's Peak, Colorado	17.48	444.0	30.14	765.5	— 6	—21.1	100	ne.	24	10.7	.....	0	5 s	.....	ne.	0	0	fair	H. Hall.
Ploche, Nevada	24.16	613.7	30.33	770.4	25	— 3.9	67	nw.	1	0.4	.....	8 c	0	nw.	.....	0	0	cloudy	C. N. Kitchel.
Pittsburg, Pennsylvania	29.16	740.7	30.02	762.5	42.5	5.8	78	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	W. A. Reid.
Poplar River, Montana	27.65	702.3	30.01	762.2	.....	.....	.....	nw.	.....	1	.....	0	0	.....	.....	0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	29.80	756.9	29.81	757.2	67.5	19.7	88	w.	17	7.6	.....	0	3 s	.....	w.	0.13	3.3	clear	H. B. Boyer.
Port Huron, Michigan	29.23	742.4	29.96	761.0	35.7	2.1	100	s.	5	2.2	.....	.....	10 s	.....	.....	0.30	7.6	cloudy	W. O. Bailey.
Portland, Maine	30.21	767.3	30.26	768.6	27.0	— 2.8	64	nw.	4	1.8	.....	10 cs	0	.....	.....	0	0	cloudy	W. W. Eichelberger.
Portland, Oregon	29.82	757.4	29.89	759.2	52.0	11.1	93	sw.	10	4.5	.....	.....	10 n	.....	s.	1.68	42.7	heavy rain	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	52	11.1	100	ne.	.....	7	.....	.....	10 n	.....	ne.	0.39	9.9	light rain	F. S. Coburn.
Prescott, Arizona	24.88	631.9	30.25	768.3	19.2	— 7.1	87	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.16	766.1	30.20	767.1	37.5	3.1	82	e.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	29.96	761.0	29.97	761.2	66.5	19.2	90	se.	10	4.5	.....	8 ck	0	s.	.....	0	0	cloudy	W. J. Evans.
Red Bluff, California	29.96	761.0	30.33	770.4	47	8.3	100	calm	0	0	.....	.....	fg.	.....	.....	0.04	1.0	dense fog	J. R. Williams.
Rochester, New York	29.31	744.5	30.02	762.5	39	3.9	100	s.	12	5.4	.....	.....	10k;fg	.....	sw.	0.01	0.3	cloudy	E. W. McGann
Roseburg, Oregon	29.44	747.8	30.01	762.2	52.5	11.4	90	s.	7	3.1	.....	.....	10 n	.....	sw.	0.61	15.5	light rain	J. J. Nanry.
Sacramento, California	30.29	769.4	30.37	771.4	48.4	9.1	93	se.	4	1.8	.....	.....	10 s	.....	se.	0	0	cloudy	J. A. Barwick.
St. Louis, Missouri	29.36	745.7	30.02	762.5	34.3	1.3	94	nw.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.24	742.7	29.28	743.7	—10	—23.3	100	n.	.....	1	.....	0	0	.....	.....	0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	28.97	735.8	29.93	760.2	29.0	— 1.7	100	nw.	8	3.6	.....	.....	10 s	.....	nw.	0.02	0.5	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.13	739.9	30.12	765.0	—10	—23.3	88	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.81	655.6	30.35	770.9	31	— 0.6	62	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	J. Craig.
San Antonio, Texas	29.40	746.7	30.12	765.0	40.5	4.7	82	nw.	12	5.4	.....	0	0	.....	.....	0.01	0.3	clear	T. J. Kenan.
San Diego, California	30.14	765.5	30.21	767.3	47.3	8.5	60	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.26	743.2	29.98	761.5	41	5.0	82	sw.	6	2.7	.....	.....	10 s	.....	w.	0.06	1.5	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.08	764.0	30.11	764.8	38.0	3.3	89	ne.	23	10.3	.....	.....	10 n	.....	.....	0.85	21.6	light rain	B. A. Blundon.
San Francisco, California	30.27	768.8	30.34	770.6	51.5	10.8	93	se.	4	1.8	.....	.....	10 s	.....	w.	0	0	cloudy	N. Gorom.
Santa Fé, New Mexico	23.15	588.0	30.14	765.5	12	—11.1	70	n.	19	8.5	.....	0	0	.....	.....	0.15	3.8	clear	H. U. Jones.
Savannah, Georgia	29.84	757.9	29.94	760.5	63	17.2	81	s.	12	5.4	.....	0	8 ks	.....	s.	0.11	2.8	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.12	663.4	29.94	760.5	42	5.6	52	sw.	38	17.0	.....	5 k	0	w.	.....	0	0	fair	A. L. Mathews.
Shreveport, Louisiana	29.76	755.9	30.01	762.2	45	7.2	93	n	9	4.0	.....	.....	10 n	.....	n.	0.14	3.6	light rain	E. N. Meekins.
Sill, Fort, Indian Territory	28.84	732.5	30.17	766.3	31.5	— 0.3	80	nw.	4	1.8	.....	0	0	.....	.....	0.10	2.5	clear	W. M. Mattingly.
Silver City, New Mexico	24.29	617.0	30.13	765.3	17.5	— 8.1	85	calm	0	0	.....	0	0	.....	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	28.37	720.6	28.44	722.4	46.1	7.8	60	se.	22	9.8	.....	.....	10 ks	.....	sw.	0.10	2.5	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.56	750.8	30.00	763.5	36.8	2.7	81	nw.	2	0.9	.....	5 cs	0	.....	.....	0	0	fair	J. B. Campbell.
Smithville, North Carolina	29.95	760.7	29.99	761.7	56	13.3	100	se.	9	4.0	.....	.....	10 ks	.....	sw.	0.47	11.9	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	27.76	705.1	29.89	759.2	42	5.6	92	sw.	13	5.8	.....	.....	10 n	.....	.....	0.11	2.8	light rain	H. Clifford.
Springfield, Illinois	29.26	743.2	29.99	761.7	39	3.9	78	w.	5	2.2	.....	.....	10 s	.....	w.	0.01	0.3	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.11	764.8	30.25	768.3	31.0	— 0.6	96	calm	.....	.....	.....	0	10 n	.....	.....	0.30	7.6	raining	Charles Mayr.
Springfield, Mo	28.53	724.6	30.00	763.5	32	0.0	88	nw.	9	4.0	.....	.....	10 ks	.....	nw.	0	0	cloudy	J. B. Marbury.
Starkville, Miss	29.30	745.7	29.86	758.4	49	9.4	93	n.	6	2.7	.....	.....	10 n	.....	n.	0.27	6.9	light rain	C. Dill.
Stevenson, Fort, Dakota	28.06	712.7	30.12	765.0	— 9	—22.8	55	e.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. Burrows.
Stockton, Fort, Texas	27.08	687.8	30.22	767.6	26	— 3.3	88	nw.	6	2.7	.....	0	0	.....	.....	0.28	7.1	clear	J. F. Marshall.
Thatcher's Island, Mass	30.15	765.8	30.21	767.3	40.5	4.7	82	ne.	16	7.2	.....	.....	10 s	.....	ne.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.43	696.7	30.25	768.3	27.5	— 2.5	90	s.	.....	1	.....	0	0	.....	.....	0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.23	742.4	29.97	761.2	41	5.0	73	s.	6	2.7	.....	.....	10 s	.....	sw.	0.05	1.3	cloudy	A. Buell.
Tucson, Arizona	27.63	701.8	30.13	765.3	27	— 2.8	77	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.54	750.3	29.92	760.0	55	12.8	62	w.	10	4.5	.....	.....	10 s	.....	w.	0	0	cloudy	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	22.3	— 5.4	73	n.	.....	1	.....	0	0	.....	.....	0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.62	752 3	29.89	759.2	50.0	10.0	88	n.	9	4.0	.....	.....	10 s	.....	n.	0.10	2.5	cloudy	James Kenealy.
Visalia, California	29.97	761.2	30.35	770.9	36.8	2.7	86	se.	1	0.4	.....	2 cs	0	.....	.....	0	0	clear	O. D. Stewart.
Washakie, Fort, Wyoming	24.40	619.7	30.17	766.3	15.0	— 9.4	70	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	T. M. Ambler.
Washington, D. C	29.98	761.5	30.10	764.5	38.5	3.6	100	nw.	3	1.3	.....	.....	10s;fg	.....	.....	0.80	20.3	cloudy	B. M. Purssell.
West Las Animas, Colorado	26.03	661.2	30.19	766.8	19	— 7.2	44	sw.	7	3.1	.....	0	8 s	.....	w.	0	0	cloudy	F. H. Brandenburg.
Williamsport, Pa	29.47	748.5	30.10	764.5	40	4.4	89	calm	0	0	.....	.....	10 s	.....	.....	0.10	2.5	threatening	B. F. Hough.
Wilmington, N. Carolina	29.94	760.5	30.00	762.0	58	14.4	100	se.	6	2.7	.....	.....	10 s	.....	.....	0.27	6.9	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.75	654.0	30.28	769.1	31	— 0.6	85	sw.	12	5.4	.....	0	8 s	.....	w.	0.02	0.5	cloudy	J. Grover.
Yankton, Dakota	28.71	729.2	30.14	765.5	11	—11.7	61	calm	0	0	.....	0	0	.....	.....	0.07	1.8	clear	J. H. Atfield.
Yuma, Arizona	30.08	764.0	30.23	767.8	43.8	6.6	45	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3	.....	.....	49.0	9.4	81	calm	0	0	.....	0	0	.....	.....	0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I	29.89	759.2	29.96	761.0	68.7	20.4	88	se.	9	4.0	.....	1 c	0	w.	.....	0	0	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I	30.00	762.0	30.01	762.2	72	22.2	88	n.	1	0.4	.....	0	3 s	.....	e.	0	0	fair	Robert Johnston.
Paramaribo, S. A	30.01	762.2	30.01	762.2	78	25.6	91	e.	.....	.....	3	.....	10 n	e.	.....	0.400	10.2	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.36	745.7	29.92	760.0	76	24.4	89	n.	.....	.....	1	3 ck	3 k	calm	n.	0	0	fair	Francisco J. Cisneros.
Rivas, Nicaragua, C. A	.....	.....	.....	.....	76	24.4	96	ne.	.....	.....	1	0	0	.....	.....	0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	28.66	728.0	28.72	729.5	29	— 1.7	88	calm	.....	.....	0	.....	9 n	.....	.....	0.18	4.6	cloudy	W. J. Fisher.
St. Thomas, W. I	29.97	761.2	30.09	764.3	76	24.4	69	ne.	.....	.....	.....	2 k	3 k	ne.	ne.	0	0	fair	Aug. Walloe.
York Factory R. A	29.94	760.5	30.01	762.2	— 4.5	—20.3	82	nw.	10	4.5	.....	1 c	0	nw.	.....	0	0	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
British Naval.																	
H. M. S. Amethyst, Montevideo, Uruguay†	29.91	759.7	69	20.6	60	nnw.			6	0							blue sky.
H. M. S. Audacious, N. 1° 21′, E. 103° 15′	29.72	754.9	78	25.6	90	nne.			1	2	ne.						d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			70	21.1	71	ssw.			1–2	0					1	ssw.	blue sky.
H. M. S. Boadicea, Simon's Bay, Cape Colony	29.84	757.9				wsw.			3	2							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.06	763.5	73	22.8	90	sse.			2	10	sse.				2	sse.	d. clouds.
H. M. S. Champion, N. 5° 30′ E. 107° 00′	29.88	758.9	79	26.1	90	nne.			3	7	calm				2	sw.	d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.69	779.5	29	— 1.7		calm			0	0							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B. A.	29.72	754.9	43	6.1	91	wsw.			5–6	7							squally.
H. M. S. Constance, N. 43° 18′ W. 10° 10′	30.35	770.9	56	13.3		wsw.			3						4		d. clouds.
H. M. S. Curacoa, Yokohama, Japan	30.08	764.0	40.5	4.7	100	n.			2	0							blue sky.
H. M. S. Diamond, Sydney, N. S. W *†	29.62	752.3	74	23.3		calm			0	2							d. clouds.
H. M. Dock-Yard, Bermuda, W. I	30.15	765.8	62	16.7	66	wnw.			1–2	4	wnw.						d. clouds.
H. M. S. Eclipse, N. 7° 25′, E. 81° 50′	29.83	757.7	81	27.2		nne.			3–6	10					4	ne.	raining.
H. M. S. Fawn, S. 34° 39′ E. 21° 53′	29.55	750.6	64.5	18.1	78	wsw.			6	10					5	wsw.	overcast.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.96	761.0	61	16.1	82	nnw.			3	4							d. clouds.
H. M. S. Iron Duke, N. 3° 53′ E. 99° 59′	29.86	758.4	80	26.7	91	nw.			2–3	9	n.						d. clouds.
H. M. S. Lark. S. 33° 52′, E. 151° 14′	29.88	758.9	75.3	24.1	79	calm			0	0							blue sky.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.92	760.0	63	17.2		n.			3						2	n.	d. clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.56	776.2	39.5	4.2	82	nne.			1	10							misty.
H. M. S. Rambler, Port Belgrano, La Plata, S, A	29.48	748.8	54	12.2	73	w.			3	2	wsw.						d. clouds.
H. M. S. Serapis, N. 35° 26′, E. 16° 52′	29.78	756.4	61.5	16.4	94	ese.			3	10					5	ene.	overcast.
H. M. S. Starling, S. 0° 12′, W. 3° 00′	29.94	760.5	78.7	25.9	86	s.			2	2	sse.				1	ssw.	d. clouds.
H. M. S. Superb, N. 35° 26′ E. 34° 56′*	30.15	765.8	68	20.0	69	nne.			3	2	nnw.				3	n.	d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.95	760.7	65	18.3	100	s.			1	8							foggy.
H. M. S. Sylvia, Cape Providence, Patagonia	29.45	748.0	44.7	7.1	86	sw.			3–6	10							raining.
H. M. S. Woodlark, Shat-el Arab river	30.14	765.5	63.5	17.5	73	calm			0	0							blue sky
H. M. S. Zephyr, Chee-foo, China	30.62	777.7	25.5	— 3.6		sw.			1	0							blue sky.
Portuguese Naval.																	
Tamega, Macao, China	30.48	774.2	53.2	11.8	60	n.			4	10		n.					overcast.
United States Naval.																	
Navy Yard, Pensacola, Fla	29.79	756.7	63	17.2	94	nnw.				10		nnw.	0.42	10.7			cloudy.
Navy Yard, Portsmouth, N. H	30.22	767.6	25	— 3.9	?	ne.	8	3.6		10		ne.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	30.06	763.5	33.5	0.8	50	calm			0	0			0	0			clear.
Adams, Sitka, Alaska *†	28.47	723 1	44	6.7	60	ene.			3	10		ene.					drizzling.
Alaska, Mare Island, Cal	30.32	770.1	50	10.0	86	ese.			1	5		s.	0	0			fair.
Alliance, N. 27° 52′, W. 66° 20′	30.20	767.1	66	18.9	100	ne.			1–2	2			0	0	sm'h		fair.
Ashuelot, N. 32° 36′, E. 128° 40′	30.59	777.0	42	5.6	83	nnw.			3	8		n.					cloudy.
Brooklyn, S. 37° 38′ W. 55° 11′	29.59	751.6	65	18.3	94	n.	25	11.2		0			0	0	r'gh	nnw.	clear.
Colorado, New York, N. Y	30.23	767.8	36	2.2	100	se.	6	2.7		10		calm	0.19	4.8			rainy.
Enterprise, Norfolk, Va	30.09	764.3	46	7.8	82	calm			0	10		w.					foggy.
Essex, Callao, Peru	29.91	759.7	65	18.3	89	sse.			1	10					sm'h	se.	overcast.
Franklin, Norfolk, Va	30.06	763.5	44	6.7	100	nw.	2.2	1.0		10		calm	0.31	7.9			foggy.
Galena, Montevideo, Uruguay	29.75	755.6	67	19.4	64	n.			6	10					r'gh	n.	clear.
Hartford, S. 42° 27′ W. 79° 36′*	30.05	763.3	52	11.1	80	ssw.			6	10		s;w.	0	0	r'gh	s.	cloudy.
Independence, Mare Island, Cal	30.34	770.6	50	10.0	93	se.			4	10			0	0			cloudy.
Iroquois, Callao, Peru	29.90	759.4	65	18.3	94	calm			0	10							foggy.
Jamestown, Boston, Mass	30.19	766 8	30	— 1.1	89	n.			1	10		n.	0	0			cloudy.
Juniata, Fayal, Azores Islands*	30.42	772.7	64	17.8	83	sse.			3	5		s.	0	0	sm'h		fair.
Kearsarge, N. 27° 57′, W. 66° 20′	30.19	766.8	67	19.4	79	ene.			1	8		ne.			sm'h		fair.
Lackawanna, S. 8° 07′, W. 91° 13′*	29.88	758.9	71	21.7	75	ese.			3	5		w.			sm'h	se.	fair.
Lancaster, Genoa, Italy*	29.92	760.0	46	7.8	85	n.			3	10		calm			sm'h		cloudy.
Michigan, Erie, Pa	29.72	754.9	38	3.3	80	e.			3	10							raining.
Minnesota, New York, N. Y	30.18	766.6	35	1.7	100	ene.	12	5.4									raining.
Monocacy, Nagasaki, Japan	30.50	774.7	38	3.3	90	nnw.			2	5		n.					fair.
New Hampshire, Newport, R. I	30.23	767.8	38	3.3	80	se.			2	10		calm			sm'h		cloudy.
Nipsic, Lisbon, Portugal*	30.41	772.4	61	16.1	70	wnw.			2	8					sm'h		cloudy.
Onward, Callao, Peru†	30.05	763.3	63	17.2	100	calm			0	10		n.			long	w.	misty.
Palos, Tientsin, China*	30.54	775.7	20	— 6.7	100	calm			0	0							clear.
Pensacola, S. 2° 39′, W. 81° 38′*	29.84	757.9	69	20.6	90	sw.			2	0			0	0	light	s.	clear.
Powhatan, Boston, Mass	30.21	767.3	30	— 1.1	89	nnw.			2	10							overcast.
Quinnebaug, Villafranche, France*	29.96	761.0	55	12.8	73	wnw.			2	10		calm					cloudy.
Ranger, Acapulco, Mexico	29.88	758.9	75	23.9	81	calm			0	2		calm			sm'h		fair.
Richmond, Nagasaki, Japan*	30.45	773.4	37	2.8	80	ne.			1	10		ne.	0	0			cloudy.
Saratoga, New York, N. Y	30.06	763.5	37	2.8	100	nne.			3	10		ne.	light	light	sm'h		overcast.
St. Louis, League Island, Pa	30.28	769.1	39	3.9	100	ne.			2	10			0.51	13.0			cloudy
Tennessee, N. 27° 45′, W. 66° 17′	30.16	766.1	68	20.0	74	ne.	8	3.6		8			0	0	long		cloudy.
Vandalia, N. 27° 52, W. 66° 19′*	30.19	766.8	67	19.4	68	ne.			2	5		ne.			long	ne.	fair.
Wabash, Boston, Mass	30.23	767.8	30	— 1.1	78	n.	5	2.2		10		n.	0.04	1.0			cloudy.
Wachusetts, Mare Island, Cal*	30.22	767.6	48	8.9	92	ese.			2	10		calm	0	0	sm'h		cloudy.
Wyandotte, Washington, D. C	30.11	764.8	43	6.1	91	ne.			2	10		ne.	1.4	36.			raining.
Yantic, N. 27° 52′, W. 66° 20′	30.28	769.1	66	18.9	68	ene.			1	2		ne.			long	ne.	clear.
Merchant Marine.																	
S. S. Grecian, Harve, France*	29.78	756.4	52	11.1	86	wsw.			4	9		wsw.	½h'r	½h'r			cloudy.
S. S. Scandinavian, N. 47° 36′, W. 45° 58′	29.31	744.5	48	8.9		ene.			4	10		ene.	17 h'r	17 h'r	cross	var.	drizzling.
S. S. British Crown, N. 39° 34′, W. 71° 33′†	29.97	761.2	47	8.3		sse.			6	10		ese.	0	0	mod.	ese.	overcast.
S. S. Indiana, Philadelphia, Pa			40	4.4	82	ne.			4	10		ne.					rainy.
S. S. Lord Clive, Liverpool, Eng† *	29.68	753.9				w.			4	0			0	0			
S. S. Lord Gough, N. 50° 57′, W. 32° 13′	30.05	763.3	49	9.4		se.			3	10			5 h'r	5 h'r	cross		raining.
S. S. Ohio, Liverpool, Eng †	29.62	752.3	42	5.6	91	wsw.			4	2		w.					showery.
S. S. Pennsylvania, N. 45° 29′, W. 49° 25′ †	29.35	745.5	41	5.0		wnw.			4	17		nw.			mod.	ne.	overcast.†
S. S. Castor, N. 48° 00′, W. 27° 00′*	30.26	768.6	50.0	10		n.			3	10		nnw.			3	n.	fair.
S. S. Jason, N. 47° 40′, W. 43° 59′	29.48	748.9	54.5	12.5		ssw.			3	8 n					5	nw.	raining.
S. S. Bolivia, N. 48° 33′, W 43° 33′*†	29.64	752.8	56	13.3	100	ese.			4	10					r'gh	w.	threatening
S. S. Dorian, N. 39° 37′, W. 9° 25′ *	30 31	769.9	56	13.3		n.			3	6		nne.	0	0	sli't	nnw.	fine.
S. S. Elysia, N. 53° 30′, W. 3° 31′ †	29.78	756.4				ssw.			4	6		w.	0	0	sm'h		fair.
S. S. Galatia, N. 37° 11′, E. 8° 12′			67	19.4	95	nw.			2	4		nw.	6 h'r	6 h'r	mod.	n.	clearing.
S. S. Ailsa, N. 11° 05′, W. 61° 24′†	30.02	762.5	81	27.2	96	nne.			3	8		nne.	0	0	mod.	nne.	cloudy.
S. S. Ambrose, N. 19° 13′, W. 52° 04′†	30.10	764.5	78	25.6		ene.			3	2		ne.	2 h'r	2 h'r	2	ne.	clear.
S. S. City of Agra, S. 53° 05′, W. 179° 00′	29.78	756.4	50.8	10.4	97	nnw.			6	10							overcast.
S. S. Commewyne, N. 28° 52′, W. 49° 49′	30.04	763.0	68.7	20.4	61	nw.			4	4							d. clouds.
S. S. Gordon Castle, N. 9° 52′, E. 68° 26′	29.90	759.4	82.7	28.2	79	n.			2–3	4							d. clouds.
Inchkeith, S. 60 22′, E. 91° 04′	29.87	758.7	81.4	27.4	83	ssw.			3	6							gloomy.
S. S. Mexico, N. 23° 06′, W. 108° 29′†	30.00	762.0	68	20.0	79	n.			5	0					sm'h		clear.
S. S. Marathon, N. 43° 52′, W. 9° 08′	30.34	770.6	55	12.8		nw.			4	7		nw.			mod.	nw.	misty.
S. S. Scythia, N. 41° 06′, W. 63° 21′	30.63	762.7	41	5.0		nw.			4	9		n.	0	0	h'vy	ne.	cloudy.
S. S. Colina, St. John's, N. F						n.			1	10		n.	3 h'r	3 h'r			cloudy.
S. S. France, N. 41° 48′, W. 65° 40′			35.6	2		nne.			4	ck	0	nne.			cross	nne.	covered.
S. S. Labradore, N. 48° 15′, W. 43° 35′			55.4	13.0		se.			6	7		s.	rain	rain	h'vy	sw.	
S. S. Wisconsin, N. 40° 30′ W. 70° 00′	30.02	762.5	40	4.4		e.			4	10		e.	2 h'r	2 h'r	sm'h		cloudy.
S. S. Wyoming, N. 47° 21′, W. 45° 11′	29.35	745.5	48	8.9		e.			5	9		e.	0	0	long	ne.	foggy.
S. S. Bohemia, N. 42° 01′, W. 48° 40′†	29.64	752 8				n.			1	5			0	0	long	n:ne	foggy.
S. S. Frisia, N. 40° 14′, W. 69° 53′	30.17	766.3	41	5.0		e.			4	10		e.	6 h'r	6 h'r	sm'h	e.	cloudy.
S. S. Gellert Hamburg, Germany	29.72	754.9	40	4.4		ssw.			4	8		sw.	2 h'r	2 h'r			covered.
S. S. Rugia, N. 49° 20′, W. 20° 09′*	30.28	769.1	60.8	16		w.			6	10		w.	1 h'r	1 h'r	5	w.	misty.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Silesia, N. 48° 22′, W. 36° 30′†	29.97	761.2	53	11.7	100	ssw.			6		10		s.	8 h'r	8 h'r	5	ssw.	raining.
S. S. Vandalia, New York, N. Y.	30.22	767.6	38.3	3.5	95	ne.			2-3		10		ne.	o	o			
S. S. Hevelius, Liverpool, Eng*†	29.62	752.3	48	8.9		sw.			4		5?		ssw.	o	o			clear?
S. S. Sirius, Rio de Janeiro, Brazil*..	29.83	757.7				calm			0		0			o	o			clear.
S. S. Colorado, N. 26° 25′, W. 87° 04′†	29.85	758.2	76	24.4		s.			6		6		s.	o	o	high	sse.	cloudy.
S. S. Rio Grande, N. 30° 57′, W. 75° 42′†	30.12	765.0	72	22.2		ssw.			3		9		ssw.	1 h'r	1 h'r	long	s.	overcast.
S. S. Archimede, N. 37° 34′ W. 44° 23′†	29.82	757.4	66	18.9	74	sw.			4		2		ssw.	o	o	h'vy	nnw.	clear.
S. S. John Hopkins, Boston, Mass			31	—0.6		e.			2		8		s.	light	light			rainy.
S. S. Glenapp, N. 29° 00, W. 15° 45′†	30.37	771.4				ene.			3		3		ene.	o	o	mod.	ne.	clear.
S. S. Glenfyne, S. 5° 29′, W. 34° 41′*†	29.63	752.6				ese.			3		1		ese	o	o	sm'h	ese.	fair.
S. S. Brooklyn, N. 55° 18′, W. 6° 10′			42	5.6		wsw.			6				w.			8	wnw.	cloudy.
S. S. Chalmette, N. 25° 05′, W. 83° 45′.†...	29.99	761.7	75	23.9		ese.			4		4		ese.	1 h'r	1 h'r	mod.	se.	clear.
S. S. Lone Star, N. 34° 20′, W. 76° 22′†.	30.01	762.2	62	16.7		n.			1		10			rain	rain	r'gh	se.	squally.
S. S. New York, N. 31° 30′, W. 79° 00′†.	30.06	763.5	72	22.2		sse.			6		6		s.			r'gh	se.	cloudy.
S. S. Denmark, N. 49° 24′, W. 30° 34′ †.	30.10	764.5	56	13.3		sw.			4		10		w.	sh'rs	sh'rs	h'vy	wsw.	rain & fog.
S. S. England, N. 44° 29′ W. 50° 41′	29.39	746.5				w.			5		8		w.			high	n.	foggy.
S. S. Erin, N. 42° 30′, W. 49° 43′	29.58	751.3	42	5.6		sw.			4		2		sw.	o	o	h'vy	nne.	fine.
S. S. Helvetia, N. 51° 22′, W. 13° 15′.	29.66	753.4	50	10.0		nw.			5		8		wnw.	6 h'r	6 h'r	h'vy	wnw.	rainy.
S. S. Holland, Nore Lightship, Eng	29.69	754.1	44	6.7		w.			2		2		nw.	o	o	sm'h		fine.
S. S. The Queen, off Start Point, Eng*	29.71	754.6	45	7.2		wsw.			4		10			sh'rs	sh'rs	sm'h		dull.
S. S. City of Alexandria, N. 37° 48′, W. 74° 30′ †.	30.02	762.5	48	8.9		ssw.			7		10		nw.	3 h'r	3 h'r	h'vy	se.	foggy.
S. S. City of Merida, N. 23° 09′, W. 82° 22′ *†	29.91	759.7	73.4	23.0		ene.			3		5		ene.	o	o	light	ene.	fine.
S. S. Braunschweig, Porto Grande, Cape Verde Ids.			74.0	23.3	100	nne.			4		6		ne.	o	o	light	ne.	fair.
S. S. Hohenstaufen, S. 33° 44′, W. 52° 22′	29.85	758.2	65.3	18.5		n.			4		0			o	o	light	n.	clear.
S. S. Oder, N. 50° 19′, W. 14° 51′	29.85	758.2	51.4	10.8		wnw.			5		6		w.	3 h'r	3 h'r	high	w.	cloudy.
S. S. Salier, N. 46° 03′, W. 47° 45′	29.35	745.5	41.0	5.0		wnw.			4		10		wnw.	1 h'r	1 h'r	h'vy	e.	misty.
S. S. Belgic, San Francisco, Cal..			51	10.6	79	calm			0		3		w.	o	o			clear.
S. S. Gaelic, N. 37° 49′, W. 143° 27′ *	30.07	763.8	58	14.4	94	wsw.			3		3		w.			con.	w.	d. clouds.
S. S. Oceanic, Hong Kong, China			63	17.2	72	ne.			2		2		se.					clear.
S. S. Mississippi, Near Astoria, Oregon*†	29.92	760.0	48	8.9	92	w.			4		10		w.					raining.
S. S. Willamette, N. 39° 42′, W. 124° 20′†	30.16	766.1	55	12.8	93	s.			6		10		s.	0.08	2.0	high	nw.	rainy.
S. S. Columbia, N. 45° 43′, W. 124° 15′†	29.88	758.9	53	11.7	80	sw.			3		10		ssw.			long	w.	cloudy.
S. S. Oregon, San Francisco, Cal†	30.25	768.3	55	12.8	93	calm			0		0							clear.
S. S. Ancon, San Francisco, Cal †	30.29	769.4	51	10.6	93	calm			0		0		w.					cloudy.
S. S. City of Chester, Hookton, Cal*†	30.19	766.8	49	9.4	93	se.			2		10							raining.
S. S. Dakota, N. 45° 45′, W. 124° 50′	30.03	762.7	60	15.6	95	n.			5		2		n.	o	o	mod.	nw.	clear.
S. S. Orizaba, N. 33° 43′ W. 118° 15′ *†	30.20	767.1	57	13.9	75	var.			1		0					str'ng	s.	clear.
S. S. State of California, Portland, Oregon*†	29.86	758.4	52	11.1		sw.			3		10		sw.					raining.
S. S. Australia, N. 32° 37′, W. 140° 49′	30.29	769.4	63	17.2	89	se.			4		10		se.	o	o	long	nw.	clear.
S. S. City of New York, Sydney, N. S. W†	29.88	758.9	77	25.0	82	calm			0		0			o	o			clear.
S. S. City of Pekin, N. 46° 11′, E. 169° 48′ †	29.45	748.0	35	1.7	80	nw.			4		5		nw.	o	o	mod.	w.	fair.
S. S. City of Rio de Janeiro, Manzanillo, Mexico†	29.91	759.7	78	25.6	82	nne.			1		2		nw.	o	o	sm'h		fine.
S. S. City of Sydney, N. 30° 54′ W. 139° 05′ †	30.33	770.4	66	18.9	79	sw.			2		8		sw.	o	o	h'vy	nw.	cloudy.
S. S. City of Tokei, N. 29° 45′, E. 153° 34′ †	30.27	768.8	67	19.4		w.			3		8		w.	light	light	mod.	wnw.	
S. S. Colima, Panama, Panama†	29.89	759.2	72	22.2	90	nnw.			3		5?		nw.	o	o			clear?
S. S. San José, N. 20° 50′, W. 105° 40′						wsw.			2					o	o	long	wnw.	clear.
S. S. Zealandia, Sydney, N. S. W	29.66	753.4	76	24.4	82	calm			0		1		nw.			mod.	e.	fine.
S. S. Muriel, N. 38° 45′, W. 72° 55′			62	16.7	66	ese.			4		10			sh'rs	sh'rs	r'gh	se.	drizzling.
S. S. Caracas, N. 26° 27′, W. 69° 42′†	30.22	767.6	71	21.7		e.			3		8		e.	o	o	h'vy	n.	fine.
S. S. Claudius, N. 13° —′, W. 82° 10′ †.	30.02	762.5				ne.			3		5		ne.	o	o	short	ne.	fair.
S. S. Valencia, N. 17° 30′, W., 68° 04′†	30.13	765.3	81	27.2	87	nne.			2		2		ese.	o	o	mod.	ene.	fine.
S. S. Belgenland, Jersey City, N. J.	30.29	769.4	36	2.2	80	ne.			5		10		ne.	20 h'r	20 h'r			cloudy.
S. S. Pennland, N. 47° 28′, W. 43° 34′	29.50	749.3	55	12.8	100	e.			6		10			9 h'r	9 h'r	r'gh	se.	overcast.
S. S. Rhynland, Antwerp, Belgium	29.89	759.2	43	6.1	75	sw.			6		6		sw.	o	o			squally.
S. S. Wuesland, N. 49° 49′ W. 31° 34′	30.18	766.6	53	11.7	93	ese.			4		10		ese.	10 h'r	10 h'r	cross	var.	heavy rain.
S. S. P. Oaland, N. 40° 41′, W. 65° 49′	30.15	765.8	44.4	6.9	82	n.			4		4		n.			4	nne.	fair.
S. S. Zaandam, N. 49° 37′, W. 26° 00′	30.17	766.3	56.8	13.8	93	ne.			2-4		10n		sw.	24 h'r	24 h'r	2	sw.	
S. S. State of Florida, N. 52° 06′, W. 24° 00′	30.06	763.5	50	10.0		nw.			4		8		nnw.	6 h'r	6 h'r	irreg.	nnw.	cloudy.
S. S. State of Indiana, N. 50° 25′, W. 38° 05′†	30.04	763.0	46	7.8		e.			6		10		e.	18 h'r	18 h'r	mod.	e.	rain & fog.
S. S. Hekla, N. 52° 00′, W. 36° 00′*	30.13	765.2	50.0	10.0		ese.			4		10		e.	o	o	long	nnw.	overcast.
S. S. Iowa, off Fastnet, Ireland*†	29.80	750.9	46	7.8		ene.			3		10			2 h'r	2 h'r	sm'h	wsw.	drizzling.
S. S. Plantyn, N. 50° 13′, W. 27° 30′	29.99	761.7							4		3		sw.	4 h'r	4 h'r	sm'h	w.	
S. S. Baltic, N. 44° 08′ W. 56° 40′	29.63	752.6	41	5.0	100	ne.			5		10					mod.	nw.	showery.
S. S. Celtic, N. 40° 28′, W. 70° 00′ †	30.17	766.3	42	5.6		ese.			3		10		se.	8 h'r	8 h'r	sm'h		gloomy.
S. S. Germanic, N. 48° 46′, W. 31° 23′†	30.18	766.6	57	13.9		sw.			4		10		sw.	sh'rs	sh'rs	mod.	sw.	drizzling.
S. S. Lepanto, N. 42° 53′, W. 43° 30′ *	29.69	754.1	56	13.3		wnw.			10		10		nw.	6 h'r	6 h'r	h vy	w.	heavy rain.
S. S. Marengo, N. 45° 33′, W. 38° 45′	29.89	759.2				s.			6		10		s;sse.	15 h'r	15 h'r	r'gh	sw.	rainy.
S. S. Salerno, Hull, Eng*	29.69	754.1				nw.			4		10			1 h'r	1 h'r			cloudy.
S. S. Catherine Whiting, Providence, R. I†	30.26	768.6	88	31.1		ne.			1				ne.	o	o			
S. S. Saxon, Philadelphia, Pa†	30.09	764.3	42	5.6		ese.			4		10							raining.
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 25° 50′, W. 77° 10′ †	30.05	763.3	75	23.9		se.			4		4		se.	o	o	mod.	e.	fair.
Bk. Adelaide, N. 30° 38′, W. 63 18′*†	30.29	769.4	64	17.8		n.			4		4		nnw.	o	o	long	n.	fair.
Bg. Alcira, N. 36° 16′, W. 73° 54′ ..	30.07	763.8				nw.			2		10		nw.	6 h'r	6 h'r	cross	var.	cloudy.
Bk. Alpha, N. 30° 10′, W. 21° 01′			70	21.1		e.			6		2		e.	o	o	mod.	ne.	fair.
Schr. Annie Lewis, N. 29° 00′, W. 87° 45′†	29.96	761.0	70	21.1		wsw.			4		8		sw.	8 h'r	8 h'r	h'vy	se.	cloudy.
Bk. Anna Thormann, S. 33° 20′ E. 33° 54′*	29.71	754.5	71.4	21.9	74	calm			0		1 k		e.	o	o	cross	var.	clear.
S. S. Antonio Lopez, Cadiz, Spain*†	30.40	772.1	55	12.8	87	nw.			1		1			o	o	sm'h		hazy.
Bk. Aquidneck, S. 9° 03′, W. 34° 24′*†	30.10	764.5	88	31.1		e.			1				ene.	o	o	light	se.	clear.
Bgt. Arthur, N. 14° 35′, W. 25° 31′ *†	30.06	763.5				ne.			4				ne.			mod.	ne.	fair.
Schr. Anna Holton, N. 23° 39′, W. 83° 40′†	30.03	762.7	79	26.1		se.			5		2		se.	o	o	mod.	se.	clear.
Bg. Belle of the Bay, N. 27° 00′, W. 88° 25′ *†	30.01	762.2				sw.			5		8		sw.	4 h'r	4 h'r	cross	se.	raining.
Bk. Champion, N. 29° 31′, W. 73° 07′			67.0	19.4		e.			3		8		sse.	½h'r	½h'r	mod.	ne.	cloudy.
Bg. Clara M. Goodrich, Key Francis, W. I.*†...	30.00	762.0				e.			5		5		e.	o	o			fair.
Schr. C. R. Flint, N. 29° 25′, W. 78° 00′			78	25.6		sse.			4		8		ssw.	o	o	r'gh	se.	cloudy.
S. S. D. J. Foley, N. 25° 14′, W. 74° 18′*†...	30.10	764.5	76	24.4		ese.			4		9		ese.	o	o	long	ene.	cloudy.
Bkt. David Preston, Pensacola, Fla			68.0	20.0		nw.					10		n.	o	o			
Bk. E. L. Pettingill, N. 3° 52′, W. 123° 18′*†	29.90	759.4	78	25.6		sse.			4		8		ese.	12 h'r	12 h'r	sm'h	nnw.	cloudy.
Schr. Edith R. Seward, N. 37° 18′, W. 76° 19′ *†...	30.09	764.3	36	2.2							fg.			o	o			foggy.
S. E. J. Spicer, Liverpool, Eng*.	29.53	750.0	54	12.2		w.			7		7		w.	rain	rain			cloudy.
Schr. E. D. Bigelow, Verdun Roads, France*†	30.00	762.0				sw.			5		2							raining.
Bk. Essex, N. 2° 12′ E. 50° 48′ *†	29.90	759.4	84	28.9		nne.			6					shr's	shr's	3	nne.	squally.
Schr. F. E. McDonald, Camden, Maine †	30.29	769.4	10	— 8.9		nw.			1		0			o	o			fine
S. S. Foscolia, N. 38° 50′, W. 58° 03′						nw.			9		10		nw.	14 h'r	14 h'r	h'vy		cloudy.
Bk. Freya, N. 23° 23′, W. 81° 50′			75	23.9		e.			4		1		e.	o	o	sm'h		fine.
Bg. George, N. 24° 30′, W. 58° 30′ *†	30.21	767.3				ne.			5		5		ne.	o	o	mod.	nnw.	fair.
S. Geo. Stetson, N. 37° —′ W. 68° —′*†	30.10	764.5	57	13.9	87	e.			4		6		e.			chop	se.	cloudy.
Bk. Gronsvaer, S. 38° 22′, E. 178° 30′†	29.91	759.7	71.0	21.7		ese.			1		2		se.	o	o	sm'h		fine.
Bk. Godeffroy, S. 50° 39′, W. 76° 10′†	29.49	749.0	41.4	5.2	84	s.			6	c	7 k	sw.	s.	4 h'r	4 h'r	mod.	var.	cloudy.
Bk. Great Surgeon, S. 25° 57′, E. 61° 54′*†	30.14	765.5	79	26.1		sse.			3		5		sw.	o	o	long	ese.	fair.
Bk. Grey Eagle, S. 17° 54′, W. 35° 50′*†	29.90	759.4				ene.			3		3			o	o	light	ese.	fair.
Bk. Hattie G. McFarland, N. 32° 10′, W. 70° 40′†...	30.26	768.6	66	18.9		s.			4		8		sw.	o	o	long	e.	
Schr. Isabel Alberto, N. 37° 42′, W. 74° 38′ †.	30.09	764.3				w.			2		10		w.	h'vy	h'vy	cross	var.	cloudy?
Schr. Jennie N. Huddell, N. 35° 40′, W. 75° 10′†...	30.11	764.8	59	15.0		e.			1		10		se.	light	light	h'vy	se.	threatening.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Joseph A. Ropes, S. 9° 30′, E. 48° 34′ *†	29.94	760.5	84	28.9	87	e.			2		5		e.	0	0	mod.	n.	fair.
Bkt. Josephine, N. 22° 32′, W. 33° 27′†	30.14	765.5	78	25.6	53	e.			4		0			½ h'r	½ h'r	sta'h		clear.
Bk. Julia H., N. 49° 53′, W 7° 43′	29.67	753.6			76	w.			6					8 h'r	8 h'r	6	w.	rain & fog.
S. S. J. W. Wilson, Pensacola, Fla †	29.75	755.6	62	16.7		wsw.			1		8		wsw.	12 h'r	12 h'r			cloudy.
Light House Tender, Laurel, Pensacola, Fla†	29.77	756.1	63	17.2		sw.			0–1		9		sw.	3 h'r	3 h'r	h'vy	ssw.	cloudy.
Bk. Louise Adelaide, Port Mariel, Cuba, W. I			70	21.1		ese.			2		8		se.	0	0	long	ene.	fine.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.08	764.0				calm			0		10			8 h'r	8 h'r	sm'h		light rain.
S. S. Madrid, N. 46° 58′, W. 17° 42′*†	30.34	770.6	55	12.8		w.			5		9			0	0	mod.	wnw.	overcast.
S. S. Malabar, N. 40° 02′, E. 13° 30′†	30.00	762 0				var.					8		se.	0	0	sm'h		cloudy.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	29.98	761.5	70	21.1		s.			1									cloudy.
S. Minnie N. Gerow, N. 30° 04′, W. 54° 23′*†	30.00	762.0				nw.			5		5		nw.			r'gh	nw.	squally.
S. M. P. Grace, S. 45° 22′, W. 114° 10′ *†	30.10	764.5	56	13.3		n.			5		10		n.			sm'h	nnw.	dense fog.
Bg. Myrtle, Clements Port, Nova Scotia *†	30.15	765.8				ne.			1		1		ne.	0	0			clear.
Bg. O. C. Clary, N 20° 25′, W. 72° 06′*†	30.04	763.0	82	27.8	91	ene.			4		1		ene.	0	0	sm'h	nne.	clear
Bk. Ottawa, N. 41° 28′, W. 24° 50′*	30.44	773.2	60	15.6		sse.			2		4		sse.	0	0	sm'h	w.	clearing.
S. Paramita, San Francisco, Cal			51	10.6		e.			3					0	0			cloudy.
Bk. Pilgrim, N. 26° 03′, W. 69° 00′*†	30.20	767.1				ne.			4		2		ne.	0	0	long	n.	fair.
S. S. Radnorshire, N. 24° 52′, E. 119° 20′*†	30.45	773.4				nne.			8		8		n.	0	0	long	ne.	cloudy.
Bk. Rebus, N. 50° 10′, W. 2° 41′*	29.60	751.8	47	8.3		ssw.			3		9		sw.	light	light	sm'h	wnw.	cloudy.
Schr. S. B. Hubbard, Hampton Roads, Va.†	30.16	766.1	45	7.2		calm			0		10			7 h'r	7 h'r	long	e.	dense fog.
Bk. Scud, N. 38° 30′, W. 73° 20′ *†	30.14	765.5				wnw.			3		fg.			driz	driz	h'vy	e.	foggy.
Bk. Southern Belle, N. 46° 15′, W. 16° 15′*†	30.15	765.8	55	12.8		wsw.			6		10			2 h'r	2 h'r	long	w.	fair.
S. S. Strathleven, N. 7° 39′, E. 107° 46′	29.89	759.2	77.8	25.4	98	nne.			5		6		nne.			5	nne.	showery.
Bk. Sunbeam, N. 38° 21′, W. 57° 10′	29.77	756.1	53	11.7	86	wnw.			7		10		wnw.	2 h'r	2 h'r	h'vy	wnw.	cloudy.
Schr. T. S. McLellan, N. 23° 20′, W. 61° 30′*†	30.20	767.1	70	21.1		ene.							ene.				ene.	
U. S. F. C. S. S. Fish Hawk, Washington, D. C†	30.22	767.6	43	6.1	83	se.			1		10		calm	0.06	1.5			foggy.
Bk. Vincenzo Accame, N. 35° 10′, W. 57° 15′ †	30.01	762.2	60.8	16.0		wnw.			6		6		nnw.	10 h'r	10 h'r		nnw.	
Bk. Wandering Jew, Montevideo, Uruguay †	29.79	756.7	68	20.0		nnw.			7		2		nnw.	0	0			clear.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.05	763.3				ssw.			1		3		w.			sm'h	s.	fair.
S. Wm. Woodbury, N. 53° 37′, E. 4° 13′			48	8.9		sse.			2		6		sse.			sm'h	sw.	foggy.

International Chart I. December 22, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 23, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Velocity.		Force.	Clouds. Amount and kind.		Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.23	767.7	58.6	14.8	81	e.	.....	.....	3	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.05	763.2	60.1	15.6	62	w.	.....	.....	7	.....	6	.....	.....	0	0	cloudy	Thève.
La Calle	.....	.....	29.99	761.7	62.2	16.8	81	nnw.	.....	.....	3	.....	5	.....	.....	0.551	14.0	cloudy	Fonfréde.
Tunis	.....	.....	29.98	761.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.23	767.9	59.7	15.4	57	ne.	.....	.....	1	.....	6	.....	.....	0	0	cloudy	Pérès.
Tebessa	.....	.....	30.14	765.6	55.8	13.2	68	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	51.1	10.6	58	nw.	.....	.....	2	.....	2	.....	.....	0	0	fair	Louchamp.
Laghouat	.....	.....	30.24	768.1	62.6	17.0	34	nw.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair	Abraham.
Biskra	.....	.....	30.21	767.3	62.2	16.8	37	nnw.	.....	.....	1	.....	3	.....	.....	0	0	pretty fair	Malau.
Australian.																			
Melbourne, Victoria	29.93	760.2	30.02	762 5	60.6	15.9	68	ssw.	12	5.4	.....	.....	9	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	28.86	733.1	29.43	747.5	33.4	0.8	96	no.	.....	.....	2	.....	10	.....	.....	0.260	6.6	snowing	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.70	728.9	29.48	748.7	33.8	1.0	87	e.	5.6	2.5	.....	.....	8	.....	.....	0	0	.....	Dr. Wierzbiski.
Eperies	28.74	730.0	29.65	753.2	30.0	— 1.1	90	s.	.....	.....	4	.....	10	.....	.....	0	0	foggy	Julius Mikolik.
Gratz	28.17	715.6	29.46	748.2	32.4	0.2	78	ne.	.....	.....	1	.....	10	.....	.....	0.008	0.2	.....	Andreas Rospini.
Hermannstadt	28.21	716.4	29.69	754 0	31.6	— 0.2	89	s.	.....	.....	4	.....	3	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	27.93	709.5	29.31	744.5	30.0	— 1.1	91	wsw.	.....	.....	2	.....	10	.....	.....	0.091	2.3	snowing	The Staff.
Lemberg	28.61	726.8	29.04	752.9	28.0	— 2.2	75	s.	.....	.....	2	.....	8	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.12	739.7	29.23	742.5	50.5	10.3	90	sse.	.....	.....	5	.....	10	.....	.....	1.220	31.0	.....	I. R. Hydrographic Office.
Szathmar	29.16	740.6	29.58	751.2	31.8	— 0.1	78	se.	.....	.....	1	.....	8	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.24	742.8	29.53	750.1	37.8	3.2	70	s.	.....	.....	3	.....	6	.....	.....	0.433	11.0	.....	Karl Stancel.
Trieste	29.19	741.4	29.29	744.0	44.6	7.0	96	e.	.....	.....	2	.....	10	.....	.....	0.921	23.4	raining	Royal Academy.
Vienna	28.66	728.0	29.41	746.9	29.3	— 1.5	94	se.	.....	.....	2	.....	10	.....	.....	0.157	4.0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.34	745.2	29.44	747.8	37.3	2.9	81	wnw.	23	10.3	.....	.....	4	.....	.....	0.090	2.3	blue sky	W. Boswell
Armagh, Observatory	29.51	749.5	29.75	755.6	37.0	2.8	90	wnw.	10	4.5	.....	.....	6	.....	.....	.....	.....	d. clouds	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.61	752.1	39.1	3.9	83	wnw.	34	15.2	.....	.....	7	.....	.....	.....	.....	d. clouds	John Harmup.
Bolton, Sharples	29.03	737.1	29.57	751.1	40.3	4.6	80	nnw.	12	5.4	.....	.....	6	.....	.....	.....	.....	d. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.13	739.9	29.52	749.8	39.9	4.4	78	w.	.....	.....	3	.....	3	.....	.....	0	0	d. clouds	McLandsborough&Preston
Bridgetown, Barbadoes	29.92	760.0	29.95	760.7	81.0	27.2	66	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	43.0	6.1	75	nw.	.....	.....	3.0	.....	1	.....	.....	.....	.....	blue sky	John McLaren.
Chatham, School M. E	29.44	747.8	29.57	751.1	41.1	5.1	73	w.	.....	.....	1	.....	7	.....	.....	.....	.....	d. clouds	Corpl. G. A. Pickles.
Falmouth, Observatory	29.66	753.4	29.89	759.2	45.9	7.7	83	nw.	.....	.....	5	.....	5	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.85	707.4	30.06	763.5	63.0	17.2	78	ne.	.....	.....	1	.....	6?	.....	.....	.....	.....	overcast?	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.74	755.4	29.97	761.2	85.0	29.4	79	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.20	767.1	30.26	768 6	59.2	15.1	94	w.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.35	745.5	29.56	750.8	38.7	3.7	70	wnw.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.41	747.0	29.59	751.6	41.3	5.2	72	wnw.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.48	748.8	29.78	756.4	45.0	7.2	72	nw.	.....	.....	3	.....	6	.....	.....	.....	.....	d. clouds	A. Collenette, F. M. S.
Kew, Observatory	29.58	751.3	29.62	752.3	41.8	5.4	70	w.	22	9.8	.....	.....	7	.....	.....	.....	.....	d. clouds	The Staff.
Leicester, Museum	29.31	744.5	29.57	751 1	42.0	5.6	72	nw.	.....	.....	3	.....	8	.....	.....	.....	.....	d. clouds	J. C. Smith.
Malta, Mediterranean	29.80	756.9	29.86	758.4	62.0	16.7	73	w.	.....	.....	3	.....	7	.....	.....	blank	blank	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.02	762.5	30.07	763.8	72.0	22.2	87	s.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.39	746.5	29.62	752.3	42.3	5.7	68	nw.	.....	.....	5	.....	3	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.75	755.6	29.82	757.4	44.4	6.9	82	nw.	.....	.....	4	.....	5	.....	.....	.....	.....	d. clouds	John Merrifield.
Sandwick Manse, Orkneys	29.35	745.5	29.46	748.3	35.8	2.1	92	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	snowy	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.67	753.6	29.74	755.4	49.0	9.4	71	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	gloomy	W. H. Lyne.
Sheffield	29.30	744.2	29.58	751.3	41.0	5.0	78	wnw.	.....	.....	3	.....	3	.....	.....	0	0	d. clouds	W. F. Cooper.
Silloth Rectory	29.52	749.8	29.55	750.6	43.3	6 3	72	wnw.	.....	.....	2	.....	5	.....	.....	0	0	showery	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.58	751.3	40.5	4.7	73	wnw.	20	8.9	.....	.....	5	.....	.....	.....	.....	d. clouds	I. New.
Stratfield Turgiss	29.43	747.5	29.65	753.1	42.7	5.9	71	nw.	.....	.....	3	.....	4	.....	.....	.....	.....	squally	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.82	757.4	29.86	758.4	48	8.9	70	nw.	.....	.....	7	.....	5	.....	.....	.....	.....	d. clouds	W. Newcombe.
Valencia, Observatory	29.94	760.5	29.97	761.2	46.6	8.1	66	wnw.	19	8.5	..	.....	10	.....	.....	.....	.....	misty	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.86	758.4	29.90	759.4	24	— 4.4	92	n.	6	2.7	.....	5c	2s	calm	calm	0	0	fair	H. J. Cundall, C. E
Chatham, N. B*	29.90	759.4	29.97	761.2	— 4	—20.0	100	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	G. A. Blair.
Father Point, Quebec*	29.93	760.2	29.95	760.7	11	—11.7	91	calm	0	0	.....	.....	10 n	.....	.....	0	0	foggy	J. McWilliams.
Fort Garry, Manitoba*	28.90	735.0	29.89	759.2	— 7	—21 7	58	s.	9	4.0	.....	0	5 ks	s.	.....	0	0	foggy	James Stewart.
Halifax, N. S*	29.83	757.7	29.98	761.5	21	— 6.1	96	w.	3	1.3	.....	.....	10 k	.....	.....	0	0	cloudy	A. Allison.
Kingston, Ontario*	29.36	745 7	29.71	754.6	33	0.6	96	ne.	3	1.3	.....	.....	fg.	.....	.....	0.46	11.7	foggy	A. P. Knight, M. A.
Montreal, Quebec*	29.48	748.8	29.69	754.1	32	0.0	92	se.	4	1.8	.....	.....	10 n	.....	.....	0.26	6.6	heavy snow	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.03	737.3	29.74	755.4	33	0.6	92	s.	3	1.3	.....	.....	10 n	.....	sw.	0.09	2.3	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.12	739.6	29 84	757.9	33	0.6	100	w.	7	3.1	.....	.....	10 n	.....	.....	0.26	6.6	threatening	H. Morgan.
Port Stanley, Ontario	29.18	741.2	29.85	758.2	32	0.0	96	w.	10	4.5	.....	.....	10 n	.....	w.	0.20	5.1	cloudy	M. Payne.
Quebec, Quebec*	29.50	749.3	29.84	757.9	23	— 5.0	100	e.	.....	.....	8	.....	10 n	.....	e.	0.12	3.0	heavy snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.23	742.4	29.70	754.4	32	0.0	88	calm	0	0	.....	.....	fg	.....	.....	0.40	10.2	foggy	W. H. McIntyre.
Saugeen, Ontario*	29.02	737.1	29.75	755.6	33	0.6	88	sw.	5	2.2	.....	.....	10	.....	.....	0.01	0.3	cloudy	
St. Andrews, N. B	29.81	757.2	29.87	758.7	28	— 2.2	87	e.	3	1.3	.....	.....	10 n	.....	.....	0	0	cloudy	
Sydney, C. B*	29.79	756.7	29.86	758.4	25	— 3.9	92	nw.	1	0.4	.....	0	0	.....	.....	0.05	1.3	clear	T. C. Hill, C. E
Toronto, Ontario*	29.40	746.7	29.80	756.9	34	1.1	92	n.	8	3.6	.....	.....	10 ks	.....	w.	0.38	9.7	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.81	757.2	29.88	758.9	20	— 3.3	70	e.	3	1.3	.....	8 ck	2 k	.....	s.	0	0	cloudy	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28 36	720.3	29.82	757.4	31.0	— 0.6	95	w.	.....	.....	2	.....	10 s	.....	w.	0.554	14.1	overcast	Wm. Wylie.
St. Johns, Newfoundland	29.40	746.7	29.66	753.4	31	— 0.6	100	ne.	2	0.9	.....	.....	10	.....	.....	1.18	30.0	threatening	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.78	756.4	29.81	757.2	67.0	19.4	73	sw.	16.4	7.3	.....	0	2 s	.....	.....	0	0	light haze	John Duthie.
Cape Town, C G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.72	627.8	.....	.....	14.0	—10.0	.....	ene.	.....	.....	1	8 ck	.....	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.35	770.8	30.46	773.6	20.8	— 6.2	76	sw.	2.2	1.0	.....	0	0	.....	.....	0	0	clear	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.52	775.2	30.54	775.8	33.6	0.9	74	ene.	6.3	2.8	.....	10 ck	0	wsw.	.....	0	0	covered	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.38	746.2	29.43	747.4	35.8	2.1	91	se.	.....	6	.....	10	.....	.....	.....	.....	.....	hazy	Oversergent Fischer.
Fanoe	29.35	745.5	29.37	746.0	34.5	1.4	98	sse.	.....	.....	4	10	.....	.....	.....	.....	.....	foggy	Overloerer Lauridsen.
Godthaab, Greenland	29.98	761.6	30.03	762.7	20.1	— 6.6	89	nnw.	.....	.....	2	10	.....	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.89	759.1	29.91	759.6	17.2	— 8.2	.....	calm	.....	.....	0	9	.....	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	30.11	764.8	30.16	766.0	— 0.4	—18.0	.....	calm	.....	.....	0	1	.....	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.86	758.5	29.91	759.6	15.8	— 9.0	91	ne.	.....	.....	8	0	.....	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29 43	747.4	29.46	748.3	27.3	— 2.6	85	n.	18	8	.....	7	.....	.....	.....	.....	.....	snowing	Overloerer Bergh.
Vestervig	29.26	743.1	29.35	745.5	32.9	0.5	96	sse.	.....	.....	2	4	.....	.....	.....	.....	.....	.....	Loearer Oesterbol.
Upernavik, Greenland	30.18	766.5	30.22	767.7	—10.7	—23.7	.. ..	calm	.....	.....	0	0	.....	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.38	746.3	30.04	763.0	48.2	9	84	nw.	.....	.....	3	2 c	k; n	.....	.....	0.134	3.4	.....	M. Labroue, Director.
Alençon, Normal School	29.23	742.4	29.78	756 4	43.9	6 6	74	nw.	.....	.....	4	.....	k	ese.	ese.	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.37	746.1	29.64	752.9	36.5	2.5	96	nw.	.....	.....	1	10	.....	.....	nw.	0	0	covered	M. Fénéon, Command't.
Avignon, Normal School	29.62	752.4	29.70	754.4	53.6	12	43	nw.	.....	.....	3	5	.....	.....	nw.	0.087	2.2	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.08	738.7	29.65	753.1	40.3	4.6	77	nnw.	.....	.....	3	10	.....	.....	nw.	0.394	10.0	covered	M. Saillard, Director.
Beauvais, Normal School	29.38	746.2	29.65	753.1	41.9	5.5	78	wnw.	.....	.....	2	8	.....	.....	nw.	0.287	7.3	raining	M. Frère Eugène Marie.
Besançon, Normal School	28.68	728.4	29.58	751.2	39.9	4.4	97	ssw.	.....	.....	4	n	.....	.....	sw.	0.780	19.8	.....	M. Gobin, Director.
Bordeaux, Observatory	29.73	755.1	29.99	761.8	50.0	10.0	49	nw.	.....	.....	3	5	.....	.....	nw.	0.276	7.0	cloudy	M. Rayet, Director.
Bourges, Normal School	29.25	742.9	29.81	757.2	43.7	6.5	77	nw.	.....	.....	3	k	.....	.....	nw.	0.925	23.5	.....	M. Malet, Director.
Brest, Naval Observatory	29.76	755.9	30.00	762.1	47.1	8.4	83	nnw.	.....	.....	3	4	.....	.....	nnw.	2.315	58.8	misty	M. de Kermaingé, Dir.
Caen, Normal School	29.69	754.0	29.76	755.9	42.4	5.8	88	sw.	.....	.....	1	2	.....	.....	sw.	0.24	6.	slightly cl'dy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.689	17.5	.....	M. Jadot, Director.
Charleville, Normal School	29.00	736.5	29.52	749.7	38.8	3.8	66	nnw.	.....	.....	1	.....	8	.....	.....	0.24	6.	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.43	722.1	29.81	757.2	42.1	5.6	63	wnw.	.....	.....	4	.....	8	.....	.....	1.012	25.7	¾ covered	M. Allnard, Director.
Cluny, Normal School	28.84	732.6	29.71	754.6	41.0	5	82	sw.	.....	.....	1	.....	5	sw.	w.	1.004	25.5	snowing	M. de Villemontée, Dir.
Commercy, Normal School	28.69	728.7	29.57	751.1	34.0	1.1	96	w.	.....	.....	3	.....	n	w.	w.	0.35	9.	.....	Dr. Coulet, Director.
Gap, Normal School	27.07	687.6	29.67	753.6	35.6	2	85	ne.	.....	.....	1	10	.....	.....	w.	1.42	36.	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.52	724.5	29.66	753 3	48.4	9.1	48	nw.	.....	.....	3	7	.....	.....	nw.	0.12	3.	.....	M. Kina, Director.
Grenoble, Normal School	28.90	734.1	29.69	754.1	39.2	4	100	nnw.	.....	.....	4	.....	.....	.....	.....	1.161	29.5	.....	M. Allard, Director.
Guéret	28.25	717.5	29.85	758 3	41.0	5	84	nw.	.....	.....	4	10 n	.....	.....	sw.	0.55	14.	raining	M. Delorme, Dir.
Lamballe, Normal School	29.57	751.1	29.85	758.1	44.6	7	79	nw.	.....	.....	4	.....	5	.....	nw.	0.689	17.5	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.47	748.6	30.04	763.0	49.3	9.6	85	wnw.	.....	.....	3	.....	10	.....	.....	0.512	13.0	covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.89	759.1	29.99	761.8	51.8	11.0	61	wnw.	.....	.....	1	.....	5	.....	nw.	0	0	½ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.65	727.6	29.72	755.0	41.2	5.1	69	wnw.	.....	.....	3	.....	5 n	.....	.....	0.315	8.0	cloudy	M. André, Director.
Mans, Normal School	29.47	748.5	29.78	756.5	43.7	6.5	93	sw.	.....	.....	4	.....	2	.....	nw.	0.563	14.3	slightly cl'dy	M. Piboën, Director.
Marseille, Observatory	29.41	746 9	29.67	753.7	52.0	11.1	51	wnw.	.....	.....	4	.....	5	.....	nw.	0	0	.....	M. Stephan, Director.
Montlouis	24.02	625.3	29.46	748.3	36.5	2.5	65	w.	9.4	4.2	.....	.....	8	.....	.....	0	0	.....	M Caré for Dr. Fines.
Montpellier, Normal School	29.58	751.2	29.76	755.8	52.2	11.2	43	w.	.....	.....	6	.....	0	.....	.....	0	0	clear	M. Galzin, Director.
Nancy, Normal School	28.70	728.9	29.50	749.4	34.2	1.2	93	sw.	.....	.....	1	.....	10 n	.....	.....	0.425	10.8	snowing	M. Husse, Director.
Nantes, Observatory	29.80	756.9	29.96	761.0	49.3	9.6	61	wnw.	.....	.....	2–3	.....	2 k	.....	.....	1.260	32.0	.....	M. Larocque, Director.
Perpignan, Observatory	29.76	755.8	29.87	758.6	48.9	9.4	80	n.	31.8	14.2	.....	.....	10	.....	nnw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.00	533.4	.....	.....	16.2	— 8.8	.....	w.	.....	.....	3–4	.....	.....	.....	w.	1.024	26.0	.....	M. Vaussenat.
Privas, Normal School	28.67	728.1	29.75	755.6	45.5	7.5	53	ne.	.....	.....	4	.....	2	nw.	nw.	0	0	slightly cl'dy	M. Taillen.
Puy de Dôme Obs'y, Summit	28.69	628.8	.....	.....	24.3	— 4.3	100	nw.	.....	.....	8	.....	10	.....	.....	1.217	30.9	light snow	M. Allnard, Director.
Rochefort, Naval Obs'y	29.93	760.1	29.96	760.9	48.2	9.0	100	wnw.	.....	.....	2	.....	1	.....	nw.	0.16	4.	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.72	754.9	29.94	760.4	49.1	9.5	98	wsw.	.....	.....	1	.....	0	.....	.....	1.043	26.5	clear	M. Brotier, Director.
Rodez, Normal School	27.73	704.4	29.94	760.4	37.6	3.1	86	ne.	.....	.....	2	.....	10	.....	nw.	0	0	covered	M. Seger, Director.
Rouen, Normal School	29.69	754.1	29.74	755.3	43.5	6.4	79	w.	.....	.....	1	.....	5	w.	.....	0.295	7.5	raining	M. Moullot.
Saint Lô	.....	.....	.....	.....	45.3	7.4	70	nw.	.....	.....	3	.....	5	.....	nw.	0.437	11.1	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.50	749.4	29.67	753.6	42.3	5.7	74	wnw.	.....	.....	1	.....	1	.....	nw.	0.406	10.3	.....	M. Renou, Director.
Toulouse, Observatory	29.26	743.3	29.99	761.7	47.7	8.7	88	wnw.	.....	.....	8	.....	8	nw.	.....	0.272	6.9	very cloudy	M. Baillaud, Director.
Tours	29.64	752.8	29.82	757 3	47.1	8.4	64	w.	.....	.....	3	.....	5	nnw.	nw.	0.689	17.5	cloudy	M. de Tastes.
Versailles, Observatory	29.18	741.2	29.67	753.7	41.4	5.2	81	nw.	.....	.....	2	.....	.....	.....	.....	0.358	9.1	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.95	760.8	30.10	764.6	49.8	9.9	86	w.	25.5	11.4	.. ..	.....	8 k	nw.	nw.	0.449	11.4	.....	M. Cartier, Director.
GERMAN.																			
Ansbach	27.88	708.2	29.37	745.9	30.2	— 1.0	88	calm	.....	.....	0	.....	10	.....	.....	0.161	4.1	.....	Prof. Jnedt.
Bamberg	28.50	723.8	29.32	744.7	31.6	— 0.2	96	sw.	.....	.....	2	.....	9	.....	.....	0.323	8.2	.....	Prof. Dr. Hoh.
Berlin	29.21	742.0	29.39	746.6	34.3	1.3	73	sw.	.....	.....	2	.....	9	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	28.91	734.2	29.43	747.4	30.4	— 0.9	80	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	29.02	737.2	29.47	748.5	35.2	1.8	92	sw.	.....	.....	2	.....	10	sw.	.....	0.217	5.5	raining	Albert Senz.
Cassel	28.63	727.1	29.34	745.2	32.9	0.5	86	nw.	.....	.....	2	.....	8	nw.	.....	0.122	3.1	snowing	Dr. H. Möhl.
Frankfort-on-the-Main	29.04	737.6	29.42	747.2	37.4	3.0	81	w.	.....	.....	1	.....	8	.....	.....	0.004	0.1	.....	Physical Society.
Friedrichshafen	28.04	712.3	29.50	749.3	37.8	3.2	97	w.	.....	.....	7	.....	10	w.	.....	0.205	5.2	.....	Wilhelm, Chief Tel.
Hamburg	29.30	744.1	29.39	746.4	34.3	1.3	92	se.	.....	.....	3	.....	9	.....	.....	.....	.....	snowy	E. Preller.
Kiel	29.37	746.1	29.39	746.5	36.5	2.5	91	se.	.....	.....	2	.....	9	.....	.....	0.087	2.2	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28 94	735.1	29.37	746.1	31.8	— 0.1	79	e.	.....	.....	1	.....	10	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.19	741.4	29.38	746.3	31.8	— 0.1	89	e.	.....	.....	2	.....	10 ks	.....	e.	0	0	.....	Weather Observatory.
Memel	29.62	752.4	29.67	753.6	27.5	— 2.5	94	s.	.....	.....	3	.....	10	.....	.....	.....	.....	light fog	Issermann.
Munich	27.48	698.0	29.30	744.2	34.0	1.1	89	nw.	.....	.....	8	.....	10	.....	.....	0.122	3.1	snowing	Central Station.
Neufahrwasser	29.57	751.1	29.59	751.5	28.9	— 1.7	90	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	28.88	733.5	29.39	746.6	36.5	2.5	89	w.	.....	.....	2	.....	10	w.	.....	0.484	12.3	.....	Dicknether.
Stuttgart	28.50	723.9	29.41	747.1	33.4	0.8	94	w.	.....	.....	1	.....	10	.....	.....	0.488	12.4	rain & snow	Prof. Dr. Schoder.
Wustrow	29.41	747.0	29.44	747.7	32.9	0.5	96	se.	.....	.....	2	.....	10 s	.....	.....	0	0	.....	Profs. Brandes & Reimer
GREEK.																			
Athens	29.41	747.2	29.81	757.1	54.7	12.6	.....	n.	.....	.....	1.0	0	6 k	.....	.....	0.177	4.5	.....	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	30.02	762.6	30.08	763.9	79.2	26.2	42	ene.	12.0	5.4	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.50	749.3	29.98	761.4	81.7	27.6	25	wnw.	6.0	2.7	.....	.....	0	.....	.....	0	0	hazy	
Bombay	29.91	759.6	29.94	760.6	79.6	26.4	66	nw.	10.0	4.5	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.08	713.4	29.93	760.1	84.2	29.0	21	ese.	4.0	1.8	.....	.....	1	.....	.....	0	0	d. clouds	
Trichinopoly	29 70	754.4	29.98	761.6	79.5	26.4	71	ne.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.34	694.5	29.93	760.2	78.1	25.6	34	ese.	7.0	3.1	.....	.....	4	sw.	.....	0	0	d. clouds	
Lahore	29.30	744.1	30.07	763.8	61.6	16.6	56	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.12	739.7	30.05	763.4	65.2	18.4	63	calm	0	0	.....	.....	6	w.	.....	0	0	.....	
Agra	29.45	748.1	30.03	762.7	75.0	23.9	38	e.	.....	.....	.....	.....	3	.....	e.	0	0	blue sky	
Nagpur	28.97	735.7	30.02	762 6	75.5	24.2	38	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28 67	728.1	30.05	763.2	73.4	23.0	54	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.05	753.1	30.04	763.0	67.3	19.6	40	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.72	754.9	30.05	763 2	63.0	17.2	66	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.87	758 7	30.06	763.6	63.6	17.6	69	wnw.	2.1	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	28 00	711.1	30.08	763.9	63.5	17.5	38	nw.	5.0	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.97	761.2	30.05	763 3	71.2	21.8	66	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	30.04	763.0	30.06	763.5	66.5	19.7	63	w.	0.5	0.2	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.91	759.6	30.03	762.8	68.4	20.2	72	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.97	761.2	30.06	763 6	68.0	20.0	78	sw.	2.1	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.73	755.2	30.08	764.1	64.9	18.3	89	ne.	2.0	0.9	.....	.....	8	w.	w.	0	0	d. clouds	
Jeypore	28.54	725.0	30.01	762.2	74.7	23.7	53	ssw.	0.2	0.1	.....	.....	0	.....	.....	0	0	blue sky	
ITALIAN.																			
Udine	28.93	734.9	29.35	745.6	38.1	3.4	93	ne.	2.5	1.1	.....	.....	10	.....	.....	0.413	10.5	.....	Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	28.92	734.5	29.45	748.1	36.1	2.3	91	sw.	4.3	1.9			9	wsw.		0.346	8.8		Prof. Schiapparelli.
Padua	29.24	742.6	29.35	745.5	34.9	1.6	96	nw.	11.2	5.0			10			0.315	8.0		Prof. Dott. Lorenzoni.
Moncalieri	28.52	724.5	29.47	748.4	38.3	3.5	85	nw.	2.5	1.1			7	ne.		0.217	5.5		Prof. F. F. Denza.
Genoa	29.22	742.2	29.42	747.2	39.9	4.4	66	ne.	13.7	6.1			2	n.		0.272	6.9		Prof. G. M. Garibaldi.
Mondovi	27.52	699.0	29.49	749.0	34.2	1.2	85	ne.			2		1	w.		0	0		Prof. D. C. Bruno.
Pesaro	29.26	743.1	29.31	744.4	40.3	4.6	87	wnw.	26.2	11.7			10			0.165	4.2		Prof. Luigi Guidi.
Florence	29.07	738.3	29.33	744.9	51.8	11.0	83	sw.			4		8	sw.		1.087	27.6		Prof. Costantino Pittei.
Leghorn	29.26	743.1	29.34	745.3	51.4	10.8	74	w.	11.9	5.3			5	w.		1.101	29.5		Prof. P. Monte.
Rome	29.30	744.3	29.48	748.8	55.6	13.1	79	sw.	19.9	8.9			10	w.		0.507	14.4		Prof. P. Tachini.
Lecce	29.41	747.0	29.67	753.6	57.0	13.9	81	se.	9.4	4.2			10			0.012	0.3		Prof. C. de Giorgi.
Cosenza	28.87	733.3	29.78	756.4	52.9	11.6	76	wsw.	3.8	1.7			10	sw.		0.969	24.6		Prof. D. Conti.
Cagliari	29.50	749.3	29.70	754.3	56.5	13.6	88	wnw.			4		10	nw.		0.024	0.6		Prof. A. Pacinotti.
Palermo	29.54	750.3	29.80	756.8	59.9	15.5	66	w.	20.6	9.2			10	w.		0.012	0.3		Prof. G. Caccialore
Syracuse	29.77	756.1	29.81	757.2	60.4	15.8	76	w.	11.9	5.3			6	sw.		0.039	1.0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.66	738.0	29.58	751.2	55.9	13.3	82	wsw.	18.6	8.3			10	w.		0.350	8.9		Prof. F. Brioschi.
Stelvio	21.48	545.6			18.3	— 7.6	97	sw.			4		10			0.204	6.7	covered	Prof. P. F. Denza.
Valdobbia	21.56	547.4			24.3	— 4.3	68	e.			2		10			2.105	55.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.25	768.5	30.28	769 3	34.0	1.1	100	nw.			2		10 ck		nw.	0.087	2.2	cloudy	Hattori.
Awomori	30.21	767.3	30.25	768.3	32.3	0.2	94	w.	17.3	7.7			10 n			0.055	1.4	light snow	K. Ogawa.
Hakodate	30.20	767.2	30.21	767.4	30.5	— 0.8	83	n.	12.0	5.4			10		nw.	0	0	overcast	
Hamamatsu	30.35	770.9	30.38	771.6	36.0	2.2	71	calm			0	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					31.8	— 0.1	78	n.	4.9	2.1		4 cs	1 ck			0	0		
Kanazawa	30.27	768.8	30.38	771.6	30.1	— 1.1	75	ese.	3.7	1.6			9		w.	0.490	12.6	cloudy	S. Endo.
Kioto	30.23	767.8	30.42	772.6	27.5	— 2.5	89	s.	0.3	0.1		0	0			0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.29	769.3	30.51	774.9	36.6	2.6	82	calm	0	0		9 c	0	W.		0	0	cloudy	S. Takehayashi.
Niigata	30.31	769.9	30.35	770.9	33.4	0.8	96	se.	4.4	2.0			10 ck		W.	0.220	5.6	covered	M. Morita.
Nobiru	30.28	769 0	30.29	769.4	29.1	— 1.6	90	nw.	1.7	0.7		2 ck	0			0	0	fair	H. Midzushina.
Numazu	30.30	769.5	30.33	770.4	37.0	2.8	74	ene.			2	7 ck	1 ks;s	s.	s.	0	0	cloudy	R. Kaneda.
Osaka	30.41	772.5	30.43	772.9	31.6	— 0.2	79	n.	1.9	0.8		0	0			0	0	clear	H. Omura.
Sapporo					26.5	— 3.1	66	w.	12.0	5.4		0	8			0.005	0.1	cloudy	
Tokei Obs'y, Yeddo	30.27	768.8	30.35	770.9	34.8	1.6	57	nw.	6.3	2.8		0	1 ck;s		sw.	0	0	clear	The Staff.
Wakayama	30.38	771.7	30.44	773.2	39.8	4.3	60	nw.	4.1	2.8		0	8 ck		nw.	0	0	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.81	757.2	30.00	762.0	81.2	27.3	70	e.	12.0	5.4		0	6 ks;ku		ne.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.68	601.4	29.90	759.4	46.8	8.2	76	calm	0	0		2 c	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.32	617.7	30.18	766.6	44.2	6.8	84	nnw.			1	0	2 cs		sw.	0	0	clear	Prof. M. Leal.
Mazatlan	29.74	755.4	30.00	762.0	64.0	17.8	62	ene.	1.6	0.8		0	0			0	0	light haze	F. Quijano, U. E.
Mexico, Central Obs'y	23.06	585.6	30.22	767.6	43.2	6.2	63	calm	0	0		1 cs	0			0	0	clear	The Staff.
Morelia	24.17	614.0	30.02	762.6	46.6	8.1	64	se.			2	1 c	1 k	s	s.	0	0	½ cloudy	M. Tena, M. D.
Pabellon, Aguascallentes	23.96	608.5	30.12	765.0	37.9	3.3	57	wsw.			1	1 cs	0	sw.		0	0	clear	M. Y. de Leon, M. E.
Puebla, Catholic Institute	23 34	592.8	30.11	764.9	50.9	10.5	73	calm	0	0		0	0			0	0	clear	Prof. P. Spina.
Zacatecas	22.41	569.3	30.24	768.0	37.0	2.8	80	sw.	5.5	2.5		0	1 s		sw.	0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.43	747.5	29.43	747.5	41.5	5.3		wnw.			4					0.024	0.6		
Groningen	29.28	743.8	29.34	745.2	37.6	3.1		s.			1					0	0		
Helder	29 32	744.6	29.32	744.6	40.3	4.6		w.			4					0.232	5.9		
Hellevoetsluis	29.39	746.5	29.39	746.5	40.3	4.6	77	wnw.			4					0.105	4.2		
Utrecht	29.33	745 0	29.38	746.2	39.4	4.1	90	sw.			2		8			0.173	4.4	very cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.18	741.1	29.24	742.7	34.9	1.6	89	sse.	2	1			10			0.380	9.8		
Brono	29.21	741.8	29.24	742.8	34.2	1.2	59	se.	29	13			3			0	0		
Christiania	29.15	740.3	29.30	744.1	34.7	1.5	94	sw.	13	6			10			0.213	5.4		
Gjæsvær	29.40	746 7	29.42	747.3	27.5	— 2.5		se.			6		0						
Lodingen	29.35	745.5	29.40	746 7	28.6	— 1.9	59	e.			4		2			0	0		
PORTUGUESE.																			
Angra, Azores	30.16	766.0	30.32	770.0	63.1	17.3	86	sse.	9.4	4.2			6			0	0		Dr. J. A. Sampaio.
Campo Major	29.13	740.0	30.15	765.9	52.5	11.4	85	wnw.	8.1	3.6			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.35	771.0	30.45	773.3	63.0	17.2	58	calm	0	0			8	ene.		0	0		Capt. D. A. de Ounha.
Lisbon, Observatory	30.01	762.2	30.37	771.5	56.3	13.5	80	nne.	14.3	6.4			7			0	0		The Staff.
Ponta Delgada, Azores	30.31	769.9	30.38	771.7	65.1	18.4	78	s.	9.8	4.4			3	W.		0	0		
Saint Paul de Lomdo	29.67	753.6	29.87	758.8	74.3	23.5	98	nw.	1.8	0.8			10			0	0		
Serra da Estrella	25.42	645.6	30.25	768.4	40.8	4.9	89	nw.	38.5	17.2			10			0.874	22.2	foggy	
RUSSIAN.																			
Akmolinski																			Major K. Lasarew.
Archangel	30.07	763.8	30.09	764.3	— 6.2	—21.2	84	ese.	9	4		0	3 ks			0	0		Capt. Sseliwerstow.
Astrakhan	30.34	770.6	30.26	768.5	9.3	—12.6	69	wnw.	7	3			1 s			0	0		Capt. Wisganow.
Barnaul	29.97	761.1	30.55	775.9	—11.6	—24.2	84	calm	0	0			0			0	0		Meteorological Obs'y.
Bielosersk	29.58	751.2	30.10	764.4	2.8	—16.2	95	se.	9	4		7 cs	0			0	0		
Dorpat	29.52	749.7	29.78	756.3	16.9	— 8.4	100	s.	2	1			10 n			0.043	1.1		Observatory.
Ekaterinburg	29.03	737.3	30.11	764.9	— 8.9	—22.7	90	n.	9	4			10			0.122	3.1	snowing	Meteorological Obs'y.
Elissawetgrad	29.57	751.0	30.05	763.3	20.7	— 6.3	64	ese.	4	2		0	1 s			0	0		
Kasan	29.82	757.3	30.12	765.0	— 1.3	—18.5	80	nnw.	4	2			10						Observatory.
Kem	29 90	759.5			— 6.0	—21.1	93	calm	0	0		0	1 s			0	0		
Kertch	29.90	759.5	29.92	760.0	28.2	— 2.1	81	ene.	7	3		0	0			0	0		Lagorio & Sastyrez.
Kieff	29.24	742 6	29.91	759.7	23.0	— 5.0	81	sse.	7	3			10ks;n						Observatory.
Libau	29.61	752.2	29.64	752.8	29.7	— 1.3	90	se.			1		10			0	0		E. Quaas.
Lugan	29.95	760.7	30.18	766.5	0.9	—17.3	84	e.	9	4			9			0.004	0.1		Meteorological Obs'y.
Moscow	29.03	752.6	30.19	766.7	— 8.1	—22.3	79	calm	0	0		0	0			0	0		
Nikolaiev	29.91	759.8	29 99	761.7	22.6	— 5.2	85	ese.	9	4		0	0			0	0		Capt. Kurdakow.
Pekin, China	30.30	769.5	30.44	773.1	25.2	— 3.8	27	calm	0	0		0	0						Physical Observatory.
Petrozavodsk	29.72	754.9	29.95	760.6	— 8.0	—22.2	77	se.	0	0		0	5 ks			0	0		Dr. Bergmann.
Pinsk	29.21	742.0			28.0	— 2.2	92	se.	11	5			10 s			0	0		
St. Petersburg	29.83	757.7	29.85	758.1	— 1.1	—18.4	89	se.	11	5			10			0	0		Central Physical Obs'y.
Sevastopol	29.60	751.9	29.77	756.1	42.1	5.6	46	ne.	7	3		5 cs	0			0	0		
Semipalatinsk	29.64	752.8	30.36	771 1	15.1	— 9.4	62	e.	13	6			9			0	0		Major Lasarew.
Staroi Bykhov	29.47	748.5	29.96	761.0	16.3	— 8.7	97	ese.	7	3			10			0	0		
Tashkend, Laboratory	28.60	726.4	30.23	767.9	39.2	4.0	62	calm	0	0			10			0	0	hv'y clouds	Teich, A. M.
Tiflis	28.76	730.6	30.24	768.1	37.9	3.3	48	se.	2	1		0	8 s			0	0		Physical Observatory.
Tomsk	30.30	769.5	30.63	777.9	—27.2	—32.9	84	calm	0	0		0	0						
Vladivostok	30.30	769 6	30.37	771.3	10.2	—12.1	48	n.	7	3		0	0			0	0		
Warsaw	29.16	740.6	29.00	751.7	29.5	— 1.4	78	sse.	11	5			10					heavy cl'ds	Astronomical Obs'y.
Wilna	29.32	744 7	29.76	756.0	21.9	— 5.6	93	se.	4	2			10					heavy cl'ds	Berg, Assistant.
Yeniseisk	30.26	768.7	30.60	777.2	—15.5	—26.4	87	nw.	2	1			10					light clouds	M. O. Marks.
SCOTTISH.																			
Monach Lt			29.62	752.3	38	3.3	90	nnw.			6	10	5	nnw.		0.3	8.	cloudy	J. Youngclause.
North Unst			29.32	744.7				nw.			4	0	3	nnw.		blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.70	754 4	29.80	757.0	57.7	14.3	65	W.	7.8	3.5		0	0			0	0	clear	Antonio Reve, Director.
Bilbao, Met. Obs'y	30.15	765.8	30.21	767.3	52.0	11.1	87	nw.	7.2	3.2			10			0.134	3.4	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.17	690.0	30.20	767.0	49.1	9.5	80	W.	16.3	7.3			8			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.91	708.8	30.17	766.2	52.5	11.4	69	nw.	22.4	10.0		0	1			0	0	almost clear	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Velocity.		Force.	Clouds. Amount and kind.		Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
									Miles p. hr.	Mtrs. p. sec		Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.			0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	29.92	760.0	30.08	764.0	62.4	16.9	71	nw.	2.2	1.0	.....	4	3	ese.	.....	0	0	cloudy..	Olayo Diaz, Director.
Oviedo	29.37	746.0	30.26	768.5	49.1	9.5	88	e.	12.5	5.6	.....	2 c	0	ne.	.....	0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.32	744.8	30.23	767.9	54.3	12.4	91	calm	0	0	.....	.....	10	.....	.....	0.307	7.8	covered	R. Gil Villanueva, Dir.
SPANISH.—(Sub-series.)																			
Manilla, Philippine Islands	29.96	761.0	30.02	762.5	75.6	24.2	84	nne.	2.2	1.0	.....	8 ck	0	e.	.....	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.21	767.3	30.31	769.9	54.1	12.3	79	wnw.	4.0	1.8	.....	.....	10	.....	nw.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.92	759.9	30.01	762.2	78.1	25.6	66	ne.	13.9	5.9	.....	4 c	4 k	ne.	ne.	0	0	d. clouds	Manuel Maese.
Tuguegarao, Philippine Id's	30.00	762.1	30.14	765.5	70.5	21.4	98	nnw.	4.5	2.0	.....	.....	10 n	.....	ne.	0.10	2.5	rainy	José L. Yrastorza.
SWEDISH.																			
Haparanda	29.74	755.4	29.79	756.7	2.8	—16.2	100	e.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	29.58	751.4	29.63	752.7	19.8	— 6.8	94	ne.	.....	.....	2	.....	10	.....	.....	0.315	8.0	.....	
Hernosand	29.43	747.4	29.48	748.7	36.7	2.6	89	se.	.....	.....	4	.....	10	.....	.....	0.185	4.7	.....	
Stockholm	29.32	744.6	29.49	749.1	34.7	1.5	93	s.	.....	.....	2	.....	10	.....	.....	0.043	1.1	.....	
Wisby	29.45	748.1	29.51	749.6	36.7	2.6	93	s.	.....	.....	4	.....	7	.....	.....	0.150	3.8	.....	
Sub-series.																			
Upsala	29.36	745.7	29.45	747.9	34.7	1.5	98	sse.	11.6	5.2	.....	.....	10	.....	.....	0.008	0.2	.....	S. G. Fineman.
SWISS.																			
Geneva	28.19	716.1	29.66	753.3	40.5	4.7	81	wsw.	.....	.....	3	.....	10	.....	.....	0.587	14.9	raining	The Observatory.
TURKISH.																			
Constantinople	.....	.....	29.76	755.8	50.5	10.3	71	w.	3	1.5	.....	.....	10	.....	sw.	0.169	4.3	raining	The Observatory.
Valona	.....	.....	29.77	756.1	57.4	14.1	.....	s.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.83	757.7	69.8	21.0	74	sw.	.....	.....	3	.....	10 n	.....	sw.	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.68	753.9	29.76	755.9	39	3.9	70	n.	1	0.4	.....	.....	10 n	.....	.....	0.59	15.0	light snow	J. O. Barnes.
Alpena, Michigan	29.07	738.4	29.78	756.4	30	— 1.1	88	w.	6	2.7	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.11	637.8	30.19	766.8	15	— 9.4	56	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	27.02	686.3	30.05	763.3	33	0.6	62	sw.	9	4.0	.....	.....	10 s	.....	sw.	0	0	cloudy	B. O. Lenoir.
Atlanta, Georgia	28.78	731.0	30.01	762.2	45.0	7.2	88	nw.	10	4.5	.....	.....	10 ks	.....	nw.	0.66	16.8	cloudy	H. C. Smith.
Atlantic City, New Jersey	29.75	755.6	29.76	755.9	38	3.3	89	w.	15	6.7	.....	c	2 s	.....	.....	0.72	18.3	clear	Jas. M. Watson.
Augusta, Georgia	29.76	755 9	29.96	761.0	50	10.0	86	w.	1	0.4	.....	0	0 s	.....	sw.	0.09	2.3	cloudy	John Healy.
Baltimore, Maryland	29.80	756.9	29.85	758.2	40	4.4	89	w.	4	1.8	.....	2 c	fg.	w.	.....	0.29	7.4	clear	Geo W Felger.
Barnegat, New Jersey	29.72	754.9	29.74	755.4	39.0	3.9	89	w.	18	8.0	.....	2 k	4 k	w.	w.	0.87	22.1	fair	G. A. Hill.
Behring Id., Behring Sea	29.70	754.4	29.68	753.9	20.4	— 6.4	.....	calm	0	0	.....	.....	10 n	.....	calm	0.10	2.5	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.20	716 3	29.96	761.0	15	— 9.4	83	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	A. Pritchard.
Benton, Fort, Montana	27.04	686.8	30.04	763.0	35	1.7	66	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	S. Wheaton.
Bismarck, Dakota	27.93	709.4	29.94	760.5	12	—11.1	83	calm	0	0	.....	10 ck	0	nw.	.....	0	0	cloudy	Cyrus Cramer.
Block Island, Rhode Island	29.54	750.3	29.57	751.1	47	8.3	93	n.	4	1.8	.....	.....	fg.	.....	.....	0.58	14.7	dense fog	J. T. Elker.
Boise City, Idaho	27.40	695.9	30.38	771.6	26	— 3.3	92	nw.	6	2.7	.....	.....	10 s	.....	.....	0.12	3.0	cloudy	B. E. Light.
Boston, Massachusetts	29.49	749.0	29.65	753.1	38.0	3.3	100	ne.	18	8.0	.....	.....	10m fog	.....	.....	0.97	24.6	light rain	O. B. Cole.
Brownsville, Texas	30.10	764.5	30.15	765.8	44.5	6.9	84	nw.	4	1.8	.....	0	3 s	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.04	737.6	29.84	757.9	33.8	1.0	100	sw.	16	7.2	.....	.....	10 s	.....	sw.	0.31	7.9	cloudy	W. Finn.
Buford, Fort, Dakota	27 79	705 9	30.03	762 7	23	— 5.0	73	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.44	747.8	29.75	755.6	33.6	0.9	93	s.	9	4.0	.....	.....	10 n	.....	s.	0.27	6.9	heavy snow	G. O. Schaeffer.
Cairo, Illinois	29.64	752.8	30.06	763.5	35.8	2.1	81	n.	2	0.9	.....	.....	10 s	.....	n.	0.03	0.8	cloudy	W. H. Ray.
Cape Henry, Virginia	29.84	757.9	29.86	758.4	41	5.0	100	nw.	10	4.5	.....	.....	10 ks	.....	nw.	0.44	11.2	cloudy	A. K. Alderson.
Cape May, New Jersey	29.78	756.4	29.81	757.2	39.0	3.9	89	w.	20	8.9	.....	3 c	0	nw.	.....	0.72	18.3	clear	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	29.94	760.5	29.96	761.0	61	16.1	93	w.	2	0.9	.....	.....	10 s	.....	.....	0.31	7.9	cloudy	F. W. Mixer.
Champaign, Illinois	29.08	738.6	29.95	760.7	29.0	— 1.7	67	sw.	16	7.2	.....	.....	10 s	.....	sw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	29.82	757.4	29.88	758.9	60	15.6	100	sw.	3	1.3	.....	.....	fg.	.....	.....	0.10	2.5	dense fog	J. H. Smith.
Charlotte, N. Carolina	29.00	736.6	29.90	759.4	41.0	5.0	100	nw.	1	0.4	.....	.....	fg.	.....	.....	0.59	15.0	dense fog	D. O'Donoghue.
Chattanooga, Tennessee	29.16	740.7	30.02	762.5	42.0	5.6	73	nw.	8	3.6	.....	.....	10 s	.....	nw.	0.02	0.5	cloudy	B. L. Goulding.
Cheyenne, Wyoming	23.80	604.5	30.08	764.0	31.7	— 0.2	47	nw.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	E. McGovern.
Chicago, Illinois	29.14	740.1	29.90	759.4	28.9	— 1.7	78	w.	11	4.9	.....	.....	10 s	.....	.....	0	0	cloudy	J. Mitchell.
Chincoteague, Virginia	29.82	757.4	29.84	757.9	40	4.4	89	nw.	11	4.9	.....	0	7 ks	.....	nw.	0.37	9.4	fair	C. F. Dickens.
Cincinnati, Ohio	29.31	744.5	30.01	762.2	37	2.8	72	w.	10	4.5	.....	.....	10 s	.....	w.	0.20	5.1	cloudy	R. B. Watkins.
Cleveland, Ohio	29.14	740.1	29.93	760.2	32.6	0.3	90	w.	7	3.1	.....	.....	10 s	.....	w.	0.26	6.6	cloudy	J. B. Newlin.
Coleman City, Texas	28.20	716.3	30.10	764.5	30	— 1.1	100	e.	1	0.4	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.06	738 1	29.97	761.2	35	1.7	69	w.	10	4.5	.....	.....	10 s	.....	.....	0.15	3.8	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.09	713.5	30.11	764.8	27.2	— 2.7	77	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.68	677.7	30.08	764.0	35	1.7	72	sw.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	W. B. Lamar.
Davenport, Iowa	29.22	742.2	29.93	760.2	28	— 2.2	77	w.	12	5.4	.....	8 ck	hz.	w.	.....	inap.	inap.	cloudy	R. R. Martin.
Davis, Fort, Texas	25.17	639.3	30.11	764.8	33	0.6	74	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.48	723.4	30.30	769.6	31.2	— 0.4	81	sw.	2	0.9	.....	0	0	.....	.....	0.24	6.1	clear	D. Moore.
Deadwood, Dakota	25.11	637.8	30.10	764.5	36	2.2	92	ne.	2	0.9	.....	.....	10 s	.....	.....	0.05	1.3	cloudy	F. Willson.
Delaware Breakwater, Del.	29.79	756.7	29.81	757.2	38	3.3	72	w.	14	6.3	.....	0	0	.....	.....	0.61	15.5	clear	T. S. Townsend.
Denison, Texas	29.19	741.4	30.04	763.0	36.0	2.2	79	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24.50	622.3	30.02	762.5	31.0	— 0.6	65	s.	6	2.7	.....	.....	9 s	.....	.....	0	0	cloudy	F. M. Neal.
Des Moines, Iowa	29.02	737.1	30.00	762.0	17	— 8.3	67	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. W. Conrad.
Detroit, Michigan	29.13	739.9	29.89	759.2	37.0	2.8	82	sw.	7	3.1	.....	.....	10 s	.....	w.	0.10	2.5	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.27	692.6	30.07	763.8	18	— 7.8	70	calm	0	0	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.15	740.4	29.92	760.0	25.3	— 3.7	73	w.	3	1.3	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.07	738.4	29.88	758.9	23	— 5.0	73	nw.	3	1.3	.....	.....	10 s	.....	nw.	0.01	0.3	cloudy	N. B. Conger.
Eagle Pass, Texas	29.34	745 2	30.18	766.6	32.0	0.0	78	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.28	642.1	30.20	767.1	27	— 2.8	88	sw.	14	6.3	.....	0	0	.....	.....	0 30	7.6	clear	J. M. Clifford.
Eastport, Maine	29.81	757.2	29.88	758.9	34.0	1.1	78	ne.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27 12	688.8	30.08	764.0	30	— 1.1	71	w.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.28	667.5	30.14	765.5	31	— 0.6	71	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.12	739.6	29.89	759.2	36	2.2	79	w.	10	4.5	.....	.....	10 s	.....	.....	0.28	7.1	cloudy	Peter Wood.
Escanaba, Michigan	29.04	737.6	29.76	755.9	30.0	— 1.1	85	w.	4	1.8	.....	.....	10 s	.....	w.	0.04	1.0	cloudy	George Heathcote.
Fredericksburg, Texas	28.31	719.1	30.13	765 3	32	0.0	81	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	30.08	764 0	30.13	765.3	47	8.3	77	nw.	4	1.8	.....	2 cs	0	sw.	.....	0	0	clear	E. O'C. Macinerney.
Grand Haven, Michigan	29.12	739.6	29.83	757.7	34.0	1.1	78	sw.	17	7.6	.....	.....	10 s	.....	sw.	0.01	0.3	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.23	640.8	30.11	764.8	31	— 0.6	81	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	Robert C. Lord.
Hatteras, North Carolina	29.84	757.9	29.86	758.4	58	14.4	100	nw.	3	1.3	.....	.....	10 s	.....	sw.	0.34	8.6	cloudy	R. M. Crawford.
Helena, Montana	25.68	652.3	30.06	763.5	37	2.8	61	nw.	13	5.8	.....	0	0 s	.....	.....	0.02	0.5	fair	N. O. Smith.
Henrietta, Texas	29.00	736.6	30.08	764.0	29	— 1.7	77	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. P. Sherry.
Huron, Dakota	28.40	721.3	29.94	760.5	13	—10.6	66	se.	6	2.7	.....	0	5 k	.....	se.	0	0	fair	S. W. Glenn.
Indianapolis, Indiana	29 13	739.9	29.98	761.5	34	1.1	75	sw.	4	1.8	.....	.....	10 ks	.....	w.	inap.	inap.	cloudy	O. Schutze.
Indianola, Texas	30.09	764.3	30.12	765.0	50.0	10.0	86	calm	0	0	.....	3 cs	0	se.	.....	0	0	clear	I. A. Reed.
Jacksboro, Texas	28 83	732.3	30.07	763.8	30	— 1.1	68	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	29.89	759 2	29.94	760.5	65	18.3	90	sw.	3	1.3	.....	.....	10 s	.....	.....	1.94	49.3	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.29	693.2	29.99	761.7	29	— 1.7	88	sw.	3	1.3	.....	.....	10 s	.....	nw.	0	0	cloudy	A. Schneider.
Keokuk, Iowa	29.26	743 2	29.97	761.2	23.0	— 5.0	73	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. Z. Gosewisch.
Key West, Florida	30.00	702.0	30.02	762.5	74.0	23.3	97	nw.	6	2.7	.....	.....	10 n	.....	sw.	0.03	0.8	light rain	R. H. Paxton.
Kittyhawk, North Carolina	29.91	759.7	29.93	760.2	46	7.8	93	ne.	6	2.7	.....	3 k	0	ne.	.....	0.39	9.9	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	28.95	735.3	30.03	762.7	42	5.6	92	nw.	3	1.3	.....	6 k	0	nw.	.....	0.19	4.8	fair	J. A. Cody.
La Crosse, Wisconsin	29.03	737.3	29.88	758.9	25	— 3.9	73	w.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.00	738.1	30.02	762.5	25	— 3.9	88	calm	0	0	.....	0	fg.	.....	.....	0	0	clear	A. W. Browne.
Lewiston, Idaho	29.40	746.7	30.28	769.1	37.5	3.1	56	e.	2	0.9	.....	0	0	.....	.....	0.08	2.0	clear	W. Bell.
Little Rock, Arkansas	29.71	754 6	30.04	763.0	35	1.7	89	ne.	2	0.9	.....	.....	fg.	.....	.....	0.02	0.5	dense fog	W. U. Simons.
Los Angeles, California	29.74	755.4	30.14	765.5	38	3.3	82	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.40	746.7	30.00	762.0	38	3.3	72	w.	12	5.4	.....	.....	10 s	.....	.....	0.12	3.0	cloudy	L. M. Dey.

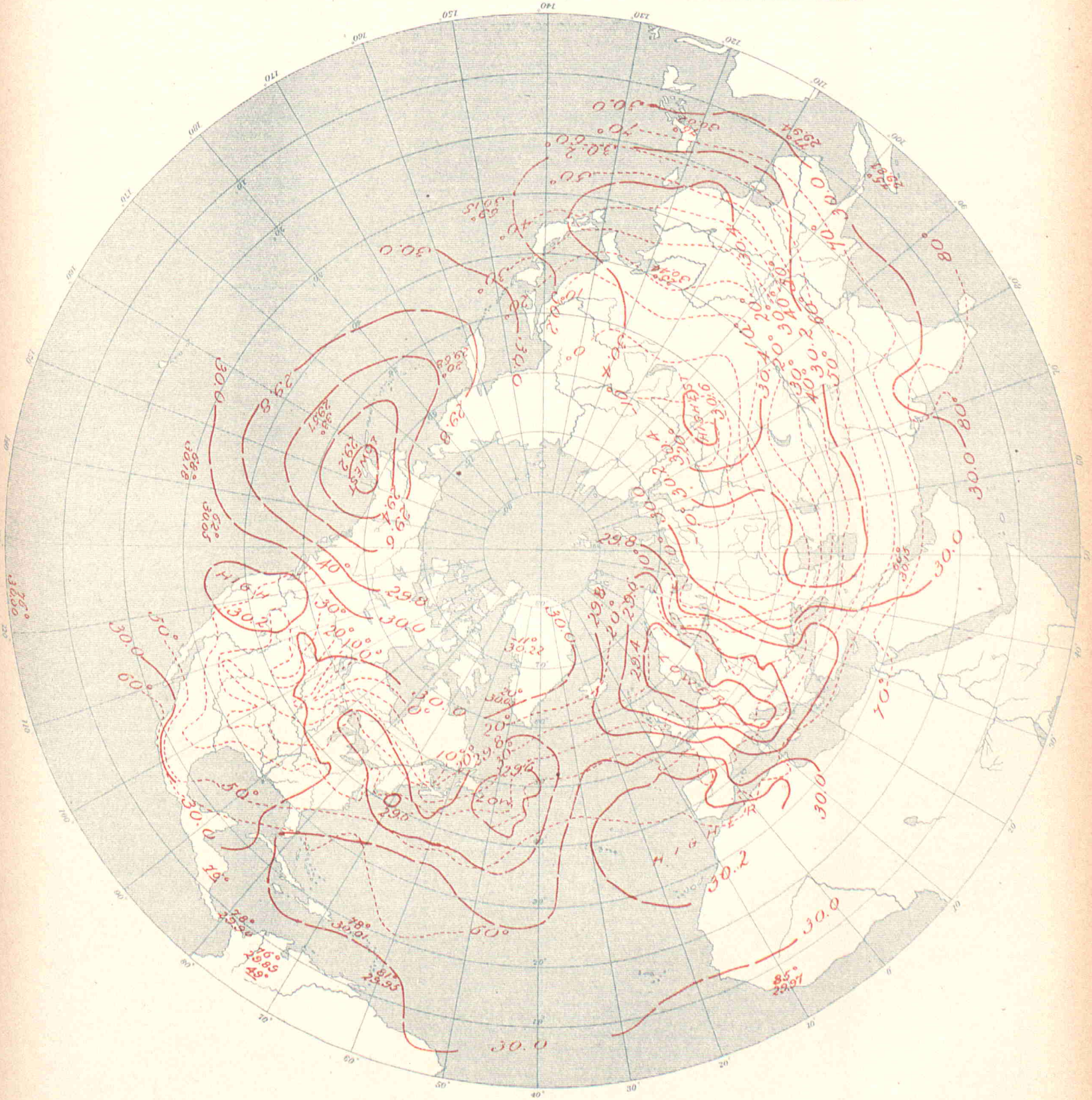
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.15	740.4	29.88	758.9	37	2.8	82	calm	0	0		0	fg.			0.77	19.6	clear	Lewis Duane.
Mackinaw City, Michigan	29.08	738.6	29.78	756.4	34.3	1.3	94	calm	0	0			10 n			0.18	4.6	light snow	F. R. Day.
Macon, Fort, North Carolina	29.87	758.7	29.88	758.9	52.0	11.1	100	sw.	2	0.9			10 n			0.34	8.6	light rain	C. A. Shaw.
Madison, Wisconsin	28.79	731.3	29.89	759.2	26	— 3.3	88	w.	8	3.6			10 n			inap.	inap.	light snow	F. P. Chaffee.
Maginnis, Fort, Montana	25.38	644.6	29.92	760.0	35	1.7	49	w.	14	6.3			10 s		nw.	0	0	cloudy	F. Burke.
McKavett, Fort, Texas	27.73	704.3	30.11	764.8	29	— 1.7	80	sw.	4	1.8		0	0			0	0	clear	J. E. Thatcher.
Marquette, Michigan	28.92	734.6	29.70	754.4	34	1.1	88	w.	6	2.7			10 n			0.13	3.3	light snow	J. Gilligan.
Memphis, Tennessee	29.73	755.1	30.09	764.3	33	0.6	100	calm	0	0			10 s			0.08	2.0	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.05	737.9	29.86	758.4	32	0.0	60	sw.	12	5.4			10 s			inap.	inap.	cloudy	W. Line.
Missoula, Fort, Montana	26.74	679.2	30.20	767.1	34	1.1	72	nw.	14	6.3		0	0			0.00	1.5	clear	I. H. Young.
Mobile, Alabama	30.03	762.7	30.07	763.8	48.8	9.3	77	nw.	4	1.8			10 s		nw.	0	0	cloudy	C. A. Read.
Montgomery, Alabama	29.79	756.7	30.03	762.7	47.4	8.6	91	nw.	5	2.2			10 s		nw.	0.03	0.8	cloudy	J. B. McLaughlin.
Moorhead, Minnesota	28.80	731.5	29.91	759.7	— 6	—21.1	62	se.	4	1.8		0	0			0	0	clear	H. Bessant.
Morgantown, W. Virginia	28.87	733.3	29.94	760.5	41.5	5.3	72	sw.	7	3.1			10 s		sw.	0.34	8.6	cloudy	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.36	593.3	29.99	761.7	19.0	— 7.2	100	e.	66	29.6			10n;fg		e.	0.27	6.9	light snow	B. S. Pague.
Nashville, Tennessee	29.43	747.5	30.04	763.0	41.0	5.0	73	nw.	4	1.8			10 ks		nw.	0.03	0.8	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	29.55	750.6	29.67	753.6	35.5	1.9	94	n.	12	5.4			10 s		n.	1.05	26.7	cloudy	J. H. Sherman.
New London, Connecticut	29.62	752.3	29.67	753.6	38	3.3	100	n.	7	3.1			10 n		n.	0 17	4.3	light rain	J. G. Lynch.
New Orleans, Louisiana	30.00	762.0	30.06	763.5	51.5	10.8	68	n.	7	3.1			10 s		n	0	0	cloudy	L. Dunne.
Newport, Rhode Island	29.55	750.6	29.60	751.8	42.0	5.6	100	ne.	3	1.3			10n;fg			0.82	20.8	heavy rain	W. McGillivray.
New York, New York	29.57	751.1	29.76	755.9	38	3.3	89	w.	4	1.8			10 s		nw.	0.45	11.4	cloudy	J. B. Merrill.
Norfolk, Virginia	29.84	757.9	29.87	758.7	45	7.2	93	n.	4	1.8			10ks;fg		w.	0.30	7.6	cloudy	Wm. Davis.
North Platte, Nebraska	26.85	682.0	30.01	762.2	17.6	— 8.0	72	calm	0	0		0	5 s			0	0	fair	E. F. Brady.
Olympia, Washington T'y.	30.19	766.8	30.23	767.8	32.0	0.0	78	s.	3	1.3		10 ks	0	nw.		0.01	0.3	cloudy	J. Dascomb.
Omaha, Nebraska	28.75	730.2	30.04	763.0	13.5	—10.3	74	calm	0	0		0	sk			0	0	clear	A. Pollak.
Oswego, New York	29.38	746.2	29.73	755.1	39.5	4.2	86	w.	16	7.2			10 s		w.	0.42	10.7	cloudy	J. G. Linsley.
Palestine, Texas	29.54	750.3	30.12	765.0	38.0	3.3	89	w.	6	2.7		0	0			0.01	0.3	clear	L. M. Pindell.
Pensacola, Florida	30.04	763.0	30.06	763.5	50.0	10.0	77	nw.	5	2.2			10 s		nw.	0	0	cloudy	M. McGauran.
Philadelphia, Pa	29.69	754.1	29.80	756.9	42.5	5.8	83	nw.	6	2.7			10ks;fg		nw.	0.43	10.9	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.56	446.0	30.22	767.6	9	—12.8	87	n.	18	8.0		0	8 s		n.	0	0	cloudy	H. Hall.
Pioche, Nevada	24.02	610.1	30.19	766.8	33.4	0.8	62	nw.	12	5.4		2 c	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.07	738.4	29.93	760.2	37.0	2.8	89	sw.	4	1.8			10 s		sw.	0.26	6.6	cloudy	W. A. Reid.
Poplar River, Montana	27.58	700.5	29.94	760.5				nw.			1		10 s			0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.08	764.0	30.08	764.0	51.1	10.6	69	nw.	13	5.8			10 s		nw	0	0	cloudy	H. B. Boyer.
Port Huron, Michigan	29.13	739.9	29.86	758.4	31.6	— 0.2	94	sw.	7	3.1			10 s			0.03	0.8	cloudy	W. O. Bailey.
Portland, Maine	29.68	753.9	29.73	755.1	33.5	0.8	83	ne.	15	6.7			10 n		ne.	0.20	5.1	light sleet	W. W. Eichelberger.
Portland, Oregon	30.18	766.6	30.25	768.3	38.2	3.4	89	calm	0	0		0	fg.			0.15	3.8	light fog	M. L. Hearne.
Portsmouth, N. C.					54	12.2	93	sw.			1		10 s		sw.	0.25	6.3	cloudy	F. S. Coburn.
Prescott, Arizona	24.73	628.1	30.10	764.5	32	0.0	65	sw.	2	0.9			10 s			0	0	cloudy	W. H. Clendenon.
Provincetown, Mass	29.56	750.8	29.59	751.6	41.5	5.3	92	e.	20	8.9			10 n		e.	0.36	9.1	light rain	P. T. Jenkins.
Punta Rassa, Florida	29.98	761.5	29.99	761.7	66.5	19.2	92	sw.	6	2.7			10 n			0.38	9.7	light rain	W. J. Evans.
Red Bluff, California	29.96	761.0	30.33	770.4	49	9.4	100	n.	3	1.3			10 ks		s.	0.12	3.0	cloudy	J. R. Williams.
Rochester, New York	29.09	738.9	29.80	756.9	34	1.1	100	w.	16	7.2			10s;fg		w.	0.27	6.9	threatening	E. W. McGann
Roseburg, Oregon	29.67	753.6	30.24	768.1	40	4.4	86	e.	7	3.1			10 s		sw.	1.21	30.7	cloudy	J. J. Nanry.
Sacramento, California	30.21	767.3	30.29	769.4	47.8	8.8	93	nw.	4	1.8			10 s		nw.	0.03	0.8	cloudy	J. A. Barwick.
St. Louis, Missouri	29.39	746.5	30.04	763.0	29.0	— 1.7	100	sw.	8	3.6		4 cs	0	w.		0	0	fair	J. H. Weber.
St. Michael, Fort, Alaska	29.59	751.6	29.62	752 3	—17	—27.2	100	n.			1	0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	28.96	735.6	29.92	760.0	11.0	—11.7	80	sw.	4	1.8			10 s			inap.	inap.	cloudy	P. F. Lyons.
St. Vincent, Minnesota	28.92	734.6	29.91	759.7	— 6	—21.1	91	se.	2	0.9		7 k	0			0	0	fair	C. B Dilley
Salt Lake City, Utah	25.54	648.7	30.08	764.0	38	3.3	85	calm	0	0			10 n			0.09	2.3	light rain	J. Craig.
San Antonio, Texas	29.38	746.2	30.10	764.5	34.5	1.4	79	calm	0	0		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.04	763.0	30.11	764.8	44.2	6.8	80	n.	3	1.3		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.19	741.4	29.92	760.0	35.2	1.8	79	w.	6	2.7			10 s			0.03	0.8	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.70	754 4	29.73	755.1	38.0	3.3	89	w.	9	4.0		8 k	0	w.		0.64	16.3	cloudy	B. A. Blundon.
San Francisco, California	30.21	767.3	30.28	769.1	49	9.4	96	s.	1	0.4			fg.			0.08	2.0	dense fog	N. Gorom.
Santa Fé, New Mexico	23.11	587.0	30.10	764.5	18	— 7.8	61	e.	2	0.9		6 c	1 s			0	0	fair	H. U. Jones.
Savannah, Georgia	29.83	757.7	29.93	760.2	58.5	14.7	80	nw.	6	2.7			10 ks		nw.	0.40	10.2	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.22	666.0	30.05	763.3	31	— 0.6	62	w.	4	1.8		9 cs	0			c	0	cloudy	A. L. Mathews.
Shreveport, Louisiana	29.82	757 4	30.07	763.8	36	2.2	100	sw.	3	1.3		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	28.71	729.2	30.04	763 0	25.5	— 3.6	82	s.	4	1.8		0	0			0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.27	616.4	30.11	764.8	30.0	— 1.1	80	calm	0	0		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.46	748.3	29.52	749.8	37.6	3.1	62	e.	14	6.3		5 cs	0	e.		0.30	7.6	fair	F. W. Fickett.
Smith, Fort, Arkansas	29.52	749.8	30.02	762 5	29.0	— 1.7	88	calm	0	0		0	0			0	0	clear	J. B. Campbell.
Smithville, North Carolina	29.82	757.4	29.86	758.4	55	12.8	100	w.	3	1.3			fg.			0.05	1.3	dense fog	O. Parker.
Spokane Falls, Wash. Ter.	28.14	714.7	30.26	768.6	31	— 0.6	81	sw.	5	2.2		0	0			0.15	3.8	clear	H. Clifford.
Springfield, Illinois	29.25	742.9	29.98	761.5	30	— 1.1	68	sw.	6	2.7		0	0			inap.	inap.	clear	T. B. Jennings.
Springfield, Massachusetts	29.58	751.3	29.72	754.9	34.5	1.4	94	n.			1		10 n			1.06	26.9	raining	Charles Mayr.
Springfield, Mo	28.50	723.9	30.03	762.7	29	— 1.7	82	sw.	5	2.2		0	3 ks		sw.	0	0	clear	J. B. Marbury.
Starkville, Miss	29.60	751.8	30.10	764.5	37	2.8	82	w.	4	1.8		0	0			0.65	16.5	clear	C. Dill.
Stevenson, Fort, Dakota	27.88	708.1	29.94	760.5	14	—10.0	66	se.	1	0.4		7 cs	0			0	0	fair	W. Burrows.
Stockton, Fort, Texas	26.99	685.5	30.13	765.3	32	0.0	81	sw.	8	3.6		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	29.62	752.3	29.68	753.9	43.0	6.1	100	ne.	29	13.0			10 n		ne.	0.69	17.5	light rain	G. Liebmann.
Thomas, Camp, Arizona	27 31	693.7	30.13	765.3	29.5	— 1.4	75	se.			1		10 s			0	0	cloudy	J. T. Fitzgerald.
Toledo, Ohio	29.16	740.7	29.90	759.4	37	2.8	61	sw.	9	4.0			10 s			0.09	2.3	cloudy	A. Buell.
Tucson, Arizona	27.60	701.0	30.10	764.5	33	0.6	71	calm	0	0		8 cs	0			0	0	cloudy	J. L. Whiteside.
Umatilla, Oregon	29.94	760.5	30.32	770.1	32.5	0.3	94	se.	5	2.2		1 cs	0			0.04	1.0	clear	J. Daly.
Verde, Fort, Arizona					26.7	— 2.9	67	n.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.83	757.7	30.10	764.5	40.0	4.4	89	se.	5	2.2		0	hz.			0.05	1.3	clear	James Kenealy.
Visalia, California	29.89	759.2	30.27	768.8	39.3	4.1	96	calm	0	0		7 cs	0			0	0	fair	O. D. Stewart.
Washakie, Fort, Wyoming	24.23	615.4	30.00	762.0	22.0	— 5.6	84	calm	0	0			9 k			0	0	cloudy	T. M. Ambler.
Washington, D. C.	29.74	755.4	29.86	758.4	34.3	1.3	100	calm	0	0			fg.			0.42	10.7	dense fog	B. M. Pursell.
West Las Animas, Colorado	25.86	656.8	30.02	762.5	12.4	—10.8	58	nw.	7	3.1		2 c	0	n.		0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.19	741.4	29.82	757.4	40.5	4.7	77	w.	6	2.7			10 ks		w.	0.32	8.1	cloudy	B. F. Hough.
Wilmington, N. Carolina	29.82	757.4	29.88	758.9	59	15.0	93	n.	1	0.4			10 s			0.12	3.0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.78	654.8	30.32	770.1	37	2.8	64	s.	6	2.7		0	8 s		w.	0.02	0.5	cloudy	J. Grover.
Yankton, Dakota	28.56	725.4	30.00	762.0	2	—16.7	72	n.	6	2.7		0	0			0	0	clear	J. H. Atfield.
Yuma, Arizona	29.89	759.2	30.04	763.0	46.0	7.8	44	ne.	3	1.3			10 s		nw.	0	0	cloudy	W. S. Delano.
Sub-stories.																			
Bogota, U. S. Columbia	22.01	559.0			49.0	9.4	70	calm	0	0		1 c	0	w.		0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I.	29.91	759.7	29.97	761.2	72.7	22.6	91	calm	0	0		9 k	0	s.		0	0	cloudy	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	69	20.6	85	n.	1	0.4		0	0			0	0	fine	Robert Johnston.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	77	25.0	86	se.			2	4 c	5 k	e.	e.	0	0		Dr. C. J. Hering.
Puerto Berrio, U. S. Colombia	29.33	745.0	29.89	759.2	76	24.4	94	calm			0	1 c	2 s	calm	calm	0	0	clear	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					76	24.4	94	ne.			1	0	1 ks		ne.	0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.00	736.6	29.06	738.1	27	— 2.8	77	calm			0		5 s			0.04	1.0	fair	W. J. Fisher.
St. Thomas, W. I.	29.96	761 0	30.08	764.0	77	25.0	62	e.				1 k	3 k	e.	e.	0	0	fair	Aug. Walloe.
York Factory, B. A.	29.92	760.0	30.00	762.0	— 7.5	—21.9	79	nw.	9	4.0		5 k	2 s	w.	nw.	0	0	cloudy	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay	29.88	758.9	71	21.7	75	se.			1		5	e.				2	sse.	misty.
H. M. S. Audacious, N. 1° 21′ E. 103° 15′	29.86	758.4	79	26.1	90	nne.			1		1	nne.						showery.
H. M. S. Beacon, Lake Timsah, Egypt			70	21.1	71	sew.			3-4		0					2	ssw.	blue sky.
H. M. S. Boadecia, Simon's Bay, Cape Colony	29.92	760.0				nw.			3-4		7							showery.
H. M. S. Carysfort, Gulf of Suez, Egypt	29.93	760.2	70	21.1	90	se.			4		10	ssw.				2	sse.	d. clouds.
H. M. S. Champion, N. 3° 35′, E. 105° 24′	29.82	757.4	79	26.1	100	ne.			3		6					4	wnw.	d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.55	776.0	35	1.7	70	n.			1-2		10							d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island, B. A.	30.16	766.1	40	4.4	86	calm			0		5							d. clouds.
H. M. S. Constance, N. 40° 16′, W. 11° 40′	30.39	771.9	60	15.6		wnw.			3							4		d. clouds.
H. M. S. Curacoa, Yokohama, Japan			44.5	6.9	100	nw.			1		8							d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.71	754.6	70	21.1	66	ese.			1-3		3							squally.
H. M. Dock-Yard, Bermuda, W. I	30.06	763.5	64	17.8	78	s-w.			1-2		9	ssw.						d. clouds.
H. M. M. Eclipse, N. 8° 33′ E. 81° 13′	29.84	757.9	80	26.7		ne.			2-3		9							raining.
H. M. S. Fawn, S. 35° 15′, E. 21° 17′	29.63	752.6	66.5	19.2	79	wnw.			7		1					7	wnw.	blue sky.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.92	760.0	61	16.1	82	n.			3		10							overcast.
H. M. S. Iron Duke, N. 5° 20′, E. 97° 25′	29.87	758.7	75	23.9	95	ne.			5		10	ne.				2	n.	overcast.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	29.85	758.2	77.3	25.2	71	sse.			4		10					1	sse.	thnd'r storm.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.89	759.2	62	16.7		n.			3							2	n.	d. clouds.
H. M. S. Magpie, N. 32° 44′ E. 129° 51′	30.52	775.2	41.5	5.3	83	calm			0		8							dense mist.
H. M. S. Rambler, Port Belgrano, La Plata, S. A	29.79	756.7	67	19.4	79	se.			3		1							blue sky
H. M. S. Serapis, N. 34° 20′, E. 21° 10′	29.87	758.7	66.5	19.2	76	wnw.			3		7					3	wnw.	d. clouds.
H. M. S. Starling, S. 1° 27′, W. 5° 04′	29.89	759.2	78	25.6	90	sse.			2		2	sse.				1	sse.	d. clouds.
H. M. S. Superb, N. 36° 37′, E. 36° 09′*	29.83	757.7	56	13.3	80	sse.			4-6		7	wsw.				3	s.	raining.
H. M. S. Swiftsure, Callao Bay, Peru	29.99	761.7	65	18.3	100	s.			1		5							d. clouds.
H. M. S. Sylvia, Cordova Inlet, Patagonia	29.86	758.4	44	6.7	92	wnw.			1		10							raining.
H. M. S. Woodlark, Shat-el Arab river	30.05	763.3	65.5	18.6	78	se.			2		4	w.						d. clouds.
H. M. S. Zephyr, Chee-foo, China	30.47	773.9	26.5	— 3.1		calm			0		0							misty.
Portuguese Naval.																		
Tamega, Macao, China	30.37	771.4	51.8	11.0	52	n.			3		0							blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	29.81	757.2	50	10.0	78	nw.	3	1.3			10		nw.	0	0			cloudy.
Navy Yard, Portsmouth, N. H	29.74	755.4	36	2.2	100	e.	20	8.9			10		se.	0.5	13.			rainy.
Naval Hospital, Yokohama, Japan*	30.19	766.8	40	4.4	56	n.			1		10		sw.	0	0			cloudy.
Adams, Sitka, Alaska*†	29.56	750.8	38	3.3	63	ene.			2		10		ene.					cloudy.
Alaska, Mare Island, Cal	30.26	767.1	50	10.0	93	calm			0		0			0.125	3.2			clear.
Alliance, N. 26° 23′, W. 64° 47′	30.18	766.6	69	20.6	100	ese.			2		8			0	0	sm'h		cloudy.
Ashuelot, N. 31° 40, E. 124° 54′	30.59	777.0	46	7.8	85	nw.			2		5		nw.					fair.
Brooklyn, S. 35° 27′, W. 54° 42′	29.74	755.4	69	20.6	95	n.	5	2.2			5		calm	0	0	sm'h		fair.
Colorado, New York, N. Y	29.72	754.9	37	2.8	90	nw.	4	1.8			10		nw.	0.14	3.6			hazy.
Enterprise, Norfolk, Va	29.86	758.4	45	7.2	92	nw.			1		8							cloudy.
Essex, Callao, Peru	29.92	760.0	67	19.4	90	calm			0		10					sm'h		cloudy.
Franklin, Norfolk, Va	29.84	757.9	45	7.2	92	n.	4	1.8			10		var.	0.43	10.9			foggy.
Galena, Montevideo, Uruguay	29.76	755.9	71	21.7	90	se.			2		8		sse.			long	se.	fair.
Hartford, S. 40° 10′ W. 78° 47′*	30.15	765.8	54	12.2	79	ssw.			4		5		s.	driz.	driz.	mod.	s.	fair.
Independence, Mare Island, Cal	30.27	768.8	45	7.2	100	calm			0		2			0.05	1.3			foggy.
Iroquois, Callao, Peru	29.96	761.0	65	18.3	94	calm			0		10							overcast.
Jamestown, Boston, Mass	28 63	727.2	39	3.9	91	ene.			2		10							rainy.
Juniata, Fayal, Azores Islands*	30.26	768.6	66	18.9	100	sse.			5		5		s.	sli't	sli't	mod.	s.	fair.
Kearsarge, N. 20° 31′, W. 64° 42′	30.18	766.6	70	21.1	84	ese.			2		10		se.			long	ne.	cloudy.
Lackawanna, S. 7° 38′ W. 93° 10′*	29.88	758.9	71	21.7	80	ese.			4		5		se.			sm'h	se.	fair.
Lancaster, Genoa, Italy*	29.30	744.2	42	5.6	91	n.			5		5		n.			sm'h		fair.
Michigan, Erie, Pa	29.84	757.9	34	1.1	100	w.			3		10		ne.					cloudy.
Minnesota, New York, N. Y	29.74	755.4	38	3.3	100	nnw.	12	5.4			10							cloudy.
Monocacy, Nagasaki, Japan	30.45	773.4	45	7.2	84	nnw.			1		8		w.					fair.
New Hampshire, Newport, R. I	29.61	752.1	42	5.6	100	calm			0		10		calm			sm'h		rainy.
Nipsic, Lisbon, Portugal*	30.30	769.6	60	15.6	76	nne.			2		10					sm'h		cloudy.
Onward, Callao, Peru	30.06	763.5	65	18.3	94	calm			0		10		n.			long	w.	misty
Palos, Tientsin, China*	30.35	771.6	23	— 5.0	100	nw.			1		0							clear.
Pensacola, S. 1° 01′, W. 81° 17′*	29.81	757.2	72	22.2	85	s.			1		5		s.	0	0	sm'h		fair.
Powhatan, Boston, Mass	29.68	753.9	40	4.4	91	e.			3		10							raining.
Quinnebaug, Villefranche, France*	29.36	745.7	61	16.1	30	ssw.			3-4		0					sm'h		clear.
Ranger, Acapulco, Mexico	29.93	760.2	75	23.9	81	calm			0		2		calm			sm'h		fair.
Richmond, Nagasaki, Japan*	30.42	772.7	41	5.0	83	ne.			1		5		ne.	0	0			fair.
Saratoga, New York, N. Y	29.83	757.7	37	2.8	80	w.			2		10		w.	light	light	sm'h		overcast.
St. Louis, League Island, Pa	29.98	761.5	37	2.8	90	w.			2		8		nw.	0.48	12.2			fair.
Tennessee, N. 26° 34′ W. 64° 34′	30.16	766.1	70	21.1	75	ese.	4	1.8			8			0	0	long	e.	cloudy
Vandalia, N. 26° 35′, W. 64° 33′*	30.18	766.6	68	20.0	78	ese.			1		10		calm			long	ne.	cloudy.
Wabash, Boston, Mass	29.65	753.1	39	3.9	91	e.	4	1.8			10		e.	0.62	15.8			rainy.
Wachusetts, Mare Island, Cal*	30.16	766.1	46	7.8	100	var.			1		1		calm	0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.05	763.3	51	10.6	93	nw.			2		2		w.	0.6	15.			fair.
Yantic, N. 26° 35′, W. 64° 54′	30.31	769.9	68	20.0	69	ne.			2		10					long	ne.	cloudy.
Merchant Marine.																		
S. S. Grecian, Harve, France*	29.68	753.9	47	8.3	62	nnw.			7		9		nnw.	7 h'r	7 h'r			cloudy.
S. S. Scandinavian, N. 49° 18′, W. 42° 08	29.62	752.3	54	12.2		ese.			3		2		s.	3 h'r	3 h'r	cross	s.	misty.
S. S. British Crown, N. 41° 00′ W. 66° 30′†	29.72	754.9	44	6.7		e.			5		10		e.	9 h'r	9 h'r	mod.	ese.	overcast
S. S. British Prince, Mersey river, Eng†	29.68	753.9				nw.			8		3		nw.					squally.
S. S. Indiana, Philadelphia, Pa			40	4.4	82	nne.			4		10		ne.					rainy.
S. S. Lord Clive, Liverpool, Eng*†	29.55	750.6				nw.			6		4		nw.	sq'lls	sq'lls			
S. S. Lord Gough, N. 50° 29′, W. 38° 54′	29.72	754.9	51	10.6		sse.			3		10		sw.	shr's	sh'rs	cross		cloudy.
S. S. Ohio, Liverpool, Eng†	29.61	752.1	39	3.9	91	wnw.			5		4		nnw.					fair.
S. S. Pennsylvania, N. 47° 22′ W. 43° 13′†	29.56	750.8	47	8.3		e.			3		1		s.			long	ssw.	clear.
S. S. Castor, N. 49° 00′ W. 21° 45′*	30.11	764.7	50.0	10		nnw.			4		6		nnw.			4	nw.	fair.
S. S. Jason, N. 46° 20′, W. 47° 51′	29.45	748.0	36.5	2.5		nnw.			3		6 n					3	nw.	foggy.
S. S. Bolivia, N. 46° 37′, W. 47° 56′*†	29.59	751.6	38	3.3	90	sw.			3		fg.					sm'h	w.	foggy.
S. S. Dorian, Lisbon, Portugal*	30.21	767.3	60	15.6		n.			4		6		n.					showery
S. S. Galatia, N. 37° 00′, E. 3° 54′			69	20.6	50	w.			8		2		nw.	0	0	high	w.	fair.
S. S. Utopia, N. 35° 43′, W. 6° 45′†	30.42	772.7	65	18.3	68	w.			2		1		w.	0	0	sm'h	w.	clear.
S. S. Ailsa, N. 11° 04′, W. 83° 42′†	30.01	762.2	80	26.7	87	ne.			2		8		ne.	0	0	long	nne.	cloudy.
S. S. Ambrose, N. 15° 45′, W. 56° 37′†	30.12	765.0	79	26.1		ene.			3		2		ene.	2 h'r	2 h'r	1	ene.	clear.
S. S. City of Agra, S. 53° 05′, W. 171° 04′	30.01	762.2	53.2	11.8	86	nw.			5		10							foggy.
Bk. Commewyne, N. 31° 21′ W. 47° 43′	29.88	758.9	68.3	20.2	75	nw.			5		5							d. clouds.
S. S. Gordon Castle, N. 10° 48′, E. 64° 17′	29.92	760.0	80.3	26.8	82	nne.			3-4		2							d. clouds.
S. S. Inchkeith, S. 5° 00′, E. 91° 27′	29.85	758.2	82.2	27.9		s.			3		5							d. clouds.
S. S. Mexico, N. 24° 01′, W. 111° 42′†	30.12	765.0	65	18.3	53	nnw.			2		0					mod.	nw.	clear.
S. S. Marathon, N. 47° 25′, W. 8° 15′	30.08	764.0	54	12.2		nnw.			5		8		nw.			hv'y	nw.	cloudy
S. S. Scythia, N. 41° 40′, W. 56° 37′	29.75	755.0	49	9.4		nnw.			6		8		n.	0	0	mod.	nnw.	cloudy.
S. S. Colima, St. John's, N. F†	29.44	747.8				n.			1		8		n.	snow	snow			cloudy
S. S. France, N. 43° 01′, W. 59° 15′†	29.71	754.7	37.4	3		nne.			4		ck	0	nne.				n.	covered.
S. S. Labradore, N. 47° 07′, W. 49° 21′			42.8	6.0		w.			1					snow	snow	h'vy	sw.	
S. S. Wisconsin, N. 41° 40′, W. 64° 30′	29.72	754 9	40	4.4		ese.			4		10		sw.	0	0	sli't	e.	cloudy.
S. S. Wyoming, N. 45° 30′, W. 51° 29′	29.55	750.6	35	1.7		nnw.			3		7		nw.	0	0	mod	n.	misty.
S. S. Bohemia, N. 43° 17′, W. 44° 54′†	29.64	752.8	62	16.7		s.			5		6		se.	0	0	mod.	ese.	foggy.
S. S. Frisia, N. 41° 34′, W. 63° 59′	29.92	760.0	45	7.2		var.			2		9		nw.			sm'h	e	cloudy.
S. S. Gellert, N. 52° 27′, E. 3° 19′	29.35	745.5	50	10.0		nw.			6		10		n.	1 h'r	1 h'r	mod.	nw.	cloudy

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Rugia, N. 49° 39′, W. 12° 23′*	30.21	767.3	51.8	11		n.			5		5?		n.	0	0	4	w.	clear.?
S. S. Silesia, N. 47° 03′, W. 42° 05′†	29.75	755.6	53	11.7	96	ssw.			4		4		s.	0	0	6-7	sw.	hazy.
S. S. Vandalia, New York, N. Y.	29.78	756.4	39.2	4.0	98	wnw.			2		10		nw.	0	0			cloudy.
S. S. Mentmore, Liverpool, Eng.*	29.57	751.1				nw.			5		2		nw.					showery.
S. S. Hevelius, Liverpool, Eng.*†	29.55	750.6	46	7.8		w.			7		7		wsw.	2 h'r	2 h'r			light rain.
S. S. Sirius, Rio de Janeiro, Brazil.	29.80	756.9				s.			2		2		s.	0	0			clear.
S. S. Bulgarian, Mersey River, Eng.						wnw.			6		10		wnw.	3 h'r	3 h'r	high	nw.	
S. S. Colorado, N. 28° 12′, W. 91° 30′†	30.08	764.0	55	12.8		wnw.			4		7		wnw.	2 h'r	2 h'r	mod.	wnw.	cloudy.
S. S. Rio Grande, N. 26° 52′, W. 77° 00′†	30.13	765.3	78	25.6		ssw.			3		9		wsw.	0	0	long	ssw.	overcast.
S. S. Archimede, N. 37° 47′, W. 38° 38′†	29.83	757.7	70	21.1	70	ssw.			4		4?		sw.	0	0	h'vy	ssw.	cloudy.?
S. S. John Hopkins, Boston, Mass.			38	3.3		n			4		8		nw.	0	0			foggy.
S. S. Glenapp, N. 30° 54′, W. 13° 10′†	30.37	771.4				ne.			3		5		ne	0	0	light	ne.	
S. S. Glenfyne, S. 2° 57′, W. 37° 30′*†	29.58	751.3				se.			2		2		se.	0	0	sm'h	se.	clear.
S. S. Brooklyn, N. 55° 29′, W. 11° 38′			43	6.1		wnw.			6				nw.			7	nnw.	cloudy.
S. S. Chalmette, N. 26° 30′ W. 79° 50′†	30.03	762.7	76	24.4		s.			6		8		sw.	0	0	mod.	ne.	cloudy.
S. S. Lone Star, N. 32° 20′, W. 79° 18′†	29.84	757.9	66	18.9		wsw.			4		10			rain	rain	r'gh	var.	drizzling.
S. S. New York, N. 35° 00′, W. 75° 00′†	29.87	758.7	62	16.7		n.			6		7		n.			r'gh	e.	cloudy.
S. S. Denmark, N. 48° 48′, W. 30° 19′†	29.77	756.1	56	13.3		ssw.			4		10		w.	sh'rs	sh'rs	h'vy	w.	raining.
S. S. England, N. 43° 27′, W. 56° 54′	29.68	753.9				nw.			6		10		nw.	shr's	sh'rs	mod.	n.	cloudy.
S. S. Erin, N. 44° 41′, W. 44° 26′	29.54	750.3	52	11.1		ssw.			4		3		wnw.	8 h'r	8 h'r	long	w.	clear.
S. S. Helvetia, N. 51° 10′, W. 19° 30′	29.89	759.2	54	12.2		w.			5		10		w.	7 h'r	7 h'r	light	wsw.	heavy rain.
S. S. The Queen, N. 49° 46′ W. 9° 23′*	30.06	763.5	47	8.3		nw.			6		10			shr's	sh's	r'gh	nw.	dull.
S. S. City of Alexandria, N. 33° 32′, W. 76° 15′†	29.89	759.2	71	21.7		w.			6		10		nw.	4 h'r	4 h'r	h'vy	w.	misty.
S. S. City of Merida, N. 23° 09′, W. 82° 22′*†	29.90	759.4	78.8	28.8		ene.			1		5		ene.	0	0	light	ene.	fine.
S. S. Braunschweig, Porto Grande, Cape Verde Isl'ds	30.03	762.7	71.0	21.7	95	ne.			2		3		ne.	0	0	sm'h	ne.	fair.
S. S. Oder, N. 50° 37′ W. 21° 44′	30.05	763.3	54.5	12.5		wnw.			6		10		wnw.	2 h'r	2 h'r	rg'h	wnw.	covered.
S. S. Salier, N. 47° 56′, W. 41° 41′	29.61	752.1	57.2	14.0		sse.			4		5		sse.	6 h'r	6 h'r	h'vy	sse.	fair.
S. S. Belgic, San Francisco, Cal†	30.18	766.6	52	11.1	66	calm			0		3		w.	0	0			foggy.
S. S. Gaelic, N. 37° 26′, W. 146° 11′*	29.79	756.7	50	10.0	93	wsw.			8		6		wsw.			cross	w.	overcast.
S. S. Oceanic, N. 22° 19′, E. 115° 08′*	30.30	769.6	58	14.4	48	ne.			3		2		s.			2	ne.	clear.
S. S. Mississippi, N. 48° 17′, W. 123° 55′...*†	30.25	768.3	43	6.1	75	e.			4		3		w.					fair.
S. S. Willamette, N. 44° 10′, W. 124° 42′†	30.16	766.1	50	10.0	100	e.			6		4?		s.	0	0	high	w.	cloudy.?
S. S. Oregon, San Francisco, Cal†	30.23	767.8	49	9.4	93	calm			0									foggy.
S. S. Ancon, San Francisco, Cal†	30.22	767.6	47	8.3	62	w.			1		10		w.					foggy.
S. S. City of Chester, Eureka, Cal*†..	30.28	769.1	50	10.0	72	se.			6		0							clear.
S. S. Dakota, Strait of Fuca†..	29.99	761.7	50	10.0	79	s.			5		10		se.	12 h'r	12 h'r	mod.	var.	cloudy.
S. S. Orizaba, N. 32° 40′, W. 117° 14′*†	30.10	764.5	57	13.9	75	var.			1		0					mod.	sw.	clear.
S. S. State of California, Portland, Oregon*†	30.20	767.1	40	4.4		nw.			2		8		nw.	0	0			cloudy.
S. S. Australia, N. 34° 19′, W. 134° 55′	30.15	765.8	62	16.7	88	s.			5		10		s.	0	0	long	w.	misty.
S. S. City of New York, Sydney, N. S. W.†	29.92	760.0	80	26.7	58	sw.			1		5		w.	0	0			fair.
S. S. City of Pekin, N. 46° 13′ W. 161° 19′†	29.57	751.1	33	0.6	70	wnw.			6		10		wsw.	0	0	mod.	w.	cloudy.
S. S. City of Rio de Janeiro N. 21° 01′, W. 105° 30′†	29.97	761.2	72	22.2	71	nne.			3		0			0	0	mod.	nw.	clear.
S. S. City of Sydney, N. 28° 31′, W. 143° 50′†	30.28	769.1	68	20.0	74	sse.			3		2		se.	0	0	h'vy	nw.	fair.
S. S. City of Tokei, N. 31° 11′, E. 149° 08′†	30.25	768.3	69	20.6		sw.			2		10		wnw.	2 h'r	2 h'r	mod.	s.	
S. S. Colima, Panama, Panama†	29.90	759.4	78	25.6	86	nw.			2		4		nw.	0	0			clear.
S. S. San José, N. 18° 26′ W. 104° 50′						ne.			2		2 k			0	0	long	wnw.	clear.
S. S. Zealandia, Sydney, N. S. W.	29.86	758.4	75	23.9	86	sw.			3				w.			mod.	e.	fine.
S. S. Muriel, Off Fire Island, N. Y.	29.63	752.6	50	10.0		nw.			5		10			5 h'r	5 h'r	mod.	ese.	cloudy.
S. S. Caracas, N. 30° 40′, W. 70° 52′†	30.12	765.0	71.5	21.9	83	sw.			6		10		w.	6 h'r	6 h'r	mod.	wsw.	cloudy.
S. S. Claudius, N. 16° 10′, W. 80° 50′†	30.07	763.8				ne.			5		2		ne.	sq 'lls	sq 'lls	short	ene.	fair.
S. S. Valencia, N. 13° 30′, W. 68° 30′†	30.01	762.2	82	27.8	85	ne.			3		5		e.	3 h'r	3 h'r	h'vy	ne.	light rain.
S. S. Belgenland, Jersey City, N. J.	29.77	756.1	39	3.9	73	nw.			3		3		nw.	10 h'r	10 h'r			clearing.
S. S. Pennland, N. 48° 26′, W. 37° 36′			56	13.3	100	s.			3		10			12 h'r	12 h'r	long	sw.	foggy.
S. S. Rhyuland, Antwerp, Belgium	29.47	748 5	41	5.0	82	wnw.			6		8		w.	2 h'r	2 h'r			squally.
S. S. Waesland, N. 48° 47′, W. 38° 46′	29.83	757.7	54	12.2	97	sse.			4		10		sw.	4 h'r	4 h'r	long	sw.	dense fog.
S. S. P. Caland, N. 41° 25′, W. 60° 34′			45.5	7.5	92	var.			3		8		ssw.			4	nne.	cloudy.
S. S. Zaandam, N. 49° 37′, W. 19° 50′	30.04	763.0	57.2	14.0	93	w.			2		10 n		sw.	20 h'r	20 h'r	3	w.	
S. S. State of Florida, N. 53° 37′, W. 160° 45′	29.92	760.0	50	10.0		nw.			1		10			0	0	light	nw.	cloudy.
S. S. State of Indiana, N. 48° 50′, W. 44° 25′†	29.54	750.3	50	10.0		s.			2		2		s.	8 h'r	8 h'r	r'gh	sw.	foggy.
S. S. Hekla, N. 50° 20′, W. 42° 30′*	29.59	751.5	50.9	10.5		sse.			3		10		s.	10 h'r	10 h'r	cross	ssw.	raining.
S. S. Iowa, N. 51° 05′, W. 14° 54′ *†	30.18	766.6	50.0	10.0		wsw.			5		8		w.	1 h'r	1 h'r	mod.	wnw.	cloudy.
S. S. Plantyn, N. 50° 00′, W. 32° 27′	29.98	761.5							2					8 h'r	8 h'r	sm'h	w.	light fog.
S. S. Baltic, N. 41° 53′, W. 63° 22′	29.93	760.2	37	2.8	100	nw.			1		10			0	0	mod.	n.	overcast.
S. S. Britannic, N. 51° 21′, W. 14° 22′†	29.82	757.4	54	12.2	100	ssw.			4		10		ssw.	2 h'r	2 h'r	mod.	wsw.	overcast.
S. S. Celtic, N. 41° 02′, W. 62° 56′†	29.96	761.0	55	12.8		ese.			3		10		se.	0	0	mod.	ne.	cloudy.
S. S. Germanic, N. 50° 09′, W. 22° 11′†	30.13	765.3	56	13.3		wsw.			5		10		w.	sh'rs	sh'rs	mod.	wsw.	overcast.
S. S. Lepanto, N. 42° 19′, W. 46° 00′*	29.56	750.8	58	14.4		s.			5		8		w.	0	0	h'vy	sw.	cloudy.
S. S. Marengo, N. 47° 12′, W. 35° 45′	29.99	761.7				sse.			6		10		s.	11 h'r	11 h'r	r'gh	sw.	hazy.
S. S. Salerno, Hull, Eng.*	29.51	749.5	58	14.4		nw.			4		10		w.	1 h'r	1 h'r	sm'h	nw.	cloudy.
S. S. Aries, N. 40° 20′, W. 73° 20′*†	29.60	751.8				wnw.			5		9		wnw.	20 h'r	20 h'r	h'vy	ne.	cloudy.
S. S. Catherine Whiting, Providence, R. I.†	29.72	754.9	80	26.7		ne.			1					rain	rain			rainy.
S. S. Saxon, N. 40° 06′ W. 73° 45′ †	29.72	754.9	40	4.4					6		10					sm'h		
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 26° 04′, W. 78° 53′†	30.04	763.0	75	23.9		sse.			4		2							hazy.
Bk. Adelaide, N. 30° 19′, W. 61° 08′*†	30.25	768.3	66	18.9		w.			3		8		wnw.	0	0	long	nnw.	cloudy.
Bg. Alcira, N. 38° 05′, W. 73° 58′	29.82	757.4	61	16.1		nw.			4		6		nnw.	4 h'r	4 h'r	cross	var.	cloudy.
Bk. Alpha, N. 28° 00′ W. 24° 00′†	30.20	767.1	70	21.1		ese.			6		3		se.	0	0	long	ne.	fair.
Schr. Annie Lewis, N. 29° 26′ W. 85° 31′†	30.11	764.8	58	14.4		nw.			4		5?		nw.	0	0	long	w.	cloudy.?
Bk. Anna Thormann, S. 33° 34′, E. 32° 32′*	29.86	758.5	71.1	21.7	70	calm			0		0			0	0	cross	var.	clear.
S. S. Antonio Lopez, Cadiz, Spain*	30.31	769.9	56	13.3	78	nw.			4		9			0	0	mod.		cloudy.
Bk. Aquidneck, S. 6° 11′, W. 34° 55′*†	30.10	764.5	90	32.2		var.			2				ene.	0	0	light	ese.	clear.
Bgt. Arthur, N. 12° 55′, W. 24° 31′ *†	30.01	762.2				ne.							ne.				ne.	misty.
Schr. Anna Holton, N. 24° 12′, W. 84° 58′†	29.99	761.7	80	26.7		se.			4		1?		sw.	1 h'r	1 h'r	mod.	sw.	cloudy.?
Bg. Belle of the Bay, N. 28° 20′, W. 87° 55′*†	30.02	762.5				nw.			6		10		nw.	0	0	cross	nnw.	cloudy.
Bk. Champion, N. 32° 25′, W. 74° 17′			70.0	21.1		wsw.			4		10		wsw.			mod.	sw.	cloudy.
Bg. Clara M. Goodrich, Key Francis, W. I.*†	30.00	762.0				e.			5		5		e.	0	0			fair.
Schr. C. R. Flint, N. 32° 05′, W. 78° 50′			71	21.7		wnw.			5		10		nw.	8 h'r	8 h'r	r'gh	ssw.	cloudy.
S. S. D. J. Foley, N. 28° 55′, W. 74° 44′*†	30.02	762.5	75	23.9		s.			6		8		s.	0	0	mod.	sse.	cloudy.
Bkt. David Preston, Pensacola, Fla			55.0	12.8		nne.					0			0	0			
Bk. E. L. Pettingill, N. 1° 07′, W. 124° 30′*†	30.00	762.0	76	24.4		se.			5		0			0	0	sm'h	se.	clear.
Schr. Edith R. Seward, N. 37° 18′, W. 76° 19′*†	29.90	759.4	44	6.7		w.			1		fg.			0	0			foggy.
S. E. J. Spicer, Liverpool, Eng.*	29.66	753.4	44	6.7		n.			8		7		n.	rain	rain			cloudy.
Bk. E. D. Bigelow, Verdon Roads, France†*	30.00	762.0				wnw.			8		2		nnw.					clear.
Bk. Essex, N. 0° 08′, E. 49° 58′*†	29.89	759.2	81	27.2		nne.			6					rain	rain	light	nne.	squally.
Schr. F. E. McDonald, Camden, Maine†	29.91	759.7	30	—1.1		ne.			1					snow	snow			snowing.
S. S. Foscolia, N. 38° 14′, W. 53° 24′						nw.			9		10		nw.	8 h'r	8 h'r	h'vy		cloudy.
Bk. Freya, N. 23° 15′, W. 81° 40′			74	23.3		ene.			2		1		e.	0	0	sm'h		fine.
Bg. George, N. 22° 48′, W. 60° 32′ *†	30.23	767.8				ese.			5		5		ne.	0	0	mod.	ne.	fair.
S. Geo. Nielson, N. 38° —′, W. 65° —′ *†	29.58	751.3	65	18.3	89	se.			6		4?		sw.	hv'y	hv'y	r'gh	s.	cloudy.?
Bk. Gronsvaer, S. 37° 22′, E. 178° 24′†	30.02	762.5	71.4	21.9		ssw.			2		3		sw.	0	0	mod.	ne.	fine.
Bk. Godeffroy, S. 53° 49′, W. 79° 06′†	29.81	757.2	43.7	6.5	88	wsw.			6		10		wsw.	12 h'r	12 h'r	long	wsw.	showery.
Bk. Great Surgeon, S. 26° 01′, E. 60° 40′ *†	30.18	766.6	78	25.6		se.			3		2		sw.	0	0	mod.	ssw.	clear.
Bk. Grey Eagle, N. 19° 18′, W. 30° 35′ *†	29.90	759.4				ene.			4		3		ne.	0	0			fine.
Bk. Hattie G. McFarland, N. 30° 40′, W. 67° 41′†	30.23	767.8	68	20.0		ssw.			5		6		sw.	0	0	long	e.	
Bk. Horace Scudder, Sandy Hook, N. J.†	29.91	759.7	40	4.4		wnw			5				w.	0	0		e.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Schr. Isabel Alberto, N. 38° 42′, W. 74° 22′ †	29.89	759.2	.....	.....	.....	nw.	.....	.....	6	.....	3	.....	nw.	sli't	sli't	mod	se.	clearing.
Schr. Jennie N. Huddell, N. 36° 50′, W. 75° 45′†	29.91	759.7	43	6.1	.....	nnw.	.....	.....	3	.....	10	.....	n.	0	0	h'vy	se.	threatening.
Bk. Joseph A. Ropes, S. 10° 20′, E. 48° 27′ *†	29.94	760.5	84	28.9	83	e.	.....	.....	2	.....	7	.....	e.	0	0	mod.	n.	cloudy.
Bkt. Josephine, N. 21° 02′, W. 32° 41′†	30.09	764.3	76	24.4	64	ese.	.....	.....	4	.....	8	.....	.....	1 h'r	1 h'r	mod.	ese.	squally.
S. S. J. W. Wilson, Pensacola, Fla†	29.99	761.7	51	10.6	.....	nnw.	.....	.....	2	.....	10	.....	nnw.	0	0	.....	.....	cloudy.
Light House Tender, Laurel, Pensacola, Fla †	30.02	762.5	55	12.8	.....	nw.	.....	.....	1–2	.....	10	.....	nw.	0	0	mod.	s.	cloudy.
Bk. Louise Adelaide, N. 23° 00′, W. 84° 50′ *†	30.02	762.5	70	21.1	.....	e.	.....	.....	3	.....	.....	.....	s.	3 h'r	3 h'r	small	ene.	showery.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.06	763.5	.....	.....	.....	.....	.....	.....	1	.....	10	.....	.....	12 h'r	12 h'r	sm'h	.....	showery.
S. S. Madrid, N. 48° 07′, W. 12° 32′*†	30.30	769.6	50	10.0	.....	nnw.	.....	.....	3	.....	2	.....	nw.	5 h'r	5 h'r	mod.	nw.	fair.
S. S. Malabar, N. 37° 59′, E. 15° 05′ †	29.97	761.2	.....	.....	.....	nw.	.....	.....	6	.....	0	.....	.....	0	0	sm'h	.....	clear.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	29.97	761.2	68	20.0	.....	sw.	.....	.....	1	.....	.....	.....	sw.	.....	.....	.....	.....	light rain.
S. Minnie N. Gerow, N. 27° 52′, W. 50° 03′*†	30.10	764.5	.....	.....	.....	wnw.	.....	.....	3	.....	7	.....	nw.	.....	.....	sm'h	nnw.	fair.
S. M. P. Grace, S. 47° 35′, W. 109° 07′ *†	30.05	763.3	53	11.7	.....	nnw.	.....	.....	6	.....	10	.....	n.	.....	.....	r'gh	nnw.	misty.
Bg. Myrtle, Clements Port, Nova Scotia *†	29.85	758.2	.....	.....	.....	calm	.....	.....	0	.....	10	.....	calm	0	0	.....	.....	
Bg. O. C. Clary, Gonaive Bay, Hayti, W. I. *†	30.04	763.0	84	28.9	91	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
Bk. Ottawa, N. 41° 31′, W. 22° 55′*	30.39	771.9	62	16.7	.....	sse.	.....	.....	3	.....	2	.....	s.	0	0	sm'h	w.	clear.
S. Paramita, San Francisco, Cal	.....	.....	52	11.1	.....	calm	.....	.....	0	.....	.....	.....	.....	0	0	.....	.....	
Bk. Pilgrim, N. 27° 20′, W. 69° 50′ *†	30.23	767.8	.....	.....	.....	ese.	.....	.....	3	.....	3	.....	s.	0	0	long	n.	fair.
S. S. Radnorshire, N. 25° 48′, E. 120° 46′*†	30.30	769 6	.....	.....	.....	ne.	.....	.....	7	.....	10	.....	ne.	12 h'r	12 h'r	long	ne.	cloudy.
Bk. Rebus, Dover, Eng.*	29.35	745 5	.....	.....	.....	wnw.	.....	.....	8	.....	8	.....	wnw.	0	0	sm'h	wnw.	hazy.
Schr. S. B. Hubbard, Hampton Roads, Va†	29.94	760.5	58	14.4	.....	calm	.....	.....	0	.....	10	.....	.....	6 h'r	6 h'r	long	ne.	hazy.
Bk. Scud, off Barnegat, N. J. *†	29.94	760.5	.....	.....	.....	wnw.	.....	.....	6	.....	3	.....	wnw.	6 h'r	6 h'r	long	e.	clearing.
Bk. Southern Belle, N. 43° 34′, W. 16° 20′*†	30.30	769.6	54	12.2	.....	w.	.....	.....	3	.....	5	.....	.....	0	0	.....	.....	fair.
S. S. Strathleven, N. 8° 42′, E. 109° 04′	29.94	760.5	77.0	25.0	95	nne.	.....	.....	6	.....	9	.....	nne.	light	light	6	nne.	showery.
Bk. Sunbeam, N. 38° 11′, W. 53° 37′	29.72	754.9	54	12.2	80	wnw.	.....	.....	8	.....	10	.....	wnw.	4 h'r	4 h'r	hv'y	wnw.	cloudy.
Schr. T. S. McLellan, N. 21° 19′, W. 61° 04′*†	30.15	765.8	69	20.6	.....	ene.	.....	.....	.....	.....	.....	.....	ene.	.....	.....	.....	ene.	
U.S. F. C. S. S. Fish Hawk, Washington, D. C †	30.01	762.2	39	3.9	82	calm	.....	.....	0	.....	6	.....	calm	0.30	7.6	.....	.....	foggy.
Bk. Vincenzo Accame, N. 32° 36′. W. 58° 45′ †	30.13	765.3	66.2	19.0	.....	w.	.....	.....	4	.....	5	.....	wnw.	2½ h'r	2½ h'r	.....	n.	
Bk. Wandering Jew, Montevideo, Uruguay †	29.77	756.1	69	20.6	.....	s.	.....	.....	5	.....	9	.....	s.	0	0	....	.....	threatening.
Bk. Warden Law, Tocapilla, Peru, S. A *	30.03	762.7	.....	.....	.....	calm	.....	.....	0	.....	2	.....	sw.	.....	.....	sm'h	sw.	fair
S. Wm. Woodbury, N. 54° 09′, E. 6° 59′	.....	.....	42	5.6	.....	w.	.....	.....	6	.....	6	.....	w.	.....	.....	sm'h	w.	cloudy.

International Chart I. December 23, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 24, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer, corrected for instrumental error and for temperature.		Barometer, reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.22	767.6	59.0	15.0	78	n.	.....	.....	2	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.09	764.3	60.1	15.6	77	w.	.....	.....	6	.....	4	.....	.....	0	0	cloudy	Thève.
La Calle	.....	.....	29.96	761.0	59.4	15.2	78	nnw.	.....	.....	5	.....	5	.....	.....	0.551	14.0	cloudy	Foufréde.
Tunis	.....	.....	29.87	758.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.24	768.0	56.8	13.8	76	w.	.....	.....	2	.....	4	.....	.....	0	0	cloudy	Pérès.
Tebessa	.....	.....	30.06	763.5	45.7	7.6	80	nw.	.....	.....	1	.....	4	.....	.....	0	0	cloudy	Dognon.
Geriville	.....	.....	.....	.....	42.4	5.8	82	nw.	.....	.....	10	.....	4	.....	.....	0	0	cloudy	Louchamp.
Laghouat	.....	.....	30.15	765.8	57.2	14.0	41	nw.	.....	.....	3	.....	2	.....	.....	0	0	fair	Abraham.
Biskra	.....	.....	30.11	764.9	63.0	17.2	38	nw.	.....	.....	1	.....	6	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	30.12	765.0	30.21	767.3	57.9	14.4	70	s.	7	3.1	.....	.....	8	.....	.....	0.09	2.3	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	28.94	735.0	29.50	749.3	35.6	2.0	89	sw.	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.60	726.4	29.39	746.4	30.2	— 1.0	100	wnw.	3.8	1.7	.....	.....	10	.....	.....	0.217	5.5	.....	Dr. Wierzbiski.
Eperies	28.40	721.4	29.30	744.2	33.8	1.0	96	calm	.....	.....	0	.....	10	.....	.....	0.315	8.0	.....	Julius Mikolik.
Gratz	28.22	716.8	29.50	749.4	31.3	— 0.4	87	w.	.....	.....	1	.....	10	.....	.....	0.394	10.0	.....	Andreas Rospini.
Hermannstadt	27.83	706.8	29.26	743 3	37.8	3.2	81	sw.	.....	.....	2	.....	10	.....	.....	0.217	5.5	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.17	715.5	29.55	750.5	32.9	0.5	80	nw.	.....	.....	2	.....	10	.....	.....	0.287	7.3	.....	The Staff.
Lemberg	28.34	719.9	29.35	745.6	31.3	— 0.4	90	se.	.....	.....	2	.....	10	.....	.....	0.024	0.6	.....	Dr. T. Stanecki.
Pola	29.38	746.2	29.49	749.1	44.8	7.1	82	nw.	.....	.....	1	.....	5	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	28.78	731.0	29.23	742.5	36.7	2.6	96	se.	.....	.....	1	.....	10	.....	.....	0	0	dense fog	Joseph Midlussay, S. J.
Szegedin	29.06	738.0	29.35	745.4	32.7	0.4	92	w.	.....	.....	1	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.41	747.0	29.51	749.6	45.7	7.6	74	se.	.....	.....	1	.....	4	.....	.....	0	0	.....	Royal Academy.
Vienna	28.74	730.1	29.48	748.7	35.6	2.0	75	w.	.....	.....	2	.....	10	.....	.....	0.047	1.2	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.56	750.8	29.67	753.6	32.2	0.1	96	w.	6	2.7	.....	.....	6	.....	.....	0.030	0.8	d. clouds	W. Boswell
Armagh, Observatory	29.58	751.3	29.82	757.4	37.5	3.1	94	ssw.	13	5.8	.....	.....	10	.....	.....	.....	.....	drizzling	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.82	757 4	41.0	5.0	65	wsw.	16	7.2	.....	.....	1	.....	.....	.....	.....	blue sky	John Hartnup.
Bolton, Sharples	29.26	743.2	29.80	756.9	34.2	1.2	89	nne.	.....	.....	.....	.....	.....	.....	.....	.....	.....	misty	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	80.0	26.7	74	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl.J.Surgenor, A. H C.
Cardington	.....	.....	.....	.....	38.0	3.3	83	nw.	.....	.....	0.4	.....	1	.....	.....	.....	.....	blue sky	John McLaren.
Chatham, School M. E	29.72	754.9	29.86	758.4	37.6	3.1	78	calm	.....	.....	0	.....	4	.....	.....	.....	.....	misty	Corpl. G. A. Pickles.
Falmouth, Observatory	29.71	754 6	29.94	760 5	45.8	7.7	84	nnw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	The Staff.
Fort Napier, Natal	27.49	698.2	29.70	754.4	70.0	21.1	46	ne.	.....	.....	2	.....	8	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.70	754.4	29.96	761.0	78.0	25.6	95	n.	.....	.....	6	.....	3	.....	.....	.....	.....	foggy	Sergt. John Robinson.
Gibraltar, Mediterranean	30.19	766.8	30.24	768.1	60.0	15.6	94	sw.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H C.
Glasgow, Observatory	29.44	747.8	29.64	752.8	38.6	3.7	91	w.	.....	.....	3	.....	10	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.69	754.1	29.87	758.7	37.0	2.8	76	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	The Staff.
Guernsey	29.65	753.1	29.95	760 7	45.0	7.2	68	nw.	.....	.....	1	.....	5	.....	.....	blank	blank	d. clouds	A. Collenette, F. M. S.
Kew, Observatory	29.85	758.2	29.88	758.9	38.3	3.5	77	wnw.	8	3.6	.....	.....	2	.....	.....	.....	.....	misty	The Staff.
Leicester, Museum	29.60	751.8	29.86	758.4	37.0	2.8	84	nw.	.....	.....	1	.....	3	.....	.....	.....	.....	d. clouds	J. C. Smith.
Malta, Mediterranean	.....	.....	.....	..	56.4	13.6	98	w.	.....	.....	2	.....	.....	.....	.....	blank	blank	blue sky	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.05	763.3	30.09	764.3	73.0	22.8	95	sw.	.....	.....	1	.....	9	.....	.....	.....	.....	overcast	C. S. Duncombe
Oscott, St. Mary's College	29.30	744.2	29.84	757.9	40.0	4.4	73	w.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.66	753.4	29.89	759.2	38.9	3.8	75	w.	.....	.....	2	.....	1	.....	.....	.....	.....	blue sky	The Staff.
Plymouth	29.86	758.4	29.94	760 5	42.0	5.6	91	calm	.....	.....	0	.....	10	.....	.....	.....	.....	gloomy	John Merrifield.
Sandwick Manse, Orkneys	29.49	749.0	29.60	751.8	35.3	1.8	80	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	snowy	Rev. C. Clouston, L L. D.
Scutari Cemetery, Turkey	29.37	746.0	29.43	747.5	57.6	14.2	71	s.	.....	.....	3	.....	9	.....	.....	blank	blank	gloomy	W. H. Lyne.
Sheffield	29.50	749.3	29.86	758.4	39.1	3.9	77	calm	.....	.....	0	.....	10	.....	.....	0	0	overcast	W. F. Cooper.
Silloth Rectory	29.71	754.6	29.74	755.4	39.8	4.3	86	w.	.....	.....	3	.....	10	.....	.....	0.015	0.4	drizzling	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.82	757.4	36.5	2.5	81	sw.	7	3.1	.....	.....	10	.....	.....	.....	.....	gloomy	I. New.
Stratfield Turgiss	29.67	753.6	29.89	759.2	39.1	3.9	77	w.	.....	.....	2	.....	0	.....	.....	.....	.....	blue sky	Rev.C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.86	758.4	29.90	759.4	47	8.3	85	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.81	757.2	29.83	757.7	46.6	8.1	94	se.	13	5.8	.....	.....	10	.....	.....	.....	.....	misty	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.66	753.4	29.70	754.4	31	— 0.6	96	ne.	12	5.4	.....	.....	10 n	.....	calm	0	0	cloudy	H. J. Cundall, C E
Chatham, N. B*	29.72	754.9	29.78	756.4	28	— 2.2	92	ne.	6	2.7	.....	.....	10 n	.....	ne.	0.02	0.5	cloudy	G. A. Blair.
Father Point, Quebec*	29.78	756.4	29.81	757.2	20	— 6.7	91	calm	0	0	.....	.....	10 n	.....	calm	.....	.....	light snow	J. McWilliams.
Fort Garry, Manitoba*	29.26	743.2	30.16	766.1	7	—13.9	91	sw.	2	0.9	.....	3 cs	0	sw.	.....	0	0	fair	James Stewart.
Halifax, N. S*	29.56	750.8	29.69	754.1	31	— 0.6	96	n.	2	0.9	.....	.....	fg.	.....	.....	0.200	5.1	foggy	A. Allison.
Kingston, Ontario*	29.46	748 3	29.81	757.2	31	— 0.6	100	w.	5	2.2	.....	10 c	0	n.	.....	0.02	0.5	light snow	A. P. Knight, M. A
Montreal, Quebec*	29.50	749.3	29.71	754.6	33	0.6	96	calm	0	0	.....	.....	10 n	.....	.....	0.35	8.9	sleeting	C. H. McLeod, C E.
Parry Sound, Ontario*	29.10	739.1	29.82	757.4	33	0.6	88	w.	11	4.9	.....	.....	10 n	.....	sw.	0.12	3.0	light snow	Rev. R. Mosley.
Port Dover, Ontario	29.22	742.2	29.94	760.5	29	— 1.7	100	calm	0	0	.....	.....	10 n	.....	calm	0.005	0.1	threatening	H. Morgan.
Port Stanley, Ontario	29.27	743.4	29.94	760.5	29	— 1.7	.....	w.	10	4.5	.....	.....	10 n	.....	.....	inap.	inap.	light snow	M. Payne.
Quebec, Quebec*	29.41	747.0	29.75	755.6	24	— 4.4	100	e.	.....	.....	6	.....	10 n	.....	.....	0.75	19.0	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.26	743.2	29.73	755.1	32	0.0	96	calm	0	0	.....	.....	8 n	.....	nw.	0.13	3.3	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.12	739.6	29 86	758.4	33	0.6	92	w.	11	4.9	.....	.....	10 s	.....	.....	0.16	4.1	light snow	
St. Andrews, N. B	29.66	753.4	29.72	754.9	28	— 2.2	94	ne.	3	1.3	.....	.....	10 n	.....	.....	0.21	5.3	cloudy	
Sydney, C. B*	29.63	752.6	29.69	754 1	32	0.0	92	n.	1	0.4	.....	8 ck	2 s	.....	.....	0	0	fair	T C. Hill, C. E
Toronto, Ontario*	29.50	749.3	29.89	759.2	30	— 1.1	88	w.	6	2.7	.....	.....	10 ks	.....	w.	0.03	0.8	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.62	752.3	29.69	754.1	31	— 0.6	87	n.	1	0.4	.....	.....	10 k	.....	n.	0.07	1.8	cloudy	Lt. F. E. Wilmot, R N.
Sub-stations.																			
Mount Forest	28.41	721.6	29.48	748.8	28.0	— 2.2	100	w.	.....	.....	2	.....	10 s	.....	.....	0.034	0.9	light snow	Wm. Wylie.
St. Johns, Newfoundland	29.33	745 0	29.59	751 6	31	— 0.6	100	nw.	2	0.9	.....	.....	10	.....	.....	inap.	inap.	snowing	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.94	760.5	29.97	761.2	66.7	19.3	90	wsw.	18.8	8.4	.....	0	2 s	.....	.....	0	0	hazy	John Duthie.
Cape Town, C G.H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.70	627.3	.....	.....	18.0	— 7.8	.....	calm	.....	.....	0	0	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.23	767.8	30.34	770.6	25.7	— 3.5	51	calm	2.9	1.3	.....	.....	0	.....	.....	0	0	.....	**Mission, S. J.**
Zi-Ka-Wei, near Shanghai	30.38	771.6	30.41	772.3	36.0	2.2	82	n.	3.4	1.5	.....	.....	10	.....	.....	0.016	0.4	covered.....	**M. Marc Dechevrens, S.J.**
DANISH.																			
Copenhagen	29.50	749.3	29.55	750.5	33.8	1.0	85	ene.	11	5	.....	.....	10	.....	.....	.....	.....	.....	**Oversergent Fischer.**
Fanoe	29.55	750.6	29.57	751.1	32.0	0.0	98	w.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	**Overloerer Lauridsen.**
Godthaab, Greenland	29.95	760.6	29.99	761.7	18.1	— 7.7	83	ene.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	**S. Kleinschmidt.**
Ivigtut, Greenland	29.93	760.3	29.95	760.8	22.1	— 5.5	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	snowing	
Jacobshavn, Greenland	30.00	762.1	30.05	763.3	— 2.2	—19.0	.....	e.	.....	.....	4	.....	1	.....	.....	.....	.....	snowing.....	
Stykkisholm, Iceland	29.94	760.5	29.98	761.6	17.2	— 8.2	85	ne.	.....	.....	8	.....	8	.....	.....	.....	.....	.....	**A. O. Thorlacius.**
Thorshavn	29.51	749.6	29.55	750.5	24.8	— 4.0	89	calm	0	0	.....	.....	7	.....	.....	.....	.....	.....	**Overloerer Bergh.**
Vestervig	29.45	748.1	29.55	750.5	30.7	— 0.7	100	s.	.....	.....	2	.....	10	.....	.....	.....	.....	snowing.....	**Loerer Oesterboi.**
Upernavik, Greenland	30.14	765.5	30.19	766.7	—11.2	—24.0	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.50	749.2	30.17	766.3	43.2	6.2	97	nw.	.....	.....	1	.....	10	.....	.....	0.378	9.6	light rain.....	**M. Labroue, Director.**
Alençon, Normal School	29.39	746.6	29.95	760.6	40.6	4.8	96	sw.	.....	.....	1	.....	k	ese.	ese.	0	0	.....	**M. Nicot, Director.**
Arras, Engineer School	29.64	752.9	29.91	759.6	38.8	3.8	94	nnw.	.....	.....	3	.....	k	.....	sw.	0	0	.....	**M. Fénéon, Command't.**
Avignon, Normal School	29.84	758.0	29.92	760.0	45.3	7.4	57	n.	.....	.....	2	.....	0	.....	.....	0	0	clear.....	**M. Giraud, Director.**
Bar-sur-Seine	29.33	745.0	29.91	759.6	37.8	3.2	88	nnw.	.....	.....	1	.....	10	.....	nw.	0.059	1.5	covered.....	**M. Saillard, Director.**
Beauvais, Normal School	29.63	752.6	29.91	759.6	39.7	4.3	83	w.	.....	.....	1	.....	8	.....	nw.	0.189	4.8	very cloudy.	**M. Frère Eugène Marie.**
Besançon, Normal School	28.99	736.4	29.90	759.5	41.4	5.2	97	s.	.....	.....	1	.....	10 n	.....	sw.	0.142	3.6	raining.....	**M. Gobin, Director.**
Bordeaux, Observatory	29.73	755.1	29.99	761.8	46.9	8.3	92	s.	.....	.....	1	.....	10	.....	.....	0.217	5.5	raining.	**M. Rayet, Director.**
Bourges, Normal School	29.37	745.9	29.93	760.3	41.9	5.5	92	sw.	.....	.....	1	.....	k	.....	sw.	0.20	5.	.....	**M. Malet, Director.**
Brest, Naval Observatory	29.75	755.7	30.00	761.9	48.6	9.2	97	sw.	.....	.....	1	.....	10	.....	sw.	0.256	6.5	.....	**M. de Kermaingé, Dir.**
Caen, Normal School	29.88	759.0	29.96	760.9	44.2	6.8	71	w.	.....	.....	1	.....	8	.....	w.	0	0	very cloudy	**M. Berson, Director.**
Châlons-sur-Marne, N.Sch'l	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	**M. Jadot, Director.**
Charleville, Normal School	29.23	742.5	29.75	755.7	39.9	4.4	75	e.	.....	.....	1	.....	2	.....	.....	0.106	2.7	¼ covered...	**M. Grimard, Director.**
Clermont-Ferrand Obs'y	28.55	725.2	29.94	760.5	40.6	4.8	87	nw.	.....	.....	1	.....	10	.....	nw.	0.150	3.8	covered.....	**M. Allnard, Director.**
Cluny, Normal School	29.11	739.5	29.98	761.6	38.3	3.5	88	nw.	.....	.....	2	.....	7	.....	nw.	0.205	5.2	light fog.....	**M. de Villemontée, Dir.**
Commercy, Normal School	28.97	735.9	29.86	758.5	35.6	2	93	w.	.....	.....	1	.....	kn	w.	w.	0.441	11.2	.....	**Dr. Coulet, Director.**
Gap, Normal School	27.22	691.3	29.80	756.8	38.3	3.5	49	ne.	.....	.....	1	.....	3	.....	.....	0	0	.....	**M. Jeangirard, Director.**
Gréasque, du Rhone	28.69	728.7	29.84	757.8	43.0	6.1	78	nw.	.....	.....	4	.....	1	.....	nw.	0	0	.....	**M. Kina, Director.**
Grenoble, Normal School	29.17	740.9	29.96	760.9	36.9	2.7	93	ese.	.....	.....	1	.....	10 n	.....	ese.	0.992	25.2	foggy.....	**M. Ablard, Director.**
Guéret	28.28	718.2	29.86	758.5	49.1	9.5	97	wsw.	.....	.....	4	.....	10 n	.....	nw.	0.16	4.	covered.....	**M. Delorme, Dir.**
Lamballe, Normal School	29.69	754.0	29.97	761.2	46.4	8	91	wnw.	.....	.....	2	.....	5	.....	wnw.	0	0	foggy	**M. Ollitrault, Director.**
Lescar, Normal School	29.44	747.8	30.01	762.3	47.7	8.8	94	w.	.....	.....	1	.....	10	.....	.....	0.528	13.4	raining	**M. Chauvin, Director.**
Lorient, Naval Observatory	29.90	759.4	30.00	762.0	50.9	10.5	84	.....	.....	.....	.....	.....	8	s.	sw.	0.079	2.0	¼ covered...	**Lt. T. Carré, Director.**
Lyon, St. Genis-Laval	28.88	733.5	29.97	761.2	37.9	3.3	88	ne.	.....	.....	1	.....	10	.....	nnw.	0.067	1.7	light rain.....	**M. André, Director.**
Mans, Normal School	29.63	752.6	29.95	760.7	43.7	6.5	94	wnw.	.....	.....	1	.....	8	.....	nw.	0	0	very cloudy	**M. Piboën, Director.**
Marseille, Observatory	29.57	751.0	29.84	758.0	46.0	7.8	59	nw.	.....	.....	5.6	.....	6	.....	nw.	0	0	.....	**M. Stephan, Director.**
Montlouis	24.77	629.2	29.61	752.2	38.5	3.6	74	sw.	3.8	1.7	.....	.....	7	.....	.....	0	0	.....	**M. Caré for Dr. Fines.**
Montpellier, Normal School	29.76	756.0	29 94	760.5	49.6	9.8	62	nw.	.....	.....	6	.....	5	w.	.....	0	c	cloudy.....	**M. Galzin, Director.**
Nancy, Normal School	28.98	736.2	29.78	756.5	37.0	2.8	75	nw.	.....	.....	2	ck	0	nw.	.....	0.402	10.2	.....	**M. Hasse, Director.**
Nantes, Observatory	29.85	758.3	30.02	762.4	56.0	10	84	wsw.	.....	.....	0–1	.....	8 k; kn	.....	wnw.	0	0	.....	**M. Larocque, Director.**
Perpignan, Observatory	29.85	758.3	29.97	761.2	51.8	11.0	65	n.	9.4	4.2	.....	.....	9	nnw.	nw.	0	0	.....	**Dr. Fines, Director.**
Pic-du-Midi, Summit	21.05	534.7	.....	.....	15.8	— 9.0	.....	nw.	.....	.....	3–4	.....	10	.....	nw.	1.220	31.0	snowy.....	**M. Vaussenat.**
Privas, Normal School	28.87	733.4	29.98	761.5	39.2	4	80	s.	.....	.....	2	.....	hz	s.	s.	0	0	hazy	**M. Taillieu.**
Puy de Dôme Obs'y, Summit	24.90	632.4	.....	.....	25.5	— 3.6	100	w.	.....	.....	6	.....	10	.....	.....	0.622	15.8	snowing....	**M. Allnard, Director.**
Rochefort, Naval Obs'y	29.96	760.9	29.99	761.7	47.8	8.8	97	calm	.....	.....	0	.....	hz	.....	w.	0.71	18.	hazy	**Lt. E. Decante, Director.**
Roche-sur-Yon, N. School	29.76	755.8	29.98	761.4	48.7	9.3	97	w.	.....	.....	1	.....	10	.....	.....	0	0	covered.....	**M. Brotier, Director.**
Rodez, Normal School	27.83	706.8	30.04	763.1	37.4	3	94	w.	.....	.....	1	.....	10	.....	w.	0	0	covered.....	**M. Seger, Director.**
Rouen, Normal School	29.83	757.6	29.87	758.8	44.2	6.8	82	nw.	.....	.....	2	.....	10	nw.	.....	0.087	2.2	covered.....	**M. Mouillot.**
Saint Lô	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	**M. Delaplanche, Dir.**
Saint Maur, Observatory	29.73	755.1	29.89	759.3	41.4	5.2	76	wnw.	.....	.....	1	.....	10	.....	nw.	0.260	6.6	.....	**M. Renou, Director.**
Toulouse, Observatory	29.34	745.2	30.00	763.6	43.5	6.4	94	nw.	.....	.....	1	.....	10	.....	.....	0.441	11.2	covered.....	**M. Baillaud, Director.**
Tours	29.78	756.3	29.95	760.8	46.4	8.0	72	wnw.	.....	.....	1	1	1	nnw.	nw.	0.035	0.9	slightly cl'dy	**M. de Tastes.**
Versailles, Observatory	29.42	747.3	29.91	759.8	39.6	4.2	83	.....	.....	.....	.....	.....	.....	.....	.....	0.008	0.2	.....	**Dr. A. Bérigny, Director.**
Sub-series.																			
St. Martin du Hinx	29.89	759.2	30.04	763.0	53.1	11.7	95	w.	31.5	14.1	.....	.....	10 kn	.....	.....	0.776	19.7	raining.....	**M. Cartier, Director.**
GERMAN.																			
Ansbach	28.13	714.6	29.63	752.6	32.4	0.2	91	w.	.....	.....	6	.....	10	w.	.....	0.583	14.8	.....	**Prof. Jnedt.**
Bamberg	28.74	730.0	29.57	751.1	35.6	2.0	84	calm	.....	.....	0	.....	10	.....	.....	0.067	1.7	.....	**Prof. Dr. Hob.**
Berlin	29.29	743.9	29.47	748.5	31.1	— 0.5	96	nw.	.....	.....	2	.....	10	.....	.....	0	0	.....	**Prof. Dr. Arndt.**
Breslau	28.91	734.3	29.43	747.5	30.0	— 1.1	78	w.	.....	.....	2	.....	10	.....	.....	0.035	0.9	.....	**Royal University Obs'y.**
Carlsruhe	29.30	744.3	29.75	755.6	37.4	3.0	79	sw.	.....	.....	5	.....	10	w.	.....	0	0	.....	**Albert Senz.**
Cassel	28.81	731.8	29.52	749.9	36.3	2.4	85	nw.	.....	.....	2	.....	8	nw.	.....	0	0	.....	**Dr. H. Möhl.**
Frankfort-on-the-Main	29.30	744.2	29.67	753.6	38.8	3.8	83	w.	.....	.....	1	.....	9	.....	.....	0.039	1.0	.....	**Physical Society.**
Friedrichshafen	28.31	719.1	29.79	756.6	36.0	2.2	75	w.	.....	.....	9	.....	8	w.	.....	0.004	0.1	.....	**Wilhelm, Chief Tel.**
Hamburg	29.49	749.1	29.58	751.4	27.1	— 2.7	100	nne.	.....	.....	1	.....	10	.....	.....	0	0	foggy.....	**E. Preller.**
Kiel	29.53	750.1	29.55	750.5	33.4	0.8	91	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	**Prof. Dr. G. Karsten.**
Leipsic, Astrom'l Obs'y	29.11	739.3	29.54	750.3	31.6	— 0.2	85	wnw.	.....	.....	2	.....	2	.....	.....	0	0	hazy	**H. Leppig, Asst.**
Magdeburg	29.32	744.8	29.52	749.7	30.9	— 0.6	90	nw.	.....	.....	2	.....	7 k	.....	w.	0	0	.....	**Weather Observatory.**
Memel	29.54	750.3	29.59	751.5	28.4	— 2.0	92	e.	.....	.....	2	.....	10 8	.....	.....	.....	.....	.....	**Issermann.**
Munich	27.78	705.6	29.61	752.2	30.7	— 0.7	96	w.	.....	.....	6	.....	10	w.	.....	0.232	5.9	snowing.....	**Central Station.**
Neufahrwasser	29.45	748.0	29.47	748.4	29.7	— 1.3	90	se.	.....	.....	2	.....	10	.....	.....	0.138	3.5	light snow ..	**A. Lothes.**
Neustadt, Palatinate	29.18	741.2	29.70	754.4	38.3	3.5	75	w.	.....	.....	4	.....	8	w.	.....	0	0	.....	**Dicknether.**
Stuttgart	28.74	729.9	29.65	753.2	36.5	2.5	65	w.	.....	.....	5	.....	8	w.	.....	0	0	.....	**Prof. Dr. Schoder.**
Wustrow	29.52	749.8	29.55	750.5	32.5	0.3	100	ene.	.....	.....	1	.....	10	.....	.....	0.012	0.3	.....	**Profs. Brandes & Reimer**
GREEK.																			
Athens	29.13	739.8	29.51	749.6	62.4	16.9	.....	s.	.....	.....	3.5	0	1 k	.....	.....	0.004	0.1	.....	**Schmidt & Wourlisch.**
INDIAN.																			
Kurrachee	30.09	764.2	30.14	765.4	79.7	26.5	44	e.	16.0	7.2	.....	.....	0	.....	.....	0	0	blue sky.....	
Deesa	29.55	750.6	30.03	762.7	80.9	27.2	24	n.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky.....	
Bombay	29.93	760.2	29.97	761.2	80.6	27.0	68	wnw.	12.0	5.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Poona, Yarrowda	28.11	714.1	29.96	761.2	82.4	28.0	22	ese.	7.0	3.1	.....	.....	2	ese.	.....	0	0	d. clouds....	
Trichinopoly	29.71	754.5	29.99	761.7	79.7	26.5	57	ne.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast.....	
Belgaum	27 40	696.1	29.94	760.5	78.2	25.7	24	e.	7.0	3.1	.....	.....	2	s.	.....	0	0	d. clouds....	
Lahore	29.37	746.0	30.15	765.7	62.8	17.1	57	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Roorkee	29.13	739.9	30.06	763.6	66.0	18.9	52	calm	0	0	.....	.....	2	w.	.....	0	0	.....	
Agra	29.50	749 2	30.07	763.9	74.2	23.4	34	calm	0	0	.....	.....	2	.....	e.	0	0	d. clouds....	
Nagpur	28.99	736 3	30.04	763.0	78.2	25.7	36	calm	3.0	1.3	.....	.....	5	se.	.....	0	0	d. clouds. ..	
Jubbulpore	28.68	728 5	30.06	763.5	76.3	24.6	49	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Lucknow	29.67	753.7	30.06	763.6	69.3	20.7	46	calm	0	0	.....	.....	1	.....	.....	0	0	d. clouds....	
Allahabad	29.72	754.9	30.05	763.2	66.3	19.1	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Patna	29.89	759.1	30.08	764.0	68.5	20.3	52	wnw.	2.5	1.1	.....	.....	0	.....	.....	0	0	blue sky.....	
Hazaribagh	28.00	711.3	30.07	763.8	66.1	18.9	46	nnw.	6.5	2.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Cuttack	29.97	761.2	30.05	763.3	72.9	22.7	68	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Calcutta, Alipore	30.05	763.2	30.07	763.8	68.5	20.3	70	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Dhubri	29.93	760 2	30.05	763.3	67.4	19.7	77	calm	0.6	0.3	.....	.....	0	.....	.....	0	0	blue sky.....	
Chittagong	29.95	760.8	30.04	763.1	70.1	21.2	70	nw.	2.1	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Sibsagar	29.78	756.4	30.13	765.3	62.5	16.9	89	ne.	1.0	0.4	.....	.....	10	w.	w.	0.27	6.9	overcast.....	
Jeypore	28.60	726.6	30.08	764.0	72.2	22.3	53	nw.	4.9	2.2	.....	.....	0	.....	.....	0	0	blue sky.....	
ITALIAN.																			
Udine	29.08	738.7	29.50	749.4	41.2	5.1	76	se.	0.7	0.3	.....	.....	2	.....	.....	0.299	7.6	.....	**Prof. Giovanni Clodig.**

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	29.13	739.8	29.66	753.4	45.0	7.2	29	nnw	14.3	6.4			0			0.031	0.8		Prof. Schiapparelli.
Padua	29.39	746.5	29.50	749.4	43.7	6.5	48	wnw.	9.4	4.2			4	nw.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.75	730.2	29.69	754.1	44.8	7.1	53	nw.	3.1	1.4			0			0	0		Prof. F. F. Denza.
Genoa	29.44	747.7	29.63	752.7	48.2	9.0	27	n.	11.2	5.0			0			0	0		Prof. G. M. Garibaldi.
Mondovi	27.74	704.6	29.71	754.6	41.0	5.0	25	w.			4		0			0	0		Prof. D. C. Bruno.
Pesaro	29.52	749.8	29.57	751.1	47.5	8.6	62	nw.	0.7	0.3			5			0	0		Prof. Luigi Guidi.
Florence	29.32	744.6	29.58	751.2	46.4	8.0	47	ne.			2		0			0	0		Prof. Costantino Pittei.
Leghorn	29.45	748.1	29.54	750.3	52.0	11.1	27	nw.	17.4	7.8			1			0	0		Prof. P. Monte.
Rome	29.38	746.3	29.56	750.8	51.1	10.6	48	n.	1.3	0.6			2			0.315	8.0		Prof. P. Tachini.
Lecce	29.24	742.8	29.50	749.4	53.1	11.7	79	wnw.	13.7	6.1			4			0.213	5.4		Prof. C. de Giorgi.
Cosenza	28.68	728.4	29.59	751.5	45.3	7.4	71	nne.	3.8	1.7			10	ne.		1.673	42.5		Prof. D. Conti.
Cagliari	29.52	749.8	29.72	754.8	54.9	12.7	45	nw.			6		3			0.020	0.5		Prof. A. Pacinotti.
Palermo	29.45	748.0	29.71	754.5	49.8	9.9	54	nw.	26.2	11.7			10	nw.		0.205	5.2		Prof. G. Caccintore
Syracuse	29.60	751.9	29.65	753.0	56.8	13.8	46	w.	12.5	5.6			4	wnw.		0.012	0.3		Sig. Vincenzo Giuliano.
Sub-alpine.																			
Naples, S. R	29.01	736.9	29.54	750.2	50.7	10.4	63	w.	0	0			8	nw.		0.232	5.9		Prof. F. Brioschi.
Stelvio	21.64	549.6			9	—12.8	88	ne.			4		10			0	0	covered	Prof. P. F. Denza.
Valdobbia	21.66	550.1			11.7	—11.3	69	n.			0		10			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.30	769.5	30.32	770.3	31.5	— 0.3	93	calm			0		10 n		w.	0.031	0.8	snowing	Hattori.
Awomori	30.27	768.8	30.31	769.9	16.0	— 8.6	85	ssw.	1.2	0.5		0	0			0	0	clear	K. Ogawa.
Hakodate	30.28	769.0	30.29	769.3	17.5	— 8.1	74	n.	4.8	2.1		1	0			0	0	clear	
Hamamatsu	30.32	770.1	30.35	770.8	38.4	3.6	72	calm			0	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					36.3	2.4	86	nne.	0.7	2.9		0	0 ck		sw.	0	0	cloudy	
Kanazawa	30.23	767.9	30.34	770.6	35.0	1.7	90	se.	0.2	0.1		5	3		w.	0	0	cloudy	S. Endo.
Kioto	30.17	766.3	30.36	771.1	30.9	— 0.6		ssw.	1.2	0.5		9 cs	0			0	0	fair	M. Tojima.
Nagasaki, I. M. Obs'y	30.17	766.2	30.38	771.6	42.1	5.6	83	calm	0	0			10 s			0.020	0.5	overcast	S. Takahayashi.
Niigata	30.29	769.3	30.33	770.4	34.5	1.4	95	se.	4.3	1.9			10 n		w.	0.305	7.7	light rain	M. Moritu.
Nobiru	30.30	769.7	30.32	770.1	32.6	0.3	88	nnw.	2.0	0.9		5 ck	4 ks	w.		0	0	fair	H. Midzushima.
Numazu	30.28	769.0	30.31	769.9	34.2	1.2	83	calm			0	0 cs	0			0	0	fair	R. Kaneda.
Osaka	30.34	770 6	30.36	771.0	32.9	0.5	87	nne.	3.8	1.7		0	0			0	0	clear	H. Omura.
Supporo					12.0	—11.1	90	calm	0	0		1	0			0	0	clear	
Tokei Obs'y, Yeddo	30.24	768.0	30.32	770.1	32.6	0.3	94	nnw.	4.4	2.0		10k;cs	0	w.		0	0	clear	The Staff.
Wakayama	30.29	769.4	30.35	770.9	37.7	3.2	82	ene.	1.8	0.8		8 ck	0	w.		0	0	cloudy	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.86	758.4	30.04	763.0	81.4	27.4	63	e.	14.0	6.3			8 ks,kn			0.01	0.3	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.64	600.6	29.86	758.6	45.1	7.3	87	calm	0	0		0	0			0	0	clear	Prof. Vicente Fernandez.
Leon	24.31	617.5	30.18	766.6	42.8	6.0	89	nnw.			1	1	0	s.		0	0	clear	Prof. M. Leal.
Mazatlan	29.75	755.6	30.01	762.3	61.5	16.4	69	e.	1.6	0.8		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.66	585.8	30.22	767.5	44.6	7.0	70	calm	0	0		4 ck	5 ks			0	0	cloudy	The Staff.
Morelia	24.26	616.3	30.14	765.6	45.1	7.3	67	n.			2	1 c	0	s.		0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.92	607.6	30.08	763.9	40.3	4.6	66	calm	0	0		0	0			0	0	clear	M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.35	593.0	30.09	764.2	50.9	10.5	48	calm	0	0			10			0	0	covered	Prof. P. Spina.
Zacatecas	22.45	570.2	30.24	768.2	43.0	5.0	51	nw.	5.7	2.6		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.80	756.8	29.80	756.8	39.2	4.0		nw.			4					0.154	3.9		
Groningen	29.57	751.0	29.62	752.4	37.9	3.3		n.			4					0	0		
Helder	29.69	754.3	29.69	754.2	40.3	4.6		nw.			4					0	0		
Hellevoetsluis	29.74	755.5	29.74	755.5	40.3	4.6	71	n.			2					0.224	5.7		
Utrecht	29.69	754.0	29.73	755.2	39.2	4.0	82	nw.			2		5			0.091	2.3	cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.40	746.8	29.47	748.4	33.8	1.0	92	sse.	7	3			10			0.339	8.6	snowing	
Brono	29.40	746.8	29.44	747.8	33.8	1.0	65	ne.	9	4			5			0	0		
Christiania	29.39	746.6	29.54	750.4	33.8	1.0	89	sse.	2	1			10			0.008	0.2	snowing	
Gjæsvær	29.40	748.3	29.48	748.9	24.1	— 4.4		se.			6		0						
Lodingen	29.42	747.2	29.47	748.4	26.8	— 2.9	64	calm			0		1			0	0		
PORTUGUESE.																			
Angra, Azores	30.00	763.5	30.22	767.5	64.0	17.8	90	s.	15.0	6.7			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.26	743.3	30.27	768.9	59.0	15.0	75	wnw.	6.9	3.1			5			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.28	769.0	30.36	771.2	65.5	18.6	63	ese.	9.4	4.2			1	ne.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.02	762.6	30.39	771.9	55.2	12.9	92	n.	7.4	3.3			10			0	0		The Staff.
Ponta Delgada, Azores	30.24	768.0	30.31	769.8	65.1	18.4	75	s.	20.6	9.2			3			0.043	1.1		
Saint Paul de Loanda	29.72	754.9	29.92	760.0	77.4	25.2	80	nnw.	1.3	0.6			10			0	0		
Serra da Estrella	25 43	645.8	30.24	768.0	43.3	6.3	64	nw.	43.0	19.2			2			0.591	15.0	foggy	
RUSSIAN.																			
Akmolinski	28.85	732.9	30.05	763.3	4.5	—15.3	86	sw.	22	10			10 n						Major K. Lasarew.
Archangel	30.11	764.7	30.13	765.2	—17.7	—27.6	81	e.	9	4		0	0			0	0		Capt. Sseliwerstow.
Astrakhan	30.29	769.4	30.21	767.3	19.6	— 6.9	70	calm	0	0			0						Capt. Wisganow.
Barnaul	29.73	755.2	30.29	769.3	7.5	—13.6	79	ne.	4	2			10			0	0		Meteorological Obs'y.
Bielosersk	29.55	750.6	30.07	763.7	6.4	—14.2	94	ne.	2	1			10 n			0.012	0.3	snowing	
Dorpat	29.49	749.0	29.74	755.5	20.8	— 6.2	100	e.	2	1			10 n			0.039	1.0	foggy	Observatory.
Ekaterinburg	29.11	739.5	30.21	767.3	— 9.9	—23.3	88	nnw.	7	3			10			0.012	0.3		Meteorological Obs'y.
Elissawetgrad	29.28	743.6	29.76	755.9	19.2	— 8.8	80	ese.	20	9			10 s			0.004	0.1		
Kasan	29.89	759.1	30.19	766.9	— 5.6	—20.9	75	wnw.	4	2			10					snowing	Observatory.
Kem	29.90	759.5			— 0.4	—18.0	89	s.	4	2			10 n			0	0		
Kertch	29.68	753.9	29.70	754.4	33.8	1.0	94	calm	0	0			10 n			0	0		Lagorio & Sastyres.
Kieff	29.01	736.8	29.09	754.2	10.6	—11.9	89	se.	11	5			c;cs	10 ks				light clouds	Observatory.
Libau	29.55	750 5	29.57	751.1	26.8	— 2.9	87	e.			1		10			0	0		E. Quaas.
Lugan	29.79	756.7	30.02	762.4	10.8	—11.8	89	e.	13	6			10			0	0		Meteorological Obs'y.
Moscow	29.01	752.2	30.17	766.3	— 9.2	—22.9	80	ese.	3.4	1.5			0			0	0		
Nikolaiev	29.57	751.1	29.65	753 0	26.2	— 3.2	82	se.	13	6			10 n			0	0		Capt. Kurdakow.
Pekin, Ohlan	30.19	766.8	30.33	770.4	24.6	— 4.1	48	calm	0	0		0	0						Physical Observatory.
Petrosavodsk	29.72	755 0	29.95	760.6	5.0	—15.0	87	se.	7	3			10			Inap.	Inap.	light clouds	Dr. Bergmann.
Pinsk	29.02	737.2			22.5	— 5.3	90	ese.	34	15			10 s			0.004	0.1		
St. Petersburg	29.83	757.6	29.84	758 0	14.0	—10.0	94	ese.	7	3			10			0	0		Central Physical Obs'y.
Sevastopol	29.37	746.0	29.54	750.2	48.7	9.3	74	sse.	20	9			10 n			0	0	heavy cld's.	
Semipalatinsk	29.53	750 0	30.23	767.9	21.2	— 6.0	93	calm	0	0			10			0	0		Major Lasarew.
Staroi Bykhov	29.37	745.9	29.86	758.4	14.5	— 9.7	43	ese.	13	6			0	10 ks		0	0		
Tashkend, Laboratory	28.01	726.8	30.27	768.8	33.8	1.0	90	n.	4	2			10			0.303	7.7	snowing	Teich, A. M.
Tiflis	28.58	726.0	30.06	763.4	37.0	2.8	54	calm	0	0		0	6 s			0	0		Physical Observatory.
Tomsk	30.24	768.2	30.58	776.6	—17.5	—27.5	85	ne.	2	1		1 c	0						
Vladivostock	30.21	767.4	30.28	769 1	6.4	—14.2	68	calm	0	0		4 cs	0			0.008	0.2		
Warsaw	28.97	735.9	29.41	746 9	30.4	— 0.9	94	se.	7	3			10					heavy cld's.	Astronomical Obs'y.
Wilna	29.16	740.6	29.60	751.7	25.9	— 3.4	93	se.	2	1			10					heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.48	774.2	30.83	783.1	—36.9	—38.3	81	calm	0	0			0						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.61	752.1	43	6.1	91	wnw			4	5	5	nw.		0.2	5.	d. clouds	J. Youngehause.
North Unst			29.49	749.1				nw.			4		10			blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	29.74	755.4	29.85	758.1	55.4	13.0	63	w.	2.2	1.0		0	1			0	0	clear	Antonio Reve, Director.
Bilbao, Met. Obs'y	30.09	764 3	30.15	765.8	54.0	12.2	93	nw.	4.3	1.9			10			0.358	9.1	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.18	690.4	30.20	767.0	50.0	10.0	78	s.	2.7	1.2			5			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.93	709.4	30.18	766.6	54.7	12.6	64	nw.	19.7	8.8		0	4			0	0	cloudy	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	29.96	760.9	30.07	763.8	64.8	18.2	66	nw.	3.1	1.4	.....	3	4	sse.	.....	0	0	clouds	Olayo Diaz, Director.
Oviedo	29.37	746.0	30.24	768.2	54.5	12.5	74	e.	12.3	5.5	.....	2 k	0	ne.	.....	0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.36	745.8	30.28	769.1	52.0	11.1	98	w.	4.9	2.2	.....	.....	10	.....	.....	0.252	6.4	misty	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.93	760.1	29.98	761.6	78.2	25.7	83	nnw.	4.4	2.0	.....	3 ck	0	e.	.....	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.22	767.6	30.32	770.2	57.2	14.0	89	wnw.	5.7	2.5	.....	0	5	.....	w.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.91	759.7	30.00	762.0	75.9	24.4	94	e.	18.6	8.3	.....	2 cs	6 kn	e.	e.	0.236	6.0	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.95	760.8	30.09	764.2	71.9	22.2	97	calm	0	0	.....	.....	10 kn	.....	.....	1.19	30.2	rainy	José L. Yrastorza.
SWEDISH.																			
Hapsranda	29.76	756.0	29.80	757.0	7.5	—13.6	100	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	29.60	751.9	29.65	753.2	31.3	— 0.4	100	se.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Hernosand	29.52	749 8	29.57	751.1	34.5	1.4	89	calm	.....	.....	0	.....	10	.....	.....	0	0	...	.....
Stockholm	29.46	748.2	29.63	752.7	32.7	0.4	92	se.	.....	.....	2	.....	10	.....	.....	0.079	2.0	.....	
Wisby	29.51	749.6	29.57	751.1	32.0	0.0	85	e.	.....	.....	4	.....	10	.....	.....	.....	.....	snowing	
Sub-series.																0.039	1.0	snowing	
Upsala	29.52	749.7	29.60	751.9	31.3	— 0.4	100	e.	3.4	1.5	.....	.....	10	.....	.....	0.059	1.5	foggy	S. G. Fineman.
SWISS.																			
Geneva	28.48	723.3	29.95	760 7	39.0	3.8	71	ssw.	.....	.....	2	.....	8	.....	.....	0.189	4.8	covered	The Observatory.
TURKISH.																			
Constantinople	.....	.....	29.49	749.0	59.0	15.0	61	s.	11	5.0	.....	.....	8	.....	sw.	0.457	11.6	.....	The Observatory.
Valona	.....	.....	29.46	748.2	49.8	9.9	.....	sw.	.....	.....	1	.....	10	.....	.....	0	0	covered	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.95	760.8	67.5	19.7	75	sw.	.....	.....	1	.....	10 n	.....	sw.	0.05	1.3	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	29.77	756.1	29.86	758.4	36	2.2	69	w.	1	0.4	.....	6 c	2 s	nw.	nw.	inap.	inap.	cloudy	J. O. Barnes.
Alpena, Michigan	29.24	742.7	29.95	760.7	31.5	— 0.3	94	w.	8	3.6	.....	.....	10 s	.....	.....	0.07	1.8	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.03	635.8	30.11	764.8	22	— 5.6	53	ne.	3	1.3	.....	0	6 s	.....	.....	0	0	fair	W. C. Barnes.
Assinnaboine, Ft., Montana	27.24	691.9	30.27	768.8	14	—10.0	66	ne.	1	0.4	.....	0	0	.....	.....	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	28.98	736.1	30.21	767.3	36.0	2.2	65	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	H. C. Smith.
Atlantic City, New Jersey	29.91	759.7	29.92	760.0	35	1.7	69	nw.	7	3.1	.....	0	5 s	.....	.....	0	0	fair	Jas. M. Watson.
Augusta, Georgia	30.00	762.0	30.20	767.1	36	2.2	79	calm	0	0	.....	0	0	.....	.....	0	0	clear	John Healy.
Baltimore, Maryland	29.97	761.2	30.02	762.5	39	3.9	65	nw.	6	2.7	.....	0	4 ks	nw.	0	0	0	fair	Geo W Felger.
Barnegat, New Jersey	29.88	758.9	29.90	759.4	36.0	2.2	69	nw.	14	6.3	.....	0	5 k	nw.	0	0	0	fair	G. A. Hill.
Behring Id., Behring Sea	29.59	751.6	29.61	752.1	21.0	— 6.1	.....	ne.	6	2.7	.....	0	5 k;s	.....	calm	0.07	1.8	fair	Leonard Steineger.
Bennett, Fort, Dakota	28.61	720.7	30.37	771.4	29	— 1.7	80	nw.	14	6.3	.....	.....	10 s	.....	nw.	inap.	inap.	cloudy	A. Pritchard.
Benton, Fort, Montana	27.28	692.9	30.28	769.1	12	—11.1	64	calm	0	0	.....	0	0	.....	.....	inap.	inap.	clear	S. Wheaton.
Bismarck, Dakota	28.35	720.1	30.36	771.1	19	— 7.2	84	nw.	20	8.9	.....	0	0	.....	.....	0	0	clear	Cyrus Cramor.
Block Island, Rhode Island	29.80	756.9	29.83	757.7	37.5	— 3.1	82	n.	12	5.4	.....	.....	10 ks	.....	n.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.19	690.6	30.17	766.3	15	— 9.4	91	w.	6	2.7	.....	.....	10 s	.....	w.	0.16	4.1	cloudy	B. E. Light.
Boston, Massachusetts	29.62	752.3	29.78	756.4	37.0	2.8	89	w	6	2.7	.....	.....	10 s	.....	w.	0.27	6.9	cloudy	O. B. Cole.
Brownsville, Texas	29.92	760.0	29.97	761.2	58.0	14.4	79	se.	8	3.6	.....	0	0	.....	.....	0	0	clear	M. McCarty.
Buffalo, New York	29.14	740.1	29.94	760.5	29.4	— 1.4	90	w.	14	6.3	.....	.....	10 s	.....	w.	0.06	1.5	cloudy	W. Finn.
Buford, Fort, Dakota	28 27	718.0	30.51	774.9	7	—13.9	80	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.47	748.5	29.78	756.4	36.9	2.7	85	s.	5	2.2	.....	.....	10 n	.....	s.	0.08	2.0	light rain	G. C. Schaeffer.
Cairo, Illinois	29.78	756.4	30.20	767.1	34.8	1.6	81	sw.	3	1.3	.....	0	fg.	.....	.....	0	0	clear	W. H. Ray.
Cape Henry, Virginia	30.00	762.0	30.02	762.5	41	5.0	73	nw.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	29.94	760.5	29.96	761.0	38.5	3.6	77	nw.	18	8.0	.....	.....	10 s	.....	nw.	0	0	cloudy	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	30.17	766.3	30.19	766.8	44	6.7	83	n.	8	3.6	.....	5 c	0	.....	.....	0	0	fair	F. W. Mixer.
Champaign, Illinois	29.30	744.2	30.17	766.3	27.0	— 2.8	70	w.	5	2.2	.....	0	6 s	.....	sw.	0	0	fair	L. A. Welsh.
Charleston, S. Carolina	30.06	763.5	30.12	765.0	41	5.0	73	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.22	742.2	30.11	764.8	34.0	1.1	78	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.37	746.0	30.23	767.8	29.5	— 1.4	82	ne.	1	0.4	.....	1 cs	fg.	.....	.....	0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	24 11	612.4	30.39	771.9	11.9	—11.2	70	nw.	10	4.5	.....	0	0	.....	.....	inap.	inap.	clear	E. McGovern.
Chincoteague, Virginia	29.36	745.7	30.12	765.0	23.9	— 4.5	80	w.	8	3.6	.....	0	0	.....	.....	0.01	0.3	clear	J. Mitchell.
Cincinnati, Ohio	29.97	761 2	29.99	761.7	40	4.4	65	nw.	14	6.3	.....	.....	9 ks	.....	nw.	0	0	cloudy	O. F. Dickens.
Cleveland, Ohio	29.48	748.8	30.18	766.6	33	0.6	68	w.	3	1.3	.....	0	0	.....	.....	inap	inap.	clear	R. B. Watkins.
Coleman City, Texas	29.26	743.2	30.05	763.3	29.8	— 1.2	90	w.	10	4.5	.....	.....	10 n	.....	w.	inap	inap.	light snow	J. B. Newlin.
Columbus, Ohio	28.16	715.3	30.06	763.5	35	1.7	82	w.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	L. Dorman.
Concho, Fort, Texas	29.18	741.2	30.10	764.5	32	0.0	78	w.	9	4.0	.....	.....	10 s	.....	w.	0.02	0.5	cloudy	D. Cuthbertson.
Custer, Fort, Montana	28.01	711.4	30.03	762.7	40.0	4.4	73	w.	4	1.8	.....	10 cs	0	.....	.....	0	0	cloudy	J. McGlone.
Davenport, Iowa	27.05	687.1	30.45	773.4	10	—12.2	80	e.	4	1.8	.....	0	0	.....	.....	inap.	inap.	clear	W. B. Lamar.
Davis, Fort, Texas	29.44	747.8	30.15	765.8	25	— 3.9	73	calm	0	0	.....	7 cs	0	.....	.....	0	0	fair	R. R. Martin.
Dayton, Washington T'y	25.14	638.5	30.08	764.0	35	1.7	69	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Deadwood, Dakota	28 16	715.3	29.99	761.7	35.8	2.1	64	sw.	2	0.9	.....	.....	10 s	.....	sw.	0	0	cloudy	D. Moore.
Delaware Breakwater, Del	25.51	647.9	30.50	774.7	22	— 5.6	87	calm	0	0	.....	7 c	0	nw.	.....	0.59	15.0	fair	F. Willson.
Denison, Texas	29.95	760.7	29.97	761.2	38	3.3	82	sw.	11	4.9	.....	.....	10ks	.....	sw.	0	0	cloudy	T. S. Townsend.
Denver, Colorado	29.25	742.9	30.10	764.5	45.0	7.2	68	s.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	J. W. Byram.
Des Moines, Iowa	24 87	631.7	30.39	771.9	22.5	— 5.3	71	s.	3	1.3	.....	0	4 s	.....	sw.	0.28	7.1	fair	F. M. Neal.
Detroit, Michigan	29.17	740.9	30.15	765.8	26	— 3.3	64	w.	2	0.9	.....	5 ck	5 s	W.	W.	0	0	cloudy	F. W. Conrad.
Dodge City, Kansas	29.26	743.2	30.02	762.5	32.0	0.0	88	w.	12	5.4	.....	.....	10 s	.....	w.	0.01	0.3	cloudy	O. F. R. Wappenhans.
Dubuque, Iowa	27.51	698.7	30.31	769.9	32	0.0	100	n.	13	5.8	.....	.....	10ks	.....	n.	inap.	inap.	cloudy	V. P. Temple.
Duluth, Minnesota	29.38	746.2	30.16	766 1	27.2	— 2.7	77	calm	0	0	.....	.....	10 s	.....	w.	0	0	cloudy	J. Harvey Smith.
Eagle Pass, Texas	29.31	744.5	30.12	765.0	24.8	— 4.0	77	nw.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	N. B. Conger.
Eagle Rock, Idaho	29.15	740.4	29.99	761.7	39.2	4.0	95	e.	1	0.4	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eastport, Maine	25.42	645.7	30.34	770.6	— 4	—20.0	87	sw.	4	1.8	.....	.....	10 s	.....	sw.	0	0	cloudy	J. M. Clifford.
Elliott, Fort, Texas	29.66	753.4	29.73	755.1	29.0	— 1.7	88	n.	9	4.0	.....	.....	10 s	.....	.....	0.09	2.3	cloudy	D. C. Murphy.
El Paso, Texas	27.22	691.4	30.18	766.6	30	— 1.1	71	n.	24	10.7	.....	9 k	0	n.	.....	0	0	cloudy	W. J. Cundall.
Erie, Pennsylvania	26.25	666.7	30.11	764.8	39.0	3.9	65	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Escanaba, Michigan	29.20	741.7	29.97	761.2	31	— 0.6	78	w.	14	6.3	.....	.....	9 s	.....	w.	0.10	2.5	cloudy	Peter Wood.
Fredericksburg, Texas	29.32	744.7	30.04	763.0	30.0	— 1.1	88	w.	2	0.9	.....	0	9 s	.....	w.	0.01	0.3	cloudy	George Heathcote.
Galveston, Texas	28.24	717.3	30.06	793 5	38	3.3	82	calm	0	0	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Grand Haven, Michigan	30.07	763.8	30.12	765.0	56	13.3	86	se.	7	3.1	.....	0	0	.....	.....	0	0	clear	E. O'C. MacIlvernsy.
Grant, Fort, Arizona	29.34	745.2	30.05	763.3	35.0	1.7	79	w.	11	4.9	.....	.....	10 s	.....	w.	0.01	0.3	cloudy	J. E. Mueller.
Hatteras, North Carolina	25.36	644.1	30.24	768.1	31	— 0.6	74	nw.	24	10.7	.....	0	0	.....	.....	0	0	clear	Robert O. Lord.
Helena, Montana	29.96	761.0	29.98	761.5	44	6.7	93	nw.	12	5.4	.....	hz	3 s	.....	.....	0	0	clear	R. M. Crawford.
Henrietta, Texas	25.82	655.8	30.20	767.1	19	— 7.2	87	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	N. C. Smith.
Huron, Dakota	28.99	736.3	30.07	763.8	42	5.6	73	n.	3	1.3	.....	.....	10ks	.....	n.	0	0	cloudy	J. P. Sherry.
Indianapolis, Indiana	28.71	729 2	30.25	768.3	24.3	— 4.3	76	nw.	7	3.1	.....	.....	10 s	.....	.....	0.09	2.3	cloudy	S. W. Glenn.
Indianola, Texas	29.32	744.7	30.17	766.3	29	— 1.7	77	w.	2	0.9	.....	d	0	.....	.....	0	0	clear	O. Schutze.
Jacksboro, Texas	30.01	762.2	30.04	763 0	59.0	15.0	81	se.	10	4.5	.....	5 k	hz.	s.	.....	0	0	fair	I. A. Reed.
Jacksonville, Florida	28.90	734.0	30.14	765.5	36	2.2	79	se.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	D. J. Carr.
Keogh, Fort, Montana	30.14	765.5	30.19	766 8	45	7.2	83	calm	0	0	.....	0	fg.	.....	.....	inap.	inap.	clear	J. W. Smith.
Keokuk, Iowa	27.73	704.3	30.43	772.9	8	—13.3	58	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Schneider.
Key West, Florida	29.42	747.3	30.13	765.3	29.0	— 1.7	77	w.	2	0.9	.....	hz.	0	.....	.....	0	0	dense haze	F. Z. Gosewisch.
Kittyhawk, North Carolina	30.04	763.0	30.06	763.5	65.0	18.3	90	n.	20	8.9	.....	.....	10 s	.....	n.	0.96	24.4	cloudy	R. H. Paxton.
Knoxville, Tennessee	30.00	762.0	30.02	762 5	43.5	6.4	93	ne.	18	8.0	.....	1 ck	5 ks	w.	w	0	0	fair	H. Mc P. Baldwin.
La Grosse, Wisconsin	29.19	741.4	30.27	768.8	20	— 3.3	84	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. A. Cody.
Leavenworth, Kansas	29.30	744.2	30.15	765.8	25	— 3.9	73	w.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	S. C. Emery.
Lewiston, Idaho	29.16	740.7	30.12	765.0	34	1.1	78	s.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	A. W. Browne.
Little Rock, Arkansas	29.80	756.9	30.04	763.0	37.0	2.8	66	e.	6	2.7	.....	10 k	0	s.	.....	0	0	cloudy	W. Bell.
Los Angeles, California	29.80	756.9	30.13	765.3	37	2.8	89	calm	0	0	.....	3 cs	0	.....	.....	0	0	clear	W. U. Simons.
Louisville, Kentucky	29.58	751.3	30.18	766.6	35.5	1.9	64	sw.	3	1.3	.....	5 c	0	w.	.....	0	0	fair	T. S. Collins.
												0	0	.....	.....	0	0	clear	L. M Dey.

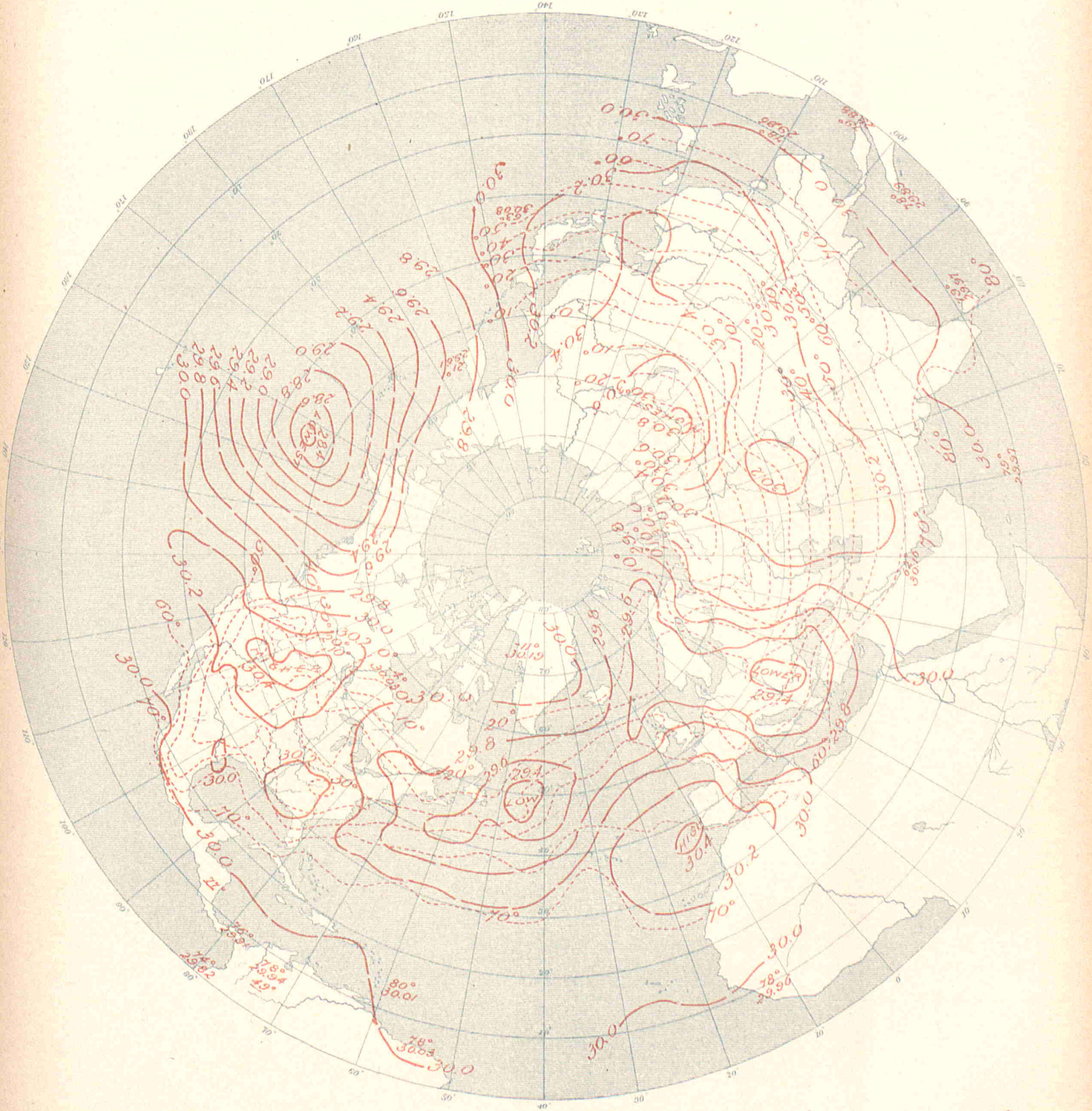
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.36	745.7	30.09	764.3	37	2.8	51	nw.	8	3.6		0	2 s		nw.	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.28	743.7	29.98	761.5	33.0	0.6	88	nw.	12	5.4		0	8 s		nw.	0.23	5.8	cloudy	F. R. Day.
Macon, Fort, North Carolina	29.99	761.7	30.00	762.0	44	6.7	93	nw.	8	3.6		2 cs	fg.			0	0	clear	C. A. Shaw.
Madison, Wisconsin	29.05	737.9	30.15	765.8	20	— 6.7	70	w.	6	2.7		1 c	0	w.		inap.	inap.	clear	F. P. Chaffee.
Maginnis, Fort, Montana					15	— 9.4	51	nw.	4	1.8		0	0			0.23	5.8	clear	F. Burke.
McKavett, Fort, Texas	27.78	705.6	30.16	766.1	38	3.3	82	calm	0	0			10 s			0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.23	742.4	30.01	762.2	32	0.0	88	nw.	8	3.6			10 n			0.16	4.1	light snow	J. Gilligan.
Memphis, Tennessee	29.87	758.7	30.23	767.8	36	2.2	89	se	4	1.8		2 cs	fg.			0	0	clear	D. T. Flannery.
Milwaukee, Wisconsin	29.30	744.2	30.12	765.0	26	— 3.3	64	w.	8	3.6		0	0			0.01	0.3	clear	W. Libe.
Missoula, Fort, Montana					18	— 7.8	73	n.	3	1.3		0	5 s			0	0	fair	J. H. Young.
Mobile, Alabama	30.18	766.6	30.22	767.6	36.5	2.5	92	n.	4	1.8		0	0			0	0	clear	C. A. Read.
Montgomery, Alabama	30.01	762.2	30.25	768.3	34.3	1.3	100	calm	0	0		0	fg.			0	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	29.09	738.9	30.20	767.1	14	—10.0	76	s.	2	0.9			10 s			0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.04	737.6	30.10	764.5	36.0	2.2	67	sw.	9	4.0			10 s		sw.	0	0	cloudy	J. O. Sprigg, jr.
Mt. Washington, N. H.	23.35	593.1	29.98	761.5	15.0	— 9.4	100	nw.	27	12.1			10n; fg		nw.	0.35	8.9	light snow	B. S. Pague.
Nashville, Tennessee	29.61	752.1	30.22	767.6	31.0	— 0.6	88	calm	0	0		5 cs	0	w.		0	0	fair	L. N. Jesunofsky.
New Haven, Connecticut	29.71	754.6	29.83	757.7	36.5	2.5	68	calm	0	0			10 s			0	0	cloudy	J. H. Sherman.
New London, Connecticut	29.79	756.7	29.84	757.9	37	2.8	72	nw.	2	0.9			10 s		nw.	inap.	inap.	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.15	765.8	30.21	767.3	48.0	8.9	77	calm	0	0		0	0			0	0	clear	L. Dunne.
Newport, Rhode Island	29.76	755.9	29.81	757.2	38.6	3.7	87	nw.	4	1.8			10 s		nw.	0.05	1.3	cloudy	W. McGillivray.
New York, New York	29.70	754.4	29.89	759.2	37	2.8	72	w.	1	0.4			10 s		w.	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.00	762.2	30.03	762.7	43	6.1	74	n.	5	2.2			10 s			0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.18	690.4	30.34	770.6	30.6	— 0.8	82	nw.	14	6.3			10 s			0.09	2.3	cloudy	E. F. Brady.
Olympia, Washington T'y	29.81	757.2	29.85	758.2	45.0	7.2	93	s.	12	5.4			10 n			0.51	13.0	light rain	J. Dascomb.
Omaha, Nebraska	28.88	733.5	30.18	766.6	27.7	— 2.4	88	n.	6	2.7			10 s			0	0	threatening	A. Pollak.
Oswego, New York	29.50	749.3	29.86	758.4	35.0	1.7	74	w.	9	4.0			10 n		w.	0.02	0.5	light snow	J. G. Linsley.
Palestine, Texas	29.55	750.6	30.13	765.3	45.0	7.2	83	se.	8	3.6		3 cs	0	sw.		0	0	clear	L. M. Pindell.
Pensacola, Florida	30.20	767.1	30.24	768.1	38.1	3.4	82	nw.	2	0.9		0	0			0	0	clear	M. McGauran.
Philadelphia, Pa	29.85	758.2	29.96	761.0	40.5	4.7	58	nw.	8	3.6			10 ks		nw.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.58	446.5	30.24	768.1	0	—17.8	83	ne.	28	12.5		0	0			0.25	6.3	clear	H. Hall.
Ploche, Nevada	24.20	614.7	30.38	771.6	24.4	— 4.2	66	nw.	5	2.2		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.16	740.7	30.02	762.5	34.0	1.1	72	w.	7	3.1			10 s		w.	inap	inap.	cloudy	W. A. Reid.
Poplar River, Montana								nw.			1	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.19	766.8	30.20	767.1	51.0	10.9	82	ne.	7	3.1		4 cs	0	w.		0	0	fair	H. B. Boyer.
Port Huron, Michigan	29.25	742 9	29.98	761.5	31.0	— 0.6	94	w.	8	3.6			10 s			0.05	1.3	cloudy	W. O. Bailey.
Portland, Maine	29.71	754.6	29.76	755.9	33.5	0.8	74	ne.	1	0.4			10 s			0.22	5.6	cloudy	W. W. Eichelberger.
Portland, Oregon	29.79	756.7	29.86	758.4	47.0	8.3	93	s.	10	4.5			10 n		s.	0.43	10.9	light rain	M. L. Hearne.
Portsmouth, N. C.																			F. S. Coburn.
Prescott, Arizona	24.90	632.4	30.27	768.8	23.3	— 4.8	76	sw.	1	0.4		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass.	29.73	755.1	29.76	755.9	37	2.8	82	nw.	2	0.9			10 s		nw.	0.26	6.6	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.09	764.3	30.10	764.5	55	12.8	77	n.	14	6.3		8 c	0	w.		0.14	3.6	cloudy	W. J. Evans.
Red Bluff, California	29.79	756.7	30.16	766.1	48	8.9	100	s.	18	8.0			10 n		s.	0.22	5.6	light rain	J. R. Williams.
Rochester, New York	29.19	741.4	29.90	759.4	30.5	— 0.8	83	w.	12	5.4			10 k		w.	inap.	inap.	cloudy	E. W. McGann
Roseburg, Oregon	29.39	746.5	29.96	761.0	45.7	7.6	83	s.	5	2.2			10 n		s.	0.72	18.3	light rain	J. J. Nanry.
Sacramento, California	30.17	766.3	30.25	768.3	48.8	9.3	93	se.	10	4.5			10 s		sw.	0.02	0.5	cloudy	J. A. Barwick.
St. Louis, Missouri	29.54	750.3	30.18	766.6	31.8	— 0.1	95	s.	3	1.3		1 c	2 s			0	0	clear	J. H. Weber.
St. Michael, Fort, Alaska	29.58	751.3	29.61	752.1	—21	—29.4	100	n.			2	0	0			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.20	741.7	30.16	766.1	22.0	— 5.6	87	sw.	2	0.9			10 s			0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.22	742.2	30.21	767.3	14	—10.0	89	nw.	1	0.4		0	0			0	0	clear	O. B Dilley.
Salt Lake City, Utah	25.90	657.8	30.44	773.2	23	— 5.0	64	n.	2	0.9		4 c	0			0.05	1.3	fair	J. Craig.
San Antonio, Texas	29.31	744.5	30.03	762.7	37.5	3.1	82	calm	0	0		0	0			0	0	clear	T. J. Kenan.
San Diego, California	30.10	764.5	30.17	766.3	50.4	10.2	42	ne.	5	2.2		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.31	744.5	30.04	763.0	32.2	0.1	78	w.	16	7.2			10 s			0.02	0.5	cloudy	M. H. Perry.
Sandy Hook, New Jersey	29.85	758 2	29.88	758.9	37.0	2.8	72	nw.	11	4.9			10 s		nw.	0	0	cloudy	B. A. Blundon.
San Francisco, California	30.19	766.8	30.26	768.6	50.5	10.3	96	se.	8	3.6			10 n		w.	0.05	1.3	light rain	N. Gorom.
Santa Fé, New Mexico	23.30	591.8	30.29	769.4	18	— 7.8	53	ne.	5	2.2		0	0			0.01	0.3	clear	H. U. Jones.
Savannah, Georgia	30.08	764.0	30.18	766.6	41	5.0	62	nw.	8	3.6		0	0			0	0	clear	H. W. Ford.
Shaw, Fort, Montana	26.34	669.0	30.17	766.3	33	0.6	54	sw.	24	10.7		6 k	0	w.		0	0	fair	A. L. Mathews.
Shreveport, Louisiana	29.92	760.0	30.17	766.3	39	3.9	89	se.	3	1.3		3 c	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	28.77	730.7	30.10	764.5	41	5.0	79	n.	9	4.0		10 k	0	n.		0	0	cloudy	W. M. Mattingly.
Silver City, New Mexico	24.26	616.2	30.10	764.5	33.5	0.8	87	nw.	2	0.9		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.17	740.9	29.24	742.7	40.2	4.6	76	s.	19	8.5			10 n		s.	2.42	61.5	light rain	F. W. Fickett.
Smith, Fort, Arkansas	29.63	752.6	30.13	765.3	38.0	3.3	82	e	4	1.8		6 cs	0	e.		0	0	fair	J. B. Campbell.
Smithville, North Carolina	30.02	762 5	30.06	763.5	46	7.8	76	nw.	5	2.2		0	1 s			0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	27.92	709.2	30.05	763 3	33	0.6	81	ne.	4	1.8			10 s			0	0	cloudy	H. Clifford.
Springfield, Illinois	29.45	748.0	30.18	766.6	30	— 1.1	64	se.	3	1.3		4 c	1 s	sw.	sw.	0	0	fair	T. B. Jennings.
Springfield, Massachusetts	29.70	754.4	29.84	757.9	36.5	2.5	74	nw.			3	7 ks?	1 n	w.	w.	0.02	0.5	fair	Charles Mayr.
Springfield, Mo	28.62	726.9	30.15	765.8	38	3.3	77	s.	8	3.6		9 cs	0			0	0	cloudy	J. B. Marbury.
Starkville, Miss.	29.74	755.4	30.24	768.1	38	3.3	89	s.	2	0.9		0	0			0	0	clear	C. Dill.
Stevenson, Fort, Dakota	28.34	719.8	30.40	772.1	13	—10.6	83	nw.	10	4.5		0	0			0	0	clear	W. Burrows.
Stockton, Fort, Texas	26.88	682.7	30.02	762.5	39	3.9	73	sw.	16	7.2		0	0			0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	29.73	755.1	29.79	756.7	35.0	1.7	79	nw.	4	1.8		8 k	0	w.		0.14	3.6	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.37	695.2	30.19	766.8	40.5	4.7	51	nw.			2	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.31	744.5	30.05	763.3	35	1.7	69	w.	15	4.5			10 s		w.	inap.	inap.	cloudy	A. Buell.
Tucson, Arizona	27.72	704.1	30.22	767.6	32	0.0	81	e.	1	0.4		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	29.00	751.6	29.99	761.7	37	2.8	82	se.	14	6.3		7 k	3 s	w.		0	0	cloudy	J. Daly.
Verde, Fort, Arizona					25.7	— 3.5	56	nw.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.95	760.7	30.22	767.6	40.5	4.7	75	se.	7	3.1		0	0			0	0	clear	James Kenealy.
Visalia, California	29.86	758.4	30.24	768.1	41.5	5.3	92	e.	5	2.2		0	3 s			0	0	clear	O. D. Stewart.
Washakie, Fort, Wyoming	24.59	624.6	30.36	771.1	3.6	—15.8	77	calm	0	0		0	0			0.02	0.5	clear	T. M. Ambler.
Washington, D. C.	29.92	760 0	30.04	763.0	35.0	1.7	67	calm	0	0		1 k	2 s	w.		0	0	clear	B. M. Purssell.
West Las Animas, Colorado	26.21	665.7	30.37	771.4	22.5	— 5.3	68	nw.	8	3.6		2 c	0	nw.		0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.30	744 2	29.93	760.2	35.5	1.9	73	w.	6	2.7			10 ks		w.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.02	762.5	30.08	764.0	40	7.8	83	n.	4	1.8		0	0			0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.67	652.0	30.20	767.1	28	— 2.2	77	ne.	9	4.0		0	8 s		w.	0	0	cloudy	J. Grover.
Yankton, Dakota	28.79	731.3	30.22	767.6	28	— 2.2	77	nw.	3	1.3			10 ks			0	0	cloudy	J. H. Atfield.
Yuma, Arizona	30.04	763.0	30.19	766.8	53.7	12.1	28	nw.	4	1.8		0	0			0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.01	559.0			49.0	9.4	72	ne.	6	2.7		1 cs	0	w.		0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I.	29.94	760.5	30.01	762.2	68.8	20.4	94	se.	3	1.3			10 k		ne.	2.76	70.1	cloudy	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.04	763.0	30.05	763.3	72	22.2	78	n.	4	1.8		0	0			0	0	fine	Robert Johnston.
Paramaribo, S. A.	30.03	762.7	30.03	762.7	78	25.6	86	e.			2	4 c	5 k	e.	e.	0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.94	760.5	78	25.6	89	calm			0		10 ks		calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					76.5	24.7	92	ne.			2	0	0			0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska																			W. J. Fisher.
St. Thomas, W. I.	29.96	761.0	30.08	764.0	78	25.6	77	ene.					8 kn		ene.	0	0	cloudy	Aug. Walloe.
York Factory, B. A.	29.95	760.7	30.03	762.7	— 3.5	—19.7	82	w.	9	4.0		2 c	0	w.		0.01	0.3	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.07	763.8	68	20.0	84	s.			2		3	s.						d. clouds.
H. M. S. Audacious, N. 2° 13′, E. 106° 25′	29.77	756.1	80	26.7	100	ene.			2		10	ne.				3	ne.	overcast
H. M. S. Beacon, Lake Timsah, Egypt			78	25.6	65	ssw.			1		3	ssw.				1	ssw.	d. clouds.
H. M. S. Boadicea, Simons Bay, Cape Colony	30.07	763.8				sw.			1		8							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.02	762.5	70	21.1	90	nne.			1		8	ese.						d. clouds.
H. M. S. Champion, N. 1° 43′, E. 104° 35′	29.88	758.9	79	26.1	95	nw.			4		8	nw.				2	nw.	raining.
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.34	770.6	37	2.8	80	nne.			1		10							overcast.
H. M. S. Comus, Esquimalt, Vancouver Island, B C			47	8.3	92	sse.			6		10							squally.
H. M. S. Constance, N. 37° 00′, W. 13° 38′	30.44	773.2	61	16.1		wnw.			1							4		d. clouds.
H. M. S. Curacoa, Yokohama, Japan	30.07	763.8	46.5	8.1	69	se.			1–2		5							d. clouds.
H. M. S. Dido, N. 14° 38′, W. 59° 52′	30.05	763.3	80	26.7		ene.			4		3	e.				2	e.	d clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.90	759.4	66	18.9	78	se.			2–3		8							showery.
H. M. Dock Yard, Bermuda, W. I.	29.92	760.0	68	20.0	90	ssw.			2–3		5	ssw.						d. clouds.
H. M. S. Eclipse, N. 8° 33′ E. 81° 13′	29.87	758.7	79	26.1		nne.			2–3		10							raining.
H. M. S. Fawn, S. 34° 30′, E. 21° 30′	29.95	760.7	63	17.2	80	ssw.			3–4		10	ssw.				5	ssw.	overcast.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.97	761.2	60.5	15.8	79	var.			1		10							misty.
H. M. S. Heroine, N. 30° 22′ W. 18° 23′	30.31	769.9	65	18.3	83	e.			3		6	calm				sm'h		d. clouds.
H. M. S. Iron Duke, N. 6° 00′, E. 94° 12′	29.89	759.2	78	25.6	90	e.			4		10	e.				2	n.	overcst.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	30.10	764.5	65.3	18.5	81	s.			3		10							squally.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.73	755.1	62	16.7		n.			1							1	n.	d. clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.35	770 9	46.9	8.3	82	nne.			1		10							misty.
H. M. S. Rambler, Port Belgrano, La Plata, S. A.	29.96	761.0	62	16.7	66	sw.			1		2							d. clouds.
H. M. S. Serapis, N. 33° 32′, E. 25° 29′	29.89	759.2	65.5	18.6	78	wsw.			4		8					3	w.	d. clouds.
H. M. S. Starling, S. 2° 27′, W. 6° 53′	29.94	760.5	77.3	25.2	93	sse.			3–4		5	ese.				3	sse.	squally.
H. M. S. Superb N. 30° 37′, E. 360° 09′	29.98	761.5	61	16.1	82	s.			2		6	sse.						showery
H. M. S. Swiftsure, Callao Bay, Peru	29.98	761.5	65	18.3	100	s.			1		10							misty.
H. M. S. Sylvia, Cordova Inlet, Patagonia	29.63	752.6	49.2	9.6	98	var.			3–6		10							heavy rain.
H. M. S. Tourmaline, Bombay, India	29.94	760 5				nw.			3		0							blue sky.
H. M. S. Woodlark, Shat-el Arab river	30.06	763.5	61.5	16.4	94	se.			1		10	wnw.						thnd'r sh'rs.
H. M. S. Zephyr, Chee-foo, China	30.46	773.7	29.5	— 1.4		calm			0		0							misty.
Portuguese Naval.																		
Tamega, Macao, China	30.24	768.1	59.9	15.5	48	nnw.			3		1		s.					blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.06	763.5	39	3.9	81	n.	2	0.9			0			0	0			clear.
Navy Yard, Portsmouth, N. H.	29.77	756.1	31	— 0.6	89	calm	0	0			10		w.	0.2	5.			cloudy.
Naval Hospital, Yokohama, Japan*	30.19	766 8	43.5	6.4	60	calm			0		2		w.	0	0			clear.
Adams, Sitka, Alaska*†	29.25	742.9	40	4.4	82	se.			2		10							cloudy.
Alaska, Mare Island, Cal	30.22	767.6	54	12.2	73	calm			0		10			0	0			cloudy.
Alliance, N. 24° 54′, W. 63° 13′	30.14	765.5	74	23.3	100	se.			3		2			0	0	sm'h		fair.
Ashuelot, N. 31° 21′, E. 121° 25′	30.42	772.7	39	3.9	81	n.			2		10		n.					cloudy.
Brooklyn, Montevideo, Uruguay	29.92	760.0	67	19.4	94	s.	5	2.2			5		calm	0	0	sm'h		fair.
Colorado, New York, N. Y.	29.97	761.2	38	3.3	100	w.	2	0.9			10			0	0			overcast.
Enterprise, Norfolk, Va	30.04	763.0	42	5.6	100	s.			1		10							cloudy.
Essex, Callao, Peru	29.92	760.0	64	17.8	94	ese.			1		10							foggy.
Franklin, Norfolk, Va	30.02	762.5	42	5.6	83	nnw.	6	2.7			10			0	0			cloudy.
Galena, Montevideo, Uruguay	29.93	760.2	68	20.0	79	sw.			3		2		ssw.			sm'h		clear.
Hartford, S. 36° 52′, W. 76° 32′*	30.11	764.8	57	13.9	87	s.			6		5		s.	light	light	mod.	s.	fair.
Independence, Mare Island, Cal	30.24	768.1	50	10.0	93	calm			0		10		nw.	0	0			cloudy.
Iroquois, Callao, Peru	29.93	760.2	65	18.3	94	sse.			1		10							foggy.
Jamestown, Boston, Mass	29.75	755.6	33	0.6	89	calm			0		10			0	0			misty.
Juniata, Fayal, Azores Islands*	30.18	766.6	66	18.9	94	sse.			6		8		s.	slt	slt	mod.	s.	cloudy.
Kearsarge, N. 24° 50′ W. 63° 05′	30.14	765.5	74	23.3	90	se.			2		8					mod.	ene.	fair.
Lackawanna, S. 7° 03′, W. 95° 12′*	29.88	758.9	72	22.2	85	se.			3		10		se.			mod	se.	cloudy.
Lancaster, Genoa, Italy*	29.55	750.6	51	10.6	72	nne.			3		0					sm'h		clear.
Michigan, Erie, Pennsylvania	29.91	759.7	35	1.7	100	nw.			4		10		e.					cloudy.
Minnesota, New York, N. Y.	29.91	759.7	39	3.9	91	nnw.	2	0.9			10							cloudy.
Monocacy, Nagasaki, Japan	30.35	770.9	49	9.4	85	nne.			1		10		calm					cloudy.
New Hampshire, Newport, R. I.	29.82	757.4	38	3.3	100	wnw.			2		10		calm			sm'h		cloudy.
Nipsic, Lisbon, Portugal*	30.34	770.6	61	16.1	77	n.			2		10					sm'h		cloudy.
Onward, Callao, Peru†	30.05	763.3	63	17.2	94	se.			2		10		n.			long	w.	misty.
Palos, Tientsin, China*	30.26	768.6	23	— 5.0	100	calm			0		0							clear.
Pensacola, S. 1° 16′, W. 80° 49′*	29.82	757.4	74	23.3	81	sw.			2		10			0	0	light	s.	cloudy.
Powhatan, Boston, Mass	29.74	755.4	34	1.1	61	w.			1		10							overcast
Quinnebaug, Villafranche, France*	29.66	753.4	53	11.7	30	n.			1–4		0					sm'h		clear.
Ranger, Acapulco, Mexico	29.95	760.7	75	23.9	85	calm			0		8		calm			sm'h		cloudy.
Richmond, Nagasaki, Japan*	30.29	769.4	47	8.3	85	ne.			1		10		ne.	0	0			cloudy.
Saratoga, New York, N. Y	29.71	754.6	40	4.4	91	nw.			3		10		w.	0	0	sm'h		cloudy.
St. Louis, League Island, Pa	30.16	766.1	37	2.8	54	nw.			2		10		nw.	0	6			cloudy
Tennessee, N. 24° 49′, W. 03° 04′	30.13	765.3	74	23.3	81	se.	6	2.7			8		se.	0	0	long	ne.	cloudy.
Vandalia, N. 44° 47′, W. 63° 02′*	30.13	765.3	74	23.3	72	ese.			2		5		calm			long	ne.	fair.
Wabash, Boston, Mass	29.80	756.9	32	0.0	89	nw.	2	0.9			10		nw.	0.23	5.8			cloudy.
Wachusetts, Mare Island, Cal*	30.14	765.5	49	9.4	93	e.			1		10		calm			sm'h		drizzling.
Wyandotte, Washington, D. C	30.22	767.6	48	8.9	85	nw.			4		5		w.	0	0			fair.
Yantic, N. 24° 45′, W. 63° 15′	30.22	767.6	72	22.2	71	se.			2		2					sm'h		clear.
Merchant Marine.																		
S. S. Grecian, Harve, France*	29.88	758.9	45	7.2	76	nnw.			3		3		nnw.	0	0			clear.
S. S. Nova Scotian, N. 55° 03′ W. 11° 43′	29.68	753.9	48	8.9		wsw.			2		10		sw.			slt	nnw.	cloudy.
S. S. Scandinavian, N. 51° 00′, W. 37° 00′	29.44	747.8	49.5	9.7		se.			3		10			driz	driz	mod.	s.	rain & fog.
S. S. British Crown, N. 42° 03′, W. 66° 09′†	29.52	749.8	49	9.4		nnw.			4		10		wnw.	0	0	sm'h		overcast.
S. S. British Prince, N. 51° 57′ W. 6° 59′ †	29.85	758.2	49	9.4		nw.			4		10		nw.	0	0	sm'h	nw.	overcast.
S. S. Indiana, Philadelphia, Pa			34	1.1	90	ne.			3		2		w.					fine.
S. S. Lord Gough, N. 48° 56′, W. 45° 49′	29.25	742.9	40	4.4		w.			4		10		w.	8 h'r	8 h'r	mod	w.	foggy.
S. S. Ohio, Liverpool, Eng†	29.77	756 1	41	5.0	91	ssw.			3		3		w.					fair.
S. S. Pennsylvania, N. 49° 13′ W. 36° 43′†	29.30	745.7	56	13.3		se.			5		17		s.			mod.	se.	overcast.?
S. S. Castor, N. 49° 22′, W. 10° 15′*	29.92	760 0	50.0	10		nw.			4		10		nw.	0	0	3	nnw.	fair.
S. S. Jason, N. 44° 59′, W. 52° 17′			38.8	3.8		n;w.			3		8ks					2	nw.	gloomy.
S. S. Bolivia, N. 44° 14′, W. 53° 48′*†	29.70	754.4	36	2.2	90	w.			2		10		w.	slt	sleet	sm'h	w.	overcast.
S. S. Dorian, N. 30° 22′, W. 7 31*	30.19	760.8	60	15.6		n.			4		8		n.	0	0	slt	wnw.	cloudy.
S. S. Galatia, N. 36° 47′, E. 0° 20′†	30.27	768.8	62.3	16.8	100	wsw.			5		7		wnw.	3 h'r	3 h'r	r'gh	wsw.	squally.
S. S. Utopia, N. 34° 25′, W. 11° 25′†	30.46	773.7	64	17.8	78	n.			2		8		n.			sm'h	n.	hazy.
S. S. Ailsa, N. 11° 53′, W. 82° 41′†	30.02	762.5	80	26.7	91	ne.			4		2		ne.	0	0	mod	ne.	fair.
S. S. Antillas, N. 30° 45′, W. 72° 40′			50	10.0		n.			2		2		nnw.			sm'h	nnw.	fine.
S. S. Ambrose, N. 12° 16′ W. 49° 12′†	30.07	763.8	79	26.1		e.			3		3		ese.	0	0	3	se.	clear.
S. S. Carroll, N. 43° 09′, W. 67° 11′*†	29.80	756.9	36	2.2		ne.			3		10		ne.	light	light	short	no.	cloudy.
S. S. City of Agra, S. 53° 00′, E. 105° 00′	30.12	765.0	48.2	9.0	97	w			4		10							foggy.
S. S. Commewyne, N. 33° 45′, W. 45° 31′	29.93	760.2	67.2	19.6	74	w.			4		9							misty.
S. S. Gordon Castle, N. 11° 35′, E. 59° 56′	29.97	761.2	78.5	25.8	74	ne.			4		4							d clouds.
Inchkeith, S. 4° 05′, E. 91° 19′	29.80	758.4	80.4	26.9	87	nnw.			1		4							d. clouds.
S. S. Mexico, N. 20° 51′ W. 114° 18′*	30.10	764.5	65	18.3	49	ne.			4		0					long.	w.	clear.
S. S. Marathon, N. 51° 04′, W. 5° 50′†	29.95	760.7	53	11.7		sse.			2		8		nw.			sm'h	wnw	cloudy.
S. S. Scythia, N. 43° 00′, W. 49° 50′	29.67	753.6	48.5	9.2		nw.			2		8		n.	0	0	slt	nnw	cloudy.
S. S. Colina, St. Johns, N. F†	29.30	745.7				nw.			2		6		nw.	0	0			cloudy.
France N. 44° 30′, W. 52° 24′	29.52	749.7	35.6	2		ne.			3	ck	0	ne.		0	0	sm'h	ne	clear.
S S. Labradore, N. 44° 42′, W. 55° 50′			41.0	5.0		nw.			3							sm'h	sw.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		WEATHER.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Wisconsin, N. 42° 55′ W. 58° 20′	29.45	748.0	45	7.2	.....	e.	.....	.....	4	.....	10	.....	e.	3 h'r	3 h'r	sli't	e.	cloudy.
S. S. Wyoming, N. 43° 38′, W. 58° 53′	29.65	753.1	37	2.8	.....	var.	.....	.....	2	.....	8	.....	var.	o	o	sm'h	.....	misty.
S. S. Bohemia, N. 44° 52′, W. 39° 14′†	29.42	747.3	.....	.....	.....	sw.	.....	.....	4	.....	7	.....	wsw.	4 h'r	4 h'r	long	se.	squally.
S. S. Frisia, N. 42° 43′, W. 58° 17′	29.62	752.3	48	8.9	.....	e.	.....	.....	3–4	.....	10	.....	e.	2 h'r	2 h'r	sm'h	ene.	cloudy.
S. S. Gellert Harve, France	29.93	760.2	41	5.0	.....	nnw.	.....	.....	3	.....	7	.....	nnw.	o	o	.....	.....	covered.
S. S. Rugia, off Dodman Point, Eng	.....	.....	51.8	11	.....	s.	.....	.....	3	.....	10	.....	sw.	o	o	.....	w.	covered.
S. S. Silesia, N. 45° 08′, W. 48° 21′†	29.55	750.6	38.3	3.5	90	w.	.....	.....	5	.....	3?	.....	w.	o	o	3	w.	overcast ?
S. S. Vandalia, New York, N. Y.	29.93	760.2	39.9	4.4	93	calm	.....	.....	0	.....	10	.....	nw.	o	o	.....	.....	cloudy.
S. S. Mentmore, off Barrow, Eng *	29.76	755.9	.....	.....	.....	n.	.....	.....	2	.....	5	.....	n.	o	o	.....	.....	fair.
S. S. Hevelius, Liverpool, Eng	.....	.....	47	8.3	.....	ssw.	.....	.....	6	.....	6?	.....	sw.	2 h'r	2 h'r	.....	.....	clear ?
S. S. Sirius, Santos, Brazil *	29.75	755.6	.....	.....	.....	calm	.....	.....	0	.....	3	.....	.....	o	o	.....	.....	clear.
S. S. Bulgarian, N. 51° 50′ W. 7° 40′ *	29.92	760.0	.....	.....	.....	ssw.	.....	.....	1	.....	10	.....	wsw.	2 h'r	2 h'r	mod.	wnw.	overcast.
S. S. Colorado, off Galveston Bar, Texas †	30.05	763.3	53	11.7	.....	ne.	.....	.....	0	.....	.....	.....	.....	o	o	small	nne.	clear.
S. S. Rio Grande, Nassau, Bahamas, W. I.†	30.04	763.0	78	25.6	.....	sw.	.....	.....	3	.....	8	.....	wsw.	1 h'r	1 h'r	mod.	se.	overcast.
S. S. San Marcos, N. 38° 01′, W. 74° 30′	.....	.....	43	6.1	.....	nw.	.....	.....	4	.....	.....	.....	nw.	.....	.....	mod.	nw.	fine.
S. S. Archimede, N. 37° 44′, W. 33° 14′†	29.94	760.5	70	21.1	70	ssw.	.....	.....	4	.....	4	.....	ssw.	2 h'r	2 h'r	h'vy	ssw.	fair.
S. S. John Hopkins, N. 41° —′, W. 72° —′ *†	29.90	759.4	38	3.3	.....	w.	.....	.....	4	.....	4	.....	w.	o	o	light	sw.	fair.
S. S. Glenapp, N. 32° 50′, W. 10° 30′†	30.37	771.4	.....	.....	.....	nne.	.....	.....	2	.....	9	.....	ne.	o	o	sm'h	.....	cloudy.
S. S. Glenfyne, S. 0° 50′, W. 41° 05′†*	29.56	750.8	.....	.....	.....	e.	.....	.....	2	.....	2	.....	ese.	o	o	sm'h	e.	clear.
S. S. Brooklyn, N. 55° 11′, W. 18° 55′	.....	.....	52	11.1	.....	wnw.	.....	.....	2	.....	.....	.....	nnw.	.....	.....	5	n	overcast.
S. S. Chalmette, N. 31° 37′, W. 78° 45′	.....	.....	51	10.6	.....	nw.	.....	.....	4	.....	3	.....	nw.	4 h'r	4 h'r	sm'h	.....	clear.
S. S. Lone Star, N. 28° 35′, W. 80° 20′†	30.05	763.3	59	15.0	.....	n.	.....	.....	3	.....	4	.....	ne.	o	o	mod.	n.	fair.
S. S. New York, N. 38° 40′ W. 74° 20′†	29.93	760.2	42	5.6	.....	nw.	.....	.....	6	.....	7	.....	nw.	.....	.....	sm'h	.....	cloudy.
S. S. Denmark, N. 47° 40′, W. 41° 32′†	29.43	747.5	55	12.8	.....	w.	.....	.....	4	.....	10	.....	sw.	3 h'r	3 h'r	h'vy	w.	raining.
S. S. England, N. 41° 40′, W. 62° 46′	29.55	750.6	.....	.....	.....	w.	.....	.....	5	.....	10	.....	w.	.....	.....	mod.	nw.	foggy.
S. S. Erin, N. 46° 50′, W. 38° 39′	29.54	750.3	51	10.6	.....	ssw.	.....	.....	7	.....	6	.....	sw.	10 h'r	10 h'r	.....	nw.	fine.
S. S. Helvetia, N. 50° 42′, W. 26° 30′	29.64	752.8	55	12.8	.....	wsw.	.....	.....	5	.....	10	.....	wsw.	9 h'r	9 h'r	long	sw.	raining.
S. S. Queen, N. 49° 32′, W. 15° 23′*	29.96	761.0	54	12.2	.....	w.	.....	.....	6	.....	10	.....	.....	6 h'r	6 h'r	mod.	w.	overcast.
S. S. City of Alexandria, N. 29° 15′, W. 78° 01′†	30.06	763.5	65	18.3	.....	wnw.	.....	.....	4	.....	10	.....	nw.	5 h'r	5 h'r	hv'y	nw.	misty.
S. S. City of Merida, N. 23° 09′, W. 82° 22′*†	29.90	759.4	78.8	26.0	.....	ene.	.....	.....	3	.....	5	.....	ene.	3 h'r	3 h'r	light	ene.	cloudy.
S. S. City of Chester, N. 40° 54′, W. 69° 40′	.....	.....	39	3.9	.....	n.	.....	.....	1	.....	.....	.....	.....	.....	.....	sm'h	.....	snowy.
S. S. Braunschweig, N. 13° 09′, W. 26° 30′	29.98	761.5	75.0	23.9	77	wnw.	.....	.....	4	.....	2	.....	w.	o	o	mod.	ne.	hazy.
S. S. Oder, N. 50° 25′, W. 29° 07′	29.70	754.4	51.8	11.0	.....	ssw.	.....	.....	3	.....	10	.....	.....	2½h'r	2½h'r	r'gh	sw.	foggy.
S. S. Rhein, N. 40° 25′ W. 69° 50′	29.81	757.2	.....	.....	.....	nnw.	.....	.....	2	.....	8	.....	nnw.	o	o	sm'h	nnw.	cloudy.
S. S. Salier, N. 49° 00′, W. 34° 27′	29.53	750.0	55.4	13.0	.....	sse.	.....	.....	5	.....	10	.....	sse.	2 h'r	2 h'r	long	sse.	foggy.
S. S. Belgic, San Francisco, Cal †	30.18	766.6	53	11.7	86	se.	.....	.....	2	.....	10	.....	sse.	6 h'r	6 h'r	.....	.....	overcast.
S. S. Gaelic, N. 37° 17′, W. 148° 48′ *	29.29	744.0	60	15.6	94	s.	.....	.....	8	.....	10	.....	.....	.....	.....	cross	w.	overcast.
S. S. Oceanic, N. 24° 43′, E. 118° 48′ *	30.24	768.1	57	13.9	87	nne.	.....	.....	5	.....	9	.....	sw.	.....	.....	3	ne.	cloudy.
S. S. Mississippi, Seattle, Wash. Ter*†	29.95	760.7	47	8.3	92	e.	.....	.....	4	.....	10	.....	e.	.....	.....	.....	.....	stormy.
S. S. Willamette, Fuca Strait †	29.73	755.1	42	5.6	91	ssw.	.....	.....	7	.....	5	.....	sw.	0.85	21.6	.....	.....	squally.
S. S. Oregon, N. 40° 48′, W. 124° 40′ †	30.19	766.8	52	11.1	73	nw.	.....	.....	3	.....	5	.....	nw	.....	.....	high	w.	squally.
S. S. Ancon, San Francisco, Cal†.	30.21	767.3	50	10.0	93	sw.	.....	.....	1	.....	10	.....	sw.	.....	.....	.....	.....	rainy.
S. S. City of Chester, off Point Arena, Cal *†	30.22	767.6	50	10.0	86	nw.	.....	.....	6	.....	10	.....	nw.	.....	.....	.....	.....	cloudy.
S. S. Dakota, Victoria, B. C.†	29.72	754.9	48	8.9	78	se.	.....	.....	7	.....	5?	.....	se.	4 h'r	4 h'r	sm'h	.....	clear.?
S. S. Orizaba, N. 33° 43′, W. 118° 15′ *†	30.13	765.3	57	13.9	81	nw.	.....	.....	2	.....	0	.....	.....	.....	.....	light	sw.	clear.
S. S. State of California, N. 43° 35′, W. 124° 30′	.....	.....	44	6.7	.....	ssw.	.....	.....	5	.....	10	.....	sw.	o	o	h'vy	sw.	squally.
S. S. Australia, N. 36° 03′, W. 128° 43′	30.38	771.6	57	13.9	69	nw.	.....	.....	4	.....	1	.....	nw.	o	o	long	nw.	clear.
S. S. City of New York, Sydney, N. S. W †	30.09	764.3	76	24.4	60	sse.	.....	.....	2	.....	10	.....	sse.	4 h'r	4 h'r	.....	.....	overcast.
S. S. City of Pekin, N. 45° 57′, W. 156° 20′†	28.31	719.1	46	7.8	69	sw.	.....	.....	7	.....	10	.....	wsw.	o	o	r'gh	wsw.	cloudy.
S. S. City of Rio de Janeiro, N. 22° 29′, W. 106° 09′†	29.98	761.5	69	20.6	75	nnw.	.....	.....	2	.....	0	.....	.....	o	o	mod.	nw.	clear.
S. S. City of Sydney, N. 26° 21′, W. 148° 33′†	30.18	766.6	70	21.1	80	se.	.....	.....	2	.....	2	.....	se.	o	o	h'vy	nw.	fair.
S. S. City of Tokei, N. 33° 05′, E. 144° 19′ †	30.08	764.0	63	17.2	.....	s.	.....	.....	6	.....	.....	.....	s.	o	o	mod.	s.	.....
S. S. Colima, Panama Panama†	29.91	759.7	76	24.4	91	nnw.	.....	.....	2	.....	3	.....	nw.	o	o	.....	.....	clear.
S. S. San José, N. 16° 50′, W. 100° 00′†	29.89	759.2	.....	.....	.....	ese.	.....	.....	2	.....	2 ks	.....	ese.	o	o	mod.	wnw.	clear.
S. S. Zealandia, Sydney, N. S. W	30.04	763.0	65	18.3	89	calm	.....	.....	0	.....	0	.....	.....	.....	.....	mod.	e.	fine.
S. S. Caracas, N. 35° 08′, W. 72° 11′†	29.82	757.4	67.5	19.7	89	n.	.....	.....	8	.....	10	.....	n.	o	o	r'gh	n.	drizzling.
S. S. Claudius, N. 18° 45′, W. 77° 45′ †	30.09	764.3	.....	.....	.....	ene.	.....	.....	5	.....	8	.....	ene.	o	o	short	ene.	cloudy.
S. S. Valencia, Curacoa, W. I.†	30.02	762.5	81	27.2	81	ese.	.....	.....	3	.....	2	.....	ene.	o	o	sm'h	.....	fine.
S. S. Belgenland, N. 40° 16′, W. 71° 00′	29.90	759.4	45	7.2	68	wnw.	.....	.....	5	.....	10	.....	nw.	o	o	sm'h	.....	overcast.
S. S. Nederland, N. 50° 20′, W. 1° 08′	.....	.....	45	7.2	.....	wnw.	.....	.....	4	.....	1	.....	.....	3 h'r	3 h'r	mod.	w.	hazy.
S. S. Pennland, N. 48° 55′, W. 31° 16′	29.73	755.1	52	11.1	100	sse.	.....	.....	3	.....	10	.....	.....	9 h'r	9 h'r	long	sse.	foggy.
S. S. Rhynland, Antwerp, Belgium	29.80	756.9	39	3.9	91	wsw.	.....	.....	6	.....	5	.....	wsw.	o	o	.....	.....	squally.
S. S. Wuesland, N. 46° 51′, W. 45° 08′	29.42	747.3	37	2.8	100	w.	.....	.....	5	.....	8	.....	wsw.	o	o	mod.	w.	cloudy.
S. S. P. Oakland, 42° 31′, W. 55° 13′	29.65	753.1	45.9	7.7	88	ene.	.....	.....	2	.....	6	.....	w.	.....	.....	.....	.....	cloudy.
S. S. W. A. Scholten, off Isle of Wight, Eng	30.03	762.7	42.0	5.6	91	nnw.	.....	.....	5	.....	3	.....	nw.	o	o	sm'h	nw.	fair.
S. S. Zaandam, N. 49° 38′, W. 13° 30′	30.03	762.7	60.4	15.8	78	w.	.....	.....	3–4	.....	10 n	.....	sw.	10 h'r	10 h'r	3	w.	foggy.
S. S. State of Florida, N. 55° 02′, W. 9° 30′	29.70	754.4	50	10.0	.....	nnw.	.....	.....	1	.....	10	.....	une.	1 h'r	1 h'r	sm'h	nw.	overcast.
S. S. State of Indiana, N. 46° 40′ W. 48° 30′†	29.34	745.2	32	0.0	.....	nnw.	.....	.....	3	.....	4	.....	w.	4 h'r	4 h'r	sm'h	.....	snowy.
S. S. Hekla, N. 47° 50′, W. 47° 40′*	29.43	747.5	32.9	0.5	.....	wnw.	.....	.....	3	.....	8	.....	w.	.....	.....	sm'h	.....	foggy.
S. S. Iowa, N. 50° 43′, W. 20° 45′*†	29.98	761.5	56	13.3	.....	sw.	.....	.....	5	.....	10	.....	sw.	6 h'r	6 h'r	mod.	sw.	misty
S. S. Plantyn, N. 48° 52′, W. 37° 54′	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	16 h'r	16 h'r	sm'h	sw.	.....
S. S. Baltic, N. 40° 36′, W. 69° 35′	29.79	756.7	45	7.2	92	nw.	.....	.....	5	.....	10	.....	nw.	o	o	sm'h	.....	overcast.
S. S. Britannic, N. 51° 10′, W. 23° 09′ †	29.32	744.7	51	10.6	93	ssw.	.....	.....	4	.....	10	.....	ssw.	2 h'r	2 h'r	mod.	sw.	overcast.
S. S. Celtic, N. 41° 36′, W. 55° 48′†	29.64	752.8	51	10.6	.....	e.	.....	.....	2	.....	10	.....	e.	o	o	sm'h	.....	gloomy.
S. S. Germanic, N. 51° 08′, W. 12° 32′†	29.97	761.2	55	12.8	.....	nw.	.....	.....	4	.....	10	.....	wnw.	shr's	shr's	mod	nw.	misty.
S. S. Lepanto, N. 42° 19′, W. 50° 00′*	29.70	754.4	38	3.3	.....	nnw.	.....	.....	6	.....	8	.....	nw.	o	o	h'vy	w.	cloudy.
S. S. Marengo, N. 47° 20′, W. 28° 00′	29.91	759.7	.....	.....	.....	ssw.	.....	.....	6	.....	10	.....	s.	.....	.....	r'gh	sw.	misty.
S. S. Salerno, Beachy Head, Eng *	29.73	755.1	58	14.4	.....	n.	.....	.....	6	.....	10	.....	w.	2 h'r	2 h'r	r'gh	w.	cloudy.
S. S. Catherine Whiting, Fire Island, N. Y†	30.00	762.0	90	32.2	.....	wnw.	.....	.....	6	.....	.....	.....	nw.	o	o	light	ssw.	
S. S. Saxon, N. 42° 10′, W. 70° 03′†	29.72	754.9	39	3.9	.....	nw.	.....	.....	4	.....	10	.....	.....	.....	.....	sm'h	.....	
MISCELLANEOUS																		
Bg. Abbie Clifford, N. 25° 56′, W. 79° 11′†	30.03	762 7	71	21.7	.....	nnw.	.....	.....	2	.....	9	.....	n.	1½h'r	1½h'r	.....	.....	squally.
Bk. Adelaide, N. 30° 07′, W. 58° 29′*†	30.20	767.1	69	20.6	.....	wsw.	.....	.....	5	.....	8	.....	ssw.	o	o	short	wsw.	gloomy.
Bg. Alcira, N. 39° 06′, W. 73° 04′	29.89	759.2	56	13.3	.....	nw.	.....	.....	6	.....	6	.....	nnw.	o	o	mod.	ese.	cloudy.
Bk. Alpha, N. 26° 10′, W. 20° 20′ †	30.13	765.3	70	21.1	.....	ese.	.....	.....	5	.....	5?	.....	se.	1 h'r	1 h'r	long	ne.	cloudy.?
Schr. Annie Lewis, N. 29° 00′, W. 83° 05′ †	30.29	769.4	47	8.3	.....	n.	.....	.....	3	.....	2?	.....	nw.	o	o	sm'h	.....	cloudy.?
Bk Anna Thormann, S. 34° 09′, E. 31° 24′*	29.88	758.9	72.5	22.5	71	sw.	.....	.....	6	.....	0	.....	.....	o	o	high	sw.	clear.
S. S. Antonio Lopez, Cadiz, Spain *	30.31	769.9	58	14.4	84	w.	.....	.....	1	.....	2	.....	.....	o	o	.....	.....	hazy.
Bk. Aquidneck, S. 3° 34′ W. 36° 43′ *†	30.10	764.5	90	32.2	.....	ese.	.....	.....	2	.....	.....	.....	ene.	o	o	light	ese.	clear.
Bgt. Arthur, N. 11° 02′, W. 23° 15′*†	30.00	762.0	.....	.....	.....	ene.	.....	.....	.....	.....	.....	.....	ene.	o	o	.....	ne.	.....
Schr. Anna A. Holton, N. 24° 29′, W. 85° 32′†	30.07	763.8	78	25.6	.....	ne.	.....	.....	6	.....	8	.....	n.	4 h'r	4 h'r	r'gh	n.	cloudy.
Bg. Belle of the Bay, N. 28° 15′, W. 88° 28′ *†	30.04	763.0	.....	.....	.....	e.	.....	.....	5	.....	2	.....	ne.	o	o	sm'h	e.	clear.
Bk. Champion, N. 33° 17′, W. 75° 00′	.....	.....	72.0	22.2	.....	nw.	.....	.....	5	.....	5	.....	nw.	4 h'r	4 h'r	high	sw.	fair.
Bg. Clara M. Goodrich, Key Francis, W. I *†	30.00	762.0	.....	.....	.....	ese.	.....	.....	1	.....	5	.....	ese.	o	o	.....	.....	fair.
Schr. G. R. Flint, N. 34° 02′, W. 77° 26′	.....	.....	54	12.2	.....	wnw.	.....	.....	5	.....	3	.....	nw.	o	o	r'gh	nw.	fair.
S. S. D. J. Foley, N. 32° 19′, W. 74° 52′ *†	29.95	760.7	63	17.2	.....	nw.	.....	.....	8	.....	5	.....	nw.	o	o	r'gh	nw.	fair.
Bkt. David Preston, Pensacola, Fla	.....	.....	60.0	15.6	.....	e.	.....	.....	.....	.....	10	.....	sw.	8 h'r	8 h'r	.....	.....	.....
Bk. E. L. Pettingill, S. 2° 10′, W. 125° 10′ *†	30.00	762.0	75	23.9	.....	ese.	.....	.....	5	.....	0	.....	.....	o	o	sm'h	se.	clear.
Schr. Edith R. Seward, N. 37° 18′, W. 76° 19′*†	30.08	764.0	40	4.4	.....	wnw.	.....	.....	1	.....	7	.....	.....	o	o	.....	.....	cloudy.
S. S. E. J. Spicer, Liverpool, Eng *	29.82	757.4	48	8.9	.....	n.	.....	.....	2	.....	3	.....	n.	o	o	.....	.....	clear.
Bk. E. D. Bigelow, Verdon Roads, France*†	29.95	760.7	.....	.....	.....	sse.	.....	.....	2	.....	10	.....	sse.	.....	.....	.....	.....	misty.
Bk. Essex, S. 1° 42′, E. 44° 10′ *†	29.90	759.4	81	27.2	.....	nne.	.....	.....	6	.....	.....	.....	.....	rain	rain	light	nne.	squally.
Schr. F. E. McDonald, Camden, Maine †	29.83	757.7	21	— 6.1	.....	nw.	.....	.....	1	.....	0	.....	.....	4 h'r	4 h'r	.....	.....	fine.
S. S. Foscolia, N. 39° 18′, W. 49° 34′	.....	.....	.....	.....	.....	nw.	.....	.....	9	.....	10	.....	nw.	o	o	h'vy	.....	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
										Upper.	Lower.	Upper.	Lower.					
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Freya, Matanzas, Cuba	.....	.....	75	23.9	.....	ne.	.....	.....	5	.....	1	....	e.	2 h'r	2 h'r	.....	.....	fine.
Bg. George, N. 21° 04′, W. 61° 20′ *†	30.20	767.1	.....	.....	.....	ene.	.....	.....	5	.....	2	.....	ne.	o	o	mod.	nw.	fair.
S. George Stetson, N. 39° —′, W. 60° —′ *†	29.50	749.3	67	19.4	48	w.	.....	.....	4	.....	2?	.....	w.	light	light	r'gh	sw.	cloudy.?
Bk. Gronsvaer, S. 37° 20′, E. 176° 52′ †	29.97	761.1	71.8	22.1	.....	var.	.....	.....	2	.....	5	.....	n.	o	o	mod.	ene.	fine.
Bk. Godeffroy, S. 50° 58′, W. 79° 26′ †	29.81	757.2	49.5	9.7	95	wnw.	.....	.....	6	c	8 k	wsw.	w.	light	light	mod.	w.	clearing.
Bk. Great Surgeon, S. 26° 25′, E. 58° 50′ *†	30.25	768.3	80	26.7	.....	se.	.....	.....	3	.....	2	.....	s.	o	o	mod.	ssw.	clear.
Bk. Grey Eagle, S. 21° 51′, W. 38° 08′ *†	29.90	759.4	... .	.....	.....	ne.	.....	.....	5	.....	6	.....	ne.	o	o	light	ne.	fine.
Bk Hattie G. McFarland, N. 28° 38′, W. 63° 55′ †	30.24	768.1	72	22.2	.....	sw.	.....	.....	5	.....	6	.....	w.	o	o	long	e.	
Bk. Horace Scudder, N. 37° 50′, W. 75° 00′ †	30.20	767.1	48	8.9	.....	nw.	.....	.....	5	.....	.....	.....	.....	o	o	.....	ne.	cloudy.
Schr. Isabel Alberto, off Squan Inlet, N. J. †	30.01	762.2	.....	.....	.....	nw.	.....	.....	3	.....	10	.....	w.	o	o	sli't	se.	cloudy.
Schr. Jennie N. Huddell, Cape Henry, Va †	30.07	763.8	42	5.6	.....	nnw.	.....	.....	2	.....	10	.....	n.	driz	driz	sm'h	.....	threatening.
Bk. Joseph A. Ropes, S. 12° 14′, E 47° 45′ *†	29.98	761.5	86	30.0	84	calm	.....	.....	0	.....	8	....	....	o	o	mod.	e.	cloudy.
Bkt. Josephine, N. 20° 11′, W. 32° 15′ †	30.08	764.0	75	23.9	60	se.	.....	.....	2	.....	10	.....	.....	o	o	long	e.	hazy.
S. S. J. W. Wilson, Pensacola, Fla. †	30.10	764.5	40	4.4	.....	nw.	.....	.....	2	.....	0	.....	.....	o	o	.....	.....	clear.
Light House Tender, Laurel, Apalachicola, Fla †	30.17	766.3	45	7.2	.....	ne.	.....	.....	0–1	.....	2	.....	ne.	o	o	sm'h	.....	clear.
Bg. Lilian, N. 39° 20′, W. 73° 10′ †	29.96	761.0	44	6.7	.....	nw.	.....	.....	6	.....	6	.....	nw.	o	o	mod.	se.	cloudy.
Bk. Louise Adelaide, N. 22° 50′, W. 85° 30′	.....	.....	70	21.1	.....	calm	.....	.....	0	.....	9	.....	s.	5 h'r	5 h'r	cross	var.	overcast.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe *†	30.08	764.0	.....	.....	.....	.....	.....	.....	1	.....	10	.....	.....	24 h'r	24 h'r	sm'h	.....	rainy.
S. S. Madrid, N. 49° 23′, W. 7° 26′ *†	30.08	764.0	50	10.0	.....	wnw.	.....	.....	2	.....	fg.	.....	.....	20 h'r	20h'r	mod.	wnw.	dense fog.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.20	767.1	64	17.8	.....	nw.	.....	.....	1	.....	2	.....	nw.	.....	.....	....	.....	fair.
S. Minnie N. Gerow, N. 26° 57′, W. 57° 00′ *†	30.12	765.0	.....	.....	.....	wnw.	.....	.....	2	.....	10	....	w.	o	o	mod.	n.	threatening.
S. M. P. Grace. S. 49° 00′, W. 103° 57′ *†	30.00	762.0	52	11.1	.....	w to sw	.....	.....	5	.....	fg.	.....	.....	.....	.....	r'gh	nnw.	misty.
Bg. Myrtle, Clements Port, Nova Scotia *†	29.62	752.3	.....	.....	.....	se.	.....	.....	1	.....	10	.....	se.	snow	snow	.....	.....	misty.
Bg. O. C. Clary, Miragoane, Hayti, W. I. *†	30.04	763.0	88	31.1	92	se.	.....	.....	2	.....	o	.....	.....	o	o	.....	.....	clear.
Bk. Ottawa, N. 40° 48′, W. 20° 28′ *	30.35	770.9	60	15.6	.....	s.	.....	.....	2	.....	1	.....	ssw.	o	o	sm'h	w.	clear.
S Paramita, San Francisco, Cal	.....	.....	52	11.1	.....	ese.	.....	.....	2	.....	.....	.....	.....	o	o	.....	.....	
Bk. Pilgrim, N. 29° 36′, W. 70° 55′ *†	30.09	764.3	.....	.....	.....	ssw.	.....	.....	6	.....	1	.....	ssw.	o	o	long	s.	fine.
S. S. Rudnorshire, N. 27° 17′. E. 122° 44′ *†	30.15	765.8	.....	.....	.....	nne.	.....	.....	6	.....	8	.....	ne.	4 h'r	4 h'r	mod.	ne.	cloudy.
S. S. Raleigh, N. 38° 40′, W. 74° 00′ *†	29.82	757.4	40	4.4	.....	wnw.	.....	.....	4	.....	5	.....	wnw	o	o	light	w.	
Bk. Rebus, N. 52° 31′, E. 2° 57′ *	29.60	751.8	41	5.0	.....	wnw.	.....	.....	6	.....	7	.....	wnw.	snow	snow	r'gh	nw.	clearing.
Schr. S. B. Hubbard, Hampton Roads, Va. †	30.13	765.3	60	15.6	.....	nnw.	.....	.....	1	.....	8	.....	nw.	6 h'r	6 h'r	long	ne.	clearing.
Bk. Scud, Staten Island, N. Y. *†	30.10	764.5	.....	.....	.....	wnw.	.....	.....	4	.....	10	.....	.....	o	o	.....	.....	
Bk. Southern Belle, N. 40° 59′, W. 15° 57′ *†	30.33	770.4	60	15.6	.....	wnw.	.....	.....	2	....	5	.....	nw.	o	o	sm'h	.....	fair.
S. S. Strathleven, N. 10° 17′, E. 110° 34′	29.86	758.4	77.5	25.3	93	nne.	.....	.....	6	.....	8	.....	nne.	light	light	7	nne.	d. clouds.
Bk. Sunbeam, N. 38° 35′, W. 51° 26′	29.60	751.8	63	17.2	89	ssw.	.....	.....	3	.....	8	.....	w.	2 h'r	2 h'r	mod.	wnw.	cloudy.
Schr. T. S. McLellan, N. 19° 50′, W. 60° 40′ *†	30.10	764.5	70	21.1	.....	ene	.....	.....	.....	.....	.....	.....	ene.	.....	.....	.....	ene.	
U. S. F. C. S. S. FishHawk, Washington, D. C †	30.17	766.3	42	5.6	.....	calm	.....	.....	0	.....	8	.....	calm	o	o	.....	.....	cloudy.
Bk. Vincenzo Accame, N. 31° 16′, W. 58° 51′ †	30.13	765.3	71.6	22.0	.....	w.	.....	.....	5	.....	9	.....	w.	o	o	.....	n.	
Bk. Wandering Jew, Montevideo, Uruguay †	29.89	759.2	69	20.6	.....	se.	.....	.....	4	.....	3	.....	se.	4 h'r	4 h'r	.....	.....	clear.
Bk. Warden Law, Tocapilla, Peru, S. A *	30.05	763.3	.....	.....	.....	calm	.....	.....	0	.....	1	.....	w.	.....	.....	sm'h	sw.	fair.

International Chart I. December 24, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 25, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Algerian.																			
Nemours	.....	.....	30.30	769.7	63.3	17.4	78	n.	.....	.....	2	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.19	766.8	59.7	15.4	77	w.	.....	.....	3	.....	4	.....	.....	0	0	cloudy	Thève.
La Calle	.....	.....	29.97	761.3	61.5	16.4	79	nnw.	.....	.....	5	.....	5	.....	.....	0.020	0.5	cloudy	Fonfréde.
Tunis	.....	.....	30.00	762.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.30	769.7	59.0	15.0	70	se.	.....	.....	2	.....	0	.....	.....	0	0	clear	Pérès.
Tebessa	.....	.....	30.14	765.5	51.4	10.8	86	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Geriville	.....	.....	.....	.....	52.5	11.4	61	nw.	.....	.....	2	.....	0	.....	.....	0	0	clear	Lonchamp.
Laghouat	.....	.....	30.30	769.5	61.2	16.2	36	ne.	.....	.....	2	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.23	767.9	66.2	19.0	37	nw.	.....	.....	4	.....	2	.....	.....	0	0	fair	Malau.
Australian.																			
Melbourne, Victoria	30.16	766.0	30.25	768.3	58.2	14.6	74	s.	6	2.7	.....	.....	8	.....	.....	0	0	dull	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.27	743.5	29.84	758.0	34.5	1.4	70	sw.	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.79	731 2	29.38	751.3	30.6	— 0.8	100	wnw.	11.9	5.3	.....	.....	10	.....	.....	0.055	1.4	....	Dr. Wierzbicki.
Eperies	28.61	726.8	29.52	749.8	31.6	— 0.2	78	w.	.....	.....	4	.....	10 ks	....	se.	0	0	....	Julius Mikolik.
Gratz	28.53	724.7	29.82	757.3	37.9	3.3	44	nw.	.....	.....	4	.....	3	.....	.....	0.012	0.3	.....	Andreas Rospini.
Hermannstadt	28.07	713.0	29.54	750.4	30.6	— 0.8	96	nw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.74	729.9	29.92	759.9	31.6	— 0.2	77	w.	.....	.....	3	.....	7	.....	.....	0.161	4.1	.....	The Staff.
Lemberg	28.34	719.9	29.36	745.8	27.3	— 2.6	87	nw.	.....	.....	5	.....	10	.....	.....	0.165	4.2	.....	Dr. T. Stanecki.
Pola	29.71	754.6	29.82	757.5	47.3	8.5	46	n.	.....	.....	2	.....	3	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.04	737 5	29.48	748.9	31.5	— 0.3	96	w.	.....	.....	1	.....	10	.....	.....	0.276	7.0	.....	Joseph Midlinszky, S J.
Szegedin	29.35	745.4	29.64	752.8	32.7	0.4	89	w.	.....	.....	3	.....	5	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.76	755.8	29.86	758.4	44.2	6.8	46	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	Royal Academy.
Vienna	29.04	737.7	29.78	756.5	35.2	1.8	66	w.	.....	.....	5	.....	2	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.32	744.7	29.43	747.5	35.1	1.7	72	wsw.	9	4.0	.....	.....	6	.....	.....	0	0	d. clouds	W. Boswell
Armagh, Observatory	29.27	743.4	29.51	749.5	37.8	3.2	96	n.	3	1.3	.....	.....	10	.....	.....	.....	.....	rain & fog	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.47	748.5	40.8	4.9	97	sse.	5	2.2	.....	.....	10	.....	.....	.....	.....	rain & fog	John Hartnup.
Bolton, Sharples	28.92	734.6	29.45	748.0	39.0	3.9	82	ssw.	.....	.....	.....	.....	10	.....	.....	.....	.....	raining	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.53	13.5	.....	McLandsborough & Preston
Bridgetown, Barbadoes	30.00	762.0	30.02	762.5	80.0	26.7	82	Lo.	.....	.....	3	.....	6	.....	.....	.....	.....	gloomy	Corpl. J. Surgenor, A. H C.
Cardington	.....	.....	.....	.....	39.4	4.1	96	sw.	.....	.....	1.0	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E.	29.42	747.3	29.55	750.6	47.5	8.6	98	calm	.....	.....	0	.....	10	.....	.....	.....	.....	raining	Corpl. G. A. Pickles.
Falmouth, Observatory	29 54	750.3	29.77	756.1	52.8	11.6	90	w.	.....	.....	6	.....	7	.....	.....	.....	.....	squally	The Staff.
Fort Napier, Natal	27.83	706.9	30.04	763.0	77.4	25.2	59	s.	.....	.....	1	.....	7?	.....	.....	.....	.....	overcast?	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.72	754.9	29.95	760.7	77.0	25.0	95	nw.	.....	.....	6	.....	2	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.06?	763.5?	30.11?	764.8?	61.5	16.4	84	w.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H C.
Glasgow, Observatory	29.24	742 7	29.44	747.8	37.7	3.2	82	wsw.	.....	.....	3	.....	10	.....	.....	.....	.....	d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.39	746.5	29.56	750.8	48.4	9.1	96	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	The Staff.
Guernsey	29.46	748 3	29.75	755.6	52.0	11.1	98	wsw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	29.53	750.0	29.57	751.1	47.9	8.8	98	sw.	13	5.8	.....	.....	10	.....	.....	.....	.....	raining	The Staff.
Leicester, Museum	29.21	741.9	29.48	748.8	45.0	7.2	100	sw.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	J. C. Smith.
Malta, Mediterranean	29.55?	750.6?	29.62?	752.3?	56.4	13.6	98	nw.	.....	.....	2	.....	8	.....	.....	blank	blank	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.10	764.5	30.15	765.8	73.0	22.8	85	ne.	.....	.....	3	.....	9	.....	.....	.....	.....	overcast	C. S. Duncombe.
Oscott, St. Mary's College	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.32	744.7	29.54	750 3	49.0	9.4	96	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	The Staff.
Plymouth	29.65	753.1	29.73	755.1	52.2	11.2	96	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	gloomy	John Merrifield.
Sandwick Manse, Orkneys	29.20	741.7	29.31	744.5	33.2	0.7	97	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	snowy	Rev. C. Clouston, L L D.
Scutari Cemetery, Turkey	29.42	747.3	29.48	748.8	43.0	6.1	93	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	W. H. Lyne.
Sheffield	29.20	741.7	29.47	748.5	40.0	4.4	98	calm	.....	.....	0	.....	10	.....	.....	0.78	19.8	raining	W. F. Cooper.
Silloth Rectory	29.41	747.0	29.44	747.8	40.4	4.7	97	calm	.....	.....	0	.....	10	.....	.....	0.150	3.8	raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.50	749.3	39.3	4.1	95	wsw.	.....	.....	.....	.....	10	.....	.....	.....	.....	raining	I. New.
Stratfield Turgiss	29.33	745.0	29.54	750.3	50.7	10.4	95	w.	.....	.....	3	.....	10	.....	.....	.....	.....	showery	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.70	754.4	29.74	755.4	54	12.2	87	sw.	.....	.....	7	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.60	751.8	29.63	752.6	52.6	11.4	94	wsw.	34	15.2	.....	.....	10	.....	.....	.....	.....	raining	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.72	754.9	29.76	755.9	29	— 1.7	100	nw.	14	6.3	.....	.....	10 n	....	calm	0.070	1.8	raining	H. J. Cundall, C E
Chatham, N. B*	29.82	757 4	29.88	758.9	20	— 6.7	96	w.	1	0.4	.....	2 c	2 ks	w.	w.	0.02	0.5	fair	G. A. Blair.
Father Point, Quebec*	30.02	762.5	30.04	763.0	17	— 8.3	87	n.	17	7.6	.....	5 cs	0	nw.	.....	0	0	clear	J. McWilliams.
Fort Garry, Manitoba*	29.41	747 0	30.30	769.6	20	— 6.7	100	sw.	2	0.9	.....	.....	10 n	....	.....	0	0	light fog	James Stewart.
Halifax, N. S*	29.67	753 6	29.81	757.2	27	— 2.8	92	w.	17	7.6	.....	.....	10 k	.....	.....	0.072	1.9	cloudy	A. Allison.
Kingston, Ontario*	29.88	758.9	30.23	767.8	32	0.0	88	nw.	4	1.8	.....	.....	10 n	.....	.....	0.01	0.3	light snow	A. P. Knight, M A.
Montreal, Quebec*	29.92	760.0	30.14	765.5	28	— 2.2	88	w.	4	1.8	.....	.....	10 s	.....	.....	0.08	2.0	cloudy	C. H. McLeod, C E.
Parry Sound, Ontario*	29.53	750.0	30.26	768.6	31	— 0.6	88	w.	4	1.8	.....	.....	10 ks	.....	ne.	0.03	0.8	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.58	751 3	30.30	769.6	33	0.6	100	sw.	5	2.2	.....	.....	10 n	.....	.....	0.03	0.8	cloudy	H. Morgan.
Port Stanley, Ontario	29.01	752.1	30.29	769.4	32	0.0	92	w.	5	2.2	.....	.....	10 n	.....	w.	lnap.	lnap.	cloudy	M. Payne.
Quebec, Quebec*	29.73	755.1	30.07	763.8	24	— 4.4	88	calm	.....	.....	0	.....	10 k	.....	e.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.70	754.4	30.18	766.6	30	— 1.1	85	nw.	5	2.2	.....	.....	10 ks	.....	nw.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.50	749.3	30.24	768.1	36	2.2	79	sw.	5	2.2	.....	.....	10 ks	....	.....	0.03	0.8	cloudy	
St. Andrews, N. B	29.87	758.7	29.92	760.0	23	— 5.0	83	n.	4	1.8	.....	.....	10 n	.....	.....	0.02	0.5	cloudy	
Sydney, C. B*	29.48	748 8	29 54	750.3	33	0.6	81	nw	8	3.6	.....	.....	10 n	....	.....	0.03	0.8	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.88	758.9	30.29	769.4	33	0.6	85	w.	8	3.6	.....	.....	10 n	.....	w.	0	0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.85	758.2	29.92	760.0	32	0.0	74	nw.	6	2.7	.....	0	8 k	.....	nw.	0.04	1.0	fair	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.82	732.0	30.28	769.1	30.0	— 1.1	95	calm	.....	.....	1	.....	10 s	.....	.....	0	0	overcast	Wm. Wylie.
St. Johns, Newfoundland	29.18	741.2	29.44	747.8	32	0.0	100	ne.	1	0.4	.....	.....	10	.....	.....	0.54	13.7	hazy	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.13	765.3	30.16	766.1	70.0	21.1	78	sw.	10.3	4.6	.....	0	4 k	.....	.....	0	0	clear	John Duthie.
Cape Town, C G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
Chinese (Sub-series).																			
Sung-shu-chwang	24.56	623.7	.....	.....	17.6	— 8.0	.....	calm	.....	.....	0	.....	ks	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.15	765.8	30.26	768.6	23.4	— 4.8	71	sw.	6.3	2.8	.....	0	0	.....	.....	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.39	771.8	30.41	772.4	32.2	0.1	87	n.	1.1	0.5	.....	4 cs	0	.....	.....	0	0	cloudy	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.48	748.9	29.53	750.1	28.8	— 1.8	96	ssw.	7	3	.....	.....	10	.....	.....	.....	.....	foggy.....	Oversergent Fischer.
Fanoe	29.46	748.3	29.48	748.8	31.5	— 0.3	100	ssw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.97	761.3	30.02	762.4	14.5	— 9.7	74	nne.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.92	759.9	29.94	760.4	13.6	—10.2	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	30.03	762.8	30.08	764 0	— 4.4	—20.2	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.87	758.6	29.91	759.7	22.3	— 5.4	87	ne.	.....	.....	8	.....	2	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.37	746.0	29.41	746.9	32.0	0.0	85	s.	9	4	.....	.....	3	.....	.....	.....	.....	.....	Overloerer Hergh.
Vestervig	29.35	745.4	29.44	747.8	26.4	— 3.1	100	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy.....	Loerer Oesterbol.
Upernavik, Greenland	30.07	763.8	30.12	765.0	0.1	—17.7	.....	e.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.59	751.5	30.25	768.3	51.4	10.8	97	w.	.....	.....	1	.....	10	.....	.....	0.181	4.6	light rain.....	M. Labroue, Director.
Alençon, Normal School	29.35	745 4	29.90	759.4	50.0	10	97	ne.	.....	.....	1	.....	10 n	w.	w.	0.35	9.	raining.....	M. Nicot, Director.
Arras, Engineer School	29.31	744.4	29.57	751.0	38.8	3.8	96	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	light rain....	M. Fénéon, Command't.
Avignon, Normal School	29.98	761.4	30.06	763.4	48.2	9	52	nnw.	.....	.....	2	.....	5	.....	nnw	0	0	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.26	743.2	29.84	757.9	37.8	3.2	97	s.	.....	.....	2	.....	10	.....	sw.	0.031	0.8	light rain....	M. Saillard, Director.
Beauvais, Normal School	29.46	748.2	29.72	755.0	47.8	8.7	92	sw.	.....	.....	2	.....	10	.....	wsw.	0.024	0.6	covered.....	M. Frère Eugène Marie.
Besançon, Normal School	29.02	737.3	29.95	760.6	39.2	4	90	s.	.....	.....	1	.....	n	.....	sw.	0	0	.....	M. Goblin, Director.
Bordeaux, Observatory	29.88	758.9	30.14	765.6	55.4	13.0	77	w.	.....	.....	1	.....	10	.....	wnw.	0.197	5.0	covered.....	M. Rayet, Director.
Bourges, Normal School	29.32	744.7	29.87	758.8	50.0	10	94	s.	.....	.....	4	.....	10 n	.....	s.	.....	.....	raining.....	M. Malet, Director.
Brest, Naval Observatory	29.76	756.0	30.01	762.2	53.6	12.0	97	w.	.....	.....	3	.....	10	.....	w.	0.945	24.0	.....	M. de Kermarec, Dir.
Caen, Normal School	29.73	755.1	29.80	757.0	52.2	11.2	87	w.	.....	.....	1	.....	8	.....	w.	0	0	very cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.122	3.1	.....	M. Judot, Director.
Charleville, Normal School	29.24	742.8	29.78	756.3	34.9	1.6	81	ene.	.....	.....	1	.....	10	.....	.....	.....	.....	raining.....	M. Grimard, Director.
Clermont-Ferrand Obs'y	28 59	726.3	29.96	761.0	49.6	9.8	79	w.	.....	.....	2	.....	10	.....	.....	0.059	1.5	covered	M. Allnard, Director.
Cluny, Normal School	29.12	739.7	29.99	761.8	37.0	2.8	93	s.	.....	.....	2	.....	9	.....	s.	0.083	2.1	raining.....	M. de Villemontée, Dir.
Commercy, Normal School	28.91	734.4	29.80	757.0	37.0	2.8	93	sw.	.....	.....	1	.....	10 kn	sw.	sw.	1.354	34.4	light rain....	Dr. Coulet, Director.
Gap, Normal School	27.46	697.5	30.09	764.2	36.3	2.4	61	ne.	.....	.....	1	.....	2	.....	s.	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28.87	733.4	30.02	762.6	48 7	9.3	48	nw.	.....	.....	2	.....	3	.....	nw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.33	745.0	30.14	765.6	33.1	0.6	92	ese.	.....	.....	1	.....	kn	.....	wnw.	0	0	.....	M. Ablard, Director.
Guéret	28.40	721.3	29.98	761.0	46.4	8	90	w.	.....	.....	4	.....	10 n	.....	sw.	0.35	9.	raining.....	M. Delorme, Dir.
Lamballe, Normal School	29.67	753.5	30.12	765.0	53.2	11.8	90	w.	.....	.....	4	.....	10	.....	w.	0.059	1.5	hazy.....	M. Ollitrault, Director.
Lescar, Normal School	29.65	753.1	30.22	767.5	54.0	12.2	78	w.	.....	.....	3	0	8 kn	.....	.....	1.276	32.4	raining.....	M. Chauvin, Director.
Lorient, Naval Observatory	29.89	759 1	29.99	761.7	53.6	12.0	93	w.	.....	.....	4	.....	10	.....	.....	0.157	4.0	raining	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.95	735.3	30.05	763.3	35.6	2.0	91	sse.	.....	.....	1	.....	10	.....	.....	0.024	0.6	light rain.....	M. André, Director.
Mans, Normal School	29.56	750.8	29.88	758 9	51.8	11	97	w.	.....	.....	3	.....	8	.....	w.	0.193	4.9	very cloudy	M. Piboën, Director.
Marseille, Observatory	29.75	755.7	30.02	762.0	50.9	10.5	45	nw.	.....	.....	3	.....	3	.....	nw.	0	0	.....	M. Stephan, Director.
Montlouis	24.89	632.1	29.73	755.1	41.9	5.5	57	sw.	3.8	1.7	.....	.....	5	.....	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.89	759.2	30.06	763.6	51.1	10.6	82	se.	.....	.....	1	.....	5	wnw.	.....	0	0	cloudy.....	M. Galzin, Director.
Nancy, Normal School	29.00	736.5	29.80	756.8	37.4	3.0	86	ssw.	.....	.....	1	.....	n	.....	.....	0	0	.....	M. Husse, Director.
Nantes, Observatory	29.84	758.0	30.00	762.1	54.1	12.3	93	w.	.....	.....	2–3	.....	10	.....	.....	0.091	2.3	light rain....	M. Larocque, Director.
Perpignan, Observatory	30.00	762.0	30.11	764.9	59.5	15.3	56	nw.	26.2	11.7	.....	0	6	nw.	nw.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.23	539.3	.....	.....	25.7	— 3.5	.....	nw.	.....	.....	3–4	.....	.....	.....	nw.	1.024	26.0	.....	M. Vaussenat.
Privas, Normal School	28.91	734.2	30.00	762.1	41.0	5	91	s.	.....	.....	1	.....	2	s.	s.	0	0	slightly cl'dy	M. Tatheu.
Puy de Dôme Obs'y, Summit	24.98	634.4	.....	.....	32.2	0.1	100	w.	.....	.....	8	.....	10	.....	.....	0.484	12.3.	foggy.....	M. Allnard, Director.
Rochefort, Naval Obs'y	30.04	763.1	30.08	763.9	55.0	12.8	93	wsw.	.....	.....	3	.....	8	.....	w.	0.47	12.	¾ covered..	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.89	759.1	30.10	764.6	53.8	12.1	93	sw.	.....	.....	1	.....	5	.....	sw.	0.150	3.8	raining.....	M. Brotier, Director.
Rodez, Normal School	27.83	706.9	30.00	762.0	45.7	7.6	91	w.	.....	.....	1	.....	10	.....	w	.....	.....	light rain....	M. Seger, Director.
Rouen, Normal School	29.63	752.6	29.68	753.8	51.1	10.6	97	sw.	.....	.....	1	.....	10	w.	.....	0.177	4.5	raining.....	M. Mouillot.
Saint Lô	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.60	751.8	29.75	756.0	47.7	8.7	98	sw.	.....	.....	1	.....	10	.....	w.	0.063	1.6	.....	M. Renou, Director.
Toulouse, Observatory	29.47	748 6	30.20	767.1	52.2	11.2	93	wsw.	.....	.....	4	.....	10	n.	.....	0.189	4.8	covered.....	M. Baillaud, Director.
Tours	29.73	755.1	29.91	759.6	53.2	11.8	86	sw.	.....	.....	1	.....	10	.....	wsw.	0.197	5.0	rainy.....	M. de Tastes.
Versailles, Observatory	29.27	743.5	29.76	756.0	48.2	9.0	97	w.	.....	.....	1	.....	.....	.....	.....	0.091	2.3	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	30.11	764.9	30.26	768.7	54.1	12.3	86	w	31.5	14.1	.....	0	9 k	.....	w.	0.634	16.1	.....	M. Cartier, Director.
German.																			
Ansbach	28.39	721.2	29.90	759.5	32.0	0.0	72	sw	.....	.....	2	.....	9	sw.	.....	0.220	5.6	.....	Prof. Jnedt.
Bamberg	29.02	737.0	29.86	758.4	33.8	1.0	70	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Prof. Dr. Hoh.
Berlin	29.44	747.7	29.62	752.3	35.1	1.7	78	nw.	.....	.....	2	.....	10	.....	.....	0.039	1.0	.....	Prof. Dr. Arndt.
Breslau	29.16	740.7	29.69	754.0	31.3	— 0.4	81	wnw.	.....	.....	2	.....	10	.....	.....	0.039	1.0	.....	Royal University Obs'y
Carlsruhe	29.41	746.9	29.85	758.3	38.5	3.6	66	sw.	.....	.....	3	.....	10	sw.	.....	0.315	8.0	.....	Albert Senz.
Cassel	28.95	735.2	29.65	753·2	33.4	0.8	89	sw.	.....	.....	3	.....	10	s.	.....	0.031	0.8	snowing.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.43	747.6	29.82	757·3	36.9	2.7	77	ssw.	.....	.....	1	.....	10	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	28.48	723.5	29.97	761.1	37.8	3.2	67	sw.	.....	.....	4	.....	10	wsw.	.....	0.260	6.6	.....	Wilhelm, Chief Tel.
Hamburg	29.49	749.1	29.58	751.4	32.4	0.2	100	sw.	.....	.....	4	.....	10	.....	.....	0.067	1.7	snowing.....	E. Preller.
Kiel	29.52	749.8	29.54	750.2	35.2	1.8	87	sw.	.....	.....	2	.....	7	.....	.....	0.079	2.0	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.30	744.2	29.73	755.2	34.2	1.2	78	wsw.	.....	.....	4	.....	4	.....	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	29.48	748.7	29.67	753.5	35.8	2.1	64	wsw.	.....	.....	5	.....	10 ks	.....	w.	0.004	0.1	.....	Weather Observatory.
Memel	29.45	747.9	29.49	749.0	23.7	— 4.6	84	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy	Issermann.
Munich	28 06	712.7	29.91	759 8	33.6	0.9	64	w.	.....	.....	3	.....	9	w.	.....	0.185	4.7	.....	Central Station.
Neufahrwasser	29.49	749 0	29.50	749.4	33.1	0.6	87	nw.	.....	.....	2	.....	8	.....	.....	0.378	9.6	.....	A. Lothes.
Neustadt, Palatinate	29.31	744.5	29.83	757.8	37.8	3.2	76	calm	.....	.....	0	.....	10	w.	.....	0.488	12.4	.....	Dicknether.
Stuttgart	28.91	734.2	29.83	757.6	35.6	2.0	64	sw.	.....	.....	1	.....	10	.....	.....	0.280	7.1	rain & snow	Prof. Dr. Schoder.
Wustrow	29.56	750.8	29.58	751.4	33.3	0.7	92	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Profs. Brandes & Reimer
Greek.																			
Athens	29.19	741.3	29.58	751.3	48.7	9.3	.....	n.	.....	.....	1.5	.....	10	.....	.....	0	0	covered.....	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.08	763.9	30.13	765 2	75.0	23.9	63	wnw.	15.0	6.7	.....	.....	6	n.	.....	0	0	d. clouds	
Deesa	29.50	749 3	29.97	761.3	85.6	29.8	20	nnw.	13.0	5.8	.....	.....	6	ne.	.....	0	0	d. clouds	
Bombay	29.92	759.9	29.96	760.8	79.7	26 5	71	w.	9.0	4.0	.....	.....	10	.....	w.	0	0	overcast	
Poona, Yarrowda	28.10	713.8	29.96	760.9	81.5	27.5	18	e.	8.0	3.6	.....	.....	9	wsw.	.....	0	0	d. clouds	
Trichinopoly	29.68	753.9	29.97	761.2	75.6	24.2	84	nne.	1.0	0.4	.....	.....	10	.....	.....	0.15	3.8	overcast.....	
Belgaum	27.40	696.0	29.94	760.5	77.0	25.0	24	e.	9.0	4.0	.....	.....	3	s.	.....	0	0	d. clouds	
Lahore	29.30	744.1	30.07	763.7	63.1	17.3	50	calm	0	0	.....	.....	10	.....	.....	0	0	gloomy.....	
Roorkee	29.10	739.2	30.03	762 8	66.8	19.3	37	nw.	0.7	0.3	.....	.....	10	.....	.....	0	0	overcast.....	
Agra	29.48	748.9	30.06	763.6	72.2	22.3	43	nw.	.....	.....	.....	.....	0	.....	.....	0	0	blue sky.....	
Nagpur	28.96	735.6	30.02	762.4	77.7	25.4	40	calm	0	0	.....	.....	4	w.	.....	0	0	d. clouds	
Jubbulpore	28.68	728.6	30.07	763.8	71.3	21.8	49	calm	0	0	.....	.....	6	s.	.....	0	0	d. clouds	
Lucknow	29.63	752.6	30.02	762.5	68.3	20.2	49	nw.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky.....	
Allahabad	29.70	754 4	30.02	762.6	65.3	18.5	68	se.	2.0	0.9	.....	.....	1	.....	.....	0	0	d. clouds	
Patna	29.83	757.6	30.02	762.5	67.6	19.8	60	wnw.	2.7	1.2	.....	.....	6	wnw.	wnw.	0	0	d. clouds	
Hazaribagh	27.98	710 8	30.05	763.3	66.6	19.2	55	nnw.	7.5	3.4	.....	.....	6	.....	.....	0	0	d. clouds	
Cuttack	29.96	760.9	30.04	763.0	73.0	22.8	74	calm	0	0	.....	.....	3	.....	.....	0	0	d. clouds.....	
Calcutta, Alipore	30.01	762.3	30.03	762.8	69.9	21.1	68	w.	1.0	0.4	.....	.....	2	.....	.....	0	0	d. clouds.....	
Dhubri	29.91	759.8	30.04	762.9	67.4	19.7	74	calm	0.6	0.3	.....	.....	0	.....	.....	0	0	blue sky.....	
Chittagong	29.96	760 8	30.05	763.2	70.4	21.3	73	w.	1.5	0.7	.....	.....	3	.....	.....	0	0	blue sky.....	
Sibsagar	29.74	755.3	30.09	764.3	61.7	16.5	90	nw.	1.0	0.4	.....	.....	6	w	w.	0	0	d. clouds	
Jeypore	28.58	726.0	30.05	763.3	72.7	22.6	60	wnw.	0.6	0.3	.....	.....	3	wnw.	.....	0	0	d. clouds.....	
Italian.																			
Udine	29.43	747.5	29.85	758.2	44.4	6.9	26	w.	0.7	0.3	.....	.....	0	.....	.....	0	0	.....	Prof. Giovanni Clodig

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	WEATHER.	OBSERVERS.
ITALIAN.—Continued.																			
Milan	29.38	746.2	29.91	759.8	42.8	6.0	42	sw.	8.7	3.8	.....	.....	2	nw.	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.74	755.5	29.86	758.4	43.7	6.5	50	ssw.	6.9	3.1	.....	.....	0	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.99	736.4	29.93	760.3	40.3	4.6	59	s.	3.1	1.4	.....	.....	1	.....	.....	0	0	.....	Prof. F. F. Denza.
Genoa	29.73	755 2	29.93	760.2	48.7	9.3	28	s.	1.8	0.8	.....	.....	2	.....	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.97	710.2	29.93	760.2	37.9	3.3	40	w.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. D. G. Bruno.
Pesaro	29.63	752.7	29.69	754.0	46.8	8.2	44	w.	0	0	.....	.....	2	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.71	754.5	29.97	761.1	39.7	4.3	69	ne.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. Costantino Pittei.
Leghorn	29.80	756.8	29.88	759.0	49.1	9.5	32	e.	10.5	4.7	.....	.....	8	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.75	755.7	29.93	760.2	44.2	6.8	57	nne.	1.3	0.6	.....	.....	1	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	29.55	750.5	29.81	757.1	43.9	6.6	47	nne.	24.2	10.8	.....	.....	6	n.	.....	0.059	1.5	.....	Prof. C. de Giorgi.
Cosenza	29.10	739.1	29.85	758.2	44.6	7.0	71	nne.	3.1	1.4	.....	.....	0	.....	.....	0.118	3.0	.....	Prof. D. Conti.
Cagliari	29.77	756.2	29.97	761.2	54.1	12.3	55	nw.	.....	.....	6	.....	4	nw.	.....	0.020	0.5	.....	Prof. A. Pacinotti.
Palermo	29.69	754.0	29.94	760.5	54.5	12.5	43	nw.	16.8	7.5	.....	.....	6	nw.	.....	0.272	6.9	.....	Prof. G. Caccintore
Syracuse	29.78	756.4	29.82	757.5	55.2	12.9	35	nw.	14.3	6.4	.....	.....	6	wnw.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-alpine.																			
Naples, S. R	29.35	745 5	29.88	759.0	48.2	9.0	43	ne.	0	0	.....	.....	0	.....	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	21.88	555.6	.....	.....	12.6	—10.8	77	ne.	.....	.....	4	.....	10	.....	.....	0	0	misty	Prof. P. F. Denza.
Valdobbia	21.91	556.5	.....	.....	19.0	— 7.2	69	ne.	.....	.....	6	.....	10	.....	.....	0.787	20.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.96	760.9	29.99	761.7	35.5	1.9	86	calm	.....	.....	0	.....	10 ck	.....	sw.	0.441	11.2	cloudy	Hattori.
Awomori	29.97	761.2	30.01	762.2	30.0	— 1.1	85	sse.	2.2	1.0	.....	.....	10 n	.....	.....	0.101	2.6	light snow	K. Ogawa.
Hakodate	30.00	761.9	30.01	762.2	34.0	1.1	86	ene.	12.0	5.4	.....	.....	10	.....	s.	0	0	overcast	
Hamamatsu	29.97	761.2	30.00	761.9	37.9	3.3	92	w.	.....	.....	2	6 ck	1 s	wsw.	wsw.	0.181	4.6	cloudy	Y. Miwa.
Hiroshima, I. M. Obs'y	.....	.....	.....	.....	33.9	1.1	90	nne.	5.3	2.3	.....	0	0	.....	.....	0	0	clear	
Kanazawa	29.94	760.6	30.05	763.3	36.7	2.6	86	calm	0	0	.....	.....	10	.....	wsw.	0.166	4.2	cloudy	S. Endo.
Kioto	29.92	759.9	30.11	764.8	37.9	0.5	99	calm	0	0	.....	.....	10 s	.....	.....	0.265	6.7	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	30.01	762.2	30.22	767.6	42.1	5.6	78	calm	0	0	.....	0	0	.....	.....	0	0	clear	S. Takehayashi.
Niigata	29.98	761.5	30.02	762.5	35.1	1.7	82	se.	4.4	2.0	.....	.....	10 ck	.....	.....	0.090	2.3	cloudy	M. Morita.
Nobiru	29.96	761.0	29.98	761.4	34.6	1.4	82	nnw.	11.9	5.3	.....	.....	10 s;n	.....	.....	0.019	0.2	covered	H. Midzushina.
Numazu	29.96	760.9	29.98	761 8	39.4	4.1	98	calm	.....	.....	0	.....	10n;ks	.....	w.	0.295	7.5	cloudy	R. Kaneda.
Osaka	30.09	764.4	30.11	764.8	33.3	0.7	98	n.	3.4	1.5	.....	5 ck	5 s	sw.	w.	0.410	10.4	cloudy	H. Omura.
Supporo	.....	.....	.....	.....	22.8	— 3.1	62	se.	10.8	4.8	.....	4	0	s.	.....	0	0		
Tokei Obs'y, Yeddo	29.94	760.5	30.02	762.6	33.7	0.9	93	nnw.	11.2	5.0	.....	.....	10 n	.....	.....	0.311	7.9	raining	The Staff.
Wanayama	30.04	763.0	30.10	764.5	36.2	2.3	95	calm	0	0	.....	2 ck	1 ck	.....	.....	0.442	11.2	fair	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.87	758.7	30.05	763.3	82.0	27.8	62	e.	15.0	6.7	.....	0	4 k	.....	e.	0.06	1.5	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.66	601.0	29.88	759.0	54.5	12.5	66	calm	0	0	.....	0	4 k	.....	w.	0	0	fair	Prof. Vicente Fernandez.
Leon	24.33	618.0	30.18	766.6	44.6	7.0	80	nnw.	.....	.....	1	0	1 k;s	.....	.....	0	0	clear	Prof. M. Leal.
Mazatlan	29.74	755.3	30.00	762.0	65.0	18.3	31	ne.	1.6	0.8	.....	0	0	.....	.....	0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.07	585.9	30.23	767.8	43.7	6.5	69	nw.	0.2	0.1	.....	2 ck	3 ks	.....	.....	0	0	½ cloudy	The Staff.
Morelia	24.30	618.0	30.25	768.4	44.6	7.0	66	ne.	.....	.....	1	0	0	.....	.....	0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	23.98	609.1	30.15	765.8	37.6	3.1	53	nnw.	.....	.....	1	0	0	.....	.....	0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.36	593.3	30.11	764.7	53.1	11.7	43	calm	0	0	.....	0	0	.....	.....	0	0	clear	Prof. P. Spina.
Zacatecas	22.46	570.5	30.29	769.4	41.57	2.87	72	n.	10.7	4.7	.....	0	0	.....	.....	0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.60	751.8	29.60	751.8	38.5	3.6	.....	s.	.....	.....	4	.....	.....	.....	.....	0.008	0.2		
Groningen	29.52	749.9	29.58	751.3	37.0	2.8	.....	sw.	.....	.....	2	.....	.....	.....	.....	0.094	2.4		
Helder	29.57	751.1	29.57	751.1	40.6	4.8	.....	ssw.	.....	.....	4	.....	.....	.....	.....	0.232	5.9		
Hellevoetsluis	29.61	752.1	29.61	752.1	38.5	3.6	93	ssw.	.....	.....	3	.....	.....	.....	.....	0.252	6.4		
Utrecht	29.58	751.3	29.63	752.5	38.3	3.5	90	s.	.....	.....	2	.....	10	.....	.....	0.185	4.7	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.25	742.9	29.31	744.5	33.1	0.6	64	sse.	7	3	.....	.....	10	.....	.....	0	0		
Brono	29.51	749.5	29.55	750.5	32.7	0.4	57	sse.	9	4	.....	.....	4	.....	.....	0	0		
Christiania	29.33	744.9	29.48	748.7	31.8	— 0.1	90	sse.	0	0	.....	.....	10	.....	.....	0.047	1.2	snowing	
Gjæsvær	29.52	749.8	29.54	750.4	21.4	— 5.9	.....	calm	.....	.....	0	.....	5	.....	.....	.....	.....		
Lodingen	29.53	750.1	29.58	751.3	22.1	— 5.5	70	ne.	.....	.....	1	.....	0	.....	.....	0	0		
PORTUGUESE.																			
Angra, Azores	29.98	761.5	30.14	765.5	62.2	16.8	92	ssw.	16.1	7.2	.....	.....	10	.....	.....	0.118	3.0		Dr. J. A. Sampaio.
Campo Major	29.32	744.6	30.34	770.6	53.6	12.0	72	ese.	0.7	0.3	.....	.....	5	.....	.....	0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.27	768.8	30.35	771.0	65.3	18.5	78	se.	3.8	1.7	.....	.....	2	ne.	.....	0.020	0.5		Capt. D. A. de Cunha.
Lisbon, Observatory	30.04	762.9	30.41	772.3	54.1	12.3	83	calm	1.3	0.6	.....	.....	2	n.	.....	0	0		The Staff.
Ponta Delgada, Azores	30.16	766.1	30.23	767.9	66.2	19.0	77	s.	12.5	5.6	.....	.....	3	.....	.....	0	0		
Saint Paul de Loando	29.71	754.6	29.91	759.6	81.3	27.4	78	wsw.	1.8	0.8	.....	.....	0	s.	.....	0	0		
Serra da Estrella	25.55	647.9	30.26	768.5	50.5	10.5	15	nw.	15.4	6.9	.....	.....	0	.....	.....	0	0		
RUSSIAN.																			
Akmolinski	29.00	736.5	30.28	769.0	—25.1	—31.7	83	calm	0	0	.....	0	1 s	.....	.....	.....	.....		Major K. Lasarew.
Archangel	30.08	764.0	30.10	764.5	6.4	—14.2	87	ese.	4	2	.....	.....	10	.....	.....	0.059	1.5		Capt. Sselliwerstow.
Astrakhan	30.21	767.2	30.13	765.2	29.1	— 1.6	80	e.	11	5	.....	.....	6 s	.....	.....	0	0	light clouds	Capt. Wisganow.
Barnaul	29.72	754 8	30.26	768.6	15.4	— 9.2	90	ne.	2	1	.....	.....	10	.....	.....	0	0		Meteorological Obs'y.
Bielosersk	29.05	753.1	30.19	766.8	—14.1	—25.0	88	ese.	7	3	.....	0	4 s	.....	.....	0	0		
Dorpat	29.34	745.3	29.61	752.0	9.7	—12.4	92	e.	7	3	.....	.....	10ks;n	.....	.....	0.161	4.1		Observatory.
Ekaterinburg	29.20	741.7	30.32	770.1	—16.8	—27.1	82	n.	9	4	.....	3 c	0	.....	.....	0	0	light clouds	Meteorological Obs'y.
Elissawetgrad	28.98	739.0	29.44	747.7	33.6	0.9	73	ssw.	4	2	.....	0	8 k	.....	.....	0.166	2.7		
Kasan	30.00	793.5	30.37	771.4	— 8.0	—22.2	77	calm	0	0	.....	.....	0	.....	.....	.....	.....		Observatory.
Kem	29.91	759.8	.....	.....	9.0	—12.8	92	se.	4	2	.....	0	2 ks	.....	.....	0	0		
Kertch	29.44	747.8	29.46	748.3	45.1	7.3	92	calm	0	0	.....	.....	10	.....	.....	0.740	18.8		Lagorio & Sastyrez.
Kieff	28.45	722.7	29.11	739.3	25.3	— 3.7	80	sse.	45	20	.....	c	10ks;n	.....	.....	.....	.....		Observatory.
Libau	29.40	748.2	29.48	748 8	23.4	— 4.8	85	calm	.....	.....	0	.....	10	.....	.....	0.051	1.3		E. Quaas.
Lugan	29.51	749.0	29.73	755.1	20.7	— 6.3	76	nne.	18	8	.....	.....	10	.....	.....	0.197	5.0		Meteorological Obs'y.
Moscow	29.19	741.5	30.05	763.3	— 0.8	—18.2	80	e.	8.9	4	.....	.....	10	.....	.....	.....	.....	light snow	
Nikolaiev	29.39	746.6	29.47	748.5	35.2	1.8	90	sw.	9	4	.....	cs	3 n	.....	.....	0.236	6.0		Capt. Kurdakow.
Pekin, China	30.06	763.5	30.20	767.1	26.8	— 2.9	40	calm	0	0	.....	0	0	.....	.....	.....	.....		Physical Observatory.
Petrozavodsk	29.78	750.3	30.00	761.9	2.8	—16.2	85	se.	11	5	.....	0	4 ks	.....	.....	0	0		Dr. Bergmann.
Pinsk	28.73	729.6	.....	.....	16.5	— 8.6	91	n.	22	10	.....	.....	10 s	.....	.....	0.307	7.8		
St. Petersburg	29.74	755.3	29.75	755.7	6.1	—14.4	83	se.	18	8	.....	c	8 ks	.....	.....	0	0		Central Physical Obs'y.
Sevastopol	29.22	742.2	29.39	749.4	49.3	9.6	88	ssw.	20	9	.....	.....	10 n	.....	.....	0.217	5.5		
Sempalatinsk	29.49	749.0	30.20	767.0	19.0	— 7.2	90	e.	9	4	.....	.....	10	.....	.....	0	0		Major Lasarew.
Staroi Bykhov	28.91	734.4	29.39	746.5	23.4	— 4.8	98	e.	20	9	.....	.....	10	.....	.....	.....	.....	snowing	
Tashkend, Laboratory	28.59	726 3	30.26	768.5	31.6	— 0.2	100	calm	0	0	.....	.....	10	.....	.....	0.378	9.6	snowing	Teich, A. M.
Tiflis	28.50	725 3	30.01	762.2	41.7	5.4	54	calm	0	0	.....	0	7 s	.....	.....	0	0	light clouds	Physical Observatory.
Tomsk	30.10	764.5	30.42	772.6	— 9.0	—23.1	79	calm	0	0	.....	0	0	.....	.....	.....	.....		
Vladivostok	29.97	761.3	30.04	763.0	12.2	—11.0	44	calm	0	0	.....	0	3 k	.....	.....	0	0		
Warsaw	29.02	737.0	29.46	748.2	28.6	— 1.9	88	nw.	16	7	.....	.....	10	.....	.....	.....	.....	heavy clouds	Astronomical Obs'y.
Wilna	28.97	735.8	29.41	746.9	25.5	— 3.0	93	ene.	4	2	.....	.....	10	.....	.....	.....	.....	heavy clouds	Berg, Assistant.
Yeniseisk	30.50	774.6	30.85	783.5	—39.6	—39.8	81	calm	0	0	.....	.....	0	.....	.....	.....	.....		M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.56	750.8	41	5.0	91	n.	.....	.....	4	.....	10	.....	.....	0.2	5.	cloudy	J. Youngclause.
North Unst	.....	.....	29.29	744.0	.....	.....	.....	e.	.....	.....	4	2	4	.....	.....	blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.02	762.4	30.12	765.1	58.6	14.8	64	nw.	3.6	1.6	.....	1 c	0	.....	.....	0	0	clear	Antonio Rieve, Director.
Bilbao, Met. Obs'y	30.28	769.1	30.34	770.6	58.1	14.5	75	nw.	5.4	2.4	.....	1	8	n.	.....	0.075	1.9	almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.30	693.4	30.41	772.3	39.2	4.0	92	w.	2.9	1.3	.....	.....	10	.....	.....	0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	28.07	712.9	30.37	771 3	47.1	8.4	83	se.	0.9	0.4	.....	0	0	.....	.....	0	0	clear	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	30.08	764.0	30.23	767.9	62.8	17.1	64	wsw.	5.1	2.3		0	0			0	0	clear	Olayo Diaz, Director.
Oviedo	29.43	747.6	30.29	769.4	53.6	12.0	67	e.	11.0	4.9		2 k	0	n.		0	0	fair	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.41	746.9	30.32	770.2	52.2	11.2	98	calm	0	0			10			0.059	1.5	covered	R. Gil Villanueva, Dir.
SPANISH.—(Sub-series.)																			
Manilla, Philippine Islands	29.89	759.2	29.95	760.7	80.0	26.7	78	n.	2.2	4.9		0	8 k		ne.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.24	767.9	30.34	770.5	56.3	13.5	83	nw.	1.9	0.8		0	c			0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I.	29.84?	758.0?	29.93?	760.3?	75.9	24.4	90	e.	0.5	1.1		3 cs	4 kn	ne.	e.	0.031	0.8	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.87	758.7	29.97	761.1	74.7	23.7	93	nw.	2.2	4.9		3 ck	0	ese.		0.03	0.8	slightly cl'dy	José L. Yrastorza.
SWEDISH.																			
Haparanda	29.80	757.0	29.84	758.0	16.2	— 8.8	100	se.			2		10			0.079	2.0		
Umea	29.66	753.4	29.71	754.7	19.8	— 6.8	94	se.			2		9			0.142	3.6		
Hernosand	29.64	752.8	29.69	754.1	26.6	— 3.0	83	ene.			2		10			0	0		
Stockholm	29 35	745.5	29.53	750.0	26.2	— 3.2	94	nne.			2		10			0.043	1.1		
Wisby	29.42	747.3	29.48	748.8	31.6	— 0.2	96	ene.			4		10			0.008	0.2	snowing	
Sub-series.																			
Upsala	29.45	748.0	29.54	750.2	25.9	— 3.4	97	n.	4.7	2.1			10			0.063	1.6		S. G. Fineman.
SWISS.																			
Geneva	28.60	726.4	30.09	764.2	33.6	0.9	85	e.			1		10			0.130	3.3	snowing	The Observatory.
TURKISH.																			
Constantinople			29.53	750.0	43.3	6.3	93	n.	17	7.6			10		n.	0.220	5.6	raining	The Observatory.
Valona			29.76	755.8	48.6	9.2		n.			1		2			1.02	26.	slightly cl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			29.79	756.6	59.9	15.5	83	sw.			4		10 n		sw.			thund'r st'm	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.10	764.5	30.19	766.8	40	4.4	48	nw.	7	3.1			10 s		nw.	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.58	751.3	30.29	769.4	30	— 1.1	88	w.	2	0.9			10 s			0	0	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.11	637.8	30.19	766.8	27	— 2.8	70	ne.	2	0.9		0	0			0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.32	693.9	30.35	770.9	28	— 2.2	67	sw.	16	7.2		3 c	0	sw.		0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.09	738.9	30.32	770.1	33.5	0.8	70	e.	10	4.5		2 cs	1 s			0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.25	768.3	30.26	768 6	32	0.0	68	nw.	7	3.1		5 c	0			0	0	fair	Jas. M. Watson.
Augusta, Georgia	30.16	766.1	30.36	771.1	31	— 0.6	88	calm	0	0			2 s			0	0	clear	John Healy.
Baltimore, Maryland	30.29	769.4	30.34	770.6	37	2.8	72	w.	6	2.7		5 c	0	w.		0	0	fair	Geo W Felger.
Barnegat, New Jersey	30.22	767.6	30.24	768.1	34.0	1.1	84	w.	16	7.2		0	0			0	0	clear	G. A. Hill.
Behring Id., Behring Sea	29.74	755.4	29.76	755.9	27.8	— 2.3		n.	8	3.6			10 n			0.02	0.5	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.68	728.5	30.44	773.2	4	—15.6	76	nw.	1	0.4		0	0			0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.43	696.7	30.43	772.9	27	— 2.8	56	sw.	12	5.4		0	0			0	0	clear	S. Wheaton.
Bismarck, Dakota	28.41	721.6	30.42	772.7	— 4	—20.0	68	nw.	2	0.9		0	0			0	0	clear	Cyrus Cramor.
Block Island, Rhode Island	30.09	764.3	30.12	765.0	38.5	3.6	72	nw.	19	8.5		0	0			0	0	clear	J. T. Elker.
Boise City, Idaho	27.57	700.3	30.55	776.0	9	—12.8	87	calm	0	0		0	0			0.12	3.0	clear	B. E. Light.
Boston, Massachusetts	29.92	760.0	30.08	764.0	36.0	2.2	73	w.	10	4.5		0	7 s		nw.	inap.	inap.	fair	O. B. Cole.
Brownsville, Texas	29.99	761.7	30.04	763.0	56.5	13.6	83	n.	14	6.3			10 s		n.	0.62	15.7	cloudy	M. McCarty.
Buffalo, New York	29.52	749.8	30.32	770.1	34	1.1	94	sw.	14	6.3			10 s		sw.	inap.	inap.	cloudy	W. Finn.
Buford, Fort, Dakota	28.16	715.3	30.40	772.1	23	— 5.0	88	se.	1	0.4		2 ck	8 s		n.	0	0	cloudy	F. A. Mellen.
Burlington, Vermont	29.87	758.7	30.18	766.6	30.0	— 1.1	78	n.	5	2.2			10 s		n.	0.05	1.3	cloudy	G. C. Schaeffer.
Cairo, Illinois	29.76	755.9	30.18	766.6	44.8	7.1	70	sw.	8	3.6			10 s		sw.	0	0	threatening	W. H. Ray.
Cape Henry, Virginia	30.33	770.4	30.35	770 9	38	3.3	72	nw.	10	4.5		0	0			0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.26	768.6	30.29	769.4	37.0	2.8	82	w.	22	9.8		2 c	0			0	0	clear	W. E. Smith.
Cape Mendocino, California																			J. J. McLean.
Cedar Keys, Florida	30.17	766.3	30.19	766.8	50	10.0	64	ne.	12	5.4		10 ck	0			0	0	cloudy	F. W. Mixer.
Champaign, Illinois	29.26	743.2	30.12	765.0	36.0	2.2	75	se.	15	6.7			10 s		se.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.26	768.6	30.32	770.1	41	5.0	73	n.	7	3.1		4 cs	0			0	0	fair	J. H. Smith.
Charlotte, N. Carolina	29.46	748.3	30.35	770 9	32.0	0.0	78	nw.	3	1.3		0	fg.			0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.49	749.0	30.35	770.9	28.5	— 1.9	94	calm	0	0			fg.			0	0	dense fog	B. L. Goulding.
Cheyenne, Wyoming	24.00	609.6	30.26	769.1	13.5	—10.3	65	w.	1	0.4		10 c	0			0	0	cloudy	E. McGovern.
Chicago, Illinois	29.46	748.3	30.22	767.6	35.0	1.7	75	se.	5	2.2			10 s			0	0	cloudy	J. Mitchell.
Chincoteague, Virginia	30.30	769.6	30.32	770.1	33	0.6	78	nw.	5	2.2		0	0			0	0	clear	C. F. Dickens.
Cincinnati, Ohio	29.60	751.8	30.30	769 6	34	1.1	72	ne.	1	0.4		0	1 s		ne.	0	0	clear	R. B. Watkins.
Cleveland, Ohio	29.56	750.8	30.34	770.6	27.8	— 2.3	90	se.	5	2.2		5 cs	0	w.		inap.	inap.	fair	J. B. Newlin.
Coleman City, Texas	28.38	720.8	30.28	769.1	30	— 1.1	88	nw.	4	1.8		0	0			0	0	clear	L. Dorman.
Columbus, Ohio	29.40	746.7	30.32	770.1	32	0.0	78	sw.	4	1.8		5 c	3 s			0	0	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.25	717.5	30.27	768.8	26.3	— 3.2	77	nw.	4	1.8		5 cs	0			0	0	fair	J. McGlone.
Custer, Fort, Montana	26.99	685.5	30.39	771.9	32	0.0	81	nw.	3	1.3		3 k	0			0	0	clear	W. B. Lamar.
Davenport, Iowa	29.35	745.5	30.06	763.5	36	2.2	89	e.	16	7.2			10 n			0.30	7.6	sleeting	R. R. Martin.
Davis, Fort, Texas	25.25	641.3	30.19	766.8	21	— 6.1	76	calm	0	0		0	0			inap.	inap.	clear	J. Williams.
Dayton, Washington T'y	28.72	729.5	30.55	776.0	30	— 1.1	88	s.	4	1.8		0	0			0.35	8.9	clear	D. Moore.
Deadwood, Dakota	25.42	645.7	30.40	772.1	10	—12.2	83	ne.	3	1.3		4 c	0	w.		0	0	fair	F. Willson.
Delaware Breakwater, Del	30.28	769.1	30.30	769.6	35	1.7	79	nw.	12	5.4		0	5 ks		nw.	0	0	fair	T. S. Townsend.
Denison, Texas	29.41	747.0	30.26	768.6	35.0	1.7	79	nw.	8	3.6		0	0			0.02	0.5	clear	J. W. Byram.
Denver, Colorado	24.75	628.6	30.27	768.8	16.3	— 8.7	78	s.	2	0.9		3 c	0			0	0	clear	F. M. Neal.
Des Moines, Iowa	29.03	737.3	30.01	762.2	35	1.7	79	e.	8	3.6			10 n		e.	0.89	22.6	heavy snow	F. W. Conrad.
Detroit, Michigan	29.58	751.3	30.34	770.6	35.0	1.7	89	sw.	5	2.2			10 s		s.	0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.49	698.2	30.29	769.4	13	—10.6	66	n.	12	5.4		0	0			0	0	clear	V. P. Temple.
Dubuque, Iowa	29.38	746.2	30.15	765.8	31.2	— 0.4	88	e.	4	1.8			10 n			0.06	1.5	light snow	J. Harvey Smith.
Duluth, Minnesota	29.48	748.8	30.29	769.4	29.2	— 1.6	76	nw.	5	2.2			10 s			0	0	cloudy	N. B. Conger.
Eagle Pass, Texas	29.41	747.0	30.25	768.3	37.1	2.8	82	nw.	6	2.7		0	0			0	0	clear	F. Belford.
Eagle Rock, Idaho	25.49	647.4	30.41	772.4	12	—11.1	83	sw.	6	2.7		0	3 s		w.	0.20	5.1	clear	J. M. Clifford.
Eastport, Maine	29.87	758.7	29.94	760.5	23.0	— 5.0	80	nw.	10	4.5			10 s		nw.	0.04	1.0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.34	694.4	30.30	769.6	18	— 7.8	58	n.	4	1.8		0	0			0	0	clear	W. J. Cundall.
El Paso, Texas	26.33	668.8	30.19	766.8	26.2	— 3.2	88	calm	0	0		0	0			0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.58	751.3	30.35	770.9	34	1.1	79	s.	8	3.6			10 s			0.02	0.5	cloudy	Peter Wood.
Escanaba, Michigan	29.58	751.3	30.30	769.6	34.0	1.1	78	calm	0	0			10 s			0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.38	720.8	30.20	767.1	43	6.1	100	n.	5	2.2			10 s			0.46	11.7	cloudy	Frank Hallwegler.
Galveston, Texas	30.00	762.0	30.05	763.3	55	12.8	86	ne.	16	7.2		5 c	0	sw.		0.54	13.7	fair	E. O'C. Machiernay.
Grand Haven, Michigan	29.55	750.6	30.26	768.6	33.0	0.6	88	e.	4	1.8			10 s			0	0	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.23	640.8	30.11	764.8	32	0.0	78	ne.	6	2.7		0	0			0	0	clear	Robert C. Lord.
Hatteras, North Carolina	30.31	769 9	30.33	770.4	41	5.0	82	ne.	12	5.4		hz.	0			0	0	clear	R. M. Crawford.
Helena, Montana	26.12	663.4	30.50	774.7	7	—13.9	91	nw.	2	0.9		0	0			0	0	clear	N. C. Smith.
Henrietta, Texas	29.23	742.4	30.31	769.9	26	— 3.3	88	calm	0	0		0	0			0	0	clear	J. P. Sherry.
Huron, Dakota	28.84	732.5	30.38	771.6	16.8	— 8.4	51	nw.	5	2.2			10 k		nw.	inap.	inap.	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.37	746.0	30.22	767.6	36	2.2	69	se.	4	1.8		8 cs	1 s			0	0	cloudy	O. Schulze.
Indianola, Texas	30.03	762.7	30.05	763 5	58.0	14.4	93	ne.	15	6.7			10 s		ne.	1.23	31.2	cloudy	I. A. Reed.
Jacksboro, Texas	29.14	740.1	30.38	771.6	30	— 1.1	57	n.	6	2.7		0	0			0	0	clear	D. J. Carr.
Jacksonville, Florida	30.20	767.1	30.26	708.6	47	8.3	86	ne.	2	0.9		5 cs	fg.	w.		0	0	fair	J. W. Smith.
Keogh, Fort, Montana	27.62	701.5	30.32	770.1	18	— 7.8	70	calm	0	0		6 c; ck	0			0	0	fair	A. Schneider.
Keokuk, Iowa	29 33	745.0	30.04	763.0	36.0	2.2	89	s.	8	3.6			10 s		s.	0.22	5.6	cloudy	F. Z. Gosewisch.
Key West, Florida	30.04	763.0	30.06	763.5	69.0	20.6	93	ne.	4	1.8			3 s; k		ne.	0	0	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.33	770.4	30.35	770.9	40	4.4	82	ne.	14	6.3		hz.	0			0	0	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	29.28	743 7	30.36	771.1	25.5	— 3.6	88	se.	4	1.8		1 c	0			0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.35	745.5	30.20	767.1	22	— 5.6	73	nw.	7	3.1			10 s			0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.12	739.6	30.08	764.0	31	— 0.6	88	nw.	14	6.3			10 n			0.32	8.1	light snow	A. W. Browne.
Lewiston, Idaho	29.71	754.6	30.59	777.0	30.5	— 0.8	83	e.	4	1.8		0	0			0.20	5.1	clear	W. Bell.
Little Rock, Arkansas	29.80	756.9	30.14	765.5	45	7.2	76	nw.	8	3.6		3 cs	6 ks	sw.	w.	0	0	cloudy	W. U. Simons.
Los Angeles, California	29.74	755.4	30.14	765 5	40	4.4	57	ne.	6	2.7		0	0			0	0	clear	T. S. Collins.
Louisville, Kentucky	29.62	752.3	30.22	767.6	39	3.9	65	se.	4	1.8		2 cs	0			0	0	clear	L. M Dey.

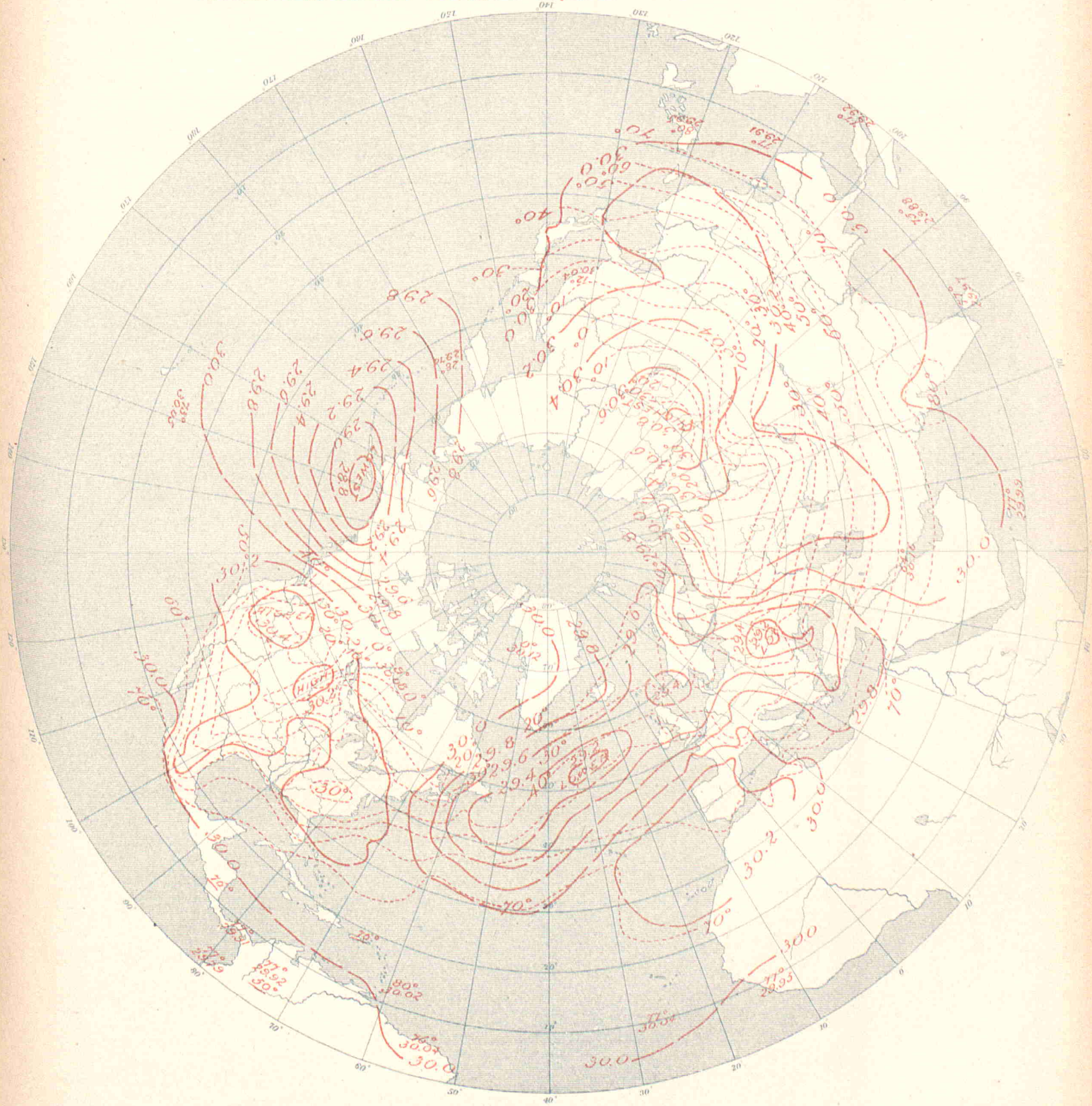
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.62	752.3	30.35	770.9	29	— 1.7	67	calm	0	0	.....	0	0	.....	.....	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.61	752.1	30.31	769.9	33.0	0.6	78	calm	0	0	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.32	770.1	30.33	770.4	38	3.3	82	n.	7	3.1	.....	0	fg.	.....	.....	0	0	clear	C. A. Shaw.
Madison, Wisconsin	29.13	739.9	30.23	767.8	28	— 2.2	77	e.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.71	653.0	30.25	768.3	29	— 1.7	49	w.	20	8.9	.....	0	0	.....	.....	0	0	clear	F. Burke.
McKavett, Fort, Texas	27.80	706.1	30.18	766.6	28	— 2.2	88	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.46	748.3	30.24	768.1	34	1.1	78	nw.	3	1.3	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. Gilligan.
Memphis, Tennessee	29.81	757.2	30.17	766.3	45	7.2	76	se.	10	4.5	.....	.....	10 s	.....	se.	0	0	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.44	747.8	30.25	768.3	33	0.6	78	calm	0	0	.....	.....	10s;fg	.....	.....	0	0	cloudy	W. Line.
Missoula, Fort, Montana	27.06	687.3	30.52	775.2	24	— 4.4	64	calm	0	0	.....	6 k	0	.....	.....	0.01	0.3	fair	I. H. Young.
Mobile, Alabama	30.16	766.1	30.20	767.1	39	3.9	89	n.	2	0.9	.....	2c;cs	0	sw.	.....	0	0	clear	C. A. Read.
Montgomery, Alabama	30.00	762.0	30.24	768.1	32.7	0.4	89	calm	0	0	.....	2 ck	0	sw.	.....	0.	0	clear	J. B. McLaughlin.
Moorhead, Minnesota	29.26	743.2	30.37	771.4	0	—17.8	68	n.	2	0.9	.....	.....	10 s	.....	n.	0	0	cloudy	H. Bessant.
Morgantown, W. Virginia	29.31	744.5	30.38	771.6	31.5	— 0.3	89	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.57	598.7	30.20	767.1	10.0	—12.2	100	nw.	48	21.4	.....	.....	fg.	.....	nw.	0.35	8.9	dense fog	B. S. Pague.
Nashville, Tennessee	29.63	752.6	30.24	768.1	32.0	0.0	88	e.	4	1.8	.....	3 cs	0	w.	.....	0	0	clear	L. N. Jesunofsky.
New Haven, Connecticut	30.04	763.0	30.16	766.1	35	1.7	79	w.	6	2.7	.....	0	5k;sk	.....	w.	0	0	fair	J. H. Sherman.
New London, Connecticut	29.99	761.7	30.04	763.0	35	1.7	64	nw.	6	2.7	.....	2 k	0	.....	.....	0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.10	764.5	30.16	766.1	50.0	10.0	64	e.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.05	763.3	30.10	764.5	34.3	1.3	81	w.	12	5.4	.....	1 k	0	.....	.....	0	0	clear	W. McGillivray.
New York, New York	30.04	763.0	30.23	767.8	37	2.8	82	sw.	5	2.2	.....	0	8 s	.....	w.	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.32	770.1	30.35	770.9	35	1.7	79	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	Wm. Davis.
North Platte, Nebraska	27.22	691.4	30.38	771.6	8.6	—13.0	71	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington Ty.	30.33	770.4	30.37	771.4	36.0	2.2	89	calm	0	0	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	J. Dascomb.
Omaha, Nebraska	28.90	734.0	30.18	766.6	23.0	— 5.0	88	n.	22	9.8	.....	.....	10 n	.....	.....	0.17	4.3	light snow	A. Pollak.
Oswego, New York	29.88	758.9	30.23	767.8	36.2	2.3	87	n.	9	4.0	.....	.....	10 n	.....	nw.	0.02	0.5	light rain	J. G. Linsley.
Palestine, Texas	29.61	752.1	30.19	766.8	46.0	7.8	68	n	10	4.5	.....	0	9 ks	.....	n.	0.11	2.8	cloudy	L. M. Pindell.
Pensacola, Florida	30.18	766.6	30.21	767.3	43.2	6.2	71	ne.	7	3.1	.....	0	3 s	.....	w.	0	0	clear	M. McGauran.
Philadelphia, Pa.	30.17	766.3	30.28	769.1	37	2.8	72	sw.	4	1.8	.....	0	hz	.....	.....	0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.58	446.5	30.24	768.1	3	—16.1	83	calm	0	0	.....	1 c	0	.....	.....	0	0	clear	H. Hall.
Ploche, Nevada	24.12	612.6	30.29	769.4	22.3	— 5.4	60	n.	10	4.5	.....	0	0	.....	.....	0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.50	749.3	30.36	771.1	33.0	0.6	83	w.	1	0.4	.....	3 k	0	w.	.....	inap.	inap.	clear	W. A. Reid.
Poplar River, Montana	27.86	707.6	30.22	767.6	.....	.....	.....	w.	.....	.....	1	0	0	.....	.....	0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.12	765.0	30.13	765.3	59.2	15.1	81	e.	15	6.7	.....	.....	10 n	.....	e.	0.03	0.8	light rain	H. B. Boyer.
Port Huron, Michigan	29.56	750.8	30.29	769.4	32.0	0.0	90	sw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	W. O. Bailey.
Portland, Maine	29.99	761.7	30.04	763.0	34.5	1.4	74	nw.	4	1.8	.....	.....	10 s	.....	nw.	0.01	0.3	cloudy	W. W. Eichelberger.
Portland, Oregon	30.34	770.6	30.40	772.1	39.0	3.9	82	se.	2	0.9	.....	10 k	0	w.	.....	0.22	5.6	cloudy	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. S. Coburn.
Prescott, Arizona	24.81	630.2	30.18	766.6	25	— 3.9	67	e.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass.	30.03	762.7	30.06	763.5	36	2.2	79	w.	10	4.5	.....	0	2 s	.....	w.	0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	30.12	765.0	30.13	765.3	59.5	15.3	75	ne.	9	4.0	.....	10 cs	0	se.	.....	0	0	cloudy	W. J. Evans.
Red Bluff, California	29.97	761.2	30.34	770.6	40	4.4	65	n.	6	2.7	.....	0	0	.....	.....	inap.	inap.	clear	J. R. Williams.
Rochester, New York	29.57	751.1	30.28	769.1	35	1.7	89	w.	12	5.4	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	E. W. McGann
Roseburg, Oregon	29.82	757.4	30.39	771.9	30.5	— 0.8	88	ne.	1	0.4	.....	10 ck	0	w.	.....	0.11	2.8	cloudy	J. J. Naury.
Sacramento, California	30.19	766.8	30.27	768.8	40.9	4.9	65	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.46	748.3	30.12	765.0	36.9	2.7	95	sw.	16	7.2	.....	.....	10 n	.....	sw.	0.09	2.3	light rain	J. H. Weber.
St. Michael, Fort, Alaska	29.51	749.5	29.55	750.6	—13	—25.0	100	n.	.....	.....	2	0	5 s	.....	.....	0	0	fair	A. P. Leavitt.
St. Paul, Minnesota	29.30	744.2	30.26	768.6	20.0	— 6.7	70	nw.	2	0.9	.....	4 cs	0	.....	.....	0	0	fair	P. F. Lyons.
St. Vincent, Minnesota	29.39	746.5	30.38	771.6	21	— 6.1	91	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.81	655.6	30.35	770.9	28	— 2.2	67	nw.	2	0.9	.....	0	8 ks	.....	nw.	0.20	6.6	cloudy	J. Craig.
San Antonio, Texas	29.43	747.5	30.15	765.8	46.5	8.1	83	ne.	5	2.2	.....	0	4 s	.....	.....	0.14	3.6	fair	T. J. Kenan.
San Diego, California	30.03	762.7	30.10	764.5	43.3	6.2	73	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.58	751.3	30.31	769.9	30	— 1.1	77	sw.	6	2.7	.....	3 c	2 s	s.	.....	0	0	fair	M. H. Perry.
Sandy Hook, New Jersey	30.21	767.3	30.24	768.1	37.0	2.8	89	sw.	19	8.5	.....	10 k	0	nw.	.....	0	0	cloudy	B. A. Blundon.
San Francisco, California	30.22	767.6	30.28	769.1	47.5	8.6	74	n.	6	2.7	.....	0	0	.....	.....	0.04	1.0	clear	N. Gorom.
Santa Fé, New Mexico	23.15	588.0	30.14	765.5	20	— 6.7	64	se.	5	2.2	.....	0	0	.....	.....	0	0	clear	H. U. Jones.
Savannah, Georgia	30.20	767.1	30.30	769.6	42	5.6	65	n.	5	2.2	.....	8 c	0	s.	.....	0	0	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.61	675.9	30.44	773.2	30	— 1.1	70	sw.	19	8.5	.....	5 cs	0	nw.	.....	0	0	fair	A. L. Mathews.
Shreveport, Louisiana	29.90	759.4	30.15	765.8	47	8.3	86	sw.	3	1.3	.....	0	9 s	.....	.....	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	28.99	736.3	30.32	770.1	24.5	— 4.2	72	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.30	617.2	30.14	765.5	23.5	— 4.7	82	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	28.94	735.1	29.01	736.8	40.7	4.8	79	e	48	21.5	.....	.....	10 n	.....	e.	0.83	21.1	light rain	F. W. Fickett.
Smith, Fort, Arkansas	29.72	754.9	30.22	767.6	33.5	0 8	88	w.	6	2.7	.....	0	0	.....	.....	0.25	6.3	clear	J. B. Campbell.
Smithville, North Carolina	30.31	769.9	30.35	770.9	35	1.7	79	n.	6	2.7	.....	1 cs	0	.....	.....	0	0	clear	O. Parker.
Spokane Falls, Wash. Ter.	28.44	722.4	30.56	776.2	29	— 1.7	88	calm	0	0	.....	.....	10 s	.....	se.	0.30	7.6	cloudy	H. Clifford.
Springfield, Illinois	29.35	745.5	30.08	764.0	40.5	4.7	82	s.	14	6.3	.....	.....	10 n	.....	s.	0.10	2.5	heavy rain	T. B. Jennings.
Springfield, Massachusetts	30.04	763.0	30.18	766.6	35	1.7	92	nw.	.....	.....	1	.....	8 n	.....	w.	0	0	cloudy	Charles Mayr.
Springfield, Mo.	28.66	728.0	30.19	766.8	32.5	0.3	88	w.	14	6.3	.....	.....	10 s	.....	sw.	0.11	2.8	cloudy	J. B. Marbury.
Starkville, Miss.	29.71	754.6	30.21	767.3	41	5.0	73	se.	8	3.6	.....	3 c	3 s	sw.	.....	0	0	fair	C. Dill.
Stevenson, Fort, Dakota	28 37	720.6	30.43	772.9	— 7	—21.7	91	e.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. Burrows.
Stockton, Fort, Texas	27.09	688.1	30.23	767.8	24	— 4.4	84	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	30.05	763.3	30.11	764.8	34.5	1.4	71	nw.	18	8.0	.....	0	0	.....	.....	inap.	inap.	clear	G. Liebmann.
Thomas, Camp, Arizona	27.33	694.2	30.15	765.8	28	— 2.2	88	se.	.....	.....	1	3 cs	0	w.	.....	0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.56	750.8	30.30	769.6	32	0.0	78	s.	2	0.9	.....	5 cs	1 s	sw.	.....	0	0	fair	A. Buell.
Tucson, Arizona	27.63	701.8	30.13	765.3	34	1.1	72	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. L. Whiteside.
Umatilla, Oregon	30.17	766.3	30.56	776.2	28.5	— 1.9	94	se.	4	1.8	.....	0	0	.....	.....	0.05	1.3	clear	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	26.6	— 3.0	70	n.	.....	.....	2	0	0	.....	.....	0	0	clear	D. Brooks.
Vicksburg, Mississippi	29.91	759.7	30.18	766.6	42.5	5.8	74	se.	6	2.7	.....	10 cs	0	.....	.....	0	0	cloudy	James Kenealy.
Visalia, California	29.88	758.9	30.26	768.6	43.0	6.1	96	calm	0	0	.....	.....	fg.	.....	.....	0	0	dense fog	O. D. Stewart.
Washakie, Fort, Wyoming	24.52	622.8	30.30	769.6	17.0	— 8.3	87	calm	0	0	.....	.....	10 n	.....	.....	0.03	0.8	light snow	T. M. Ambler.
Washington, D. C.	30.24	768.1	30.36	771.1	34.3	1.3	68	nw.	3	1.3	.....	5 c	0	w.	.....	0	0	fair	B. M. Purssell.
West Las Animas, Colorado	26.09	662.7	30.25	768.3	6.5	—14.2	78	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	F. H. Brandenburg.
Williamsport, Pa.	29.65	753.1	30.28	769.1	38	3.3	72	w.	4	1.8	.....	.....	10 ks	.....	w.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.30	769.6	30.36	771.1	36	2.2	79	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	Samuel A. Haney.
Winnemucca, Nevada	25.92	658.4	30.46	773.7	17	— 8.3	70	ne.	3	1.3	.....	0	0	.....	.....	inap.	inap.	clear	J. Grover.
Yankton, Dakota	28.88	733.5	30.30	769.6	18	— 7.8	67	n.	4	1.8	.....	.....	10 s	.....	.....	0.08	2.0	cloudy	J. H. Atfield.
Yuma, Arizona	29.92	760.0	30.07	763.8	41.4	5.2	49	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.03	559.6	.....	.....	50.0	10.0	70	calm	0	0	.....	3 c; k	0	n.	.....	0	0	fair	Joaquim Gomez.
Havana, Cuba, W. I.	29.96	761.0	30.03	762.7	69.9	21.1	90	e.	5	2.2	.....	1 cs	k	sw.	.....	0.06	1.5	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	74	23.3	78	calm	0	0	.....	10 cs	0	.....	.....	0	0	.....	Robert Johnston.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	75.5	24.2	93	se.	.....	.....	2	.....	10 n	e.	e.	0.370	9.4	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.36	745.7	29.92	760.0	77	25.0	94	calm	.....	.. ....	0	.....	10 ks	.....	calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	75.5	24.2	94	ne.	.....	.....	2	0	3 ks	.....	ne.	0	0	fair	Earl Flint.
St. Paul, Kodiak Id., Alaska	28.56	725 4	28.62	726.9	33	0.6	88	ne.	.....	.....	4	.....	10 n	.....	.....	0.98	24.9	rain & snow	W. J. Fisher.
St. Thomas, W. I.	30.03	762.7	30.15	765.8	77	25.0	76	e.	.....	.....	.....	0	2 k	.....	e.	0.42	10.7	fine	Aug. Wallee.
York Factory, B. A	30.02	762.5	30.08	764.0	— 8.5	—22.5	78	nw.	6	2.7	.....	3 k	2 s	nw.	nw.	0	0	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.18	766.6	67	19.4	79	sw.			4		1					2	sw.	blue sky.
H. M. S. Audacious, N. 3° 00′, E. 108° 32′	29.79	756.7	82	27.8	87	ne.			2		4	ne.				4	ne.	showery.
H. M. S. Beacon, Lake Timsah, Egypt			63	17.2	46	wsw.			3							1	wsw.	misty.
H. M. S. Boadicea, Simon's Bay, Cape Colony	30.20	767.1				sse.			1–2									blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	29.92	760.0	74	23.3	100	sse.			3		10	sse.				2	sse.	raining.
H. M. S. Champion, Singapore, Malap peninsula	29.92	760.0	77	25.0	95	nw.			1		10					1	nw.	overcast.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.35	770.9	38	3.3	80	calm			0		8							d. clouds.
H. M. S. Comus, Esquimalt, Vancouver Island, B. A.	30.34	770.6	42	5.6	83	nne.			1		10							overcast.
H. M. S. Constance, N. 34° 44′ W. 15° 25′	30.40	772.1	64	17.8		e.			2							4		d. clouds.
H. M. S. Curacoa, Yokohama, Japan			43.5	6.4	75	nne.			1		8							raining.
H. M. S. Dido, N. 17° 23′, W. 60° 24′	30.03	762.7	80	26.7		ene.			4		3	e.				2	e.	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	30.01	762.2	69	20.6	60	calm			0		3							d. clouds.
H. M. Dock-Yard, Bermuda, W. I	30.08	764.0	62	16.7	61	wnw.			3–4		4	wnw.				4		d. clouds.
H. M. S. Eclipse, N. 8° 33′, E. 81° 13′	29.87	758.7	77	25.0		ne.			1		10							raining.
H. M. S. Fawn, S. 34° 45′ E. 19° 20′	30.11	764.8	63.5	17.5	78	sw.			1		0					3	sw.	misty.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	29.92	760.0	60	15.6	79	n.			3		10							overcast.
H. M. S. Heroine, N. 29° 00′, W. 19° 30′	30.33	770.4	65	18.3	83	e.			2–3		4	calm				sm'h		d. clouds.
H. M. S. Iron Duke, N. 6° 40′ E. 91° 26′	29.88	758.9	75	23.9	100	e.			1–2		10	e.				1	e.	raining.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	30.25	768.3	64.3	17.9	76	sse.			2		5					1	s.	squally.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.87	758.7	62	16.7		n.			3							2	n.	d. clouds.
H. M. S. Magpie, N. 32° 44′, E. 129° 51′	30.20	767.1	44.5	6.9	88	calm			0		0							misty.
H. M. S. Rambler, Port Belgrano, La Plata, S. A	29.88	758.9	72	22.2	63	w.			4		0							squally.
H. M. S. Serapis, N. 32° 14′, E. 29° 45′	29.75	755.6	66	18.9	66	ssw.			6		6					7	ssw	d. clouds.
H. M. S. Starling, S. 3° 32′, W. 8° 41′	29.97	761.2	76.7	24.8	88	se.			4		2	se.				2	sse.	d. clouds.
H. M. S. Superb, N. 36° 37′ E. 36° 09′*	29.78	756.4	55	12.8	100	ssw.			2		9	ssw.						raining.
H. M. S. Swiftsure, Callao Bay, Peru	29.94	760.5	65	18.3	100	calm			0		8							d. clouds.
H. M. S. Sylvia, Cordova Inlet, Patagonia	29.64	752.8	46.5	8.1	90	wnw.			2		10							overcast.
H. M. S. Tourmaline, Bombay, India	29.92	760.0			...	nw.			1		2	n.						d. clouds.
H. M. S. Woodlark, Shat-el Arab river	30.06	763.5	63.5	17.5	89	e.			3		8	wnw.						d. clouds.
H. M. S. Zephyr, Chee-foo, China	30.24	768.1	29.5	— 1.4		wnw.			2		2	w.				1	w.	d. clouds.
Portuguese Naval.																		
Tamega, Macao, China	30.17	766.2	66.2	19.0	54	nnw.			3		10		nnw.					gloomy.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.06	763.5	48	8.9	77	nne.	8	3.6			8		nne.	0	0			fair.
Navy Yard, Portsmouth, N. H	30.04	763.0	30	— 1.1	7	nw.	7	3.1			2		nw.	0	0			fair.
Naval Hospital, Yokohama, Japan*	29.96	761.0	35.5	1.9	95	n.			1		10		nw.	0.30	7.6			light rain.
Adams, Sitka, Alaska *†	29.08	738.6	40	4.4	82	ene.			7		10							cloudy.
Alaska, Mare Island, Cal	30.24	768.1	47	8.3	69	calm			0		0			0	0			clear.
Alliance, N. 22° 52′, W. 61° 45′	30.13	765.3	77	25.0	100	se.			2		2			0	0	sm'h		fair.
Ashuelot, Shanghai, China	30.37	771.4	38	3.3	90	calm			0		2		calm					clear.
Brooklyn, Montevideo, Uruguay	30.02	762.5	69	20.6	95	w.	12	5.4			0			0	0	sm'h		clear.
Colorado, New York, N. Y	30.29	769.4	37	2.8	100	sw.	5	2.2			10		nnw.	0	0			overcast.
Enterprise, Norfolk, Va	30.36	771.1	37	2.8	80	calm			0		0							clear.
Essex, Callao, Peru	29.95	760.7	68	20.0	84	se.			1		5					sm'h		fair.
Franklin, Norfolk, Va	30.32	770.1	35	1.7	80	calm	0	0			0			0	0			clear.
Galena, Montevideo, Uruguay	30.01	762.2	66	18.9	77	wsw.			4		2					mod.	sw.	clear.
Hartford, S. 34° 35′ W. 73° 45′*	29.79	756.7	59	15.0	87	s.			3		5		s.	light	light	mod		fair.
Independence, Mare Island, Cal	30.16	766.1	43	6.1	91	e.			1		2			0	0			clear.
Iroquois, Callao, Peru	29.99	761.7	68	20.0	84	ese.			2		2							fair.
Jamestown, Boston, Mass	30.02	762.5	35	1.7	90	nw.			1		8		nw.	0	0			fair.
Juniata, Fayal, Azores Islands*	30.04	763.0	66	18.9	94	ssw.			5		10		s;w.	h'vy	h'vy	mod.	var.	overcast.
Kearsarge, N. 22° 48′, W. 61° 39′	30.13	765.3	78	25.6	86	se.			2		5		se.			sm'h	e.	fair.
Lackawanna, S. 6° 17′, W. 96° 58′*	29.89	759.2	72.0	22.2	85	sse.			3		2		s.			sm'h	se.	fair.
Lancaster, Genoa, Italy*	29.82	757.4	52	11.1	53	nnw.			2		2		nw.			sm'h		fair.
Michigan, Erie, Pa	30.23	767.8	37	2.8	90	sw.			2		2		sw.					fair.
Minnesota, New York, N. Y	30.27	768.8	39	3.9	71	sw.	4	1.8			10							cloudy.
Monocacy, Nagasaki, Japan	30.15	765.8	48	8.9	92	calm			0		0							clear.
New Hampshire, Newport, R. I	29.94	760.5	35	1.7	100	w.			3		2		calm			sm'h		fair.
Nipsic, Lisbon, Portugal*	30.37	771.4	56	13.3	87	s.			2		5					sm'h		fair.
Onward, Callao, Peru†	30.05	763.3	65	18.3	89	sse.			2		2		n.			long	w.	clear.
Palos, Tientsin, China*	30.17	766.3	25	— 3.9	100	calm			0		0							clear.
Pensacola, N. 3° 12′, W. 80° 12′*	29.79	756.7	77	25.0	86	sw.			3		8		sw.	light	light	sm'h		cloudy.
Powhatan, Boston, Mass	30.08	764.0	34	1.1	90	w.			3		10							cloudy.
Quinnebaug, Villafranche, France*	29.91	759.7	57	13.9	52	sw.			1		2					sm'h	s.	clear.
Ranger, Acapulco, Mexico	29.91	759.7	75	23.9	85	calm			0		2		calm			sm'h		fair.
Richmond, Nagasaki, Japan*	30.14	765.5	46	7.8	85	calm			0		0			0.05	1.3			misty.
Saratoga, New York, N. Y	30.16	766.1	38	3.3	80	sw.			2		8		w.	0	0	sm'h		cloudy.
St. Louis, League Island, Pa	30.53	775.4	37	2.8	45	wsw.			2		2			0	0			clear.
Tennessee, N. 22° 46′, W. 61° 21′	30.15	765.8	77	25.0	82	ese.	6	2.7			0			sli't	sli't	long		clear.
Vandalia, N. 22° 47, W. 61° 35′*	30.16	766.1	78	25.6	69	ese.			2		8		s.			sm'h		fair.
Wabash, Boston, Mass	30.08	764.0	35	1.7	80	nnw.	4	1.8			8		nw.	0	0			fair.
Wachusetts, Mare Island, Cal*	30.21	767.3	44	6.7	84	calm			0		0			Bl'k	Bl'k	sm'h		clear.
Wyandotte, Washington, D. C	30.46	773.7	50	10.0	86	w.			2		5		w.	0	0			fair.
Yantic, N. 22° 44′, W. 61° 46′	30.29	769.4	75	23.9	68	ese.			1		2					long	e.	fair.
Merchant Marine.																		
S. S. Grecian, Havre, France*	29.72	754.9	51	10.6	93	sw.			5		10			12 h'r	12 h'r			hazy.
S. S. Nova Scotian, N. 54° 43′ W. 19° 49′	29.29	744.0	50	10.0		ssw.			4		10		sw.			long	nne.	drizzling.
S. S. Scandinavian, N. 52° 31′, W. 31° 31′	29.14	740.1	51.0	10.6		ssw.			6		10		sw.	rain	rain	mod.	ssw.	overcast.
S. S. British Crown, N. 42° 31′, W. 53° 15′†	29.15	740.4	51	10.6		wnw.			5		7		wnw.	8 h'r	8 h'r	mod.	w.	cloudy.
S. S. British Prince, N. 31° 44′, W. 14° 01′†	29.71	754.6	52	11.1		wnw.			7		10		wnw.	3 h'r	3 h'r	h'vy	w.	overcast.
S. S. Indiana, Philadelphia, Pa†	30.35	770.9	40	4.4	82	ne.			3		2		w.					fine.
S. S. Lord Gough, N. 46° 53′, W. 52° 12′	29.22	742.2	31	— 0.6		wsw.			2		10		wsw.	0	0	sm'h		cloudy
S. S. Ohio, Liverpool, Eng †	29.44	747.8	45	7.2	92	s.			3		10							very fine?
S. S. Pennsylvania, N. 50° 12′, W. 29° 18′ †	29.33	745.0	53	11.7		ssw.			4		5		sw.			sm'h	se.	showery.
S. S. Castor, N. 49° 50′, W. 10° 00′*	29.90	759.4	46.4	8		nnw.			5		10		wnw.			4	w.	rainy.
S. S. Jason, N. 44° 30′, W. 58° 08′			41.0	5.0		n.			4		7 k					3	nw.	cloudy.
S. S. Bolivia, N. 42° 00′, W 59° 51′*†	29.64	752.8	40	4.4	91	nw.			6		10		nw.	2 h'r	2 h'r	r'gh	nw.	overcast.
S. S. Dorian, Gibralter, Mediterranean*	30.19	766 8	60	15.6		n.			5		4			0	0			fair.
S. S. Galatia, N. 36° 16′, W. 4° 20′			61	16.1		wsw.			2		7		nw.	0	0	sm'h	wsw.	
S. S. Utopia, N. 33° 28′ W. 15° 59′	30.46	773.7	66	18.9	79	ene.			1		2		ene.	0	0	sm'h	ese.	clear.
S. S. Aalsa, N. 13° 54′, W. 80° 20′†	29.99	761.7	81	27.2	91	ene.			6		5		ene.	2 h'r	2 h'r	r'gh	ene.	fair.
S. S. Antilina, N. 32° 52′, W. 71° 50′			64	17.8		calm			0									fine.
S. S. Ambrose, N. 8° 21′, W. 47° 46′ †	30.04	763.0	79	26.1		ene.			4		3		e.	0	0	4	e.	clear.
S. S. Carroll, Halifax, N. S*†	29.95	760.7	28	— 2.2		nnw.			6		8		nnw.	snow	snow			cloudy.
S. S. City of Agra, S. 52° 45′, W. 159° 45′	30 31	769.9	47	8.3	100	nw,			5		10							foggy.
S. S. Commewyne, N 35° 55′, W. 43° 35′	29.73	755.1	67.7	19.8	87	sw.			6		9							d. clouds.
S. S. Gordon Castle, N. 12° 32′, E. 55° 41′	29.99	761.7	76.7	24.8	73	ne.			4		4							d. clouds.
Inchkeith, S. 3° 45′, E. 90° 45′	29.86	758 4	84.5	29.2	83	ene.			2		2							d. clouds.
S. S. Mexico, N. 30° 39′, W. 116° 25′†	30.11	764.8	57	13.9	87	nw.			1		fg					long	wnw.	foggy.
S. S. Gallia, N. 51° 11′, W. 14° 35′	29.65	753.1	55	12.8	100	wsw.			6		10			light	light	r'gh	wsw.	
S. S. Marathon, Liverpool, Eng	29.57	751.1	50	10.0		s.			2		10			8 h'r	8 h'r	sm'h		foggy.
S. S. Scythia, N. 45° 36′, W. 43° 26′	29.28	743.7	49	9.4		calm			0		10		se.	0	0	sli't	nw.	cloudy.
S. S. Colina, St. John's, N. F	29.18	741.2				ne.			1		7		ne.	0	0			cloudy.
S. S. France, N. 46° 00′, W. 45° 20′†	29.32	744.7	42.8	6.0		n.			3	ck	0	n.		0	0	sm'h	ne.	covered.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Labradore, N. 42° 39′, W. 62° 11′ *†	29.72	754.9	37.4	3.0		nw.			6		10					sm'h	wnw.	
S. S. Arizona, N. 51° 18′, W 17° 16′	29.56	750.8	53	11.7		sw.			4		10		w.	8 h'r	8 h'r	mod.	wsw.	raining.
S. S. Wisconsin, N. 44° 16′, W 51° 55′	29.13	739.9	36	2.2		ne.			3		10		e.	4 h'r	4 h'r	sm'h		cloudy.
S. S. Wyoming, N. 41° 45′, W 65° 27′	29.89	759.2	35	1.7		wnw.			5		6		wnw.			long	w.	showery.
S. S. Bohemia, N. 46° 21′, W. 32° 42′ †	29.64	752.8	62	16.7		w.			5		4		wsw.	o	o	long	sw.	foggy.
S. S. Frisia, N. 44° 18′, W. 52° 09′	29.27	743.4	37	2.8		ene.			5		10		w.	3 h'r	3 h'r	mod.	ne.	cloudy.
S. S. Gellert, N. 49° 41′, W. 4° 24	29.80	756.9	54	12.2		w.			6		10		w.	10 h'r	10 h'r	r'gh	w.	drizzling.
S. S. Rugia, off South Foreland, Eng*	29.73	755.1	57.2	14		w.			3		10		w.	3 h'r	3 h'r			foggy.
S. S. Silesia, N. 43° 50′, W. 54° 34′†	29.50	749.3	38.5	3.6	95	nw.			6		10		nw.	4 h'r	4 h'r	5	wnw.	overcast.
S. S. Vandalia, N. 40° 22′, W. 68° 25′	30.15	765.8	41.0	5.0	90	nnw.			6		10		nnw.	o	o	mod.	nnw.	cloudy.
S. S. Archimedes, N. 36° 22′ W. 11° 41′	30.32	770.1				ne.			3		8		ne.			light	n.	cloudy.
S. S. Hevelius, Liverpool, Eng*†	29.50	749.3	45	7.2		s.			6		7		w.	6 h'r	6 h'r			raining.
S. S. Sirius, Santos, Brazil *	29.88	758.9				s.			3		10		s.	6 h'r	6 h'r			rainy.
S. S. Bulgarian, N. 51° 32′, W. 12° 50′*	29.76	755.9				w.			8		10		w.	9 h'r	9 h'r	high	w.	
S. S. Colorado, Galveston, Texas †	30.07	763.8	52	11.1		n.			5		10		n.	5 h'r	5 h'r			cloudy.
S. S. Rio Grande, N. 25° 18′, W. 79° 35′†	30.08	764.0	79	26.1		ene.			2		7		se.	½ h'r	½ h'r	mod.	ne.	fair.
S. S. San Marcos, N. 33° 54′, W. 76° 45′			54	12.2		nw.			1		0					sm'h		fine.
S. S. Archimede, N. 37° 06′, W. 27° 47′ †	30.19	766.8	70	21.1	70	s.			4		6		ssw.	4 h'r	4 h'r	r'gh	sse.	cloudy.
S. S. John Hopkins, N. 37° 21′, W. 75° 38′*†	30.40	772.1	40	4.4		w.			2		0			e	o			clear.
S. S. Glenapp, N. 34° 50, W. 80° 30′†	30.38	771.6				nne.			2		2		nne.	o	o	sm'h		clear.
S. S. Glenfyne, N. 0° 06′, W. 45° 09′						ene.			3		8		w.	o	o	sm'h	ne.	cloudy.
S. S. Brooklyn, N. 53° 44′, W. 26° 51′			49	9.4		sw.			5				wsw.			3	ne.	cloudy.
S. S. Chalmette, N. 35° 22′, W. 75° 10′.†	30.31	769.9	45	7.2		n.			3		1		n.	o	o	sm'h		clear.
S. S. Lone Star, N. 24° 42′, W. 80° 50′†	30.07	763.8	74	23.3		e.			3		5		e.	o	o	sm'h		fair.
S. S. Denmark, N. 40° 30′, W. 46° 23′ †	29.25	742.9	40	4.4		w.			6		5		w.	sh'rs	sh'rs	h'vy	wnw.	raining.
S. S. England, N. 40° 48′ W. 68° 07′	30.02	762.5				nw.			5		1		nw.	o	o	sli't	nw.	clear.
S. S. Erin, N. 49° 04′, W. 32° 41′	29.34	745.2	52	11.1		wnw.			7		4		nw.	shr's	shr's	h'vy	ssw.	fine.
S. S Helvetia, N. 51° 14′, W. 32° 30′	29.19	741.4	50	10.0		sw.			6		8		wsw.	5 h'r	5 h'r	long	sw.	raining.
S. S. The Queen, N. 49° 14′, W. 21° 00′*	29.71	754.6	54	12.2		s.			6		10			12 h'r	12 h'r	mod.	ssw.	overcast.
S. S. City of Alexandria, N. 26° 02′, W. 80° 05′ †	30.15	765.8	73	22.8		e.			3		1		se.	o	o	h'vy	nne.	clear.
S. S. City of Merida, N. 26° 35′, W. 79° 53′ *†	30.08	764.0	82.4	28.0		ene.			1		5		ene.	o	o	light	ene.	cloudy.
S. S. City of Chester, N. 42° 10′ W. 62° 23′*			42	5.6		nnw.			5							sm'h		
S. S. Braunschweig, N. 9° 15′, W. 27° 43′	30.04	763.0	77.0	25 0	79	w.			3		10		e.	light	light	mod	ene.	hazy.
S. S. Oder, N. 49° 18′, W. 35° 44′	29.34	745.2	48.2	9.0		nw.			6		7		nw.			r'gh	nw.	squally.
S. S. Rhein, N. 42° 07′, W. 63° 15′						nnw.			6		8		n.	o	o	long	nnw.	cloudy.
S. S. Salier, N. 49° 39′, W. 26° 44′	29.48	748.8	57.2	14.0		s.			5		2		ssw.	5 h'r	5 h'r	h'vy	ssw.	fair.
S. S. Belgic, San Francisco, Cal.			50	10.0	93	calm			0		3		w.	o	o			clear.
S. S. Gaelic, N. 36° 18′, W. 150° 53′ *	29.92	760.0	53	11.7	86	nw.			6		8		wnw.			cross	w.	d clouds.
S. S. Oceanic, N. 26° 29′, E. 122° 53′*	30.36	771.1	62	16.7	72	n.			6		7		sw.			6	ne.	cloudy.
S. S. Mississippi, Seattle, Wash. Ter *†	30.40	772.1	42	5.6	83	calm			0		2		w.					fine.
S. S. Willamette, Seattle, Wash. Ter †	30.42	772.7	41	5.0	91	calm			0		6		se.	o	o			cloudy
S. S. Oregon, N. 45° 56′, W. 124° 07′ †	30.31	769.9	48	8.9	85	ene.			2		5		ne.			light	w.	fair.
S. S. Ancon, San Francisco, Cal †	30.23	767.8	47	8.3	77	ene.			1		0							clear.
S. S. City of Chester, San Francisco, Cal*.	30.22	767.6	47	8.3	85	n.			2		0							clear.
S. S. Dakota, Victoria, Vancouvers Island †	30.31	769.9	45	7.2	84	n.			2		2		n.	o	o			clear.
S. S. Orizaba, N. 34° 35′ W. 120° 40′ *†	30.08	764.0	55	12.8	87	nw.			1		8		ssw.			r'gh	sw.	cloudy.
S. S. State of California, N. 38° 53′, W. 123° 50′*†	30.26	768.6	49	9.4		ene.			3		0			o	o	long	sw.	clear.
S. S. Australia, N. 37° 48′, W. 122° 30′	30.33	770.4	57	13.9	75	ne.			3		1		ne.	o	o	long	ne.	clear.
S. S. City of New York, Sydney, N. S. W†	30.20	767.1	71	21.7	57	s.			2		0			o	o			clear.
S. S City of Pekin, N. 44° 56′, W 150° 06′†	29.36	745.7	40	4.4	64	w.			7		8		wsw.	o	o	r'gh	wsw.	cloudy.
S. S. City of Rio de Janeiro, N. 22° 55′, W 108° 18′ †	29.96	761.0	69	20.6	75	nnw.			4		0			o	o	h'vy	nw.	clear.
S. S. City of Sydney, N. 23° 46′ W. 153° 09′ †	30.15	765.8	73	22.8	63	se.			1		2		se.	o	o	h'vy	nw.	fair.
S. S. City of Tokei, N. 34° 20′, E. 139° 38′†			55	12.8		s.			7				s.	o	o	mod.	s.	
S. S. Colima, Panama, Panama†	29.91	759.7	77	25.0	100	wnw.			2		4		wnw.	o	o			hazy.
S. S. San José, Acapulco, Mexico						nnw.			2		4 k		nw.	o	o	long	ese.	clear.
S. S. Zealandia, Sydney, N. S. W	30.09	764.3	67	19.4	95	s.			3		3?		se.			mod.	e.	cloudy.?
S. S. Claudius, N. 20° —′, W. 74° 15′ †	30.15	765.8				ene.			4		2		ene.	o	o	short	ene.	fair.
S. S. Valencia, N. 11° 00′, W., 68° 18′†	30.04	763.0	80	26.7	84	ese.			6		4		ese.	o	o	r'gh	ese.	fine.
S. S. Belgenland, N. 40° 36′, W. 64° 30′			44	6.7	76	nnw.			7		8		nw.	1 h'r	1 h'r	rg'h	nnw.	squally.
S. S. Nederland, N. 49° 33′, W. 7° 08′			53	11.7		wsw.			6		10		w.	8 h'r	8 h'r	h'vy	wsw.	overcast.
S. S. Pennland, N. 49° 58′, W 23° 59′	29.52	749.8	52	11.1	93	ssw.			2		8		nw.	10 h'r	10 h'r	long	s.	fine.
S. S. Rhynland, Antwerp, Belgium	29.63	752.6	36	2.2	90	w.			6		10		w.	2 h'r	2 h'r			drizzling.
S. S. Wiesland, N. 44° 58′ W. 51° 46′	29.36	745.7	34	1.1	100	ne.			4		10		wsw.	snow	snow	light	n.	light fog.
S. S. P. Caland, N. 43° 36′, W. 49° 58′	29.24	742.7	38.8	3.8	97	ne.			3		9							cloudy.
S. S. W. A. Scholten, Falmouth, Eng			54.4	12.4	90	nw.			8		5		nw.	10 h'r	10 h'r	sm'h		rainy.
S. S. Zaandam, N. 49° 38′, W. 6° 29′	29.94	760.5	62.2	16.8	83	w.			5		10n		w.	10 h'r	10 h'r	4	w.	foggy.
S. S. State of Indiana, N. 44° 50′, W. 54° 04′†	29.24	742.7	33	0.6		nw.			4		9		nw.	4 h'r	4 h'r	sm'h		snowy.
S. S. Hekla, N. 45° 30′, W. 53° 30′*	29.32	744.6	42.8	6.0		wnw.			3		8		wnw.	snow	snow	sm'h		fog & snow.
S. S. Iowa, N. 49° 59′, W. 26° 12′*†	29.56	750.8	56	13.3		sw.			5		2		wsw.	7 h'r	7 h'r	rg'h	ssw.	hazy.
S. S. Plantyn, N. 47° 32′, W. 44° 10′									3		3		sw.			sm'h	ssw.	foggy.
S. S. Britanic, N. 50° 36′, W. 30° 42′			48	8.9	92	n.			4		4		wsw.	4 h'r	4 h'r	con.	var.	gloomy.
S. S. Celtic, N. 42° 33′, W. 48° 34′ †	29.23	742.4	44	6.7		e.			2		10		e.	o	o	sm'h		gloomy.
S. S. Lepanto, N. 42° 14′, W. 54° 44′ *	29.37	746.0	45	7.2		wnw.			6		9		nw.	4 h'r	4 h'r	h'vy	w.	cloudy.
S. S. Marengo, N. 48° 20′, W. 22° 30′	29.73	755.1				s.			6		10		sw.	20 h'r	20 h'r	r'gh	sw.	rainy.
S. S. Salerno, Beachy Head, Eng *	29.69	754.1	54	12.2		w.			6		10		w.	3 h'r	3 h'r	r'gh	w.	raining.
S. S. Catherine Whiting, Delaware River †	30.32	770.1	82	27.8		w.			1		0			o	o			
S. S. Saxon, Boston, Mass†	30.15	765.8	35	1.7		w.			3		0							fine
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 24° 13′, W. 80° 02′ †	30.06	763.5	74	23.3		ene.			4		4		ene.	o	o			fine.
Bk. Adelaide, N. 29° 27′, W. 54 30′*†	30.26	768.6	72	22.2		wsw.			6		1		wsw.	o	o	short	w.	fair.
Bg. Alcira, N. 40° 10′, W. 73° 58′	30.10	764.5	53	11.7		wnw.			6		1		wnw.	o	o	mod	wnw.	clear.
Bk. Alpha, N. 24° 10′, W. 28° 30′†	30.11	764.8	70	21.1		s.			3		8		s.	1 h'r	1 h'r	mod.	ne.	squally.
Schr. Annie Lewis, Cedar Keys, Fla†	30.25	768.3	51	10.6		ne.			3		8		ne.	o	o	sm'h		cloudy.
Bk. Anna Thormann, S. 33° 32′ E. 30° 47′*	30.13	765.4	72.7	22.6	62	calm			0		10 k		sw.	o	o	mod	sw	misty.
S. S. Antonio Lopez, Cadiz, Spain*	30.33	770.4	57	13.9	55	n.			1		1			o	o			hazy.
Bk. Aquidneck, S. 1° 06′, W. 39° 18′ *†	30.10	764.5	88	31.1		ene.			2				ene.	o	o	light	ene.	clear.
Bgt. Arthur, N. 9° 34′, W. 22° 28′ *†	30.03	762.7				ne.							ne.	sh'rs	sh'rs		ne.	
Schr. Anna Holton, N. 24° 18′, W. 87° 08′†	30.07	763.8	79	26.1		ne.			6		10		ne.	6 h'r	6 h'r	r'gh	e.	cloudy.
Bg. Belle of the Bay, N. 28° 34′, W. 89° 50′ *†	30.04	763.0				ne.			6		10		nne.	8 h'r	8 h'r	high	e.	raining.
Bk. Champion, N. 33° 18′, W. 74° 35′			64.0	17.8		nnw.			3		8		wnw.	½ h'r	½ h'r	cross	var.	fair.
Bg. Clara M. Goodrich, Key Francis, W. I.*†	30.00	762.0				ese.			1		5		ese.	o	o			fair.
Schr. C. R. Flint, N. 34° 32′, W. 75° 44′			50	10.0		n.			2		2		ne.	o	o	sm'h	ne.	clear.
S. S. D. J. Foley, N. 35° 10′, W. 74° 23′*†	30.27	768.8	51	10.6		nw.			4		2		nnw.	o	o	mod.	nnw.	clear.
Bkt. David Preston, Pensacola, Fla			63.0	17.2		n.					10		n.	o	o			
Bk. E. L. Pettingill, S. 5° 11′, W. 125° 18′*†	30.00	762.0	75	23.9		ese.			5		0			o	o	mod.	se.	
Schr. Edith R. Seward, N. 36° 00′, W. 74° 25′ *†	30.36	771.1	44	6.7		n.			1		3		n.	o	o	sm'h	ne.	clear.
S. E. J. Spicer, Liverpool, Eng*	29.25	753.1	47	8.3		s.			2		10		s.	18 h'r	18 h'r			foggy.
Bk. E. D. Bigelow, Verden Roads, France*†	30.00	762.0				w.			7		10		w.					misty.
Bk. Essex, S. 3° 23′ E. 48° 29′ *†	29.91	759.7	81	27.2		wnw.			6					sh'rs	sh'rs	high	ene.	
Schr. F. E. McDonald, Belfast, Maine †	30.09	704.3				nw.			1					o	o			fine.
S. S. Foscolia, N. 40° 11′, W. 45° 24′						wsw.			10		10		wnw.	12 h'r	12 h'r	high		cloudy.
Bk Freya, Matanzas, Mexico			73	22.8		calm			0				e.	1 h'r	1 h'r			clear.
Bg. George, N. 19° 22′, W. 62° 35′ *†	30.20	707.1				ene.			5		2		ne.	o	o	mod.	e.	fair.
S. Geo. Stetson, N. 39° —′ W. 56° —′*†	29.58	751.3	57	13.9	94	nw.			7		3		nw.	o	o	cross	nw.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Gronsvaer, S. 36° 54′, E. 176° 34′†	29.95	760.7	73.3	22.9		n.			2		5		se.	0	0	mod.	ene.	fine.
Bk. Godeffroy, S. 47° 30′, W. 79° 15′†	29.88	758.9	50.9	10.5	100	w.			6		10			light	light	mod.	wsw.	foggy.
Bk. Great Surgeon, S. 26° 47′, E. 56° 55′*†	30.23	767.8	79	26.1		e.			2		2		e.	0	0	mod.	ssw.	clear.
Bk. Grey Eagle, S. 22° 55′, W. 41° 17′*†	29.81	757.2				ne.			4		6			0	0	light		
Bk. Hattie G. McFarland, N. 27° 20′, W. 60° 32′†...	30.26	768.6	73	22.8		wsw.			4		3		w.	0	0	long	w.	
Schr. Isabel Alberto, Brooklyn, N.Y.†	30.26	768.6				w.			3		10		w.	0	0			cloudy.
Schr. Jennie N. Huddell, Smith Point, Va†	30.31	769.9	38	3.3		nw.			1		2		nw.	0	0			clear.
Bk. Joseph A. Ropes, S. 13° 04′, E. 47° 18′ *†	29.96	761.0	86	30.0	80	calm			0		4			1 h'r	1 h'r	mod.	ne.	fair.
Bkt. Josephine, N. 18° 29′, W. 31° 56′†	30.08	764.0	77	25.0	65	ese.			4		2			0	0	long	e.	fair.
S. S. J. W. Wilson, off South Pass, La †	30.03	762.7				ne.			6		10		s.	0	0	r'gh	se.	cloudy.
Light House Tender, Laurel, N. 28° 17′, W. 83° 40′†....	30.16	766.1	60	15.6		e.			2–3		10		e.	2 h'r	2 h'r	sm'h		cloudy.
Bg. Lilian, N. 36° 40′, W. 72° 00′†	30.31	769.9	54	12.2		nw.			6		10		nw.	0	0	r'gh	nnw	cloudy.
Bk. Louise Adelaide, Campeachy Bay, C. A			75	23.9		ese.			2		6		se.	2 h'r	2 h'r	light	e.	fine.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.08	764.0				calm			0		hz			3 h'r	3 h'r			clearing.
S. S. Madrid, N. 50° 10′, W. 2° 34′*†	29.88	758.9	50	10.0		w.			6		10			10 h'r	10 h'r	r'gh	wnw.	hazy.
Schr. Minnie A. Bonsall, Jacksonville, Fla	30.26	768.6	66	18.9		nne.			1									cloudy.
S. Minnie N. Gerow, N. 28° 18′, W. 57° 51′*†	30.10	764.5				w.			5		5		w.			long	wnw.	fair.
S. M. P. Grace, S. 51° 05′, W. 98° 35′*†..	29.70	754.4	48	8.9		w to sw			5		fg.		sw.			r'gh	nnw.	misty.
Bg. Myrtle, Clements Port, Nova Scotia *†	29.80	756.9				n.			2		10		n.	snow	snow			fair.
Bg. O. C. Clary, Miragoane, Hayti, W. I.*†	30.08	764.0	88	31.1	92	calm			0		0			0	0			clear.
Bk. Ottawa, N. 40° 11′, W. 17° 20′*	30.31	769.9	61	16.1		s.			3		1		s.	0	0	sm'h	w.	clear.
S. Paramita, San Francisco, Cal			51	10.6		nne.			3					0	0			
Bk. Pilgrim, N. 30° 54′, W. 70° 10′*†	30.20	767.1				n.			6		2		n.	1 h'r	1 h'r	chop	wnw	fair.
S. S. Radnorshire, N. 28° 47′, E. 126° 04′*†	30.12	765.0				nnw.			6		5		n.	0	0	mod	n.	fair.
S. S. Raleigh, N 35° 30′, W. 74° 00′			52	11.1		wnw.			2		5		nw.	0	0	mod.	nw.	fair.
Bk. Rebus, Borkum Island, North Sea*	29.35	745.5				sw.			5		10		sw.	rain	rain	mod.	nw.	raining.
Schr. S. B. Hubbard, N. 36° 01′, W. 75° 24′†	30.34	770.6	50	10.0		nnw			1		0			0	0	long	n.	fine.
Bk. Southern Belle, N. 40° 09′, W. 14° 30′*†	30.30	769 6	60	15.6		sw.			2		2			0	0	sta'h		fair.
S. S. Strathleven, N. 12° 10′, E. 111° 49′	29.91	759.7	77.4	25.2	99	nne.			6		5		nne.	light	light	6	nne.	squally.
Bk. Sunbeam, N. 39° 15′, W. 48° 18′..	29.27	743.4	57	13.9	87	wsw.			9		10		w.	3 h'r	3 h'r	h'vy	w.	rainy.
Schr. T. S. McLellan, N. 18° 12′, W. 60° 45′*†	30.10	764.5	68	20.0		ene.							ene.				ene.	
U. S. F. C. S. S. Fish Hawk, Washington, D. C†.....	30.42	772.7	39	3.9	82	calm			0		5		calm	0	0			fair.
Bk. Vincenzo Accame, N. 32° 17′, W. 59° 59′ †	30.11	764.8	71.6	22.0		nw.			6		6		nw.	1⅓h'r	1⅓h'r		nnw.	
Bk. Wandering Jew, Montevideo, Uruguay †	29.85	758.2	70	21.1		n.			3		2		n.	0	0			clear.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.04	763.0				ssw.			2		2		ssw.			sm'h	sw.	fair.

International Chart I. December 25, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.

W.B.Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 26, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.29	769.3	60.1	15.6	85	n.	.....	.....	1	.....	1	.....	.....	0	0	very fair	Malaterre.
Algiers	.....	.....	30.24	768.2	58.3	14.6	89	wsw.	.....	.....	3	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.19	766.7	65.5	18.6	52	nw.	.....	.....	2	.....	3	.....	.....	0.059	1.5	pretty fair	Fonfréde.
Tunis	.....	.....	30.17	766.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.30	769.7	63.3	17.4	42	sse.	.....	.....	2	.....	1	.....	.....	0	0	very fair	Pérès.
Tebessa	.....	.....	30.28	769.2	56.8	13.8	60	w.	.....	.....	3	.....	0	.....	.....	0.079	2.0	clear	Dognon.
Geriville	.....	.....	.....	.....	60.1	15.6	44	nw.	.....	.....	0	.....	0	.....	.....	0	0	clear	Lonchamp.
Laghouat	.....	.....	30.34	770.6	57.2	14.0	39	sw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.33	770.3	68.0	20.0	47	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	30.09	764.3	30.18	766.6	59.0	15.0	81	ssw.	4	1.8	.....	.....	1	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.08	738.7	29.64	752.8	44.2	6.8	52	nw.	.....	.....	5	.....	10	.....	.....	0.008	0.2	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.56	725.4	29.34	745.1	36.1	2.3	76	wnw.	5.6	2.5	.....	.....	10	.....	.....	0.071	1.8	.....	Dr. Wierzbiski.
Eperies	28.59	726.2	29.50	749.4	28.4	— 2.0	92	s.	.....	.....	4	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.32	719 3	29.59	751.6	38.7	3.7	71	w.	.....	.....	1	.....	10	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.29	718.5	29.80	756.8	25.2	— 3.8	100	s.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.16	715.2	29.50	749.4	42.4	5.8	84	wsw.	.....	.....	4	.....	10	.....	.....	1.343	34.1	raining	The Staff.
Lemberg	28.42	721.8	29.43	747.4	33.1	0.6	76	w.	.....	.....	3	.....	10	.....	.....	0.039	1.0	.....	Dr. T. Stanecki.
Pola	29.63	752.7	29.75	755.6	51.1	10.6	74	sse.	.....	.....	3	.....	10	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	29.14	740.1	29.60	751.7	30.7	— 0.7	77	se.	.....	.....	1	.....	7	.....	.....	0.031	0.8	.....	Joseph Midlinszky, S J.
Szegedin	29.32	744.6	29.60	751.9	34.2	1.2	78	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.07	753.6	29.77	756.2	46.4	8.0	73	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Royal Academy.
Vienna	28.74	729 4	29.43	747.6	45.3	7.4	85	w.	.....	.....	5	.....	10	.....	.....	0.409	10.4	raining	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.38	746 2	29.48	748.8	33.2	0.7	84	wnw.	14	6.3	.....	.....	3	.....	.....	0.360	9.1	blue sky	W. Boswell
Armagh, Observatory	29.26	743.2	29.50	749.3	37.3	2.9	98	ne.	3	1.3	.....	.....	10	.....	.....	.....	.....	misty	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.48	748.8	39.9	4.4	93	sw.	5	2.2	.....	.....	10	.....	.....	.....	.....	misty	John Hartnup.
Bolton, Sharples	28.94	735.1	29.47	748.5	37.1	2.8	91	nne.	.....	.....	.....	.....	10	.....	.....	.....	.....	overcast	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.43	10.9	.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	80.0	26.7	74	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl.J.Surgenor, A. H C.
Cardington	.....	.....	.....	.....	42.0	5.6	81	n.	.....	.....	0.4	.....	10	.....	.....	.....	.....	overcast	John McLaren.
Chatham, School M. E	29.28	743.7	29.41	747.0	52.5	11.4	88	w.	.....	.....	2	.....	10	.....	.....	.....	.....	gloomy	Corpl. G. A. Pickles.
Falmouth, Observatory	29.46	748.3	29.68	753.9	52.6	11.4	87	w.	.....	.....	4	.....	8	.....	.....	.....	.....	d. clouds	The Staff.
Fort Napier, Natal	27.75	704.8	29.96	761.0	71.0	21.7	85	ne.	.....	.....	1	.....	9	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.72	754.9	29.98	761.5	81.0	27.2	91	nw.	.....	.....	6	.....	2	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.19	766.8	30.26	768.6	64.0	17.8	94	se.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.29	744.0	29.50	749.3	32.8	0.4	79	ene.	.....	.....	1	.....	.....	.....	.....	.....	.....	foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.27	743.4	29.44	747.8	52.9	11.6	81	w.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast	The Staff.
Guernsey	29.41	747.0	29.70	754.4	52.0	11.1	98	w.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	29.42	747 3	29.46	748.3	52.9	11.6	81	w.	15	6.7	.....	.....	10	.....	.....	.....	.....	threatening	The Staff.
Leicester, Museum	29.22	742.2	29.48	748.8	46.6	8.1	97	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	J. C. Smith.
Malta, Mediterranean	30.04	763.0	30.10	764.5	55.8	13.2	96	nw	.....	.....	2	.....	8	.....	.....	.....	.....	overcast	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.09	764.3	30.14	765.5	71.0	21.7	100	se.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	28 92	734.6	29.46	748.3	36.8	2.7	94	nne.	.....	.....	3	.....	10	.....	.....	.....	.....	raining	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.24	742 7	29.47	748.5	52.7	11.5	78	wnw.	.....	.....	2	.....	10	.....	.....	.....	.....	squally	The Staff.
Plymouth	29.56	750 8	29.63	752.6	52.4	11.3	94	w.	.....	.....	4	.....	10	.....	.....	.....	.....	gloomy	John Merrifield.
Sandwick Manse, Orkneys	29.39	746 5	29.50	749 3	31.9	— 0.1	100	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	blue sky	Rev. C. Clouston, L L D.
Scutari Cemetery, Turkey	29.75	755.6	29.81	757.2	43.0	6.1	67	n.	.....	.....	3	.....	4	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	29.18	741.2	29.46	748.3	30.4	2.4	100	calm	.....	.....	0	.....	10	.....	.....	0.30	9.1	gloomy	W. F. Cooper.
Silloth Rectory	29.45	748.0	29.48	748.8	34.2	1.2	93	e.	.....	.....	1	.....	10	.....	.....	0.290	7.4	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.49	749.0	30.0	2.2	82	nne.	3	1.3	.....	.....	10	.....	.....	.....	.....	gloomy	I. New.
Stratfield Turgiss	29.27	743.4	29.49	749 0	52.2	11.2	85	w.	.....	.....	3	.....	6	.....	.....	.....	.....	d. clouds	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	29.62	752 3	29.68	753.9	54	12 2	93	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.50	749 3	29.52	749.8	51.6	10.9	93	ssw.	16	7.2	.....	.....	10	.....	.....	.....	.....	raining	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.06	763.5	30.11	764.8	26	— 3.3	93	w.	.....	.....	4	2 cs	8 s	.....	n.	0.105	2.7	hazy	H. J. Cundall, C E
Chatham, N. B*	30.10	764.5	30.17	766.3	— 2	—18.9	100	calm	0	0	.....	0	0	.....	.....	0	0	clear	G. A. Blair.
Father Point, Quebec*	30.13	765 3	30.15	765 8	26	— 3.3	92	nw.	10	4.5	.....	.....	10 s	.....	calm	0	0	threatening	J. McWilliams.
Fort Garry, Manitoba*	29.30	744 2	30.22	767.6	3	—16.1	100	s.	7	3.1	.....	0	0	.....	.....	0	0	clear	James Stewart.
Halifax, N. S*	30.01	762 2	30.14	765.5	25	— 3.9	100	nw.	4	1.8	.....	10 k	0	.....	.....	inap.	inap.	cloudy	A. Allison.
Kingston, Ontario*	29.88	758 9	30.24	768.1	28	— 2.2	88	ne.	3	1.3	.....	.....	10 ks	.....	w.	inap.	inap.	cloudy	A. P. Knight, M A
Montreal, Quebec*	30.03	762.7	30.25	768.3	21	— 6.1	91	ne.	2	0.9	.....	.....	10	.....	.....	inap.	inap.	cloudy	C. H. McLeod, C E.
Parry Sound, Ontario*	29.48	748.8	30.21	767.3	29	— 1.7	88	se.	5	2.2	.....	.....	10 n	.....	se.	0.05	1.3	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.47	748.5	30.20	767.1	27	— 2.8	100	calm	0	0	.....	10 c	0	.....	.....	0	0	covered	H. Morgan.
Port Stanley, Ontario	29.50	749.3	30.19	766 8	26	— 3.3	96	e.	7	3.1	.....	3 cs	0	w.	.....	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.90	759.4	30.25	768 3	20	— 6.7	100	w.	.....	.....	1	.....	10 n	w.	w.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.72	754.9	30.21	767.3	27	— 2.8	88	calm	0	0	.....	.....	10 n	.....	.....	0.03	0.8	heavy snow	W H McIntyre.
Saugeen, Ontario*	29.45	748.0	30.21	767.3	26	— 3.3	88	s.	3	1.3	.....	.....	slc.	.....	.....	0.06	1.5	smoky	.
St. Andrews, N .B	30.12	765.0	30.17	766.3	18	— 7.8	91	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	.....
Sydney, C. B*	29.96	761.0	30.03	762 7	32	0.0	81	n.	12	5.4	.....	.....	10 ks	.....	n.	0	0	fair	T C. Hill, C. E
Toronto, Ontario*	29.82	757 4	30.23	767.8	32	0.0	92	w	3	1.3	.....	.....	10 ks	.....	w.	0	0	cloudy	Magnetic Observatory.
Yarmouth, N.S*	30.07	763.8	30.14	765 5	30	— 1.1	84	nw.	4	1.8	.....	2 ck	2 k	w.	nw.	0	0	fair	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.73	729.7	30.19	766.8	28.0	— 2.2	94	w.	.....	.....	1	.....	10 s	.....	wsw.	0.041	1.1	snowy	Wm. Wylie
St. Johns, Newfoundland	29.64	752.8	29.90	759.4	31	— 0.6	100	ne.	1	0 4	.....	.....	10	.....	.....	0	0	.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.20	767.1	30.23	767.8	72.0	22.2	84	s.	5.2	2 3	.....	0	0	.....	.....	0	0	light haze	John Duthie.
Cape Town, C G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
Chinese (Sub-series).																			
Sung-shu-chwang	24.73	628.1	.....	.....	13.3	—10.4	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....
Tchang-kia-tchouang	30.43	772.8	30.54	775.6	14.0	—10.0	46	ne.	19.7	8.8	.....	0	0	.....	.....	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.17	766.4	30.20	767.0	36.3	2.4	82	se.	0.9	0.4	.....	0	5 k	.....	.....	0	0	cloudy	M. Marc Dechevrens, S.J.
Danish.																			
Copenhagen	29.16	740.6	29.21	741.8	28.6	— 1.9	86	n.	11	5	.....	.....	10	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanoe	29.26	743.1	29.28	743.6	27.2	— 2.8	100	ne.	.....	.....	4	.....	9	.....	.....	.....	.....	.....	Overlaerer Lauridsen.
Godthaab, Greenland	29.89	759.2	29.93	760.3	11.8	—11.2	79	calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.82	757.5	29.84	758.0	27.0	— 2.8	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	snowing	
Jacobshavn, Greenland	29.92	759.9	29.97	761.1	4.3	—15.4	.....	calm	.....	.....	0	.....	7	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.73	755.1	29.77	756.2	20.8	— 6.2	90	e.	.....	.....	4	.....	3	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.54	750.2	29.57	751.1	31.3	— 0.4	76	n.	2	1	.....	.....	1	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.21	742.0	29.31	744.4	23.9	— 4.5	100	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	Loerer Oesterboi.
Upernavik, Greenland	30.01	762.2	30.06	763.4	— 5.8	—21.0	.....	e.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.55	750.6	30.21	767.4	53.2	11.8	98	w.	.....	.....	1	.....	kn;n	.....	.....	0	0	.....	M. Labroue, Director.
Alençon, Normal School	29.23	742.4	29.78	756.4	51.8	11	93	sw.	.....	.....	3	.....	kn	ne.	ne.	0.31	8.	.....	M. Nicot, Director.
Arras, Engineer School	29.28	743 8	29.54	750.3	46.9	8.3	95	nnw.	.....	.....	3	.....	10	.....	.....	0	0	covered	M. Fénéon, Command't.
Avignon, Normal School	29.93	760.3	30.01	762.3	47.5	8.6	86	n.	.....	.....	1	.....	8	.....	nw.	0	0	very cloudy	M. Giraud, Director.
Bar-sur-Seine	29.11	739.5	29.67	753.7	49.1	9.5	92	sw.	.....	.....	2	.....	10	.....	sw.	0.413	10.5	raining	M. Saillard, Director.
Beauvais, Normal School	29.32	744.6	29.58	751.2	51.6	10.9	93	w.	.....	.....	2	.....	10	.....	w.	0.165	4.2	covered	M. Frère Eugène Marie.
Besançon, Normal School	28.89	733.9	29.80	756.8	47.3	8.5	89	s.	.....	.....	4	.....	n	.....	sw.	0	0	.....	M. Gobin, Director.
Bordeaux, Observatory	29.83	757.7	30.10	764.4	52.3	11.3	86	wsw.	.....	.....	4	.....	10	.....	.....	0.083	2.1	raining	M. Rayet, Director.
Bourges, Normal School	29.28	743.6	29.83	757.6	51.8	11	66	s.	.....	.....	3	.....	10 n	.....	s.	0.20	5.	raining	M. Malet, Director.
Brest, Naval Observatory	29.63	752.5	29.87	758.7	54.7	12.6	98	w.	.....	.....	3	.....	10	.....	w.	0.205	5.2	hazy	M. de Kermarec, Dir.
Caen, Normal School	29.60	751.8	29.67	753.6	53.2	11.8	81	w.	.....	.....	2	.....	8	.....	w.	0	0	very cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.268	6.8	.....	M. Jadot, Director.
Charleville, Normal School	29.01	736.9	29.52	749.8	49.3	9.6	59	ssw.	.....	.....	3	.....	10	.....	sw.	0.20	5.	raining	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.52	724.3	29.87	758.8	52.0	11.1	71	w.	.....	.....	4	.....	10	.....	.....	0.024	0.6	covered	M. Allnard, Director.
Cluny, Normal School	29.02	737.1	29.89	759.2	50.4	10.2	82	sw.	.....	.....	2	.....	10	.....	sw.	0.283	7.2	raining	M. de Villemontée, Dir.
Commercy, Normal School	28.73	729.8	29.60	751.9	48.2	9	95	w.	.....	.....	4	.....	10 kn	w.	w.	1.469	37.3	raining	Dr. Goulet, Director.
Gap, Normal School	27.47	697.6	30.06	763.4	41.4	5.2	66	s.	.....	.....	2	.....	8	.....	s.	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhône	28.89	733.8	30.04	762.9	47.7	8.7	70	nw.	.....	.....	2	.....	3	.....	w.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.24	742.7	30.04	763.0	40.6	4.8	97	e.	.....	.....	1	.....	10	.....	w.	1.10	28.	raining	M. Ablard, Director.
Guéret	28.35	720.1	29.94	760.4	48.2	9	95	sw.	.....	.....	4	.....	10 n	.....	w.	0.20	5.	raining	M. Delorme, Dir.
Lamballe, Normal School	29.50	749.4	29.78	756.3	54.5	12.5	93	w.	.....	.....	4	.....	8	.....	w.	0	0	very cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.61	752.1	30.18	766.5	56.5	13.6	57	wsw.	.....	.....	1	.....	10	.....	.....	0.146	3.7	covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.79	756.6	29.89	759.2	55.4	13.0	93	w.	.....	.....	6	.....	10	.....	.....	0.236	6.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.90	734.0	29.97	761.2	47.7	8.7	89	sse.	.....	.....	1	.....	10 cn	.....	w.	0.031	0.8	covered	M. André, Director.
Mans, Normal School	29.49	749.1	29.80	756.9	54.5	12.5	94	w.	.....	.....	3	.....	8	.....	w.	0.142	3.6	very cloudy	M. Piboën, Director.
Marseille, Observatory	29.74	755.4	30.01	762.3	54.0	12.2	65	nw.	.....	.....	3	.....	10	.....	nw.	0	0	.....	M. Stephan, Director.
Montlouis	24.87	631.7	29.71	754.7	46.4	8.0	50	wsw.	7.4	3.3	.....	.....	6	w.	.....	0	0	.....	M. Caré for Dr. Fines.
Montpellier, Normal School	29.90	759.4	30.08	764.0	55.8	13.2	75	w.	.....	.....	3	.....	5	w.	.....	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	28.74	730.1	29.52	749.8	48.6	9.2	95	w.	.....	.....	3	.....	10 n	.....	.....	0.567	14.4	raining	M. Hasse, Director.
Nantes, Observatory	29.78	756.3	29.94	760.4	55.4	13	93	w.	.....	.....	2-3	.....	10	.....	.....	0.106	2.7	light rain	M. Larocque, Director.
Perpignan, Observatory	29.99	761.7	30.10	764.5	58.5	14.7	49	nw.	28.0	12.5	.....	.....	2	nnw.	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.26	540.0	.....	.....	26.1	— 3.3	.....	w.	.....	.....	2	.....	5	.....	w.	0.031	0.8	cloudy	M. Vaussenat.
Privas, Normal School	28.92	734.6	30.02	762.6	40.3	4.6	74	s.	.....	.....	2	.....	5 s	s.	s.	0	0	cloudy	M. Taillen.
Puy de Dôme Obs'y, Summit	24.95	633.7	.....	.....	35.4	1.9	100	wsw.	.....	.....	8	.....	10	.....	.....	0.984	25.0	dense fog	M. Allnard, Director.
Rochefort, Naval Obs'y	29.98	761.4	30.01	762 2	54.7	12.6	93	wsw.	.....	.....	6	.....	10	.....	w.	.....	.....	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.76	755.8	29.97	761.3	53.6	12	98	sw.	.....	.....	3	.....	10	.....	.....	0.224	5.7	covered	M. Brotier, Director.
Rodez, Normal School	27.97	710.5	30.17	766.4	44.6	7	89	nw.	.....	.....	2	.....	10	.....	.....	0.177	4.5	light rain	M. Seger, Director.
Rouen, Normal School	29.67	753.5	29.71	754.7	52.5	11.4	95	sw.	.....	.....	6	.....	10	w.	.....	0.291	7.4	covered	M. Mouillot.
Saint Lô	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Delapianche, Dir.
Saint Maur, Observatory	29.47	748.5	29.63	752.7	53.4	11.9	83	w.	.....	.....	3	.....	10	.....	w.	0.020	0.5	.....	M. Renou, Director.
Toulouse, Observatory	29.48	748.8	30.21	767.3	53.4	11.9	68	w.	.....	.....	4	.....	8	nw.	.....	0.031	0.8	very cloudy	M. Baillaud, Director.
Tours	29.67	753.6	29.84	758.0	55.0	12.8	90	wsw.	.....	.....	3	.....	10	wnw.	w.	0.138	3.5	raining	M. de Tastes.
Versailles, Observatory	29.14	740.2	29.63	752.7	48.9	9.4	97	w.	.....	.....	3	.....	.....	.....	.....	0.020	0.5	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	30.07	763.7	30.22	767.5	55.4	13.0	72	w.	11.9	5.3	.....	.....	10 k	.....	w.	0.039	1.0	hazy	M. Cartier, Director.
German.																			
Ansbach	28.00	711.2	29.45	747.9	45.0	7.2	77	sw.	.....	.....	7	.....	10	sw.	.....	0.563	14.3	.....	Prof. Jnedt.
Bamberg	28.57	725.6	29.39	746.5	46.0	7.8	82	w.	.....	.....	3	.....	10 n	w.	.....	0.591	15.0	.....	Prof. Dr. Hoh.
Berlin	29.06	738.2	29.24	742.8	37.0	2.8	79	sw.	.....	.....	3	.....	10	.....	.....	0.024	0.6	.....	Prof. Dr. Arndt.
Breslau	28.76	730.4	29.28	743.6	37.2	2.9	78	wsw.	.....	.....	1	.....	10	.....	.....	0.016	0.4	raining	Royal University Obs'y.
Carlsruhe	29.09	738.8	29.52	749.8	50.0	10.0	78	sw.	.....	.....	10	.....	10	sw.	.....	1.181	30.0	raining	Albert Senz.
Cassel	28.55	725.1	29.26	743.2	37.0	2.8	100	n.	.....	.....	1	.....	10	s.	.....	0.882	22.4	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.01	736.8	29.37	746.0	49.5	9.7	80	sw.	.....	.....	3	.....	10	.....	.....	0.437	11.1	.....	Physical Society.
Friedrichshafen	28.24	717.3	29.67	753.7	48.6	9.2	73	sw.	.....	.....	9	.....	10	sw.	.....	0.961	24.4	.....	Wilhelm, Chief Tel.
Hamburg	29.20	741.6	29.28	743.8	34.9	1.5	100	w.	.....	.....	1	.....	7	.....	.....	0.094	2.4	.....	E. Preller.
Kiel	29.24	742.7	29.26	743.1	35.4	1.9	85	calm	.....	.....	0	.....	9	.....	.....	0.228	5.8	snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	28.88	733.5	29.30	744.3	37.0	2.8	96	w.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	H. Leppig, Asst.
Magdeburg	29.08	738.7	29.27	743.4	36.5	2.5	94	w.	.....	.....	1	.....	10 n	.....	.....	0.106	2.7	raining	Weather Observatory.
Memel	29.06	738.0	29.10	739.1	26.1	— 3.3	89	nnw.	.....	.....	2	.....	10 k	.....	.....	.....	.....	snowing	Issermann.
Munich	27.74	704.6	29.57	751.1	45.1	7.3	73	w.	.....	.....	8	.....	9	w.	.....	0.445	11.3	raining	Central Station.
Neufahrwasser	29.09	738.9	29.11	739.3	31.5	— 0.3	94	sw.	.....	.....	3	.....	7	w.	.....	0.181	4.6	.....	A. Lothes.
Neustadt, Palatinate	28.92	734.6	29.44	747.8	50.9	10.5	95	sw.	.....	.....	7	.....	10	wsw.	.....	0	0	.....	Dicknether.
Stuttgart	28.59	726.1	29.48	748.8	46.0	7.8	79	w.	.....	.....	5	.....	10	.....	.....	0.413	10.5	raining	Prof. Dr. Schoder.
Wustrow	29.21	741.8	29.23	742.4	33.4	0.8	85	wnw.	.....	.....	4	0	5 8	.....	.....	0.185	4.7	.....	Profs. Brandes & Reimer.
Greek.																			
Athens	29.56	750 7	29.95	760.7	48.2	9.0	.....	n.	.....	.....	1.0	0	0	.....	.....	0	0	clear	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.07	763.8	30.12	765.1	77.9	25.5	58	wsw.	26.0	11.6	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.52	749.8	30.00	762.0	80.1	26.8	24	nnw.	10.0	4.5	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.94	760.4	29.98	761.4	80.7	27.1	61	w.	5.7	2.6	.....	.....	2	w.	.....	0	0	d. clouds	
Poona, Yarrowda	28.11	713.9	29.95	760.8	83.7	28.7	16	ese.	5.0	2.2	.....	.....	8	wsw.	.....	0	0	d. clouds	
Trichinopoly	29.66	753.4	29.94	760.6	77.5	25.3	65	ne.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.42	696.5	29.97	761.2	74.4	23.6	44	ene.	6.0	2.7	.....	.....	9	ssw.	.....	0	0	d. clouds	
Lahore	29.33	744.9	30.10	764.6	63.6	17.6	48	calm	0	0	.....	.....	2	.....	.....	0	0	blue sky	
Roorkee	29.14	740.0	30.07	763.8	64.8	18.2	49	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	.....	
Agra	29.48	748.8	30.06	763.6	69.2	20.7	53	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	29.00	736.5	30.06	763.4	74.9	23.8	45	calm	0	0	.....	.....	5	sw.	.....	0	0	d. clouds	
Jubbulpore	28.68	728.4	30.06	763.5	74.0	23.3	45	calm	0	0	.....	.....	4	n.	.....	0	0	d. clouds	
Lucknow	29.74	755.3	30.13	765.2	68.3	20.2	45	calm	0	0	.....	.....	2	.....	.....	0	0	d. clouds	
Allahabad	29.74	755.3	30.06	763 6	64.6	18.1	70	calm	0	0	.....	.....	2	sw.	.....	0	0	d. clouds	
Patna	29.89	759 1	30.08	764.0	67.4	19.7	59	ese.	2.0	0.9	.....	.....	6	ese.	ese.	0	0	d. clouds	
Hazaribagh	28.00	711.2	30.08	764.1	63.5	17.5	44	w.	3.6	1.6	.....	.....	10	.....	.....	0	0	overcast	
Cuttack	29.95	760.7	30.03	762.8	72.4	22.4	66	calm	0	0	.....	.....	4	.....	nw.	0	0	d. clouds	
Calcutta, Allpore	30.03	762.7	30.05	763 3	66.4	19.1	64	nnw.	0.5	0.2	.....	.....	9	.....	.....	0	0	d. clouds	
Dhubri	29.93	760.2	30.05	763.3	67.8	19.9	73	ne.	6.4	2.9	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.93	760.2	30.02	762 6	67.6	19.8	77	calm	1.3	0.6	.....	.....	9	.....	.....	0	0	d. clouds	
Sibsagar	29.73	755.1	30.08	764.0	62.1	16.7	87	ne.	1.0	0.4	.....	.....	5	w.	w.	0	0	d. clouds	
Jeypore	28.57	725.6	30.05	763.3	68.5	20.3	58	ese.	5.0	2.2	.....	.....	4	.....	ese.	0	0	d. clouds	
Italian.																			
Udine	29.36	745.7	29.78	756.4	40.1	4.5	65	.....	.....	.....	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	29.21	742 0	29.75	755.6	40.6	4.8	74	se.	3.8	1.7			7	nw.		0	0		Prof. Schiaparelli.
Padua	29.63	752.7	29.75	755.6	39.2	4.0	61	n.	2.5	1.1			10	n.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.80	731.5	29.74	755.4	40.5	4.7	73	ese.	2.5	1.1			2	e		0	0		Prof. F. F. Denza.
Genoa	29.60	751.7	29.79	756.7	51.8	11.0	75	e.	4.9	2.2			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	27.81	706.3	29.78	756.3	43.0	6.1	76	w.			2		3			0	0		Prof. D. C. Bruno.
Pesaro	29.71	754.7	29.76	756.0	52.5	11.4	66	sw.	4.3	1.9			10			0	0		Prof. Luigi Guidi.
Florence	29.58	751.4	29.84	758.0	42.3	5.7	75	sw.			2		10			0	0		Prof. Costantino Pittei.
Leghorn	29.66	753.4	29.75	755.6	56.7	13.7	80	sw.	6.3	2.8			9			0.020	0.5		Prof. P. Monte.
Rome	29.70	754.4	29.88	758.9	49.6	9.8	56	n.	2.5	1.1			1			0	0		Prof. P. Tachini.
Lecce	29.64	752.9	29.90	759.5	49.1	9.5	71	sse.	10.5	4.7			7	w.		0.094	2.4		Prof. C. de Giorgi.
Cosenza	29.07	738.4	29.98	761.5	50.9	10.5	75	wsw.	2.5	1.1			10	sw.		0.189	4.8		Prof. D. Conti.
Cagliari	29.80	756.9	30.00	761.9	60.8	16.0	59	wnw.			4		1			0.008	0.2		Prof. A. Pacinotti.
Palermo	29.78	756.4	30.04	762.9	61.3	16.3	58	wsw.	9.8	4.4			7	wnw.		0	0		Prof. G. Caccintore
Syracuse	29.92	760.0	29.97	761.1	61.3	16.3	61	w.	16.1	7.2			7	wnw.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.38	746.3	29.91	759.8	50.7	10.4	87	ne.	0	0			10	sw.		0	0		Prof. F. Brioschi.
Stelvio	21.83	554.6			27.1	— 2.7	96	w.			4		10			1.705	43.3	misty	Prof. P. F. Denza.
Valdobbia	21.87	555.5			25.0	— 3.9	71	n.			7		6			0.709	18.0	covered	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.93	760.3	29.96	761.1	34.9	1.6	75	calm			0		10 ck		w.	0.106	2.7	cloudy	Hattori.
Awomori	29.91	759.7	29.95	760.7	27.0	— 2.8	58	w.	6.7	3.0		0	1 ck		w.	0	0	clear	K. Ogawa.
Hakodate	29.91	759.7	29.92	760.0	31.8	— 0.1	98	w.	18.0	8.0		1	0	w.		0.242	6.2	clear	
Hamamatsu	30.03	762.7	30.06	763.4	39.4	4.1	81	calm			0	5 ck	0	w.		0.043	1.1	fair	Y. Miwa.
Hiroshima, I. M. Obs'y					39.1	3.9	83	ne.	3.6	1.6		2 cs	8 ck		w.	0	0	cloudy	
Kanazawa	29.92	759.8	30.02	762.6	38.0	3.3	83	sw.	2.0	0.9			10			0.020	0.5	overcast	S. Endo.
Kioto	29.88	758.9	30.06	763.5	32.4	0.2	95	nw.	0.8	0.4		10 cs	0			0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.85	758.0	30.06	763.4	43.1	6.2	87	n.	0.6	0.3		7 c	0	w.		0.160	4.1	fair	S. Takehayashi.
Niigata	29.95	760.7	29.99	761.7	37.2	2.9	93	se.	6.7	2.9			10 n			0.385	9.8	light rain	M. Moritu.
Nobiru	29.93	760.1	29.94	760.5	35.4	1.9	92	nnw.	5.3	2.3		5 ck	4 ks	w.		0	0	cloudy	H. Midenshina.
Numazu	29.95	760.7	29.98	761.6	38.7	3.7	88	nnw.			2	9cs;ck	0			0	0	cloudy	R. Kaneda.
Osaka	30.05	763.4	30.07	763.8	36.9	2.7	86	s.	3.7	1.6			10 ck;cs			0	0	cloudy	H. Omura.
Supporo					24.0	— 4.4	88	w.	0.6	0.3		0	3			0.070	1.8	clear	
Tokei Obs'y, Yeddo	29.90	759.4	29.98	761.4	40.0	4.4	81	wnw.	4.0	1.8		2 cs	8 ck;s		ssw.	0	0	cloudy	The Staff.
Wakayama	30.00	762.1	30.06	763.6	37.7	3.2	81	ene.	5.4	2.4		5 ck	4 ck	w.	w.	c	0	cloudy	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.85	758.2	30.04	763.0	81.6	27.6	60	e.	13.0	5.8		0	4 k		ese.	0.35	8.9	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.70	601.9	29.92	759.9	48.6	9.2	63	calm	0	0		0	0			0	0	foggy	Prof. Vicente Fernandez.
Leon	24.37	619.0	30.29	769.4	40.6	4.8	78	w.			1	0	1 c;k			0	0	clear	Prof. M. Leal.
Mazatlan	29.72	754.8	29.98	761.5	67.5	19.7	25	ne.	1.6	0.8		4 cs	0	sw.		0	0	fair	F. Quijano, U. E.
Mexico, Central Obs'y	23.13	587.4	30.29	769.4	45.7	7.6	76	calm	0	0			10 ks			0	0	covered	The Staff.
Morelia	24.26	616.2	30.10	764.4	43.3	6.3	61	ne.			2	0	0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascallentes	23.97	608.8	30.13	765.4	40.1	4.5	58	calm	0	0		0	0			0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.3	30.14	765.5	54.3	12.4	43	calm	0	0		0	3		s.	0.158	4.0	½ cloudy	Prof. P. Spina.
Zacatecas	22.49	571.0	30.31	769.8	42.2	5.1	49	s.	2.2	1.0		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.32	744.8	29.32	744.8	46.4	8.0		w.			5					0.579	14.7		
Groningen	29.27	743.5	29.33	744.9	37.9	3.3		w.			1					0.059	1.5		
Helder	29.33	745.0	29.33	745.0	38.5	3.6		nne.			1					0.161	4.1		
Hellevoetsluis	29.27	743.5	29.27	743.5	45.1	7.3	97	nnw.			2					0.622	15.8		
Utrecht	29.26	743.5	29.31	744.5	39.7	4.3	99	se.			2		10			0.461	11.7	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.22	742.3	29.29	743.9	30.2	— 1.0	88	sse.	5	2			10			0.079	2.0	snowing	
Brono	29.21	742.0	29.25	743.0	27.3	— 2.6	54	e.	18	8			10			0	0		
Christiania	29.03	737.4	29.19	741.3	22.1	— 5.5	90	nne.	2	1			4			0.047	1.2		
Gjæsvær	29.48	748 8	29.50	749.4	24.3	— 4.3		se.			7		0						
Lodingen	29.31	744.5	29.36	745 7	25.5	— 3.0	64	ne.			4		4			0	0		
PORTUGUESE.																			
Angra, Azores	29.79	756.6	29.94	760.5	65.3	18.5	84	sw.	27.2	12.2			7			0.177	4.5		Dr. J. A. Sampaio.
Campo Major	29.33	744.9	30.38	771.6	41.7	5.4	97	ese.	0.7	0.3			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.22	767.6	30.31	769.9	66.6	19.2	60	se.	3.8	1.7			4	ne.		0	0		Capt. D. A. da Cunha.
Lisbon, Observatory	30.02	762.4	30.39	771.9	47.1	8.4	97	ene.	6.3	2.8			4			0.004	0.1		The Staff.
Ponta Delgada, Azores	30.00	762.1	30.08	763.9	66.2	19.0	84	ssw.	21.7	9 7			10			0	0		
Saint Paul de Loando	29.75	755.7	29.95	760.8	77.9	25.5	88	wsw.	1.3	0.6			5	ssw.		0	0		
Serra da Estrella	25.50	647.0	30.27	768.9	47.8	8.8	41	w.	15.0	0.7			1			0	0		
RUSSIAN.																			
Akmolinski	28.94	753.0	30.20	767.0	—19.7	—28.7	82	wsw.	9	4		1 c	0						Major K. Lasarew.
Archangel	29.85	758.1	29.87	758.6	— 4.4	—20.2	82	ese.	18	8			10			0	0		Capt. Sselliwerstow.
Astrakhan	29.85	758.2	29.77	756.2	27.0	— 2.7	87	e.	25	11			10			0.055	1.4	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.72	755.0	30.29	769.4	— 4.7	—20.4	80	sw.	4	2			0			0.039	1.0		Meteorological Obs'y.
Bielosersk	29.18	741.2	29.08	753.8	10.2	— 8.8	92	ese.	18	8			10 n			0.047	1.2	snowing	
Dorpat	28.90	734.0	29.15	740.5	18.0	— 7.8	97	s.	9	4			10 s;n			0.043	1.1		Observatory.
Ekaterinburg	29.31	744.5	30.42	772.6	—10.3	—23.5	84	w.	11	5		0	0			0	0		Meteorological Obs'y.
Elissawetgrad	29.22	742.3	29.09	754.2	31.5	— 0.3	81	wnw.	2	1		0 cs	0			0	0	light clouds	
Kasan	30.04	762.9	30.34	770.7	— 3.0	—19.8	79	se.	7	3			10						Observatory.
Kem	29.51	749.6			10.4	—12.0	93	se.	31	14			10 n			0.047	1.2		
Kertch	29.48	748.7	29 50	749.2	33.8	1.0	94	nw.	9	4			10 n			0.228	5.8		Lagorio & Sastyrez.
Kieff	28.89	733 8	29.55	750.6	25.7	— 3.5	89	sw.	4	2		c	2 ks						Observatory.
Libau	29.10	739.1	29.12	739.7	30.7	— 0.7	83	sw.			1		10			0.059	1.5		E. Quass.
Lugan	29.37	745.9	29.58	751.4	25.9	— 3.4	89	ese.	13	6			10			0.200	0.6		Meteorological Obs'y.
Moscow	29.17	740.9	29.08	753.9	18.3	— 7.0	92	s.	23.5	10.5			10 n			0.003	1.6	snowing	
Nikolaiev	29.65	753.0	29.72	754.9	32.7	0.4	87	n.	9	4		0	3 s;n			0	0		Capt. Kurdakow.
Pekin, China	30.43	773.0	30.58	776.6	11.7	—11.3	29	nw.	22	10		0	0						Physical Observatory.
Petrozavodsk	29.28	743 6	29.48	748.9	14.4	— 9.8	87	se.	22	10			10			0.165	4.2		Dr. Bergmann.
Pinsk	28.91	734.3			30.0	— 0.8	94	s.	13	6			10			0.020	0.5		
St. Petersburg	29.21	742.0	29.23	742.4	23.7	— 4.6	86	sse.	16	7			10 n			0.035	0.9	snowing	Central Physical Obs'y.
Sevastopol	29.45	748.0	29.61	752.2	35.1	1.7	71	ne.	20	9			10 n			0.272	6.9		
Semipalatinsk	29.53	750.0	30.27	768.8	— 0.8	—18.2	83	e.	13	6			0			0	0		Major Lasarew.
Staroi Rykhov	29.02	737.0	29.50	749.2	22.3	— 5.4	85	se.	9	4			10			0.228	5.8	light snow	
Tashkend, Laboratory	28.51	724.1	30.10	766.0	33.4	0.8	92	n.	9	4			10			0.380	9.8	snowing	Teich, A. M.
Tiflis	28.23	717.1	29.67	753.5	42.0	5.9	75	calm	0	0			9 k			0.012	0.3		Physical Observatory.
Tomsk	29.747	755.47	30.007	703.47	— 3.8	—19.9	84	s.	2	1			10					snowing	
Vladivostok	29.88	758.9	29.95	760.6	15.1	— 9.4	35	n.	7	3			10 n			0	0		
Warsaw	28.86	731.5	29.23	742 4	29.5	— 1.4	92	ssw.	13	6			10					heavy cl'ds.	Astronomical Obs'y.
Wilna	28.85	732 9	29.29	743.9	27.7	— 2.4	96	s.	2	1			9					heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.10	764.5	30.44	773.2	—35.0	—37.2	82	calm	0	0			0						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.45	748.0	40	4.4	91	e.			4	5	5	e.		0	0	d. clouds	J. Youngclause.
North Unst			29.43	747.5				nw.			7	2	4	w.					Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.05	763 2	30.16	766.0	53.5	12.0	63	nw.	2.9	1.3		2 c;cs	0			0	0	clear	Antonio Rzve, Director.
Bilbao, Met. Obs'y	30.22	767.5	30.28	769.0	57.2	14.0	67	se.	1.1	0.5		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27 28	692.9	30.38	771.7	38.8	3.8	93	s.	6.0	2.7			10			0	0	foggy	Domingo Martin.
Madrid, Royal Obs'y	28.07	713.0	30.41	772.3	39.7	4.3	92	calm	0	0			10			0.004	0.1	covered	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
Spanish.																			
Murcia, Met. Obs'y	30.07	763.8	30.20	767.1	60.8	16.0	66	wsw.	4.7	2.1		c	o			o	o	clear	Olayo Diaz, Director.
Oviedo	29.38	746.2	30.26	768.5	52.2	11.2	75	se.	9.8	4.4		o	o			o	o	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.33	744.9	30.27	768.9	51.4	10.8	93	s.	7.4	3.3			10			o	o	covered	R. Gil Villanueva, Dir.
Spanish.—*(Sub-series.)*																			
Manilla, Philippine Islands	29.88	759.0	29.94	760.4	77.1	25.1	79	ne.	11.0	4.9		4 cs	2 ks		ne.	o	o	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.25	768.3	30.35	770.9	49.8	9.9	94	s.	7.0	3.1		o	2		ene.	o	o		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.01	762.3	30.10	764.6	80.6	27.0	63	se.	2.5	1.1		3 cs	4 k	e.	se.	o	o		Manuel Maese.
Tuguegarao, Philippine Id's	29.84	758.0	29.97	761.3	76.0	24.4	91	calm	o	o		2 ck	o	ssw.		o	o	fair	José L. Yrastorza.
Swedish.																			
Hapsranda	29.27	743.5	29.31	744.5	15.8	— 9.0	100	e.			4		10					snowing	
Umea	29.11	739.3	29.16	740.6	15.8	— 9.0	94	e.			2		10			0.244	6.2		
Hernosand	29.07	738.3	29.12	739.6	15.1	— 9.4	94	n.			4		10			0.071	1.8		
Stockholm	28.90	734.0	29.08	738.5	19.4	— 7.0	89	w.			2		10			0.059	1.5		
Wisby	29.03	737.4	29.09	738.9	28.0	— 2.2	87	nw.			4		10			0.055	1.4		
Sub-series.																			
Upsala	28.97	735 7	29.05	737.9	18.9	— 7.3	98	nw.	10.5	4.7			8		nw.	o	o		S. G. Fineman.
Swiss.																			
Geneva	28.48	723.4	29.93	760.2	47.1	8.4	83	sw.			4		10			0.496	12.6	raining	The Observatory.
Turkish.																			
Constantinople			29.83	757.7	42.6	5.8	63	nnw.	15	6.5			6		n.	o	o		The Observatory.
Valona			29.97	761.1	48.7	9.3		ne.			1		2			o	o	slightly cl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			29.72	754.8	50.9	10.5	90	sw.			5		10 n		sw.	2.615	66.4	thnd'r str'm	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.19	766.8	30.28	769.1	34	1.1	60	n.	1	0.4			10 s			o	o	cloudy	J. O. Barnes.
Alpena, Michigan	29.53	750 0	30.24	768.1	29	— 1.7	88	w.	3	1.3			10 n			0.01	0.3	light snow	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.21	640.3	30.29	769.4	17	— 8.3	58	ne.	1	0.4		o	o			o	o	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.39	695.7	30.42	772.7	16	— 8.9	70	sw.	10	4.5		o	o			o	o	clear	B. O. Lenoir.
Atlanta, Georgia	29.05	737.9	30.28	769.1	40.5	4.7	94	ne.	5	2.2			10 s			0.26	6.6	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.23	767.8	30.24	768.1	34	1.1	78	w.	3	1.3			10 s			o	o	cloudy	Jas. M. Watson.
Augusta, Georgia	30.03	762.7	30.23	767.8	45	7.2	93	ne.	4	1.8			10 s			0.55	14.0	cloudy	John Healy.
Baltimore, Maryland	30.22	767.6	30.27	768.8	37	2.8	82	calm	o	o			10s;fg			o	o	cloudy	Geo W Felger.
Barnegat, New Jersey	30.24	768 1	30.26	768.6	35.0	1.7	84	n.	4	1.8			10 s			o	o	cloudy	G. A. Hill.
Behring Id., Behring Sea	30.05	763.3	30.07	763.8	7.0	—13.9		n.	8	3.6			1 k			o	o	clear	Leonard Steineger.
Bennett, Fort, Dakota	28.69	728.7	30.46	773.7	14	—10.0	83	calm	o	o			10 s			o	o	cloudy	A. Pritchard.
Benton, Fort, Montana	27.44	697.0	30.44	773.2	15	— 9.4	51	calm	o	o		o	o			o	o	clear	S. Wheaton.
Bismarck, Dakota	28.40	721.3	30.41	772.4	17	— 8.3	83	nw.	6	2.7		4 ck	o	sw.		o	o	fair	Cyrus Cramer.
Block Island, Rhode Island	30.24	768 1	30.27	768.8	35	1.7	69	calm	o	o			10 s		w.	o	o	cloudy	J. T. Elker.
Boise City, Idaho	27.65	702.3	30.63	778.0	11	—11.7	91	nw.	2	0.9			10 s			o	o	cloudy	B. E. Light.
Boston, Massachusetts	30.08	764 0	30.24	768.1	33.0	0.6	78	nw.	6	2.7		10 ck	fg.			o	o	cloudy	O. B. Cole.
Brownsville, Texas	30.26	768.6	30.31	769.9	49.0	9.4	93	n.	4	1.8		o	o			o	o	clear	M. McCarty.
Buffalo, New York	29.43	747.5	30.23	767.8	30	— 1.1	88	sw.	4	1.8		6 ck	sk.	sw.		o	o	dense smoke	W. Finn.
Buford, Fort, Dakota	28.32	719.3	30.50	776.2	12	—11.1	83	s.	3	1.3		o	o			o	o	clear	F. A. Mellen.
Burlington, Vermont	29.95	760 7	30.26	768.6	29.0	— 1.7	77	n.	5	2.2			10 s		n.	inap.	inap.	cloudy	G. C. Schaeffer.
Cairo, Illinois	29.94	760.5	30.36	771.1	35.8	2.1	85	n.	2	0.9			10 s			0.01	0.3	cloudy	W. H. Ray.
Cape Henry, Virginia	30.24	768.1	30.26	768.6	39	3.9	82	s.	6	2.7			10 s			o	o	cloudy	A. K. Alderson.
Cape May, New Jersey	30.21	767.3	30.24	768.1	39.0	3.9	82	w.	2	0.9			10 s			o	o	cloudy	W. E. Smith.
Cape Mendocino, California																			J. J. McLean.
Cedar Keys, Florida	30.06	763.5	30.08	764.0	57	13.9	93	nw.	7	3.1			10 s			0.65	16.5	cloudy	F. W. Mixer.
Champaign, Illinois	29.40	746.7	30.27	768.8	32.3	0.2	74	sw.	12	5.4			10 s		sw.	0.19	4.8	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.08	764.0	30.14	765.5	47	8.3	100	n	16	7.2			10 n			1.19	30.2	light rain	J. H. Smith.
Charlotte, N. Carolina	29.35	745.5	30.24	768.1	38.0	3.3	89	se	2	0.9			10 s		s.	0.22	5.6	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.40	746.7	30.26	768.6	36.0	2.2	79	w.	2	0.9		o	o			o	o	clear	B. L. Goulding.
Cheyenne, Wyoming	24 18	614.2	30.46	773.7	7.2	—13.8	58	calm	o	o		o	o			o	o	clear	E. McGovern.
Chicago, Illinois	29.45	748.0	30.21	767.3	34.0	1.1	96	nw.	4	1.8			fg.			0.25	6.3	dense fog	J. Mitchell.
Chincoteague, Virginia	30.22	767.6	30.24	768.1	35	1.7	79	w.	1	0.4			10 ks		w.	o	o	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.56	750.8	30.26	768.6	39	3 9	82	nw.	7	3.1			10 s		w.	o	o	cloudy	R. B. Watkins.
Cleveland, Ohio	29.40	746 7	30.19	766.8	37.5	— 0.3	85	se.	7	3.1		9 k	o	w.		o	o	cloudy	J. B. Newlin.
Coleman City, Texas	28.54	724.9	30.44	773.2	30	— 1.1	88	n.	10	4.5		6 ck	o			o	o	fair	L. Dorman.
Columbus, Ohio	29.26	743.2	30.17	766.3	36	2.2	69	sw.	2	0.9			10 s			o	o	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28 38	720.8	30.40	772.1	35.5	1.9	72	n.	10	4.5		10 ck	o			o	o	cloudy	J. McGlone.
Custer, Fort, Montana	27.09	688.1	30.49	774.4	10	—12.2	80	e.	4	1.8		3 c	o			o	o	clear	W. B. Lamar.
Davenport, Iowa	29.60	751.8	30.31	769.9	37	2.8	82	n.	6	2.7			10 s			0.15	3.8	cloudy	R. R. Martin.
Davis, Fort, Texas	25.30	642.6	30.24	768.1	24	— 4.4	76	calm	o	o		o	o			o	o	clear	J. Williams.
Dayton, Washington T'y	28.66	728.0	30.49	774.4	22	— 5.6	87	n.	2	0.9			fg.			o	o	dense fog	D. Moore.
Deadwood, Dakota	25.54	648.7	30.53	775.4	25	— 3.9	76	calm	o	o			10 s		w.	o	o	cloudy	F. Willson.
Delaware Breakwater, Del.	30.24	768.1	30.26	768.6	35	1.7	89	sw.	4	1.8			10 ks		sw.	o	o	cloudy	T. S. Townsend.
Denison, Texas	29.59	751.6	30.44	773.2	31.0	— 0.6	78	n.	3	1.3			10 s			o	o	cloudy	J. W. Byram.
Denver, Colorado	24.93	633.2	30.45	773.4	21.0	— 6.1	67	s.	7	3.1		7 ck	o	ne.		o	o	fair	F. M. Neal.
Des Moines, Iowa	29.44	747.8	30.42	772.7	21	— 6.1	70	nw.	7	3.1			10 s		nw.	0.10	2.5	cloudy	F. W. Conrad.
Detroit, Michigan	29.44	747.8	30.20	767.1	34.0	1.1	88	ne.	8	3.6			10 s			o	o	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27 73	704.3	30.53	775.4	19	— 7.2	58	nw.	4	1.8		o	o			o	o	clear	V. P. Temple.
Dubuque, Iowa	29.55	750.6	30.32	770.1	34	1.1	79	nw.	2	0.9			10 s			0.50	12.7	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.50	749.3	30.31	769.9	22	— 5.6	73	w.	12	5.4			10 s		w.	inap.	inap.	cloudy	N. B. Conger.
Eagle Pass, Texas	29.50	749.3	30.34	770.6	45.0	7.2	60	se.	4	1.8			10 s		se.	o	o	cloudy	F. Belford.
Eagle Rock, Idaho	25.65	651.5	30.57	776.5	— 9	—22.8	82	n.	4	1.8		o	o			o	o	clear	J. M. Clifford.
Eastport, Maine	30.08	764.0	30.15	765.8	22.0	— 5.6	73	nw.	11	4.9		3 c	o	w.		o	o	clear	D. C. Murphy.
Elliott, Fort, Texas	27.52	699.0	30.48	774.2	18	— 7.8	58	ne.	8	3.6		9 k	o	ne.		o	o	cloudy	W. J. Cundall.
El Paso, Texas	26.38	670.0	30.24	768.1	34.0	1.1	72	ne.	16	7.2		o	o			o	o	clear	J. O'Dowd.
Erie, Pennsylvania	29.43	747.5	30.20	767.1	32	0.0	88	s.	12	5.4		o	fg.			o	o	clear	Peter Wood.
Escanaba, Michigan	29.56	750.8	30.28	769.1	32.5	0.3	83	calm	o	o			10 s			o	o	cloudy	George Heathcote.
Fredericksburg, Texas	28.61	726.7	30.43	772.9	37	2.8	82	n.	5	2.2			10 ks		s.	o	o	cloudy	Frank Halwegler.
Galveston, Texas	30.24	768.1	30.29	769.4	49	9.4	77	ne.	14	6.3		o	o			o	o	clear	E. O'C. MacInerney
Grand Haven, Michigan	29.51	749.5	30.22	767.6	34.0	1.1	88	ne.	1	0.4			10 s		ne.	0.09	2.3	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.34	643.6	30.22	767.6	26	— 3.3	96	ne.	4	1.8		o	o			o	o	clear	Robert C. Lord.
Hatteras, North Carolina	30.20	767.1	30.22	767.6	43	6.1	83	e.	14	6.3		6 k	3 s	se.		o	o	cloudy	R. M. Crawford.
Helena, Montana	26.08	662.4	30.46	773.7	23	— 5.0	88	calm	o	o		o	o			o	o	clear	N. C. Smith.
Henrietta, Texas	29.41	747.0	30.49	774.4	29	— 1.7	88	nw.	2	0.9			10ks			o	o	cloudy	J. P. Sherry.
Huron, Dakota	28.88	733.5	30.42	772.7	0	—17.8	68	se.	3	1.3		5 cs	o	se.		o	o	fair	S. W. Glenn.
Indianapolis, Indiana	29.40	746.7	30.25	768.3	35	1.7	75	sw.	4	1.8			10s;fg		sw.	inap.	inap.	cloudy	O. Schutze.
Indianola, Texas	30.26	768.6	30.29	769.4	49.0	9.4	86	n.	20	8.9		o	hz.			o	o	clear	I. A. Reed.
Jacksboro, Texas	29.21	741.9	30.45	773.4	30	— 1.1	67	n.	4	1.8		o	o			o	o	clear	D. J. Carr.
Jacksonville, Florida	30.06	763.5	30.11	764.8	55	12.8	93	nw.	6	2.7			10 s			1.07	27.2	cloudy	J. W. Smith.
Keogh, Fort, Montana	27 74	704.6	30.44	773.2	10	—12.2	80	calm	o	o		o	fg.			o	o	clear	A. Schneider.
Keokuk, Iowa	29.60	751.8	30.32	770.1	34.5	1.4	88	w.	7	3.1			10 s		w.	inap.	inap.	cloudy	F. Z. Gosewisch.
Key West, Florida	30.06	763.5	30.08	764.0	72.0	22.2	97	se.	3	1.3		3 cs	o	sw.		o	o	clear	R. H. Paxton.
Kittyhawk, North Carolina	30.23	767.8	30.25	768.3	44	6.7	76	e.	8	3.6		o	7 s		e.	o	o	fair	H. Mc P. Baldwin.
Knoxville, Tennessee	29.20	741.7	30.28	769.1	32	0.0	88	calm	o	o		o	fg.			o	o	clear	J. A. Cody.
La Crosse, Wisconsin	29.46	748.3	30.31	769 9	31	— 0.6	57	n.	4	1.8			10 s			inap.	inap.	cloudy	S. C. Emery.
Leavenworth, Kansas	29.46	748.3	30.42	772.7	28	— 2.2	88	nw.	6	2.7			10 s		nw.	0.01	0.3	cloudy	A. W. Browne.
Lewiston, Idaho	29.71	754.6	30.59	777.0	28.0	— 2.2	88	ne.	4	1.8		2 cs	o			o	o	clear	W. Bell.
Little Rock, Arkansas	30.03	762.7	30.30	771.1	35	1.7	89	calm	o	o		o	7 ks			o	o	fair	W. U. Simons.
Los Angeles, California	29.80	756.9	30.20	767.1	46	7.8	40	e.	7	3.1		o	o			o	o	clear	T. S. Collins.
Louisville, Kentucky	29.66	753.4	30.26	768.6	39	3.9	65	w.	10	4 5			10 s			o	o	cloudy	L. M Dey.

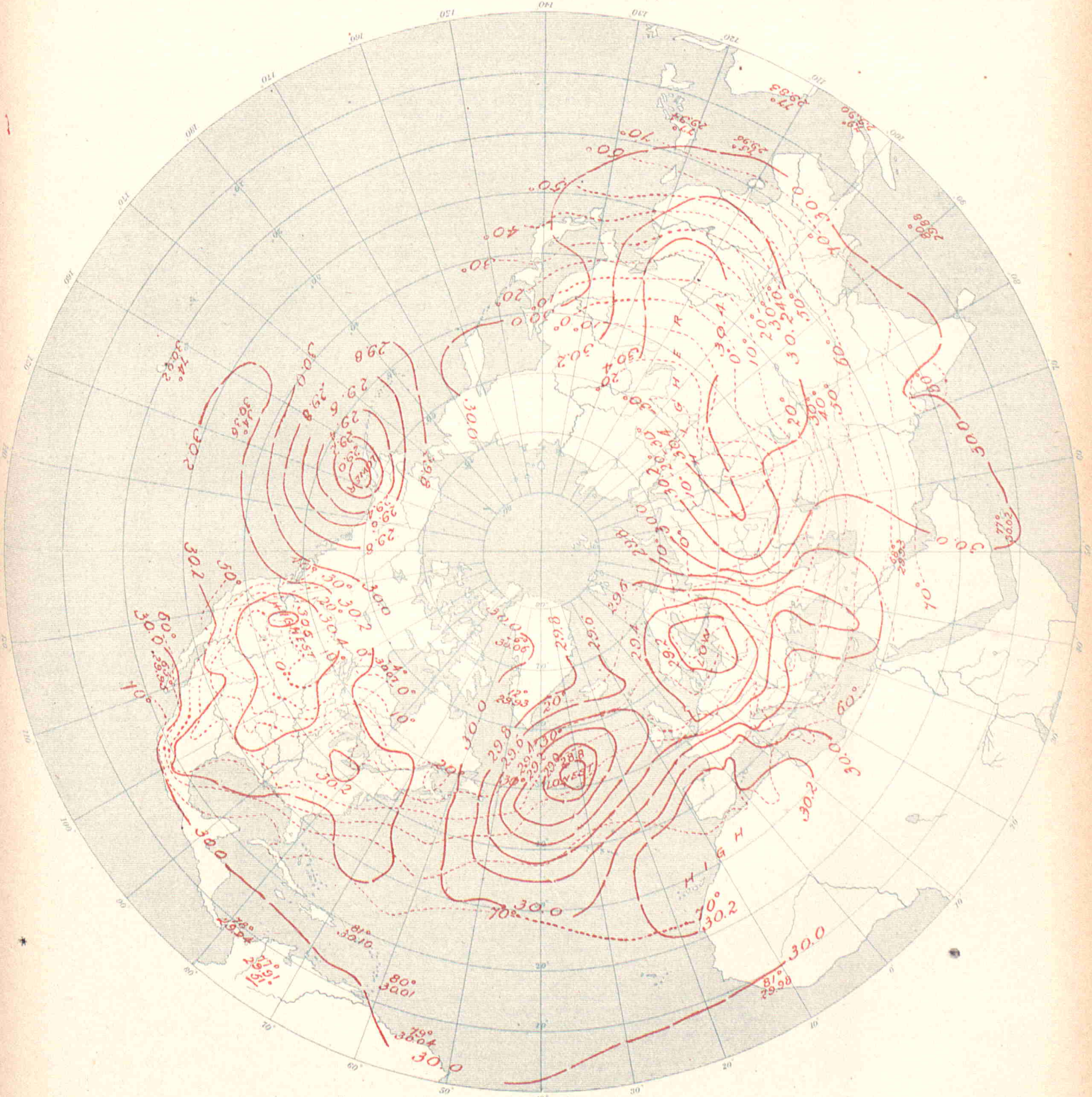
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
UNITED STATES.—(Cont'd.																			
Lynchburg, Virginia	29.50	749.3	30.23	767.8	35.5	1.9	74	s.	1	0.4			10 ks		s.	0	0	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.55	750.6	30.25	768.3	33.0	0.6	78	n.	1	0.4			10 s			0	0	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.21	767.3	30.22	767.6	42.0	5.6	100	ne.	3	1.3			10 n			0.39	9.9	light rain	C. A. Shaw.
Madison, Wisconsin	29.21	741.9	30.31	769.9	30	— 1.1	88	n.	7	3.1			10 s			0.23	5.8	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.76	654.3	30.30	769.6	18	— 7.8	42	w	8	3.6		0	0			0	0	clear	F. Burke.
McKavett, Fort, Texas	27.88	708.1	30.25	768.6	35	1.7	72	s.	4	1.8			10 s			0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.49	749.0	30.27	768.8	33	0.6	68	w.	6	2.7		8 k	0	nw.		inap.	inap.	cloudy	J. Gilligan.
Memphis, Tennessee	29.99	761.7	30.35	770.9	35	1.7	89	nw.	4	1.8		0	0			0	0	clear	D. T. Flannery
Milwaukee, Wisconsin	29.44	747.8	30.25	768.3	35	1.7	89	nw.	7	3.1			10 n			0.13	3.3	light rain	W. Line.
Missoula, Fort, Montana	27.18	690.4	30.64	778.2	10	—12.2	61	calm	0	0		0	0			0	0	clear	I. H. Young.
Mobile, Alabama	30.20	767.1	30.24	768.1	39	3.9	89	nw.	5	2.2		0	0			0.02	0.5	clear	C. A. Read.
Montgomery, Alabama	30.00	762.0	30.24	768.1	44.2	6.8	95	ne.	3	1.3			10 s			0.09	2.3	cloudy	J. B. McLaughlin.
Moorhead, Minnesota	29.23	742.4	30.34	770.6	3	—16.1	72	s.	8	3.6			10 s			0.06	1.5	cloudy	H. Bessant.
Morgantown, W. Virginia	29.14	740.1	30.21	767.3	33.0	0.6	81	calm	0	0			6 c		sw.	0	0	fair	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.71	602.2	30.34	770.6	17.0	— 8.3	87	nw.	15	6.7		8 cs	2 ks		nw.	0	0	cloudy	B. S. Pague.
Nashville, Tennessee	29.68	753.9	30.29	769.4	38.0	3.3	92	w.	4	1.8		0	0			0	0	clear	L. N. Jesunofsky.
New Haven, Connecticut	30.14	765.5	30.26	768.6	33	0.6	78	nw.	1	0.4			10 s			0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.25	768.3	30.30	769.6	32	0.0	78	calm	0	0			10 s			0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.19	766.8	30.25	768.3	46.7	8.2	72	n.	8	3.6		0	0			inap.	inap.	clear	L. Dunne.
Newport, Rhode Island	30.21	767.3	30.26	768.6	34.0	1.1	74	nw.	5	2.2			10 s		sw.	c	0	cloudy	W. McGillivray.
New York, New York	30.10	764.5	30.29	769.4	37	2.8	72	sw.	2	0.9			10 s		sw.	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.23	767.8	30.26	768.6	40	4.4	82	se.	2	0.9			10 s			0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.35	694.7	30.51	774.9	6.6	—14 1	68	nw.	5	2.2		c	0			0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.15	765.8	30.19	766.8	35.0	1.7	79	calm	0	0		10 k	0	sw.		0	0	cloudy	J. Dascomb
Omaha, Nebraska	29.20	741.7	30.49	774.4	17.0	— 8.3	76	n	2	0.9			10s;fg			0.01	0.3	cloudy	A. Pollak.
Oswego, New York	29.88	758.9	30.23	767.8	36.0	2.2	69	se.	5	2.2			10 s		w.	inap.	inap.	cloudy	J. G. Linsley.
Palestine, Texas	29.84	757.9	30.42	772.7	36.0	2.2	69	n.	10	4.5		4 ck	0	nw.		0	0	fair	L. M. Pindell.
Pensacola, Florida	30.18	766.6	30.21	767.3	46.2	7.9	96	n.	8	3.6			10 s			0.46	11.7	cloudy	M. McGauran.
Philadelphia, Pa	30.16	766 1	30.28	769.1	40	4.4	65	se.	1	0.4			10s;fg			0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.69	449.3	30.35	770.9	— 5	—20.6	100	ne.	18	8.0		0	0			inap.	inap.	clear	H. Hall.
Ploche, Nevada	24.26	616.2	30.43	772.9	18	— 7.8	67	nw.	3	1.3		0	0			0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.34	745.2	30.20	767.1	34.0	1.1	78	ne.	1	0.4			10 s			0	0	cloudy	W. A. Reid.
Poplar River, Montana								nw.			1		10 s			0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.21	767.3	30.22	767.6	52.5	11.4	84	n.	17	7.6		0	0			0.72	18.3	clear	H. B. Boyer.
Port Huron, Michigan	29.48	748.8	30.21	767.3	30.6	— 0.8	100	e.	1	0.4			10 n			inap.	inap.	light snow	W. O. Bailey.
Portland, Maine	30.18	766.6	30.23	767.8	28.0	— 2.2	64	nw.	3	1.3			10s;hz			0	0	cloudy	W. W. Elchelberger.
Portland, Oregon	30.16	766.1	30.23	767.8	41.0	5.0	87	e.	7	3.1			10s		se.	0	0	cloudy	M. L. Hearne.
Portsmouth, N. C.					43	6.1	83	e.			4	6 k	3 ks	se.		0	0	cloudy	F. S. Coburn.
Prescott, Arizona	24.90	632.4	30.27	768.8	17	— 8.3	91	e.	1	0.4		0	0			0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.20	767.1	30.22	767.6	32	0.0	78	w.	4	1.8			10 s			0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.05	763.3	30.06	763.5	66	18.9	93	s.	9	4.0		3 ck	hz.	sw.		0	0	clear	W. J. Evans.
Red Bluff, California	29.92	760.0	30.29	769.4	39	3.9	82	n.	2	0.9			10 ks		w.	0	0	cloudy	J. R. Williams.
Rochester, New York	29.52	749.8	30.23	767.8	32.5	0.3	88	sw.	6	2.7		4 k	5s;fg			0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.95	753.1	30.22	767.6	36	2.2	79	calm	0	0		8c;cs	0	w.		0	0	cloudy	J. J. Nanry.
Sacramento, California	30.22	767.6	30.30	769 6	40.4	4.7	89	s.	1	0.4		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.71	754.6	30.36	771.1	33.2	0.7	94	w.	6	2.7			10 s		w.	0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	29.58	751.3	29.61	752.1	—14	—25.6	100	n.			1	0	3 s			0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.40	746.7	30.36	771.1	19.0	— 7.2	84	sw.	7	3.1		10 k	0	w.		0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.25	742.9	30.24	768.1	10	—12.2	89	calm	0	0		0	0			0	0	clear	C. B Dilley.
Salt Lake City, Utah	26.10	662.9	30.54	775.7	17	— 8.3	56	calm	0	0		0	0			0	0	clear	J. Craig.
San Antonio, Texas	29.62	752.3	30.34	770.6	42.0	5.6	65	ne.	11	4.9		6 k	0	ne.		0	0	fair	T. J. Kenan.
San Diego, California	30.06	763.5	30.13	765.3	49.0	9.4	26	ne.	4	1.8		0	0			0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.45	748.0	30.18	766.6	36	2.2	79	se.	4	1.8			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.24	768.1	30.27	768.8	36.0	2.2	79	w.	4	1.8		10 k	0			0	0	cloudy	B. A. Blundon.
San Francisco, California	30.19	766.8	30.26	768.6	47	8.3	81	n.	5	2.2		8 cs	0	sw.		0	0	cloudy	N. Gorom.
Santa Fé, New Mexico	23.31	592.1	30.30	769.6	24	— 4.4	61	calm	0	0			10 s			0	0	cloudy	H. U. Jones.
Savannah, Georgia	30.06	763.5	30.16	766.1	48.5	9.2	86	n.	18	8.0			10 n		n.	1.91	48.5	light rain	H. W. Ford.
Shaw, Fort, Montana	26.59	675.4	30.42	772.7	30	— 1.1	80	sw.	22	9.8		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	30.13	765.3	30.38	771.6	37	2.8	82	nw.	3	1.3		0	0			0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.10	740.7	30.48	774.2	31.8	— 0.1	79	n.	8	3.6		6 ck	0	sw.		0	0	fair	W. M. Mattingly.
Silver City, New Mexico	24.32	617.7	30.16	766.1	23.5	— 4.7	82	calm	0	0		0	0			0	0	clear	N. D. Lane.
Sitka, Alaska	29.59	751.6	29.66	753.4	40.2	4.6	76	se.	14	6.3			10 n		se.	0.98	24.9	light rain	F. W. Fickett.
Smith, Fort, Arkansas	29.90	759 4	30.40	772 1	35.0	1.7	69	nw.	4	1.8			10 s		w.	0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.16	766.1	30.20	767.1	45	7.2	100	ne.	12	5.4			10 n		ne.	0.53	13.5	light rain	O. Parker.
Spokane Falls, Wash. Ter.	28.43	722.1	30.56	776.2	14	—10.0	87	e.	1	0.4		0	0			0	0	clear	H. Clifford.
Springfield, Illinois	29.58	751.3	30.32	770.1	35.5	1.9	79	w.	6	2.7			10 s			0.03	0.8	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.14	765.5	30.28	769.1	28.0	— 2.2	92	calm			0	5 c;hz	fg.	w.		0	0	fair	Charles Mayr.
Springfield, Mo	28.86	733.0	30.39	771.9	31	— 0.6	88	nw.	6	2.7			10 s		nw.	0	0	cloudy	J. B. Marbury.
Starkville, Miss	29.80	756.9	30.30	769.6	38	3.3	82	nw.	8	3.6		0	0			0	0	clear	C. Dill.
Stevenson, Fort, Dakota	28.37	720.6	30.43	772.9	11	—11.7	64	nw	8	3.6		0	0			0	0	clear	W. Burrows.
Stockton, Fort, Texas	27.15	689.6	30.29	769.4	39	3.9	73	sw.	12	5.4			10 s		nw.	0	0	cloudy	J. F. Marshall.
Thatcher's Island, Mass	30.19	766.8	30.25	768.3	31.0	— 0.6	78	nw.	11	4.9			10 k		nw.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.40	695.9	30.22	767.6	28.5	— 1.9	92	calm			0	0	0			0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.41	747.0	30.15	765.8	35	1.7	79	ne.	5	2.2			10 n			0.20	5.1	heavy snow	A. Buell.
Tucson, Arizona	27.72	704.1	30.22	767.6	28	— 2.2	77	s.	6	2.7		0	0			0	0	clear	J. L. Whiteside.
Umatilla, Oregon	30.17	766.3	30.56	776.2	26	— 3.3	94	e.	8	3.6		0	0			0	0	clear	J. Daly.
Verde, Fort, Arizona					26.3	— 3.2	56	nw.			1	0	0			0	0	clear	D. Brooks.
Vicksburg, Mississippi	30.07	763.8	30.34	770.6	39.0	3.9	75	n.	3	1.3		0	0			0	0	clear	James Kenealy.
Visalia, California	29.89	759.2	30.27	768.8	39.3	4.1	86	se.	4	1.8		0	0			0	0	clear	O. D. Stewart.
Washakie, Fort, Wyoming	24.65	626.1	30.42	772.7	— 2.2	—19.0	79	nw.	3	1.3		0	0			0.16	1.5	clear	T. M. Ambler.
Washington, D. C.	30.14	765.5	30.26	768.6	34.2	1.2	82	calm	0	0			10 s		w.	0	0	cloudy	B. M. Pursell.
West Las Animas, Colorado	26.31	668.3	30.47	773 9	12	—11.1	73	w.	7	3.1		0	0			0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.61	752.1	30.24	768.1	34	1.1	88	calm	0	0		0	0			0	0	clear	B. F. Hough.
Wilmington, N. Carolina	30.16	766.1	30.22	767.6	44	6.7	93	ne.	5	2.2			10 n			0.49	12.4	light rain	Samuel A. Haney.
Winnemucca, Nevada	25.92	658.4	30.45	773.4	10	—12.2	80	e.	12	5.4		0	0			0	0	clear	J. Grover.
Yankton, Dakota	29.00	736.6	30.44	773.2	2	—16.7	72	nw.	4	1.8			10 s			0	0	cloudy	J. H. Atfield.
Yuma, Arizona	30.06	763.5	30.21	767.3	52.0	11.1	29	n.	12	5.4		0	0			0	0	clear	W. S. Delano.
Sub-stations.																			
Bogota, U. S. Columbia	22.03	559.6			51.0	10.6	44	calm	0	0		1 cs	0	w.		0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I.	30.01	762.2	30.08	764.0	69.4	20.8	92	calm	0	0		10 cs	0	sw.		0	0	cloudy	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.07	763.8	30.08	764.0	74	23.3	73	n.	2	0.9		10 cs	0			0	0		Robert Johnston.
Paramaribo, S. A.	30.04	763 0	30.04	763.0	79	26.1	78	se.			2	5 k	7 ks	e.	e.	0.010	0.3	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	77	25.0	89	calm			0	2 c	1 s	calm	calm	0	0		Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75	23.9	96	ne.			2	0	5 ks		ne.	0.02	0.5	fair	Earl Flint.
St. Paul, Kodiak Id., Alaska	28.74	730.0	28.80	731.5	32	0.0	78	nw			3		10 n			1.07	27.2	light snow	W. J. Fisher.
St. Thomas, W. I.	30.01	762.2	30.13	765.3	76	24.4	64	e.				1 k	3 k	e.	e.	0	0	fine	Aug. Walloe.
York Factory, B. A	30.00	762.0	30.07	763.8	— 3.5	—19.7	82	nw	9	4.0		1 c	0	n.		0	0	fair	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower From.	Inch.	Mill			
British Naval.																	
H. M. S. Amethyst, Montevideo, Uruguay †	30.09	764.3	72	22.2	65	nnw.			2	0							blue sky.
H. M. S. Audacious, N. 4° 11′ E. 110° 57′	29.83	757.7	77	25.0	90	ne.			1	10	nne.				3	ne.	showery.
H. M. S. Beacon, Lake Timsah, Egypt			62	16.7	61	wsw.			6–8						2–3	wsw.	overcast.
H. M. S. Boadicea, Simon's Bay, Cape Colony	30.21	767.3				ese.			3–6								blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.00	762.0	63	17.2	88	wsw.			4–6	10	wsw.				2	ssw.	squally.
H. M. S. Champion, Singapore, China	29.90	759.4	79	26.1	90	nw.			1–2	10					1	nw.	overcast.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.18	766.6	40	4.4	82	calm			0	0							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B. A.	30.18	766.6	42	5.6	83	nw.			1–2	10							misty.
H. M. S. Constance, Madeira, Madeira Islands			72	22.2													
H. M. S Curacoa, Yokohama, Japan	29.81	757.2	48.5	9.2	71	calm			0	4							d. clouds.
H. M. S. Dido, N. 20° 11′, W. 61° 30′	30.13	765.3	76	24.4		ene.			4–5	4	ne.				3	ene.	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	30.05	763.3	67	19.4	64	calm			0	2							d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	30.18	766.6	62	16.7	61	nw.			1–2	8	wnw.						d. clouds.
H. M. M. Eclipse, N. 8° 33′ E. 81° 13′			77	25.0		nne.			1–2	10							raining.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	30.07	763.8	62	16.7	77	w.			1	6							d. clouds.
H. M. S Heroine, N. 28° 21′, W. 20° 00′	30.30	769.6	66	18.9	78	ene.			1	3	calm				sm'h		d. clouds.
H. M. S. Iron Duke, N. 6° 36′, E. 89° 37′	29.88	758.9	80	26.7	91	ne.			2–3	5	ne.				2	n.	d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	30.30	769.6	67.3	19.6	81	calm			0	7							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.92	760.0	63	17.2		nw.			2						2	nw.	d. clouds.
H. M. S. Magpie, N. 33° 29′ E. 129° 27′	30.02	762.5	50.1	10.1	79	nw.			1–2	9	wsw.				3	nnw.	d. clouds.
H. M. S. Rambler, Port Belgrano, La Plata, S. A	29.66	753.4	72	22.2	95	w.			6	3	w.						d. clouds.
H. M. S. Starling, S. 4° 58′, W. 10° 46′	29.98	761.5	75.9	24.4	85	se.			4	3	se.				2	sse.	d. clouds.
H. M. S. Superb, N. 36° 37′, E. 36° 09′*	29.57	751.1	60	15.6	70	wsw.			5–6	9	ssw.				5	wsw.	showery.
H. M. S. Swiftsure, Callao Bay, Peru	30.02	762.5	65	18.3	100	calm			0	8							d. clouds.
H. M. S. Sylvia, Cordova Inlet, Patagonia	29.41	747.0	48	8.9	92	wnw.			3	10							overcast.
H. M. S. Tourmaline, Bombay, India	29.96	761.0				e.			2	2	ne.						d. clouds.
H. M. S. Woodlark, Shat-el Arab river	29.83	757.7	67.5	19.7	69	se.			6–7	8	calm						squally.
H. M. S. Zephyr, Chee-foo, China	30.31	769.9	27.5	— 2.5		n.			0	2	n.				1	n.	squally.
Portuguese Naval																	
Tamega, Macao, China	30.15	765.7	65.7	18.8	49	n.			2	10		nnw.					d. clouds.
United States Naval.																	
Navy Yard, Pensacola, Fla	30.06	763.5	45	7.2	84	n.	2	0.9		10		ne.	0.21	5.3			cloudy.
Navy Yard, Portsmouth, N. H.	30.25	768.3	26	— 3.3	?	nw.	4	1.8		10		nw.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	29.81	757.2	41.5	5.3	87	calm			0	8			0	0			hazy.
Adams, Sitka, Alaska*†	29.63	752.6	43	6.1	51	ene.			3	10		ene.					cloudy.
Alaska, Mare Island, Cal.	30.26	767.1	45	7.2	76	e.			1	5		e.	0	0			fair.
Alliance, N. 21° 30′, W. 61° 18′	30.11	764.8	75	23.9	?	ene.			4	8			0	0	sm'h		cloudy.
Ashuelot, Shanghai, China	30.18	766.6	41	5.0	91	calm			0	5		n.					fair.
Brooklyn, Montevideo, Uruguay	29.93	760.2	74	23.3	100	nw.	9	4.0		0			0	0	sm'h		clear.
Colorado, New York, N. Y.	30.35	771.6	36	2.2	80	sw.	4	1.8		10		w.	0	0			overcast.
Enterprise, Norfolk, Va	30.29	769.4	42	5.6	83	calm			0	10							cloudy.
Essex, Callao, Peru	29.96	761.0	65	18.3	89	se.			1	10					sm'h	s.	overcast
Franklin, Norfolk, Va	30.27	768.8	41	5.0	?	calm	0	0		0			0	0			clear.
Galena, Montevideo, Uruguay	29.96	761.0	71	21.7	71	nnw.			2	0					mod.	wsw.	clear.
Hartford, S. 33° 17′ W. 71° 52′*	30.00	762.0	60	15.6	88	n.			2–3	10			0	0	sm'h		cloudy.
Independence, Mare Island, Cal.	30.12	765.0	41	5.0	83	calm			0	5			0	0			fair.
Iroquois, Callao, Peru	30.00	762.0	65	18.3	94	sse.			2	10							foggy.
Jamestown, Boston, Mass.	30.22	767.6	28	— 2.2	67	nw.			1	10		calm	0	0			cloudy.
Juniata, Fayal, Azores Islands*	29.85	758.2	66	18.9	90	s.			6	10		s;w	sli't	sli't	r'gh	s.	overcast.
Kearsarge, N. 21° 26′, W. 61° 19′	30.13	765.3	76	24.4	95	ne.			3	5		ne.			sm'h		fair.
Lackawanna, S. 5° 50′ W. 99° 10′*	29.90	759.4	74	23.3	81	sse.			4	8		se.			sm'h	se.	fair.
Lancaster, Genoa, Italy*	29.67	753.6	55	12.8	87	ese.			3	10		se.			sm'h		threatening
Michigan, Erie, Pa.	29.96	761.0	36	2.2	45	sew.			1	0							clear.
Minnesota, New York, N. Y.	30.36	771.1	37	2.8	80	w.	6	2.7		10							foggy.
Monocacy, Nagasaki, Japan	30.05	763.3	52	11.1	86	nne.			1	8		calm					fair.
New Hampshire, Newport, R. I.	30.31	769.9	35	1.7	100	wnw.			2	5		calm			sm'h		cloudy.
Nipsic, Lisbon, Portugal*	30.33	770.4	52	11.1	86	se.			2	0					sm'h		foggy.
Onward, Callao, Peru†	30.07	763.8	65	18.3	94	sse.			2	10		n.			long	w.	cloudy.
Palos, Tientsin, China*	30.50	774.7	12	—11.1	100	nnw.			5	0							clear.
Pensacola, N. 5° 51′, W. 80° 04′*	29.82	757.4	80	26.7	91	nw.			1	8		sw.	mod.	mod.	sm'h		fair.
Powhatan, Boston, Mass.	30.23	767.8	29	— 1.7	89	nw.			2	10							cloudy.
Quinnebaug, Villefranche, France*	29.73	755.1	58	14.4	57	s.			2	8		calm			sm'h	s.	cloudy
Ranger, Acapulco, Mexico	29.98	761.5	78	25.6	77	calm			0	2		calm			sm'h		fair.
Richmond, N. 32° 27′, E. 128° 28′*	29.95	760.7	54	12.2	55	w.			3	2		w.	0	0			fair.
Saratoga, New York, N. Y.	30.22	767.6	39	3.9	90	nw.			3	10		w.	0	0	sm'h		cloudy.
St. Louis, League Island, Pa.	30.54	775.7	32	0.0	89	calm			0	10			0	0			cloudy.
Tennessee, N. 21° 24′ W. 61° 18′	30.12	765.0	70	24.4	95	e.	12	5.4		8			0	0	sm'h		cloudy.
Vandalia, N. 21° 27′, W. 61° 15′*	30.12	765.0	75	23.9	95	e.			2	8					sm'h		cloudy.
Wabash, Boston, Mass.	30.24	768.1	29	— 1.7	78	nw.	2	0.9		5		nw.	0	0			cloudy.
Wachusetts, Mare Island, Cal*	30.18	766.6	43	6.1	83	se.			1	5		calm	0	0	sm'h		cloudy.?
Wyandotte, Washington, D. C	30.27	768.8	53	11.7	80	sw.			1	2		nw.	0	0			fair.
Yantic, N. 21° 28′, W. 61° 17′	30.17	766.3	74	23.3	81	e.			3	8					sm'h		cloudy
Merchant Marine.																	
S. S. Grecian, Harve, France*	29.61	752.1	53	11.7	93	wsw.			6	10			24 h'r	24 h'r			overcast.
S. S. Nova Scotian, N. 54° 02′, W. 27° 01′	28.87	733.3	47	8.3		e.			3	10		se.			cf'd	ne.	raining.
S. S. Scandinavian, N. 53° 48′, W. 23° 56′	29.03	737.3	48.5	9.2		ese.			5	10		sw.	0	0	cf'd	var.	drizzling.
S. S. British Crown, N. 44° 24′ W. 46° 57′†	29.33	745.0	46	7.8		nnw.			6	9		nw.	3 h'r	3 h'r	cf'd	var.	cloudy.
S. S. British Prince, N. 51° 53, W. 20° 50′†	29.35	745.5	52	11.1		sw.			6	10		sw.	0	0	hv'y	var.	overcast.
S. S. Indiana, Philadelphia, Pa			40	4.4	82	w.			3	8		e.					cloudy.
S. S. Lord Gough, N. 44° 23′, W. 58° 13′	29.95	760.7	34	1.1		wnw.			4	8		nw.	0	0	mod.	nw.	cloudy.
S. S. Ohio, Liverpool, Eng†	29.42	747.3	44	6.7	92	ene.			2	10							rainy.
S. S. Pennsylvania, N. 50° 57′ W. 21° 33′†	29.18	741.2	55	12.8		sw.			5	0					long	sw.	foggy.
S. S. Ja-on, N. 42° 07′, W. 63° 02′			39.2	4.0		nw.			4	7 k					3	w.	gloomy.
S. S. Bolivia, N. 40° 52′, W. 64° 45′*†	30.26	768.6	42	5.0	91	wnw.			2	10		nw.	sleet	sleet	sm'h	w.	overcast.
S. S. Dorian, Gibraltar, Spain*	30.11	764.8	60	15.6		n.			5	4			0	0			fair.
S. S. Utopia, N. 33° 13′, W. 20° 52 †	30.42	772.7	68	20.0	79	wsw.			1	8		wsw.	0	0	sm'h	wsw.	cloudy.
S. S. Ailsa, N. 15° 52′, W. 77° 27′†	30.10	764.5	81	27.2	96	ene.			0	8		ene.	0	0	r'gh	ene.	cloudy.
S. S. Antillas, N. 29° 12′, W. 70° 20′			68	20.0		se.			1	1		s.			sm'h	s.	cloudy.
S. S. Ambrose, N. 5° 06′, W. 40° 51′†	30.02	762.5	81	27.2		ene.			2	6		ene.	0	0	3	e.	cloudy.
S. S. Carroll, Halifax, N. S*†	30.30	769.6	29	— 1.7		nne.			2	10		une.	0	0			cloudy.
S. S. Caldew, S. 8° 24′, E. 102° 41′	29.92	760.0	81	27.2		sse.			0	2							blue sky
S. S. City of Agra, S. 52° 36′, W. 154° 02′	30.03	762.7	49	9.4	100	nnw.			5	10							foggy.
Bk. Commewyne, N. 38° 10′ W. 41° 24′	29.50	749.3	57.6	14.2	91	w.			0	6							d. clouds.
S. S. Gordon Castle, N. 12° 47′, E. 51° 19′	30.02	762.5	77.0	25.0	69	ne.			3–4	4							d. clouds.
S. S. Mexico, N. 33° 34′, W. 118° 26′†	30.20	767.1	58	14.4	48	ne.			3	0					long	wnw.	clear.
S. S. Gallia, N. 50° 13′, W. 22° 19′	29.18	741.2	58	14.4	86	sw.			0	10		wsw.	shr's	sh'rs	r'gh	wsw.	
S. S. Scythia, N. 47° 47′, W. 36° 45′	29.00	736.6	53	11.7		sw.			5	10		sw.	14 h'r	14 h'r	h'vy	ssw.	cloudy.
S. S. Colina, St John's, N. F.						nnw.			2	5?		n.	0	0			clear. ?
S. S. France, N. 47° 22′, W. 38° 28′†	29.08	738.7	53.6	12		ese.			5	k		ese.			h'vy	ne.	
S. S. Labradore, N. 41° 00′, W. 67° 23′*†	30.32	770.1	41.0	5.0		n.			2	3		ene	0	0	sm'h		clear.
S. S. Arizona N. 51° 20′, W. 26° 24′	28 91	734.3	53	11.7		s.			5	5		sw.	4 h'r	4 h'r	mod.	sw.	fair.
S. S. Wisconsin, N. 46° 17′, W. 45° 10′	29.10	739.1	40	4.4		n.			0	10		nne.	0	0	r'gh	nne.	cloudy
S. S. Wyoming, N. 40° 48′, W. 72° 15′	30.25	768.3	38	3.3		w.			1	4		wsw.	0	0	sm'h		fair.
S. S. Bohemia, N. 47° 15′, W. 27° 50′†	29.35	745.5				ssw.			7	7		wsw.	0	0	h'vy	ssw.	squally.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
										Upper.	Lower.	Upper.	Lower.					
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Frisia, N. 46° 08′, W. 45° 44′	29.25	742.9	49	9.4		nw.			6		10		nw.	4 h'r	4 h'r	rg'h	n.	misty.
S. S. Gellert, N. 49° 50′, W. 9° 40′	29.66	753.4	56	13.3		wsw.			6		10		w.	14 h'r	14 h'r	h'vy	w.	drizzling.
S. S. Silesia, N. 42° 33′, W. 60° 02′†	30.12	765.0	38.6	3.7	86	w.			4		5		w.	2 h'r	2 h'r	4–5	wnw.	d. clouds.
S. S. Vandalia, N. 41° 05′, W. 63° 00′	30.24	768.1	41.0	5.0	90	n.			5		10		n.	o	o	mod.	n.	cloudy.
S. S. Archimedes, N. 33° 34′, W. 14° 24′	30.25	768.3				se.			1		8		se.	o	o	sm'h		gloomy.
S. S. Hevelius, Liverpool, Eng *†	29.50	749.3	42	5.6		se.			6		10		e.	6 h'r	6 h'r			foggy.
S. S. Bulgarian, N. 51° 39′, W. 18° 56′*	29.36	745.7				wsw.			8		10		w.	12 h'r	12 h'r	high	wsw.	
S. S. Virginian, N. 40° 28′ W. 70° 12′*	30.14	765.5	52	11.1		n			2		2		n.	o	o	sm'h	w.	clear.
S. S. Colorado, Galveston, Texas†	30.28	769.1	45	7.2		n.			4		1		n.	o	o			clear.
S. S. Rio Grande, Matanzas, Cuba, W. I.†	30.04	763.0	80	26.7		e.			2		1		e.	o	o	sm'h	n.	
S. S. Archimede, N. 36° 33′, W. 21° 49′†	30.23	767.8	68	20.0	74	s.			4		2		ssw.	o	o	mod.	ssw.	clear.
S. S. John Hopkins, Norfolk, Va			40	4.4		calm			0		0?			o	o			overcast.?
S. S. Glenapp, Gibraltar, Mediterranean †	30.37	771.4				n.			2		3		nne.	o	o	sm'h		clear.
S. S. Glenfyne, S. 0° 36′, W. 47° 31′*†	29.55	750.6				ne.			4		10		ne.	snow	snow	sm'h		rainy.
S. S. Brooklyn, N. 52° 18′, W. 33° 37′			44	6.7		nne.			7				ne.			7	ne.	hazy.
S. S. Chalmette, N. 39° 30′ W. 74° 03′ †	30.35	770.9	39	3.9		wsw.			2		10			o	o			hazy.
S. S. Lone Star, N. 25° 48′, W. 84° 40′ †	30.06	763.5	74	23.3		nw.			5		5		n.	o	o	cross	var.	fair.
S. S. Denmark, N. 45° 13′, W. 52° 30′†	29.75	755.6	36	2.2		nnw.			8		8		w.	shr's	shr's	sm'h	nnw.	raining.
S. S. England, off Fire Island, N. Y	30.26	768.6				wsw.			4		8		w.	o	o	sm'h		cloudy.
S. S. Erin, N. 50° 31′, W. 26° 36′			51	10.6		wsw.			9		10			12 h'r	12 h'r	mod.	nw.	rainy.
S. S. Helvetia, N. 48° 51′, W. 37° 45′	28.86	733.0	49	9.4		nw.			6		10		w.	13 h'r	13 h'r	h'vy	var.	raining.
S. S. The Queen, N. 48° 56′ W. 25° 51′ *	29.30	744.2	56	13.3		ssw.			8		8		ssw.	sh'rs	sh'rs	h'vy	ssw.	squally.
S. S. City of Alexandria, Havana, Cuba, W.I†	30.16	766.1	74	23.3		e.			2		5		ne.	3 h'r	3 h'r			fair.
S. S. City of Merida, N. 31° 28′, W. 78° 10′			78.8	26.0		nw.			3		5		sw.	3 h'r	3 h'r	cross	var.	cloudy?
S. S. City of Chester, N. 43° 54′ W. 55° 10′			40	4.4		n.			5								ne.	
S. S. Braunschweig, N. 5° 39′, W. 28° 49′	29.99	761.7	82.0	27.8	83	wnw.			4		7		e.	o	o	mod.	ene.	cloudy.
S. S. Oder, N. 47° 47′ W. 42° 43′	29.08	738.5	48.6	9.2		n.			6		10		nne.	4 h'r	4 h'r	high	n.	cloudy.
S. S. Rhein, N. 43° 40′, W 56° 21′	29.98	761.5				nnw.			5		8		n.	o	o	mod.	nnw.	cloudy.
S. S. Sailer, N. 49° 55′, W. 18° 32′	29.42	747.3	55.4	13.0		wsw.			6		10		wsw.	4 h'r	4 h'r	h'vy	sw.	misty.
S. S. Belgic, San Francisco, Cal†	30.16	766.1	48	8.9	70	n.			2		3		nw.	o	o			clear.
S. S. Gaelic, N. 35° 17′, W. 154° 11′ *	30.36	771.1	54	12.2	93	se.			2		2		w.				w.	d. clouds.
S. S. Oceanic, N. 28° 09′, E 127° 33′*	30.05	763.3	65	18.3	53	nne.			4		9		sw.			2	e.	cloudy.
S. S. Mississippi, Seattle, Wash. Ter*†	30.25	768.3	43	6.1	75	calm			0		4		e.					fair.
S. S. Willamette, Seattle, Wash. Ter †	30.24	768.1	41	5.0	82	calm			0		5?		ene.	o	o			cloudy.?
S. S. Oregon, Portland, Oregon†	30.15	765.8	49	9.4	93	calm			0		10							threatening.
S. S. Ancon, San Francisco, Cal†	30.20	767.1	47	8.3	85	nnw.			2		2		nw.					hazy
S. S. City of Chester, San Francisco, Cal *†	30.20	767.1	46	7.8	84	n.			2		8							fair.
S. S. Dakota, Seattle, Wash. Ter†	30.19	766.8	43	6.1	75	s.			3		5		var.	2 h'r	2 h'r			clear.
S. S. Orizaba, N. 37° 12′, W. 119° 40′*†	30.20	767.1	58	14.4	64	calm			0		8		sw.			r'gh	sw.	cloudy.
S. S. State of California, San Francisco, Cal *†	30.20	767.1	47	8.3		n.			1		4		n.	o	o			fair.
S. S. City of New York, Sydney, N. S. W †	30.25	768.3	71	21.7	62	s.			2		0			o	o			clear.
S. S. City of Pekin, N. 43° 31′ W. 143° 51′†	29.96	761.0	46	7.8	69	sw.			6		10		wsw.	o	o	mod.	wsw.	cloudy.
S. S. City of Rio de Janeiro N. 24° 38′, W. 112° 28′†	29.97	761.2	65	18.3	68	nnw.			2		5		nw.	o	o	light	nw.	fair.
S. S. City of Sydney, Honolulu, Sandwich Islands†	30.12	765.0	74	23.3	59	ne.			3		5?		ne.	o	o	sm'h		cloudy.
S. S. City of Tokei, Yokohama, Japan†	29.45	748.0	42	5.6		sw.			2		5		s.	o	o	sm'h	s.	
S. S. Colima, Panama, Panama†	29.94	760.5	78	25.6	95	n			2		2		calm	o	o			fair.
S. S. San José, N. 16° 10′ W. 98° 30′†	29.93	760.2				se.			2		2 k		e.	o	o	short	ene.	clear
S. S. Zealandia, Sydney, N. S. W	30.16	766.1	70	21.1	90	ne.			5		1?		se.			mod	e.	showery?
S. S. Claudius, N. 24° 10′, W. 74° 20′†	30.21	767.3				ene.			4		5		ne.	1 h'r	1 h'r	h'vy	ene.	fair.
S. S. Valencia, Puerto Cabello, Venezuela †	30.06	763.5	77	25.0	82	w.			1		2		ese.	o	o	sm'h		fine.
S. S. Belgenland, N. 42° 00′, W. 57° 50′	30.07	763.8	44	6.7	84	n.			6		7		nne.	1 h'r	1 h'r	mod.	nnw.	squally.
S. S. Nederland, N. 49° 51′ W. 12° 00′			54	12.2		sw.			5		10			3 h'r	3 h'r	r'gh	wsw.	misty.
S. S. Pennland, N. 49° 30′, W. 17° 26′	29.45	748.0	54	12.2	100	sw.			6		10			4 h'r	4 h'r	long	ssw.	overcast.
S. S. Rhynland, Antwerp, Belgium	29.45	748.0	46	7.8	84	wsw.			5		10		wsw.	24 h'r	24 h'r			rainy.
S. S. Waesland, N. 42° 56′, W. 58° 15′	30.04	763.0	42	5.6	83	n.			5		9		nnw.	snow	snow	mod.	n.	cloudy.
S. S. P. Caland, N. 45° 01′, W. 44° 24′	29.25	742 9	47.7	8.7	97	nnw			6		10		n.			5	n.	raining.
S. S. W. A. Scholten, Falmouth, Eng			53.6	12.0	97	w.			6		7		wnw.	14 h'r	14 h'r	sm'h		
S. S. State of Florida, Glasgow, Scotland	29.43	747.5	51	10.6		e.			4		10		se.	o	o			overcast.
S. S. State of Indiana. N. 42° 22′, W. 58° 50′†	29.98	761.5	39	3.9		n.			4		8		nw.	2 h'r	2 h'r	r'gh	nw.	cloudy.
S. S. Hekla, N. 42° 50′, W. 59° 00′ *	29.99	761.8	39.9	4.4		nw.			3		8		nw.	sh'rs	sh'rs	mod.	w.	showery.
S. S. Iowa, N. 48° 52′, W. 31° 10′ *†	28.90	734.0	52	11.1		ssw.			8		3		ssw.	5 h'r	5 h'r	h'vy	con.	clearing.
S. S. Plantyn. N. 45° 27′, W. 49° 04′	29.28	743.7							5		5		sw.	6 h'r	6 h'r	r'gh	ssw.	foggy.
S. S. Britannic, N. 49° 24′, W. 38° 15′†			41	5.0		w.			4		10		nnw.	2 h'r	2 h'r	mod.	ene.	fair.
S. S. Celtic, N. 45° 00′, W. 41° 34′†	29.10	739.1	55	12.8		n.			4		10		ne	10 h'r	10 h'r	h'vy	ne.	misty.
S. S. Lepanto, N. 42° 14′, W. 57° 21′*	30.04	763.0	45	7.2		nne.			7		9		n.	o	o			cloudy.
S. S. Marengo, N. 49° 12′, W. 15° 00′	29.60	751.8				sw.			6		10		sw.	14 h'r	14 h'r	r'gh	sw.	rainy.
S. S. Salerno, N. 49° 43′, W. 6° 59′*	29.70	754.4	55	12.8		w.			6		10		w.	3 h'r	3 h'r	r'gh	w.	raining.
S. S. Catherine Whiting, Philadelphia, Pa†	30.22	767.6	42	5.6		calm			0					o	o			
S. S. Saxon, Boston, Mass †	30.23	767.8	40	4.4		wnw.			4		2							fine.
MISCELLANEOUS.																		
Bg. Abbie Clifford, N. 23° 12′, W. 81° 50′†	30.10	764.5	78	25.6		sse.			2		5		w.					fine.
Bk. Adelaide, N. 28° 54′, W. 50° 46′ *†	30.15	765.8	70	21.1		nw.			5		2		nnw.	o	o	r'gh	nw.	fair.
Bg. Alcira, N. 40° 28′, W. 73° 30′	30.18	766.6	54	12.2		wnw.			2		10		wnw.	o	o	sm'h		cloudy.
Bk. Alpha, N. 21° 10′ W. 31° 30′†	30.03	762.7	74	23.3		sse.			4		4		s.	1 h'r	1 h'r	mod.	e.	fair.
Schr. Annie Lewis, Cedar Keys, Fla †	30.19	766.8	57	13.9		nw.			3		10		nw.	10 h'r	10 h'r	sm'h		misty.
Bk. Anna Thormann, S. 32° 51′, E. 30° 01′*	30.28	769.0	72.5	22.5	74	sw.			4		6 k		sw.	o	o	mod.	sw.	cloudy.
S. S. Antonio Lopez, Cadiz, Spain*	30.32	770.1	52	11.1	86	ne.			2		0			o	o			hazy.
Bk. Aquidneck, N. 1° 06′, W. 42° 30′ *†	30.10	764.5	86	30.0		ese.			2				se.	o	o	light	e.	clear.
Bgt. Arthur, N. 8° 09′, W. 20° 32′*†	30.08	764.0				nne.			5				nne.	4 h'r	4 h'r	mod.	ne.	
Schr. Anna Holton, N. 24° 34′, W. 88° 46′†	30.13	765.3	76	24.4		nne.			5		5		n.	2 h'r	2 h'r	r'gh	w.	fair.
Bg. Belle of the Bay, N. 29° 15′, W. 94° 20′						nne.			4		2		e.	o	o	r'gh	n.	clear.
S. S. Burswell, N. 28° 04′, W. 88° 12′*†	30.15	765 8	68	20.0		n.			3		4		nnw.	1 h'r	1 h'r	high	con.	clear.
Bk. Champion, N. 34° 36′, W. 74° 58′			63.0	17.2		ene.			4		10		ene.	driz.	driz.	mod.	ne.	cloudy.
Bg. Clara M. Goodrich, Key Francis, W.I*†	30.00	762.0				e.			1		8		e.	o	o			fair.
Schr. C. R. Flint, N. 34° 18′, W. 75° 05′			57	13.9		nne.			2		10		ne.	o	o	long	ne.	cloudy.
S. S. D. J. Foley, N. 38° 16′, W. 74° 40′*†	30.27	768.8	43	6.1		wnw.			1		9			o	o	sm'h		cloudy.
Bkt. David Preston, Pensacola, Fla			58.0	14.4		ne.					5		ne.	o	o			
Bk. E. L. Pettingill, S. 8° 17′, W. 125° 34′ *†	30.00	762 0	78	25.6		ese.			5				e.	o	o	mod.	ese.	
Schr. Edith R. Seward, N. 34° 20′, W. 76° 20′*†	30.30	769.6	46	7.8		ne.			2		8			3 h'r	3 h'r	sm'h	ne.	cloudy.
S. E. J. Spicer, Liverpool, Eng†	29.50	749.3	47	8.3		sse.			3		10		sse.	rain	rain			foggy.
Bk. E. D. Bigelow, Verdon Roads, France†	30.00	762.0				wsw.			0		10		wsw.					gloomy.
Bk. Essex, S. 5° 48′, E. 47° 47′*†	29.88	758 9	85	29.4		wnw.			6					h'vy	h'vy	light		fine.
Schr. F. E. McDonald, Belfast, Maine†	30.23	767.8				nw.			1		0			o	o			fine.
S. S. Foscolia, N. 41° 17′, W. 41° 31′						nw.			9		2		nw.	o	o	high		fair.
Bk. Freya, Matanzas, Cuba, W. I			72	22.2		ne.			2		1		ne.	1 h'r	1 h'r			fine.
Bg. George. N. 18° 18′, W. 64° 07′ *†	30.17	766.3				ene.			5		8		e.	o	o	mod.	ne.	cloudy.
S. Geo. Stetson, N. 37° —′, W. 51° —′ *†	29.75	755.6	60	15.6	88	nw.			6		1		nw.	o	o	h'vy	nw.	clear.
Bk. Gronsvaer, S. 36° 35′, E. 176° 08′ †	29.79	756.6	70.2	21.2		var.			3		7		nw.	o	o	mod.	ne.	fine.
Bk. Godelfroy, S. 43° 53′, W. 78° 28′†	29.79	756.7	53.2	11.8	99	w.			5-6		10			2 h'r	2 h'r	mod.	wsw.	foggy.
Bk. Great Surgeon, S. 27° 22′, E. 55° 15′ *†	30.22	767.6	80	26.7		nne.			2		1		nne.	o	o	mod.	ssw.	clear.
Bk. Hattie G. McFarland, N. 25° 12′, W. 59° 28′†	30.26	768.6	72	22.2		ne.			5		10		ne.	8 h'r	8 h'r	short	ene.	stormy.
Schr. Isabel Alberto, Brooklyn, N. Y†	30.31	769.9				w.			2		10		w.	o	o			cloudy.
Schr. Jennie N. Huddell, Sharps, I'd, Chesapeake Bay†	30.22	767.6	39	3.9		se.			1		10			o	o			cloudy.
Bk. Joseph A. Ropes, S. 14° 00′, E. 47° 00′ *†	29.95	760.7	85	29.4	79	nw.			1		9			3 h'r	3 h'r	mod.	ne.	cloudy.
Bkt. Josephine, N. 17° 37′, W 31° 41′†	30.07	763 8	75	23.9	72	sse.			4		8		sse.	4 h'r	4 h'r	long	e.	threatening.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
S. S. J. W. Wilson, Port Eads, La †	30.13	765.3	51	10.6	.....	n.	.....	.....	6	.....	0	.....	.....	4 h'r	4 h'r	.....	.....	clear.
Light House Tender, Laurel, N. 26° 04′, W. 82° 10′†	30.07	763.8	68	20.0	.....	sse.	.....	.....	1	.....	10	.....	sse.	0	0	.....	.....	cloudy.
Bg. Lilian, N. 34° 30′, W. 71° 10′ †	30.33	770.4	57	13.9	.....	wnw.	.....	.....	1	.....	10	.....	w.	0	0	mod	nne.	threatening.
Bk. Louise Adelaide, Campeachy Bay, C. A	.....	.....	.....	.....	.....	nne.	.....	.....	1	.....	8	.....	se.	0	0	short	nnw.	overcast.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.06	763.5	.....	.....	.....	.....	.....	.....	1	.....	0	.....	nne.	0	0	.....	.....	clear.
S. S. Madrid, N. 51° 12′, E. 1° 28′ *†	29.48	748.8	49	9.4	.....	wnw.	.....	.....	5	.....	8	.....	.....	12 h'r	12 h'r	mod.	.....	misty.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.08	764.0	60	15.6	.....	nnw.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	raining.
S. Minnie N. Gerow, N. 27° 51′, W. 59° 30′*†	30.16	766.1	.....	.....	.....	n.	.....	.....	4	.....	7	.....	n.	.....	.....	sm'h	nw.	fair.
S. M. P. Grace, S. 52° 07′, W. 94° 16′ *†	29.82	757.4	47	8.3	.....	w.	.....	.....	4	.....	10	.....	w.	.....	.....	mod.	w.	misty.
Bg. Myrtle, Clements Port, Nova Scotia *†	30.02	762.5	.....	.....	.....	ne.	.....	.....	2	.....	2	.....	ne.	0	0	.....	.....	fair.
Bg. O. C. Clary, Miragoane, Hayti, W. I. *†	30.08	764.0	88	31.1	92	ese.	.....	.....	1	.....	1	.....	e.	0	0	.....	.....	clear.
Bk. Ottawa, N. 38° 54′, W. 14° 50′*	30.23	767.8	59	15.0	.....	ssw.	.....	.....	4	.....	7	.....	ssw.	0	0	sm'h	w.	foggy.
S. Paramita, San Francisco, Cal	.....	.....	49	9.4	.....	nne.	.....	.....	2	.....	.....	.....	.....	0	0	.....	.....	
Bk. Pilgrim, N. 31° 06′, W. 71° 00′ *†	30.30	769.6	.....	.....	.....	calm	.....	.....	0	.....	1	.....	e.	0	0	chop	nw.	fair.
S. S. Radnorshire, N. 29° 51′, E. 129° 46′*†	29.95	760.7	.....	.....	.....	ene.	.....	.....	3	.....	0	.....	.....	1 h'r	1 h'r	.....	.....	clear.
S. S. Raleigh, N. 32° 30′, W. 73° 30′*†	30.18	766.6	64	17.8	.....	se.	.....	.....	4	.....	8	.....	se.	0	0	mod.	se.	threatening.
Bk. Rebus, Cuxhaven, Germany*	29.15	740.4	.....	.....	.....	w.	.....	.....	4	.....	7	.....	w.	4 h'r	4 h'r	mod.	nw.	cloudy.
Schr. S. B. Hubbard, N. 34° 26′, W. 76° 15′†	30.29	769.4	50	10.0	.....	ne.	.....	.....	5	.....	10	.....	.....	6 h'r	6 h'r	short	nw.	stormy.
S. S. Strathleven, N. 15° 03′, E. 113° 04′	29.96	761.0	75.0	23.9	100	n.	.....	.....	5	.....	8	.....	nne.	light	light	5	con.	squally.
Bk. Sunbeam, N. 39° 38′, W. 45° 15′	29.40	746.7	58	14.4	88	wnw.	.....	.....	6	.....	8	.....	wnw.	6 h'r	6 h'r	hv'y	w.	cloudy.
U.S. F. C. S. S. Fish Hawk, Washington, D. C †	30.37	771.4	58	14.4	81	calm	.....	.....	0	.....	10	.....	calm	0	0	.....	.....	cloudy.
Bk. Vincenzo Accame, N. 30° 40′. W. 61° 30′†	30.28	769.1	69.8	21.0	.....	nw.	.....	.....	4	.....	8	.....	nw.	0	0	....	nnw.	
Bk. Wandering Jew, Montevideo, Uruguay †	29.79	756.7	71	21.7	.....	ne.	.....	.....	3	.....	2	.....	ne.	0	0	.....	.....	clear.
Bk. Warden Law, Tocapilla, Peru, S. A *	30.04	763.0	.....	.....	.....	calm	.....	.....	0	.....	1	.....	wsw.	.....	.....	sm'h	s.	fair.

International Chart I. December 26, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 27, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind.		Clouds. Direction.		Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Upper.	Lower.	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.35	770.8	59.4	15.2	76	n.	.....	.....	2	.....	0	.....	.....	0	0	clear.....	Malaterre.
Algiers	.....	.....	30.30	769.5	59.0	15.0	85	wsw.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	Thève.
La Calle	.....	.....	30.22	767.6	63.7	17.6	74	nw.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair..	Fonfréde.
Tunis	.....	.....	30.17	766.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.33	770.4	62.2	16.8	64	sw.	.....	.....	2	.....	2	.....	.....	0	0	fair.....	Pérès.
Tebessa	.....	.....	30.28	769.2	51.8	11.0	70	n.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	Dognon.
Geriville	.....	.....	.....	.....	59.7	15.4	47	wnw.	.....	.....	0	.....	0	.....	.....	0	0	clear.....	Lonchamp.
Laghouat	.....	.....	30.38	771.7	57.6	14.2	30	nne.	.....	.....	0	.....	0	.....	.....	0	0	clear.....	Abraham.
Biskra	.....	.....	30.34	770.7	66.6	19.2	29	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	Malau.
Australian.																			
Melbourne, Victoria	29.85	758.2	29.94	760.5	75.0	23.9	52	nne.	6	2.7	.....	.....	1	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.21	741.8	29.76	755.8	51.4	10.8	64	w.	.....	.....	5	.....	6	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.91	734.4	29.71	754.5	32.0	0.0	85	sw.	4.3	1.9	.....	.....	7	.....	.....	0.031	0.8	.....	Dr. Wierzbiski.
Eperies	28.80	731.5	29.70	754 4	36.7	2.6	66	n.	.....	.....	1	.....	7 ks	.....	.....	0	0	foggy.....	Julius Mikolik.
Gratz	28.49	723.7	29.76	756.0	42.4	5.8	76	se.	.....	.....	2	.....	7	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.28	718.4	29.74	755.4	39.6	4.2	93	nw.	.....	.....	3	.....	10	.....	.....	0.055	1.4	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.33	719.6	29.70	754.3	39.9	4.4	98	calm	.....	.....	0	.....	10	.....	.....	0.827	21.0	.....	The Staff.
Lemberg	28.65	727.6	29.66	753.4	33.1	0.6	73	nw.	.....	.....	2	.....	2	.....	.....	0	0	.....	Dr. T. Stanecki.
Pola	29.74	755.4	29.85	758.3	50.7	10.4	83	calm	.....	.....	0	.....	8	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	29.24	742.7	29.69	754.2	36.3	2.4	58	nw.	.....	.....	1	.....	8	.....	.....	1.035	26.3	.....	Joseph Midlinszay, S. J.
Szegedin	29.49	749.0	29.78	756 3	39.9	4.4	80	calm	.....	.....	0	.....	10	.....	.....	0.079	2.0	.....	Karl Stancel.
Trieste	29.78	756.5	29.89	759.1	47.8	8.8	63	calm	.....	.....	0	.....	4	.....	.....	0	0	.....	Royal Academy.
Vienna	29.04	737.5	29.77	756.2	35.6	2.0	93	calm	.....	.....	0	.....	10	.....	.....	0.768	19.5	raining	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.14	740.1	29.24	742.7	39.6	4.2	95	sse.	20	8.9	.....	.....	10	.....	.....	0.050	1.3	raining.....	W. Boswell
Armagh, Observatory	29.08	738.6	29.32	744.7	51.3	10.7	86	sw.	24	10.7	.....	.....	9	.....	.....	.....	.....	squally.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.43	747.5	51.7	10.9	87	sw.	22	9.8	.....	.....	9	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	28.92	734.6	29.46	748.3	49.8	9.9	94	ssw.	6	2.7	.....	.....	10	.....	.....	.....	.....	overcast.....	Thomas Mackereth.
Bradford, Yorkshire	28.98	736.1	29.37	746.0	49.1	9.5	94	sw.	.....	.....	1	.....	9	.....	.....	0.06	1.5	overcast.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	81.0	27.2	74	ne.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds	Corpl.J.Surgenor, A.H.C.
Cardington	.....	.....	.....	.....	55.4	13.0	87	w.	.....	.....	1.0	.....	10	.....	.....	.....	.....	overcast.....	John McLaren.
Chatham, School M. E	29.46	748.3	29.59	751.6	56.1	13.4	86	w.	.....	.....	2	.....	10	.....	.....	.....	.....	gloomy.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.50	749.3	29.73	755.1	53.1	11.7	99	sw.	.....	.....	5	.....	10	.....	.....	.....	.....	rain & fog...	The Staff.
Fort Napier, Natal	27.73	704.3	29.94	760.5	79.2	26.2	53	e.	.....	.....	1	.....	6?	.....	.....	.....	.....	overcast?....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	77.0	25.0	74	ne.	.....	.....	7	.....	0	.....	.....	.....	.....	blue sky.....	Sergt. John Robinson.
Gibraltar, Mediterranean	30.21	767.3	30.28	769.1	58.3	14.6	92	sw.	.....	.....	.....	.....	2	.....	.....	.....	.....	blue sky.....	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.05	737.9	29.25	742.9	35.0	1.7	95	nne.	.....	.....	1	.....	.....	.....	.....	.....	.....	foggy.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.41	747.0	29.58	751.3	56.6	13.6	84	wsw.	.....	.....	4	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Guernsey	29.52	749.8	29.81	757.2	53.2	11.8	98	sw.	.....	.....	5	.....	10	.....	.....	.....	.....	drizzling	A. Collenette, F. M. S.
Kew, Observatory	29.56	750 8	29.60	751.8	56.8	13.8	82	sw.	20	8.9	.....	.....	10	.....	.....	.....	.....	threatening.	The Staff.
Leicester, Museum	29.32	744.7	29.58	751.3	53.8	12.1	89	w.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds....	J. C. Smith.
Malta, Mediterranean	30.00	762.0	30.07	763.8	64.0	17.8	94	nw.	.....	.....	2	.....	8	.....	.....	.....	.....	overcast.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.08	764.0	30.12	765.0	72.0	22.2	97	n.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.98	736.1	29.49	749.0	53.5	11.9	82	wsw.	.....	.....	5	.....	8	.....	.....	.....	.....	d. clouds....	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.38	746.2	29.61	752.1	53.9	12.2	93	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining.....	The Staff.
Plymouth	29.65	753.1	29.72	754.9	53.1	11.7	98	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	drizzling....	John Merrifield.
Sandwick Manse, Orkneys	29.03	737.3	29.14	740.1	35	1.7	100	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	showery.....	Rev. C. Clouston, L L. D.
Scutari Cemetery, Turkey	29.79	750.7	29.85	758.2	48.4	9.1	60	ssw.	.....	.....	3	.....	6	.....	.....	.....	.....	d. clouds....	W. H. Lyne.
Sheffield	29.15	740.4	29.42	747.3	53.3	11.8	83	sw.	.....	.....	3	.....	7	.....	.....	0.04	1.0	overcast.....	W. F. Cooper.
Silloth Rectory	29.28	743.7	29.31	744.5	48.0	8.9	94	sw.	.....	.....	3	.....	10	.....	.....	0.010	0.3	overcast.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.45	748.0	48.0	8.9	98	w.	14	6.3	.....	.....	10	.....	.....	.....	.....	gloomy.....	I. New.
Stratfield Turgiss	29.90	759.4	30.12	765.0	55.9	13.3	92	w.	.....	.....	2	.....	10	.....	.....	.....	.....	raining.....	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	29.67	753.6	29.72	754.9	56	13.3	94	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining.....	W. Newcombe.
Valencia, Observatory	29.47	748.5	29.50	749 3	53.9	12.2	90	sw.	36	16.1	.....	.....	10	.....	.....	.....	.....	raining.....	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.82	757.4	29.87	758.7	24	— 4.4	95	nw.	.....	.....	4	.....	10 n	.....	calm	0.035	0.9	light snow...	H. J. Cundall, C E
Chatham, N. B*	29.91	759.7	29.98	761 5	22	— 5.6	91	n.	4	1.8	.....	.....	10 s	.....	n.	0	0	cloudy.....	G. A. Blair.
Father Point, Quebec*	30.03	762.7	30.06	763.5	18	— 7.8	100	ne.	25	11.2	.....	.....	10 n	.....	calm	inap.	inap.	light snow..	J. McWilliams.
Fort Garry, Manitoba*	29.57	751.1	30.48	774.2	10	—12.2	100	sw.	4	1.8	.....	.....	10 n	.....	.....	inap.	inap.	foggy.....	James Stewart.
Halifax, N. S*	29.75	755.6	29.89	759.2	23	— 5.0	61	w.	8	3.6	.....	.....	10 k	.....	.....	.....	.....	cloudy.....	A. Allison.
Kingston, Ontario*	29.81	757.2	30.16	766.1	30	— 1.1	88	nw.	3	1.3	.....	.....	10 s	.....	nw.	0.14	3.6	light snow...	A. P. Knight, M. A
Montreal, Quebec*	29.86	758.4	30.08	764.0	25	— 3.9	96	w.	4	1.8	.....	.....	10 s	.....	w.	0.03	0.8	cloudy.....	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.55	750.6	30.29	769.4	22	— 5.6	88	w.	3	1.3	.....	.....	10 n	.....	w.	0.03	0.8	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.50	750.8	30.29	769 4	31	— 0.6	100	w.	3	1.3	.....	.....	10 cs	.....	w.	0.01	0.3	cloudy.....	H. Morgan.
Port Stanley, Ontario	29.63	752.6	30.30	769.6	31	— 0.6	88	w.	8	3.6	.....	.....	10 n	.....	w.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.70	754.4	30.04	763.0	19	— 7.2	100	n.	.....	.....	1	.....	10 n	.....	nw.	0.04	1.0	light snow..	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.71	754.6	30.19	766.8	26	— 3.3	88	nw.	5	2.2	.....	8 cs	0	nw.	.....	0.06	1.5	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.53	750.0	30.27	768.8	35	1.7	79	n.	7	3.1	.....	.....	10 ks	.....	.....	0.05	1.3	cloudy.....	
St. Andrews, N. B	29.90	759.4	29.95	760.7	27	— 2.8	93	n.	5	2.2	.....	.....	10 n	.....	.....	0	0	cloudy.....	
Sydney, C. B*	29.78	756.4	29.84	757.9	29	— 1.7	96	calm	0	0	.....	.....	10 n	.....	.....	0	0	cloudy.....	T. C. Hill, C. E
Toronto, Ontario*	29.86	758.4	30.27	768.8	32	0.0	81	nw.	6	2.7	.....	.....	10 ks	.....	nw.	0.03	0.8	cloudy.....	Magnetic Observatory.
Yarmouth, N. S*	29.85	758.2	29.92	760.0	28	— 2.2	92	n.	6	2.7	.....	.....	10 s	.....	n.	0	0	cloudy.....	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.80	731 5	30.26	768.6	28.0	— 2.2	88	wnw.	.....	.....	3	.....	10 s	.....	wnw.	0	0	overcast.....	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	25	— 3.9	100	w.	1	0.4	.....	.....	10	.....	.....	0	0	.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.17	766.3	30.20	767.1	74.0	23.3	84	e.	5.2	2.3	.....	.....	0	.....	.....	0	0	light haze...	John Duthie.
Cape Town, C G.H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	OBSERVERS
Chinese (Sub-series).																			
Sung-shu-chwang	24.46	621.3	.....	.....	— 9.9	—12.3	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	**Mission, S. J.**
Tchang-kia-tchouang	30.42	772.6	30.53	775.4	13.1	—10 5	58	s.	3.8	1.7	.....	0	0	.....	.....	0	0	clear	**Mission, S. J.**
Zi-Ka-Wei, near Shanghai	30.56	776.2	30.58	776.8	24.3	— 4.3	84	nnw.	3.8	1.7	.....	0	1 k	.....	.....	0	0	clear	**M. Marc Dechevrens, S.J.**
Danish.																			
Copenhagen	29.44	747.7	29.48	748.9	29.8	— 1.2	88	nw.	11	5	.....	.....	3	.....	.....	.....	.....	.....	**Oversergent Fischer.**
Fanoe	29.49	749.1	29.51	749.6	34.7	1.5	93	w.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	**Overloerer Lauridsen.**
Godthaab, Greenland	29.77	756.2	29.82	757.3	10.4	—12.0	70	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	**S. Kleinschmidt.**
Ivigtut, Greenland	29.75	755.7	29.77	756.2	17.6	— 8.0	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.80	756.9	29.85	758.1	0.8	—18.2	.....	e.	.....	.....	4	.....	7	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.57	751.1	29.61	752.2	22.3	— 5.4	90	e.	.....	.....	7	.....	0	.....	.....	.....	.....	.....	**A. O. Thorlacius.**
Thorshavn	29.59	749.3	29.54	750.2	37.8	3.2	71	e.	13	6	.....	.....	6	.....	.....	.....	.....	.....	**Overloerer Bergh.**
Vestervig	29.38	746.2	29.47	748.6	29.7	— 1.3	94	calm	.....	.....	0	.....	7	.....	.....	.....	.....	.....	**Loerer Oesterbol.**
Upernavik, Greenland	29.79	756.6	29.84	757.8	— 4.4	—20.2	.....	e.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	
French.																			
Agen, Normal School	29.56	750.8	30.21	767.4	54.7	12.6	93	sw.	.....	.....	1	.....	km	.....	w.	0	c	.....	**M. Labroue, Director.**
Alençon, Normal School	29.38	746.2	29.93	760.2	53.6	12	97	sw.	.....	.....	1	.....	10 n	ne.	ne.	0.071	1.8	light rain	**M. Nicot, Director.**
Arras, Engineer School	29.49	749.1	29.74	755.5	55.8	13.2	82	nnw.	.....	.....	3	.....	10	.....	.....	.....	.....	raining	**M. Fénéon, Command't.**
Avignon, Normal School	30.03	762.8	30.11	764.8	62.1	10.7	59	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	**M. Giraud, Director.**
Bar-sur-Seine	29.33	744.9	29.88	759.0	52.9	11.6	90	wsw.	.....	.....	3	.....	10	.....	wsw.	0.933	23.7	raining	**M. Saillard, Director.**
Beauvais, Normal School	29.58	751.4	29.85	758.1	55.6	13.1	88	w.	.....	.....	2	.....	10	.....	w.	0.35	9.	covered	**M. Frère Eugène Marie.**
Besançon, Normal School	29.06	738.0	29.97	761.1	50.0	10	100	s.	.....	.....	4	.....	n	.....	sw.	0	0	.....	**M. Gobin, Director.**
Bordeaux, Observatory	29.96	760.9	30.22	767.6	55.2	12.9	74	sw.	.....	.....	1	.....	10	.....	w.	0.118	3.0	covered	**M. Rayet, Director.**
Bourges, Normal School	29.47	748.5	30.02	762.6	53.6	12	87	s.	.....	.....	4	.....	10	.....	s.	0.24	6.	raining	**M. Malet, Director.**
Brest, Naval Observatory	29.72	754.9	29.97	761.1	54.7	12.6	98	sw.	.....	.....	3	.....	10	.....	sw.	1.122	28.5	.....	**M. de Kermaréc, Dir.**
Caen, Normal School	29.77	756.1	29.84	758.0	54.7	12.6	87	sw.	.....	.....	2	.....	8	.....	sw.	0.67	17.	very cloudy	**M. Berson, Director.**
Châlons-sur-Marne, N.Sch'l	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.240	6.1	.....	**M. Jadot, Director.**
Charleville, Normal School	29.19	741.3	29.70	754.3	54.0	12.2	86	w.	.....	.....	2	.....	10	.....	w.	0.646	16.4	raining	**M. Grimard, Director.**
Clermont-Ferrand Obs'y	28.73	729.8	30.10	764.4	53.6	12.0	69	w.	.....	.....	2	.....	8	.....	.....	0.106	2.7	¾ covered	**M. Allnard, Director.**
Cluny, Normal School	29.18	741.1	30.04	763.1	54.7	12.6	74	sw.	.....	.....	3	.....	10	.....	sw.	0.272	6.9	.....	**M. de Villemontée, Dir.**
Commercy, Normal School	28.98	736.2	29.85	758.3	49.1	4.5	98	w.	.....	.....	4	.....	10 km	w.	w.	1.307	33.2	raining	**Dr. Coulet, Director.**
Gap, Normal School	27.47	697 6	29.98	761.0	57.2	14	40	w.	.....	.....	4	.....	3	.....	se.	0	0	.....	**M. Jeahgirard, Director.**
Gréasque, du Rhone	28.96	735.5	30.09	764 2	55.6	13.1	73	nw.	.....	.....	2	.....	1	.....	nw.	0	0	.....	**M. Kline, Director.**
Grenoble, Normal School	29.36	745.8	30.16	766.0	46.2	7.9	98	ne.	.....	.....	1	.....	10 ku	.....	w.	0.79	20.	raining	**M. Ablard, Director.**
Guéret	28.37	720.7	29.96	761.0	49.0	9.5	97	sw.	.....	.....	4	.....	cn	.....	w.	0.425	10.8	cloudy	**M. Delorme, Dir.**
Lamballe, Normal School	29.66	753.3	30.00	762.0	57.9	14.4	84	sw.	.....	.....	3	.....	5	.....	sw.	0.024	0.6	cloudy	**M. Ollitrault, Director.**
Lescar, Normal School	29.67	753.7	30.24	768.0	59.4	15.2	58	w.	.....	.....	1	0	1 k	.....	.....	0	0	clear	**M. Chauvin, Director.**
Lorient, Naval Observatory	29.91	759.8	30.02	762.4	56.5	13.6	93	wsw.	.....	.....	8	.....	10	.....	.....	0.079	2.0	covered	**Lt. T. Carré, Director.**
Lyon, St. Genis-Laval	29.04	537.7	30.11	764.7	53.1	11.7	74	s.	.....	.....	1	.....	10 kn	.....	w.	0.031	0.8	.....	**M. André, Director.**
Mans, Normal School	29.66	753.3	29.97	761.2	54.1	12.3	96	wsw.	.....	.....	3	.....	10	.....	wsw.	0.224	5.7	covered	**M. Piboën, Director.**
Marseille, Observatory	29.83	757.7	30.10	764.6	59.7	15.4	74	wnw.	.....	.....	2.3	.....	5	.....	wnw.	0	0	.....	**M. Stephan, Director.**
Montlouis	24.97	634.2	29.81	757.2	47.3	8.5	68	nw.	5.6	2.5	.....	.....	2	n.	.....	0	0	.....	**M. Caré for Dr. Fines.**
Montpellier, Normal School	29.99	761.8	30.17	766.4	62.0	17	61	w.	.....	.....	4	.....	2	nw.	.....	0	0	slightly cl'dy	**M. Galzin, Director.**
Nancy, Normal School	28.89	733.9	29.68	753.8	54.0	12.2	90	sw.	.....	.....	3	.....	n	.....	.....	0.736	18.7	.....	**M. Hasse, Director.**
Nantes, Observatory	29.92	759.9	30.08	764.0	55.0	12.8	95	sw.	.....	.....	2-3	.....	10	.....	.....	0.362	9.2	light rain	**M. Lavecque, Director.**
Perpignan, Observatory	30.11	764.8	30.22	767.6	59.7	15.4	57	nw.	24.2	10.8	.....	.....	1	.....	nw.	0	0	.....	**Dr. Fines, Director.**
Pic-du-Midi, Summit	21.35	542.3	.....	.....	31.3	— 0.4	.....	nw.	.....	.....	2	.....	1	.....	ne.	0.087	2.2	clear	**M. Vaussenat.**
Privas, Normal School	29.02	737.1	30.10	764.5	51.4	10.8	77	n.	.....	.....	2	.....	5	n.	n.	0	0	cloudy	**M. Tallien.**
Puy de Dôme Obs'y, Summit	25.14	638.5	.....	.....	37.2	2.9	100	w.	.....	.....	8	.....	10	.....	.....	0.819	20.8	foggy	**M. Allnard, Director.**
Rochefort, Naval Obs'y	30.09	764.2	30.12	765.0	55.0	12.8	93	sw.	.....	.....	4	.....	10	.....	wsw.	0.20	5.	covered	**Lt. E. Decaute, Director.**
Roche-sur-Yon, N. School	29.84	757.8	30.05	763.2	51.6	10.9	98	sw.	.....	.....	1	.....	10	.....	.....	0.083	2.1	light rain	**M. Brotier, Director.**
Rodez, Normal School	28.06	712.6	30.24	768.1	46.8	8.2	83	nw.	.....	.....	2	.....	10	.....	nw.	0.654	16.6	light rain	**M. Seger, Director.**
Rouen, Normal School	29.78	756.4	29.83	757.0	55.4	13	98	sw.	.....	.....	4	.....	10	w.	.....	0.709	18.	raining	**M. Mouillot.**
Saint Lô	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	**M. Delaplanche, Dir.**
Saint Maur, Observatory	29.69	754.2	29.80	758.4	55.8	13.2	87	wsw.	.....	.....	3	.....	10	.....	w.	0.217	5.5	.....	**M. Renou, Director.**
Toulouse, Observatory	29.57	751.0	30.30	769.5	55.6	13.1	76	wnw.	.....	.....	1	.....	8	nw.	.....	0	0	very cloudy	**M. Baillaud, Director.**
Tours	29.84	757.8	30.01	762.3	50.5	13.6	88	sw.	.....	.....	3	.....	10	.....	wsw.	0.094	2.4	rainy	**M. de Tastes.**
Versailles, Observatory	29.37	745.9	29.86	758.4	55.4	13	88	w.	.....	.....	2	.....	.....	.....	.....	0.291	7.4	.....	**Dr. A. Bérigny, Director.**
Sub-series.																			
St. Martin du Hinx	30.13	765.4	30.28	769.2	58.5	14.7	63	w.	7.8	3.5	.....	0	2 k	.....	.....	0.004	0.1	.....	**M. Cartier, Director.**
German.																			
Ansbach	28.20	716.2	29.64	752.8	50.4	10.2	90	w.	.....	.....	8	.....	10	w.	.....	0.602	15.3	.....	**Prof. Jnedt.**
Bamberg	28.80	731.6	29.63	752.7	39.6	4.2	88	calm	.....	.....	0	.....	10 n	.....	.....	0.193	4.9	.....	**Prof. Dr. Hoh.**
Berlin	29.42	747.2	29.60	751.8	32.5	0.3	89	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	**Prof. Dr. Arndt.**
Breslau	29.15	740.5	29.68	753.8	33.8	1.0	80	wnw.	.....	.....	2	.....	10	.....	.....	0.189	4.8	.....	**Royal University Obs'y.**
Carlsruhe	29.29	743.9	29.72	754.9	52.9	11.6	94	sw.	.....	.....	5	.....	10	sw.	.....	0.057	16.7	raining	**Albert Senz.**
Cassel	28.80	731.6	29.52	749.7	36.5	2.5	96	s.	.....	.....	2	.....	10	s.	.....	0.354	9.0	.....	**Dr. H. Möhl.**
Frankfort-on-the-Main	29.24	742.8	29.61	752.2	44.6	7.0	96	s.	.....	.....	1	.....	10	.....	.....	0.425	10.8	.....	**Physical Society.**
Friedrichshafen	28.43	722.0	29.87	758.6	49.6	9.8	87	w.	.....	.....	8	.....	10	w.	.....	c.504	12.8	.....	**Wilhelm, Chief Tel.**
Hamburg	29.50	749.4	29.60	751.7	31.6	— 0.2	96	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy	**E. Preller.**
Kiel	29.54	750.4	29.56	750.8	34.0	1.1	76	sw.	.....	.....	2	.....	10	.....	.....	0.016	0.4	.....	**Prof. Dr. G. Karsten.**
Leipsic, Astrom'l Obs'y	29.22	742.3	29.66	753.3	34.2	1.2	92	sse.	.....	.....	1	.....	10	.....	.....	0.606	15.4	.....	**H. Leppig, Asst.**
Magdeburg	29.42	747.3	29.62	752.3	33.1	0.6	87	ese.	.....	.....	1	.....	10	.....	.....	0.016	0.4	foggy	**Weather Observatory.**
Memel	29.28	743.8	29.33	744.9	31.5	— 0.3	89	nw.	.....	.....	5	.....	10 s	.....	.....	.....	.....	.....	**Issermann.**
Munich	27.90	708.6	29.74	755.4	48.7	9.3	80	nw.	.....	.....	6	.....	10	w.	.....	0.535	13.6	.....	**Central Station.**
Neufahrwasser	29.41	747.1	29.43	747.5	31.6	— 0.2	92	sw.	.....	.....	3	.....	10	.....	.....	0.055	1.4	light snow	**A. Lothes.**
Neustadt, Palatinate	29.10	739.2	29.62	752.4	55 0	12.8	100	w.	.....	.....	6	.....	10	.....	.....	0.476	12.1	raining	**Dicknether.**
Stuttgart	28.76	730.5	29.64	752.9	54.1	12.3	75	sw.	.....	.....	6	.....	10	.....	.....	0.209	5.3	raining	**Prof. Dr. Schoder.**
Wustrow	29.54	750.4	29.57	751.0	34.3	1.3	89	wnw.	.....	.....	4	.....	10 s	.....	.....	0	0	.....	**Profs. Brandes & Reimer.**
Greek.																			
Athens	29.48	748.9	29.87	758.8	57.4	14.1	.....	n.	.....	.....	0.5	.....	1	.....	.....	0.024	0.6	clear	**Schmidt & Wourlisch.**
Indian.																			
Kurrachee	30.11	764.9	30.16	766.2	76.2	24.6	60	sw.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.54	750.4	30.02	762.5	80.3	26.8	26	nw.	3.0	1.3	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.92	759 8	29.95	760.8	80.8	27.1	68	wnw.	10.0	4.5	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.10	713.9	29.96	760.8	81.9	27.7	15	e.	8.0	3.6	.....	.....	1	.....	.....	0	0	d. clouds	
Trichinopoly	29.68	753.9	29.97	761.1	74.6	23.7	79	nne.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.41	696.2	29.95	760.8	76.8	24.9	24	ene.	9.0	4.0	.....	.....	8	s.	.....	0	0	d. clouds	
Lahore	29.34	745.2	30.12	764.9	64.6	18.1	40	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Roorkee	29.10	739.2	30.04	763.0	64.8	18.2	44	calm	1.0	0.4	.....	.....	0	.....	.....	0	0	.....	
Agra	29.47	748.6	30.05	763.3	71.2	21.8	50	nw.	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.96	735.6	30.02	762.5	75.7	24.3	37	ese.	6.0	2.7	.....	.....	2	sw.	.....	0	0	d. clouds	
Jubbulpore	28.65	727.8	30.03	762.8	73.5	23.1	52	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.64	752.8	30.03	762.6	71.2	21.8	47	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.69	754.1	30.02	762.4	64.5	18.1	71	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.83	757.6	30.02	762.5	66.0	18.9	57	w.	2.4	1.1	.....	.....	2	w.	w.	0	0	.....	
Hazaribagh	27.96	710.1	30.04	763.1	61.7	16.5	48	wnw.	5.6	2.5	.....	.....	7	.....	.....	0	0	d. clouds	
Cuttack	29.94	760.4	30.02	762.6	67.4	19.7	75	calm	0	0	.....	.....	7	.....	wnw.	0	0	d. clouds	
Calcutta, Alipore	29.99	761.8	30.01	762.3	63.5	17.5	73	nnw.	1.0	0.4	.....	.....	9	.....	.....	0	0	d. clouds	
Dhubri	29.86	758.4	29.98	761.6	60.4	19.1	80	ene.	5.5	2.5	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.91	759.8	30.01	762.2	66.4	19.1	87	sw.	1.7	0.7	.....	.....	8	.....	.....	0	0	d. clouds	
Sibsagar	29.67	753.7	30.02	762.4	61.9	16.6	89	sw.	2.0	0.9	.....	.....	6	sw.	sw.	0	0	d. clouds	
Jeypore	28.59	726.1	30.06	763.6	71.2	21.8	61	ne.	2.6	1.2	.....	.....	0	.....	.....	0	0	blue sky	
Italian.																			
Udine	29.47	748.4	29.89	759.1	43.3	6.3	78	.....	.....	.....	.....	.....	8	.....	.....	0	0	.....	**Prof. Giovanni Clodig.**

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	29.37	746.0	29.91	759.6	40.6	4.8	71	ne.	1.8	0.8	.....	.....	2	.....	.....	0	0	.....	Prof. Schiapparelli.
Padua	29.78	756.3	29.89	759.2	41.4	5.2	60	n.	0.7	0.3	.....	.....	3	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.96	735.6	29.90	759.5	39.9	4.4	65	wsw.	2.5	1.1	.....	.....	7	nw.	.....	0	0	.....	Prof. F. F. Denza.
Genoa	29.73	755.1	29.93	760.1	55.8	13.2	70	calm	0	0	.....	.....	10	sw.	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.93	709.4	29.90	759.4	50.4	10.2	53	se.	.....	.....	2	.....	3	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.78	756.4	29.83	757.7	43.9	6.6	82	n.	6.3	2.8	.....	.....	5	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.71	754.6	29.97	761.2	48.2	9.0	92	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Costantino Pittei.
Leghorn	29.82	757.5	29.91	759.7	55.4	13.0	88	s.	6.9	3.1	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.79	756.6	29.97	761.1	53.2	11.8	71	ne.	0	0	.....	.....	8	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	29.71	751.6	29.97	761.2	53.6	12.0	80	wnw.	4.9	2.2	.....	.....	3	.....	.....	0.055	1.4	.....	Prof. C. de Giorgi.
Cosenza	29.10	739.2	30.01	762.3	54.7	12.6	77	sw.	1.8	0.8	.....	.....	3	s.	.....	0.087	2.2	.....	Prof. D. Conti.
Caglinri	29.87	758.6	30.06	763.6	61.3	16.3	67	nw.	.....	.....	6	.....	7	nw.	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.82	757.5	30.08	764.0	63.3	17.4	58	wnw.	6.3	2.8	.....	.....	6	nw.	.....	0	0	.....	Prof. G. Caccintore
Syracuse	29.97	761.2	30.01	762.3	61.9	16.6	60	ne	3.8	1.7	.....	.....	4	nne.	.....	0	0	.....	Sig. Vincenzo Giuliano.
Sub-aerias.																			
Naples, S. R	29.46	748.3	29.99	761.8	55.2	12.9	80	wnw.	0	0	.....	.....	0	.....	.....	0.031	0.8	.....	Prof. F. Brioschi.
Stelvio	22.03	559.6	.....	.....	30.9	— 0.6	90	sw.	.....	.....	2	.....	10	.....	.....	0.866	22.0	covered	Prof. P. F. Denza.
Valdobbia	22.05	560.1	.....	.....	28.0	— 2.2	71	ne.	.....	.....	6	.....	10	.....	.....	0.394	10.0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.51	749.6	29.54	750.4	33.9	1.1	81	nw.	.....	.....	4	.....	10 n;ck	.....	nw.	0.346	8.8	raining	Hattori.
Awomori	29.40	746.7	29.44	747.8	31.5	— 0.3	99	w.	39.4	17.6	.....	.....	10 n	.....	.....	0.237	6.0	snowing	K. Ogawa.
Hakodate	29.33	745.0	29.34	745.2	35.2	1.8	76	w.	9.0	4.0	.....	.....	10	.....	sw.	0.402	10.2	overcast	
Hamamatsu	29.68	753.9	29.71	754.6	37.7	3.2	74	nw.	.....	.....	8	1 ck	1 ks	nw.	nw.	0.024	0.6	cloudy	Y. Miwa.
Hiroshima, I. M. Obs'y	.....	.....	.....	.....	30.0	— 1.1	95	nne.	2.5	1.1	.....	0	7 n;ks	.....	nw.	0	0	cloudy	
Kanazawa	29.74	755.4	29.85	758.1	31.0	— 0.6	100	w.	23.0	10.3	.....	.....	10	.....	.....	0.807	20.5	snowing	S. Endo.
Kioto	29.68	753.9	29.86	758.4	33.1	0.6	55	nw.	13.4	6.0	.....	0	2 ck	.....	.....	0.012	0.3	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.02	762.5	30.24	768.0	31.1	— 0.5	67	nw.	7.2	3.2	.....	.....	10 n;s	.....	.....	0.040	1.0	light snow	S. Takehayashi.
Niigata	29.62	752.3	29.65	753.1	33.5	0.8	86	nnw.	26.7	11.9	.....	.....	10 n	.....	nw.	0.290	7.4	light snow	M. Morita.
Nobiru	29.43	747 4	29.44	747.8	37.1	2.8	74	nw.	25.2	11.3	.....	1 ck	0	sw.	.....	0.020	0.5	fair	H. Midzushina.
Numazu	29.50	749.2	29.53	750.1	48.2	9.0	51	ssw.	.....	.....	6	0	0	.....	.....	0.160	4.3	clear	R. Kaneda.
Osaka	29.92	759.9	29.93	760.3	31.2	— 0.4	61	w.	20.8	9.3	.....	0	0	.....	.....	0.020	0.5	clear	H. Omura.
Supporo	.....	.....	.....	.....	25.0	— 3.9	89	s.	7.2	3 2	.....	.....	10	.....	.....	0	0	covered	
Tokei Obs'y, Yeddo	29.44	747.9	29.52	749.9	34.9	1.6	85	nne.	3.5	1.5	.....	0	0	.....	.....	0.015	0.4	clear	The Staff.
Wakayama	29.88	758.9	29.94	760.5	34.3	1.3	57	nw.	12.6	5.6	.....	0	3ks;ck	.....	nw.	0	0	fair	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.82	757.4	30.01	762.2	81.5	27.5	67	ene.	14.0	6.3	.....	0	2 k;ks	.....	ene.	0.06	1.5	clear	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.67	601.1	29.89	759.1	52.5	11.4	78	calm	0	0	.....	0	4 k	.....	.....	inap.	inap.	fair	Prof. Vicente Fernandez.
Leon	24.35	618.5	30.14	765.5	48.7	9.3	83	nnw.	.....	.....	1	0	7 ck	.....	.....	0	0	cloudy	Prof. M. Leal.
Mazatlan	29.73	755.2	29.99	761.8	68.0	20.0	84	e.	1.6	0.8	.....	8 cs	0	sw.	.....	0	0	lazy	F. Quijano, C. E.
Mexico, Central Obs'y	23.15	587.9	30.32	770.1	45.1	7.3	88	calm	0	0	.....	2 ck	3 ks	.....	.....	0.003	1.6	½ cloudy	The Staff.
Morelia	24.17	614.0	29.98	761.5	42.1	5.6	67	se.	.....	.....	1	1 c	2 k	s.	s.	inap	inap.	½ cloudy	M. Tena, M. D.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.400	10.2	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.6	30.17	766.2	51.8	11.0	31	calm	0	0	.....	.....	10	.....	sw.	0	0	covered	Prof. P. Spina.
Zacatecas	22.49	571.3	30.19	766.9	45.8	8.1	36	wsw.	4.8	2.1	.....	.....	10 kn	.....	wsw.	0	0	covered	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.58	751.4	29.58	751.4	46.9	8.3	.....	wsw.	.....	.....	6	.....	.....	.....	.....	0.287	7.3	.....	
Groningen	29.49	749.0	29.54	750.4	36.3	2.4	.....	s.	.....	.....	1	.....	.....	.....	.....	0.109	4.3	.....	
Helder	29.48	748.8	29.48	748.8	38.1	3.4	.....	se.	.....	.....	4	.....	.....	.....	.....	0.130	3.3	.....	
Helleyoetsluis	29.53	750.0	29.53	750 0	46.8	8.2	97	wsw.	.....	.....	5	.....	.....	.....	.....	0.200	0.6	.....	
Utrecht	29.48	748.7	29.52	749.9	39.7	4.3	99	ese.	.....	.....	2	.....	hz.	.....	.....	0.394	10.0	hazy	H. van der Brink
NORWEGIAN.																			
Bergen	29.38	746.2	29.44	747.8	32.7	0.4	82	sse.	5	2	.....	.....	5	.....	.....	0	0	.....	
Brono	29.11	739.5	29.15	740.5	32.0	0.0	72	nw.	9	4	.....	.....	8	.....	.....	0	0	.....	
Christiania	29.22	742.3	29.38	746.3	17.2	— 8.2	94	e.	5	2	.....	.....	8	.....	.....	0	0	foggy	
Gjæsvær	29.04	737.7	29.07	738.3	30.9	— 0.6	.....	ne.	.....	.....	7	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.06	738.0	29.10	739.2	21.2	— 6.0	79	n.	.....	.....	1	.....	10	.....	.....	0.004	0.1	.....	
PORTUGUESE.																			
Angra, Azores	29.47	748.6	29.03	752.6	61.5	16.4	92	s.	16.1	7.2	.....	.....	8	.....	.....	2.047	52.0	.....	Dr. J. A. Sampaio.
Campo Major	29.29	743.9	30.34	770.6	40.1	4.5	100	ne.	3.8	1.7	.....	.....	10	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.16	766.1	30.25	768.4	63.5	17.5	75	calm	0	0	.....	.....	9	.....	.....	0.024	0.6	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.98	761.5	30.36	771.1	40.3	4.6	100	ne.	17.4	7.8	.....	.....	10	.....	.....	0.028	0.7	.....	The Staff.
Ponta Delgada, Azores	29.68	753.8	29.75	755.6	66.9	19.4	79	ssw.	36.7	16.4	.....	.....	3	.....	.....	0	0	.....	
Saint Paul de Loando	29.72	754.9	29.92	760.0	76.3	24.6	88	wsw.	1.3	0.6	.....	.....	8	.....	.....	0	0	.....	
Serra da Estrella	25 52	648.1	30.27	768.9	50.0	10.0	40	sse.	3.1	1.4	.....	.....	3	.....	.....	0	0	foggy	
RUSSIAN.																			
Akmolinski	29.23	742.5	30.49	774.4	—13.9	—25.5	80	w.	11	5	.....	5 ck	0	.....	.....	.....	.....	.....	Major K. Lasarew.
Archangel	29.50	749.4	29.52	749 9	9.3	—12.6	84	se.	13	6	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	29.87	758.6	29.79	756.6	27.3	— 2.6	96	ese.	4	2	.....	.....	10 n	.....	.....	0.039	1.0	heavy cld's.	Capt. Wisganow.
Barnaul	29.71	754.5	30.29	769.3	—10.4	—20.9	76	sw.	13	6	.....	.....	10	.....	.....	0.010	0.4	.....	Meteorological Obs'y.
Bielosersk	28.98	730.1	29.48	748.7	15.1	— 9.4	91	sse.	13	6	.....	.....	10 n	.....	.....	0.031	0.8	snowing	
Dorpat	28.90	734.1	29.15	740.5	18.7	— 7.4	100	wsw.	4	2	.....	.....	10 n	.....	.....	0.004	0.1	foggy	Observatory.
Ekaterinburg	29.39	746.6	30.49	774.4	— 5.4	—20.8	84	w.	13	6	.....	6 c	0	.....	.....	0	0	light clouds	Meteorological Obs'y.
Elissawetgrad	29.13	740.0	29.60	751.8	30.9	— 0.6	94	wsw.	0	0	.....	.....	10 n	.....	.....	0.039	1.0	.....	
Kasan	29.93	760.3	30.24	768.1	— 2.0	—18.9	76	sse.	11	5	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kem	29.25	742.9	.....	.....	11.1	—11.6	93	se.	13	6	.....	0	4 ks	.....	.....	0	0	heavy cl'ds.	
Kertch	29.77	750.1	29.79	756.6	37.0	2.8	88	calm	0	0	.....	0	4 ks	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	28.83	732.2	29.48	748.8	29.8	— 1.2	98	wnw	2	1	.....	.....	10 n	.....	.....	.....	.....	snowing	Observatory.
Libau	29.25	743 0	29.28	743.6	27.9	— 2.3	69	wnw.	.....	.....	1	.....	10	.....	.....	0.110	2.8	.....	E. Quaas.
Lugan	29.52	749.7	29.73	755.1	28.0	— 2.2	79	sse.	2	1	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Moscow	29.06	738.0	29.50	750.9	19.0	— 7.2	90	s.	13.4	6.0	.....	.....	10 n	.....	.....	0.138	3.5	snowing	
Nikolaiev	29.57	751.1	29.05	753.0	37.8	3.2	80	s.	13	6	.....	.....	10 n	.....	.....	0.063	1.6	.....	Capt. Kurdakow.
Pekin, China	30.38	771.6	30.52	775.2	12.9	—10.6	37	calm	0	0	.....	0	0	.....	.....	.....	.....	.....	Physical Observatory.
Petrozavodsk	29.08	738 5	29.28	743.7	19.2	— 7.1	93	sse.	22	10	.....	.....	10	.....	.....	0.051	1.3	.....	Dr. Bergmann.
Pinsk	29.07	738.3	.....	.....	20.4	— 3.1	85	w.	18	8	.....	0	2 s	.....	.....	0.051	1.3	.....	
St. Petersburg	29.15	740.4	29.17	740 8	21.9	— 5.6	87	ese.	4	2	.....	.....	10 n	.....	.....	0.047	1.2	light clouds	Central Physical Obs'y.
Sevastopol	29.53	750.1	29.70	754.3	45.0	7.2	70	sw.	27	12	.....	.....	10 n	.....	.....	0	0	.....	
Semipalatinsk	29.72	754.8	30.48	774.2	—11.6	—24.2	82	sw.	20	9	.....	.....	10	.....	.....	0.012	0.3	.....	Major Lasarew.
Starol Bykhov	29.00	736 7	29.48	748.8	27.1	— 2.7	79	w.	11	5	.....	10 ck	0	.....	.....	0.091	2.3	light snow	
Tashkend, Laboratory	28.46	722.9	30.10	764.0	34.7	1.5	82	calm	0	0	.....	.....	10	.....	.....	blank	blank	heavy cld's.	Teich, A. M.
Tiflis	28.26	717.9	29.09	754.1	40.2	7.9	47	nw.	45	20	.....	0	7 s	.....	.....	0	0	.....	Physical Observatory.
Tomsk	29.84	757.9	30.17	766.2	—26.5	—32.5	84	calm	0	0	.....	0	0	.....	.....	.....	.....	.....	
Vladivostock	30.14	765.0	30.21	767 3	— 9.4	—23.0	45	n.	0	4	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.17	740.9	29.61	752 2	25.9	— 3.4	85	nw.	22	10	.....	.....	10.	.....	.....	.....	.....	heavy cl'ds.	Astronomical Obs'y.
Wilna	28.99	736.3	29.44	747.4	26.1	— 3.3	91	nw.	2	1	.....	.....	10	.....	.....	.....	.....	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.92	760.0	30.25	768.4	—15.5	—20.4	87	se.	2	1	.....	.....	9	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	28.91	734.3	49	9.4	92	sw.	.....	.....	4	.....	10	.....	.....	0.3	8.	sleeting	J. Youngclause.
North Unst	.....	.....	29.28	743.7	.....	.....	.....	s.	.....	.....	7	.....	10	.....	.....	blank	blank	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.09	764.2	30.20	767.0	57.6	14.2	63	nw.	1.3	0.6	.....	0	0	.....	.....	0	0	clear	Antonio Rzve, Director.
Bilbao, Met. Obs'y	30.26	768.7	30.32	770.2	56.1	13.4	68	s.	1.3	0.6	.....	0	0	.....	.....	0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.33	694.1	30.44	773.1	38.5	3.6	97	w.	6.0	2.7	.....	.....	10	.....	.....	0	0	foggy	Domingo Martin.
Madrid, Royal Obs'y	28.09	713.5	30.44	773.2	37.4	3.0	93	calm	0.4	0.2	.....	.....	10	.....	.....	0	0	misty	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Velocity.		Force.	Clouds. Amount and kind. Upper.	Lower.	Direction. Upper.	Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From	Inch.	Mill.		
Spanish.																			
Murcia, Met. Obs'y	30.13	765.2	30.27	768.8	64.8	18.2	62	w.	1.6	0.7		3	2	ene.		0	0	clouds	Olayo Diaz, Director.
Oviedo	29.37	745.9	30.31	769.8	51.8	11.0	92	n.	6.0	2.7		0	0			0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.31	744.5	30.23	767.8	51.8	11.0	84	sw.	5.6	2.5			9			0	0	almost cov'd	R. Gil Villanueva, Dir.
Spanish.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.87	758.7	29.93	760.2	79.0	26.1	77	nne.	4.4	2.0		0	3 ks		ne.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.24	768.0	30.34	770.6	51.4	10.8	90	calm	0	0			10		s.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.93	760.3	30.02	762.6	81.0	27.2	72	calm	0	0		4 8	5 k	sw.	sw.	0.047	1.2		Manuel Maese.
Tuguegarao, Philippine Id's	29.95	760.8	30.08	764.1	69.9	21.1	89	nnw.	14.1	6.3			10 ks		nne.	0.01	0.3		José L. Yrastorza.
Swedish.																			
Hapsaranda	29.12	739.6	29.16	740.6	12.6	—10.8	100	ne.			2		10			0	0		
Umea	29.14	740.2	29.19	741.5	9.0	—12.8	92	nw.			2		10			0	0		
Hernosand	29.16	740.6	29.21	741.9	8.6	—13.0	84	calm			0		3			0.055	1.4		
Stockholm	29.11	739.5	29.29	744.0	13.6	—10.2	80	nw.			2		1			0	0		
Wisby	29.19	741.3	29.24	742.8	24.8	— 4.0	91	nnw.			6		7			0.071	1.8		
Sub-series.																			
Upsala	29.18	741.1	29.26	743.3	10.9	—11.7	98	wnw.	4.0	1.8			7		nnw.	0	0		S. G. Fineman.
Swiss.																			
Geneva	28.67	728.3	30.10	764.6	53.2	11.8	77	ssw.			4		10			1.177	29.9	covered	The Observatory.
Turkish.																			
Constantinople			29.90	759.4	47.7	8.7	59	sw.	18	8.0			3		sw.	0	0		The Observatory.
Valona			29.95	760.8	55.2	12.9		ne.			1		2			0	0	slightly cl'd'y	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.03	762.7	60.8	16.0	54	wnw.			3		3 ks		n.	0.51	13.0	thund'r st'm	Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.05	763.3	30.14	765.5	33	0.6	68	n.	3	1.3		5 c	2 s	nw.	nw.	0.01	0.3	fair	J. O. Barnes.
Alpena, Michigan	29.60	751.8	30.31	769.9	31	— 0.6	78	w.	4	1.8			10 s		nw.	inap.	inap.	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.24	641.1	30.32	770.1	17	— 8.3	58	ne.	4	1.8		0	0			0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.36	694.9	30.38	771.6	19	— 7.2	70	sw.	1	0.4		0	0			0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.08	738.6	30.31	769.9	36.0	2.2	79	nw.	11	4.9		4 cs	0			0	0	fair	H. C. Smith.
Atlantic City, New Jersey	30.19	766.8	30.20	767.1	29	— 1.7	77	w.	7	3.1		0	0			0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.13	765.3	30.33	770.4	46	7.8	80	nw.	1	0.4			10 s			0	0	cloudy	John Healy.
Baltimore, Maryland	30.24	768.1	30.29	769.4	40	4.4	65	nw.	5	2.2		0	4ks;fg		nw.	0	0	fair	Geo W Felger.
Barnegat, New Jersey	30.17	766.3	30.19	766.8	33.0	0.6	88	w.	15	6.7		0	0			0	0	clear	G. A. Hill.
Behring Id., Behring Sea	29.99	761.7	30.01	762.2	23.9	— 4.5		se.					10 n			0.01	0.3	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28 87	733.3	30.63	778.0	3	—16.1	76	calm	0	0		0	0			0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.40	695.9	30.40	772.1	17	— 8.3	54	calm	0	0		0	0			0	0	clear	S. Wheaton.
Bismarck, Dakota	28.57	725.7	30.58	776.7	1	—17.2	72	calm	0	0		1 cs	0			0	0	clear	Cyrus Cramor.
Block Island, Rhode Island	30.07	763.8	30.10	764.5	33	0.6	78	n.	16	7.2		0	0			0	0	clear	J. T. Elker.
Boise City, Idaho	27.65	702.3	30.63	778.0	8	—13.3	80	calm	0	0		0	0			0	0	clear	B. E. Light.
Boston, Massachusetts	29.92	760 c	30.08	764.0	32.0	0.0	78	nw.	10	4.5		0	3 s		nw.	inap.	inap.	clear	O. B. Cole.
Brownsville, Texas	30.11	764.8	30.16	766.1	60.2	15.7	98	ne.	8	3.6			10 n		ne.	0.12	3.0	light rain	M. McCarty.
Buffalo, New York	29.48	748.8	30.28	769.1	32.7	0.4	76	sw.	10	4.5			10 s		w.	0.02	0.5	cloudy	W. Finn.
Buford, Fort, Dakota	28.37	720.6	30.61	777.5	3	—16.1	87	s.	2	0.9		0	0			0	0	clear	F. A. Mellen.
Burlington, Vermont	29.81	757.2	30.12	765.0	28.0	— 2.2	80	se.	3	1.3			10 n		nw.	0.09	2.3	light snow	G. C. Schaeffer.
Cairo, Illinois	30.03	762.7	30.45	773.4	37.3	2.9	84	n.	2	0.9			10 s			0	0	threatening	W. H. Ray.
Cape Henry, Virginia	30.26	768.6	30.28	769.1	39	3.9	73	n.	15	6.7		2 c	0			0	0	clear	A. K. Alderson.
Cape May, New Jersey	30.20	767.1	30.23	767.8	38.5	3.6	78	nw.	20	8.9		0	0			0	0	clear	W. E. Smith.
Cape Mendocino, California																			J. J. McLean.
Cedar Keys, Florida	30.24	768.1	30.26	768.6	53	11.7	80	ne.	9	4.0			10 s			0	0	cloudy	F. W. Mixer.
Champaign, Illinois	29.54	750.3	30.41	772.4	32.5	0.3	72	nw.	4	1.8			10 s		nw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.21	767.3	30.27	768.8	44	6.7	100	n.	7	3.1			fg.			0.25	6.3	dense fog	J. H. Smith.
Charlotte, N. Carolina	29.38	746.2	30.27	768.8	34.0	1.1	79	calm	0	0		0	fg.			0	0	clear	D. O'Donoghue.
Chattanooga, Tennessee	29.51	749.5	30.37	771.4	34.5	1.4	74	nw.	9	4.0		0	9 s		n.	0	0	cloudy	B. L. Goulding.
Cheyenne, Wyoming	24.24	615 7	30.52	775.2	8.8	—12.9	63	nw.	6	2.7		0	0			0	0	clear	E. McGovern.
Chicago, Illinois	29.61	752.1	30.37	771.4	33.3	0.7	84	w.	6	2.7			10 s			0.01	0.3	cloudy	J. Mitchell.
Chincoteague, Virginia	30.23	767.8	30.25	768.3	35	1.7	79	n.	19	8.5		0	hz.			inap.	inap.	clear	C. F. Dickens.
Cincinnati, Ohio	29.70	754.4	30.40	772.1	40	4.4	73	nw.	2	0.9			10 s		nw.	0	0	cloudy	R. B. Watkins.
Cleveland, Ohio	29.57	751.1	30.36	771.1	32.3	0.2	96	w.	2	0.9			10 s		w.	0.06	1.5	cloudy	J. B. Newlin.
Coleman City, Texas	28.53	724.6	30.43	772.9	34	1.1	100	n.	6	2.7			10 s			0.03	0.8	cloudy	L. Dorman.
Columbus, Ohio	29.44	747.8	30.30	771.1	37	2.8	75	ne.	2	0.9			10 s			0.01	0.3	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.39	721.1	30.41	772.4	34.3	1.3	82	calm	0	0			10 s			inap.	inap.	cloudy	J. McGlone.
Custer, Fort, Montana	27.14	689.3	30.54	775.7	8	—13.3	58	e.	8	3.6			0			0	0	clear	W. B. Lamar.
Davenport, Iowa	29.74	755.4	30.45	773.4	29	— 1.7	77	nw.	7	3.1			10 s		nw.	0.01	0.3	cloudy	R. R. Martin.
Davis, Fort, Texas	25.36	644.1	30.30	769.6	14	—10.0	83	calm	0	0		0	0			0	0	clear	J. Williams.
Dayton, Washington T'y	28.58	725.9	30.42	772 7	26	— 3.3	88	se.	4	1.8			10 s			0	0	cloudy	D. Moore.
Deadwood, Dakota	25.62	650.7	30.61	777.5	14	—10.0	83	se.	4	1.8		0	0			0	0	clear	F. Willson.
Delaware Breakwater, Del.	30.23	767.8	30.25	768.3	36	2.2	79	nw.	23	10.3			10 s		nw.	0	0	cloudy	T. S. Townsend.
Denison, Texas	29.58	751.3	30.43	772.9	34.0	1.1	88	ne.	2	0.9			10 s			0	0	cloudy	J. W. Byram.
Denver, Colorado	25.07	636.8	30.59	777.0	24.0	— 4.4	88	nw.	4	1.8			10 s			0.08	2.0	cloudy	F. M. Neal.
Des Moines, Iowa	29.52	749.8	30.50	774.7	10	—12.2	80	nw.	2	0.9		0	3 s		nw.	0	0	clear	F. W. Conrad.
Detroit, Michigan	29.59	751.6	30.35	770.9	36.8	2.7	82	nw.	4	1.8			10 s			0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.69	703.3	30.49	774.4	20	— 6.7	73	n.	18	8.0		5 k	0	n.		0	0	fair	V. P. Temple.
Dubuque, Iowa	29.64	752.8	30.41	772.4	20.2	— 6.6	76	w.	1	0.4			10 s			0	0	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.58	751.3	30.39	771.9	19.8	— 6.8	88	nw.	25	11.2			10 s		nw.	0.04	1.0	cloudy	N. B. Conger.
Eagle Pass, Texas	29.56	750.8	30.40	772.1	47.0	8.3	48	nw.	6	2.7		3 ck	5 s	sw.		0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25.62	650.7	30.54	775.7	—10	—23.3	78	n.	4	1.8		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	29.89	759.2	29.96	761.0	27.0	— 2.8	82	n.	13	5.8			10 s		n.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.48	698.0	30.44	773.2	30	— 1.1	71	calm	0	0			10 s			0.40	10.2	cloudy	W. J. Cundall.
El Paso, Texas	26.49	672.8	30.35	770.9	20.0	— 6.7	87	calm	0	0		0	0			0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.55	750.6	30.32	770.1	34	1.1	79	nw.	8	3.6			10 s			0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.62	752.3	30.34	770.6	29.5	— 1.4	83	calm	0	0		0	5 s			0.01	0.3	fair	George Heathcote.
Fredericksburg, Texas	28.53	724.6	30.35	770.9	43	6.1	93	n.	3	1.3			10 s			0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.26	768.6	30.32	770.1	49	9.4	77	ne.	16	7.2			10ks		sw.	0	0	cloudy	E. O'C. MacInerney.
Grand Haven, Michigan	29.64	752.8	30.35	770.9	34.0	1.1	88	calm	0	0			10 s			inap.	inap.	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.37	644.4	30.25	768.3	24	— 4.4	88	ne.	4	1.8		0	0			0	0	clear	Robert O. Lord.
Hatteras, North Carolina	30.23	767.8	30.25	768.3	41	5.0	93	n.	14	6.3		6 k	hz.	n.		0.30	7.6	fair	R. M. Crawford.
Helena, Montana	26.07	662.2	30.45	773.4	14	—10.0	83	calm	0	0		0	0			0	0	clear	N. C. Smith.
Henrietta, Texas	29.37	746.0	30.45	773.4	34	1.1	100	nw.	2	0.9			10 n		nw.	inap	inap.	light snow	J. P. Sherry.
Huron, Dakota	29.05	737.9	30.59	777.0	2	—16.7	45	nw.	4	1.8			0			0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.53	750.0	30.38	771.6	36	2.2	79	w.	2	0.9			10s;fg		w.	0	0	cloudy	O. Schutze.
Indianola, Texas	30.26	768.6	30.29	769.4	51.0	10.6	66	ne.	20	8.9		3 cs	5 k	sw.	ne.	0	0	cloudy	I. A. Reed.
Jacksboro, Texas	29.22	742.2	30.46	773.7	35	1.7	79	n.	2	0.9			10 s			0.01	0.3	cloudy	D. J. Carr.
Jacksonville, Florida	30.23	767.8	30.28	769.1	53	11.7	80	n.	1	0.4			10 s			0	0	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.82	706.6	30.52	775.2	6	—14.4	76	calm	0	0		0	0			0	0	clear	A. Schneider.
Keokuk, Iowa	29.74	755.4	30.45	773.4	31.5	— 0.3	83	w.	8	3.6			10 s		w.	0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.08	764.0	30.10	764.5	68.0	20.0	93	ne.	10	4.5			10 s			0	0	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	30.25	768.3	30.27	768.8	42	5.6	82	ne.	23	10.3		2 c	sk.	w.		0.01	0.3	clear	H. Mc P. Baldwin.
Knoxville, Tennessee	29.29	744.0	30.37	771.4	30	1.1	88	n.	6	2.7		4 6	0			0	0	fair	J. A. Cody.
La Crosse, Wisconsin	29.54	750.3	30.38	771.6	21	— 6.1	70	sw.	5	2.2			10 s			0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.55	750.6	30.51	774.9	28	— 2.2	88	nw.	2	0.9			10 s			0	0	cloudy	A. W. Browne.
Lewiston, Idaho	29.56	750.8	30.44	773.2	33.0	0.6	73	e.	11	4.9		9 cs	0			0	0	cloudy	W. Bell.
Little Rock, Arkansas	30.10	764.5	30.44	773.2	38	3.3	82	n.	6	2.7			10ks		n.	0	0	cloudy	W. U. Simons.
Los Angeles, California	29.84	757.9	30.24	768.1	48	8.9	42	ne	11	4.9		0	0			0	0	clear	T. S. Collins.
Louisville, Kentucky	29.77	756.1	30.37	771.4	39	3.9	65	w.	3	1.3			10 s			0	0	cloudy	L. M Dey.

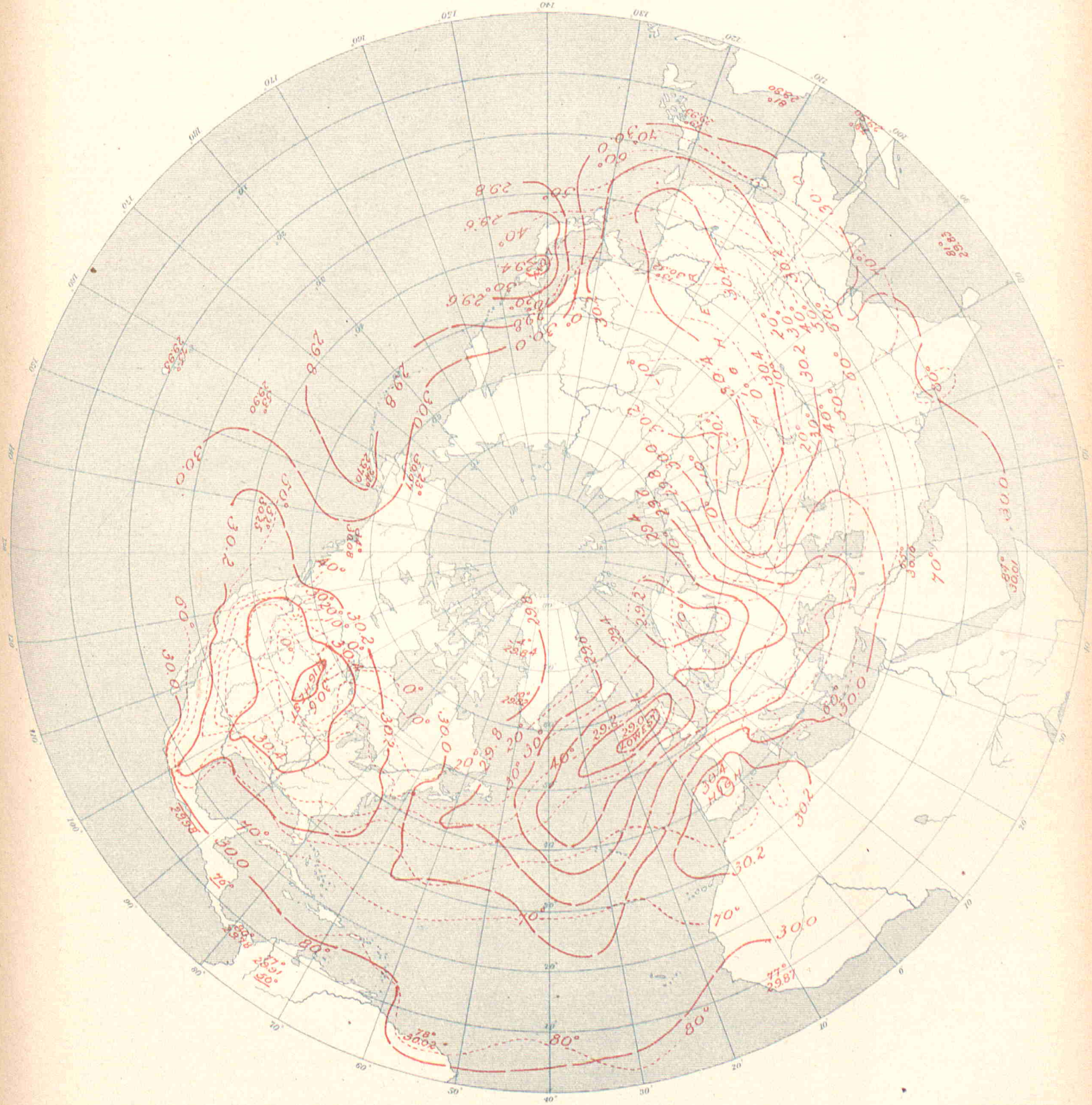
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.57	751.1	30.30	769.6	33	0.6	68	calm	0	0	.....	0	0	.....	.....	0	0	clear	Lewis Duane.
Mackinaw City, Michigan	29.64	752.8	30.34	770.6	32.5	0.3	83	nw.	5	2.2	.....	10 k	0	nw.	.....	0	0	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.22	767.6	30.24	768.1	40.0	4.4	100	n.	9	4.0	.....	0	fg.	.....	.....	0.40	10.2	clear	C. A. Shaw.
Madison, Wisconsin	29.28	743.7	30.38	771.6	27	— 2.8	88	sw.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	.....	.....	.....	.....	22	— 5.6	48	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. Burke.
McKavett, Fort, Texas	28.03	711.9	30.41	772.4	29	— 1.7	88	n.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.53	750.0	30.31	769.9	32	0.0	78	w.	5	2.2	.....	.....	10 s	.....	.....	Inap.	Inap.	cloudy	J. Gilligan.
Memphis, Tennessee	30.00	763.5	30.42	772.7	38	3.3	72	nw.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.55	750.6	30.36	771.1	42	5.6	65	w.	2	0.9	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	W. Line.
Missoula, Fort, Montana	27.05	687.1	30.51	774.9	9	—12.8	41	calm	0	0	.....	0	0	.....	.....	0	0	clear	I. H. Young.
Mobile, Alabama	30.27	768.8	30.31	769.9	40	4.4	89	n.	5	2.2	.....	7 cs	0	sw.	.....	0	0	fair	C. A. Read.
Montgomery, Alabama	30.08	764.0	30.32	770.1	36.3	2.4	100	calm	0	0	.....	0	fg.	.....	.....	0	0	dense fog	J. B. McLaughlin.
Moorhead, Minnesota	29.43	747.5	30.54	775.7	8	—13.3	76	n.	4	1.8	.....	.....	10 s	.....	.....	Inap.	Inap.	cloudy	H. Bessant.
Morgantown, W. Virginia	29.31	744.5	30.38	771.6	37.0	2.8	82	sw.	1	0.4	.....	.....	10 s	.....	.....	0	0	threatening	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.55	598.2	30.18	766.6	8.0	—13.3	100	nw.	16	7.2	.....	.....	fg.	.....	nw.	0.03	0.8	dense fog	B. S. Pague.
Nashville, Tennessee	29.78	756.4	30.38	771.6	35.5	1.9	89	n.	4	1.8	.....	.....	10 ks	.....	nw.	0	0	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.01	762.2	30.13	765.3	28.5	— 1.9	82	nw.	4	1.8	.....	0	sk	.....	.....	Inap	Inap.	clear	J. H. Sherman.
New London, Connecticut	30.09	764.3	30.14	765.5	32	0.0	78	calm	0	0	.....	0	0	.....	.....	0.02	0.5	clear	J. G. Lynch.
New Orleans, Louisiana	30.27	768.8	30.33	770.4	47.0	8.3	71	ne.	7	3.1	.....	9 cs	1 s	nw.	ne.	0	0	cloudy	L. Dunne.
Newport, Rhode Island	30.03	762.7	30.08	764.0	31.2	— 0.4	77	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. McGillivray.
New York, New York	30.00	762.0	30.19	766.8	34	1.1	78	w.	8	3.6	.....	3 cs	1 s	w.	w.	Inap.	Inap.	fair	J. B. Merrill.
Norfolk, Virginia	30.26	768.6	30.29	769.4	38	3.3	73	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	Wm. Davis.
North Platte, Nebraska	27.44	697.0	30.60	777.2	13.6	—10.2	68	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y.	30.18	766.6	30.22	767.6	43.0	6.1	93	s.	6	2.7	.....	.....	10 n	.....	.....	0.51	13.0	light rain	J. Dascomb.
Omaha, Nebraska	29.26	743.2	30.55	776.0	5.2	—14.9	69	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	A. Pollak.
Oswego, New York	29.82	757.4	30.17	766.3	35.0	1.7	73	n.	11	4.9	.....	.....	10 n	.....	nw.	0.07	1.8	light snow	J. G. Linsley.
Palestine, Texas	29.81	757.2	30.39	771.9	39.0	3.9	73	n.	8	3.6	.....	10 ck	0	w.	.....	0	0	cloudy	L. M. Pindell.
Pensacola, Florida	30.28	769.1	30.31	769.9	40.3	4.6	88	n.	3	1.3	.....	5 cs	0	nw.	.....	0	0	fair	M. McGauran.
Philadelphia, Pa.	30.14	765.5	30.25	768.3	37	2.8	72	nw.	7	3.1	.....	0	0	.....	.....	0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.62	447.5	30.28	769.1	—10	—23.3	100	ne.	8	3.6	.....	.....	10 n	.....	ne.	Inap.	Inap.	light snow	H. Hall.
Pioche, Nevada	24.22	615.2	30.40	772.1	22.4	— 5.3	56	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	O. N. Kitchel.
Pittsburg, Pennsylvania	29.50	749 3	30.36	771.1	35.0	1.7	79	nw.	4	1.8	.....	.....	10 s	.....	nw.	0.03	0.8	cloudy	W. A. Reid.
Poplar River, Montana	28.08	713.2	30.44	773 2	.....	.....	.....	nw.	.....	.....	1	0	0	.....	.....	0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.28	769.1	30.28	769.1	53.6	12.0	88	ne.	13	5.8	.....	0	7 s	.....	ne.	0	0	fair	H. B. Boyer.
Port Huron, Michigan	29.60	751.8	30.33	770.4	30.6	— 0.8	88	nw.	2	0.9	.....	.....	10 s	.....	.....	0.06	1.5	cloudy	W. O. Bailey.
Portland, Maine	29.99	761.7	30.04	763.0	30	— 1.1	77	nw.	3	1.3	.....	5 ck	2 s	nw.	n.	Inap.	Inap.	fair	W. W. Eichelberger.
Portland, Oregon	30.20	767.1	30.27	768.8	38.2	3.4	82	ne.	2	0.9	.....	.....	10 n	.....	e.	0.80	20.3	light rain	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	41	5.0	92	n.	.....	.....	2	5 k	0	n.	.....	0.40	10.2	fair	F. S. Coburn.
Prescott, Arizona	24.93	633 2	30.30	769.6	16.4	— 8.7	87	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass.	30.02	762.5	30.04	763.0	33	0.6	78	n.	9	4.0	.....	0	9 s	.....	n.	0.05	1.3	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.14	765 5	30.15	765.8	58.5	14.7	87	ne.	16	7.2	.....	.....	10 ks	.....	ne.	0	0	cloudy	W. J. Evans.
Red Bluff, California	29.94	760.5	30.31	769.9	41	5.0	82	n.	4	1.8	.....	5 c	0	w.	.....	0	0	fair	J. R. Williams.
Rochester, New York	29.52	749.8	30.24	768.1	32.5	0.3	83	nw.	10	4.5	.....	.....	10 k	.....	nw.	0.01	0.3	cloudy	E. W. McGann
Roseburg, Oregon	29.09	754.1	30.26	768.6	43	6.1	93	nw.	1	0.4	.....	.....	10 s	.....	w.	0.04	1.0	threatening	J. J. Nanry.
Sacramento, California	30.23	767.8	30.31	769.9	38.8	3.8	89	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.80	756.9	30.45	773.4	33.7	0.9	94	n	6	2.7	.....	.....	10 s	.....	.....	Inap.	Inap.	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	30.03	762.7	30.07	763.8	—23	—30.6	100	calm	.....	.....	0	0	0	.....	.....	0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.45	748.0	30.41	772.4	10.0	—12.2	80	calm	0	0	.....	10 k	0	n.	.....	0	0	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.54	750.3	30.53	775.7	10	—12.2	89	sw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.99	660.1	30.53	775.7	14	—10.0	51	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. Craig.
San Antonio, Texas	29.64	752.8	30.36	771.1	46.5	8.1	61	n.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	T. J. Kenan.
San Diego, California	30.11	764.8	30.18	766.6	46.6	8.1	29	ne.	7	3.1	.....	0	0	.....	.....	0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.61	752.1	30.34	770.6	37	2.8	82	w.	4	1.8	.....	.....	10 s	.....	w.	0.04	1.0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.15	765.8	30.18	766.6	36.0	2.2	79	w.	13	5.8	.....	0	0	.....	.....	Inap.	Inap.	clear	B. A. Blundon.
San Francisco, California	30.22	767.6	30.29	769.4	46.5	8.1	89	sw.	2	0.9	.....	5c;cs	0	sw.	.....	0	0	fair	N. Gorom.
Santa Fé, New Mexico	23.28	591.3	30.27	768.8	17	— 8.3	64	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	H. U. Jones.
Savannah, Georgia	30.19	766.8	30.29	769.4	46	7.8	80	nw.	8	3.6	.....	.....	10 s	.....	n.	0.03	0.8	cloudy	H. W. Ford.
Shaw, Fort, Montana	26.52	673.6	30.35	770.9	37	2.8	64	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	A. L. Mathews.
Shreveport, Louisiana	30.14	765.5	30.39	771.9	36	2.2	89	e	4	1.8	.....	8 k	0	e.	.....	0	0	cloudy	E. N. Meekins.
Sill, Fort, Indian Territory	29.14	740.1	30.47	773.9	36.5	2.5	84	nw.	1	0.4	.....	.....	10 n	.....	.....	0.01	0.3	heavy snow	W. M. Mattingly.
Silver City, New Mexico	24.43	620.5	30.27	768.8	17.0	— 8.3	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	30.02	762.5	30.08	764.0	34	1.1	83	se.	3	1.3	.....	.....	10 ks	.....	se.	1.26	32.0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.94	760.5	30.44	773.2	28.2	— 2.1	88	e.	2	0.9	.....	6 cs	0	w.	.....	0	0	fair	J. B. Campbell.
Smithville, North Carolina	30.21	767.3	30.25	768.3	38	3.3	100	n.	8	3.6	.....	.....	fg.	.....	.....	0.32	8.1	dense fog	O. Parker.
Spokane Falls, Wash. Ter.	28.29	718.6	30.42	772.7	21.8	— 5.7	65	ne.	1	0.4	.....	.....	10 s	.....	w.	0	0	cloudy	H. Clifford.
Springfield, Illinois	29.71	754.6	30.44	773.2	34	1.1	72	nw.	7	3.1	.....	.....	10 s	.....	nw.	Inap.	Inap.	cloudy	T. B. Jennings.
Springfield, Massachusetts	29.99	761.7	30.13	765.3	26	— 3.3	80	w.	.....	.....	1	3 c	0	w.	.....	Inap.	Inap.	clear	Charles Mayr.
Springfield, Mo.	28.94	735.1	30.47	773.9	32	0.0	83	n.	4	1.8	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	J. B. Marbury.
Starkville, Miss.	29.89	759.2	30.39	771.9	32	0.0	78	calm	0	0	.....	5 c	0	.....	.....	0	0	fair	C. Dill.
Stevenson, Fort, Dakota	28.52	724 4	30.58	776.7	— 1	—18.3	72	nw.	2	0.9	.....	4 ck	0	nw.	.....	0	0	fair	W. Burrows.
Stockton, Fort, Texas	27.25	692.1	30.39	771.9	19	— 7.2	87	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass.	30.04	763.0	30.10	764.5	30.5	— 0.8	73	nw.	13	5.8	.....	5 k	0	w.	.....	Inap.	Inap.	fair	G. Liebmann.
Thomas, Camp, Arizona	27.50	698.5	30.32	770.1	23.5	— 4.7	90	sw.	.....	.....	1	0	0	.....	.....	0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.58	751.3	30.32	770.1	39	3.9	73	w.	2	0.9	.....	.....	1s;fg	.....	.....	0.01	0.3	cloudy	A. Buell.
Tucson, Arizona	27.75	704.8	30.25	768.3	27	— 2.8	77	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. L. Whiteside.
Umatilla, Oregon	30.10	764.5	30.48	774.2	29.5	— 1.4	94	s.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	25.2	— 3.8	53	n.	.....	.....	1	0	0	.....	.....	0	0	clear	D. Brooks.
Vicksburg, Mississippi	30.13	765.3	30.40	772.1	35.0	1.7	79	n.	5	2.2	.....	5 c	0	w.	.....	0	0	fair	James Keneally.
Visalia, California	29.90	759.4	30.28	769.1	33.7	0.9	85	calm	0	0	.....	0	0	.....	.....	0	0	clear	O. D. Stewart.
Washakie, Fort, Wyoming	24.74	628.4	30.51	774.9	— 8.3	—22.4	81	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	T. M. Ambler.
Washington, D. C.	30.18	766.6	30.30	769.6	31.3	— 0.4	88	calm	0	0	.....	0	sk.	.....	.....	0	0	clear	B. M. Pursell.
West Las Animas, Colorado	26.35	669.3	30.51	774.9	24	— 4.4	88	ne.	8	3.6	.....	.....	10 n	.....	ne.	0.03	0.8	light snow	F. H. Brandenburg.
Williamsport, Pa.	29.62	752.3	30.24	768.1	36.5	2.5	65	w.	7	3.1	.....	.....	10 ks	.....	nw.	0.02	0.5	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.21	767.3	30.27	768.8	39	3.9	89	nw.	4	1.8	.....	.....	sk.	.....	.....	0.11	2.8	clear	Samuel A. Haney.
Winnemucca, Nevada	25.92	658.4	30.45	773.4	16	— 8.9	70	ne.	9	4.0	.....	0	0	.....	.....	0	0	clear	J. Grover.
Yankton, Dakota	29.15	740.4	30.58	776.7	9	—12.8	55	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. H. Attield.
Yuma, Arizona	30.10	764.5	30.24	768.1	47.7	8.7	35	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3	.....	.....	50.0	10.0	70	s.	1	0.4	.....	0	1 ks	.....	w.	0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I.	30.00	762.0	30.06	763.5	69.3	20.7	92	calm	0	0	.....	2 c	1 k	sw.	ne.	Inap.	Inap.	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	70	21.1	93	n.	1	0.4	.....	0	0	.....	.....	0	0	fine	Robert Johnston.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	78	25.6	82	e.	.....	.....	2	5 k	1 s	e.	.....	0.060	1.5	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	77	25.0	89	calm	.....	.....	0	3 ck	1 s	calm	calm	0	0	.....	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	75.5	24.2	93	ne.	.....	.....	3	0	1 ks	.....	ne.	0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.64	752.8	29.70	754.4	24	— 4.4	73	sw.	.....	.....	3	.....	8 ks	.....	.....	0.35	8.9	cloudy	W. J. Fisher.
St. Thomas, W. I.	29.96	761.0	30.08	764.0	70	24.4	76	e.	.....	.....	.....	1 c	3 k	.....	e.	0.00	1.5	fine	Aug. Walloe.
York Factory, B. A.	30.00	762.0	30.06	763.5	— 1.5	—18.6	84	n.	10	4.5	.....	0	0	.....	.....	0	0	clear	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	29.86	758.4	74.5	23.6	70	n.			2		2							d. clouds.
H. M. S. Audacious, N. 4° 44′, E. 113° 07′	29.80	756.9	81	27.2	91	nne.			1		10	ene.				3	ne.	showery
H. M. S. Beacon, Lake Timsah, Egypt			60	15.6	88	wsw.			1							1	wsw.	blue sky.
H. M. S. Boadicea, Simons Bay, Cape Colony	29.99	761.7				ese.			3-4									squally.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.16	766.1	65	18.3	83	sse.			2		8	wsw.						d. clouds.
H. M. S. Champion, Singapore, Malay peninsula	29.90	759.4	79	26.1	86	nw.			1		10					1	nnw.	overcast.
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.56	776.2	28	— 2.2		nnw.			2		0							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	30.18	766.6	43.5	6.4	87	w.			1-3		4	nne.						squally.
H. M. S. Constance, Madeira, Id			64	17.8														
H. M. S. Curacoa, Yokohama, Japan	29.48	748.8	45.5	7.5	76	w.			1		0							blue sky.
H. M. S. Dido, N 22° 05′, W. 62° 16′	30.13	765.3	75	23.9		ese.			2		3	e.				2	e.	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	30.02	762.5	65	18.3	68	calm			0		2							d. clouds.
H. M. Dock Yard, Bermuda, W. I	29.95	760.7	60	15.6	88	ene.			1-2		10	ene.						raining.
H. M. S. Eclipse, N. 8° 33′ E. 81° 13′			76	24.4		ne.			1		10							raining.
H. M. S. Gannet, S. 29° 56′, W. 71° 20′	30.06	763.5	64	17.8	78	calm			0		0							blue sky.
H. M. S. Heroine, N. 25° 51′ W. 21° 10′	30.15	765.8	68	20.0	79	ese.			2		2	calm				1	ese.	d. clouds.
H. M. S. Iron Duke, N. 6° 17′, E. 86° 56′	29.83	757.7	81	27.2	95	e.			2		3	e.				1	n.	d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	30.27	768.8	6913	20.7	77	calm			0		3							d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	30.01	762.2	67	19.4		calm			0									d clouds.
H. M. S. Magpie, N. 33° 43′, E. 132° 12′	30.08	764.0	39.5	4.2	65	nw.			6-7		6					4	wnw.	showery.
H. M. S. Rambler, Port Belgrano, La Plata, S. A	29.70	754.4	67	19.4	94	se.			0		10	s.						raining.
H. M. S. Starling, S. 6° 36′, W. 12° 14′			76.5	24.7	96	ese.			3		6	ese.				2	sse.	d. clouds.
H. M. S. Superb N. 36° 45′, E. 35° 45′	29.92	760.0	63	17.2	52	wsw.			2		2	nw.						d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.97	761.2	65	18.3	100	calm			0		10							overcast
H. M. S. Sylvia, Cordova Inlet, Patagonia	29.94	760.5	47	8.3	85	wnw.			1-3		8							squally.
H. M. S. Tourmaline, Bombay, India	29.97	761.2				nnw.			1		0							blue sky
H. M. S. Woodlark, Shat-el Arab river	30.06	763.5	64.5	18.1	52	nw.			4-6		0							squally.
H. M. S. Zephyr, Chee-foo, China	30.42	772.7	21.5	— 5.8		nnw.			4-5		1	w.				1	n.	blue sky.
Portuguese Naval.																		
Tamega, Macao, China	30.21	767.4	63.7	17.6	46	nne.			3		0							blue sky.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.17	766.3	49	9.4	71	n.	3	1.3			10		n.	0	0			cloudy.
Navy Yard, Portsmouth, N. H	30.06	763.5	26	— 3.3	?	nw.	0	2.7			10		n.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	29.42	747.3	44.5	6.9	64	w.			2		0			0.02	0.5			clear.
Adams, Sitka, Alaska *†	30.12	765.0	34	1.1	90	nnw.			1		10		ssw.					cloudy.
Alaska, Mare Island, Cal	30.22	767.6	46	7.8	85	calm			0		0			0	0			clear.
Alliance, N. 19° 58′, W. 61° 10′	30.04	763.0	77	25.0	100	ene.			2-3		2			0	0	sm'h		clear.
Ashuelot, Shanghai, China	30.59	777.0	30	— 1.1	89	n.			2		5		nw.					fair.
Brooklyn, Montevideo, Uruguay	29.74	755.4	76	24.4	100	nnw.	9	4.0			0			0	0	sm'h		clear.
Colorado, New York, N. Y	30.26	768.6	36	2.2	90	nw.	5	2.2			8		calm	0	0			cloudy.
Enterprise, Norfolk, Va	30.31	769.9	39	3.9	81	nnw.			2		2		nw.					fair.
Essex, Callao, Peru	29.95	760.7	66	18.9	90	nw.			1		10					sm'h	wnw	overcast
Franklin, Norfolk, Va	30.28	769.1	39	3.9	81	nnw.	7	3.1			2		nw.	0	0			fair.
Galena, Montevideo, Uruguay	29.76	755.9	76	24.4	86	nw.			2		0					sm'h		clear.
Hartford, Valparaiso, Chili*	29.83	757.7	65	18.3	94	calm			0		0			0	0	sm'h		clear.
Independence, Mare Island, Cal	30.33	770.4	43	6.1	91	e.			3		5			0	0			fair.
Iroquois, Callao, Peru	29.96	761.0	66	18.9	90	calm			0		10							overcast.
Jamestown, Boston, Mass	30.05	763.3	29	— 1.7	67	nnw.			2		5		calm	0	0			fair.
Juniata, Fayal, Azores Islands *†	29.50	749.3	63	17.2	100	s.			5		10		s.	h'vy	h'vy	r'gh	s.	threatening.
Kearsarge, N. 19° 05′ W. 59° 48′	30.06	763.5	76	24.4	100	ese.			4		5		se.			sm'h		fair.
Lackawanna, S. 5° 15′, W. 101° 20′*	29.87	758.7	74	23.3	76	e.			4		10		se.			mod	se.	cloudy.
Lancaster, Genoa, Italy*	29.85	758.2	58	14.4	87	calm			0		10		calm			sm'h		misty.
Michigan, Erie, Pennsylvania	30.21	767.3	34	1.1	69	wnw.			2		10		w.					cloudy.
Minnesota, New York, N. Y	30.18	766.6	36	2.2	80	nw.	12	5.4			8							clear?
Monocacy, Nagasaki, Japan	30.17	766.3	36	2.2	80	nnw.			2		10		nw.					cloudy.
New Hampshire, Newport, R. I	30.11	764.8	33	0.6	89	nw.			3		0					sm'h		clear.
Nipsic, Lisbon, Portugal*	30.31	769.9	46	7.8	92	ene.			3		10					sm'h		foggy.
Onward, Callao, Peru†	30.07	763.8	64	17.8	94	wnw.			1		10		n.			long	w.	cloudy.
Palos, Tientsin, China*	30.44	773.2	15	— 9.4	100	sw.			1		0							clear.
Pensacola, N. 8° 66′, W. 79° 36′*	29.78	756.4	80	26.7	78	n.			4		2		n.	0	0	slight	n.	clear.
Powhatan, Boston, Mass	30.06	763.5	28	— 2.2	88	nnw.			1		5							fair.
Quinnebaug, Genoa, Italy*	29.89	759.2	57	13.9	75	calm			0		10		calm			sm'h	s.	cloudy.
Ranger, Acapulco, Mexico	29.96	761.0	76	24.4	81	calm			0		2		calm			sm'h		clear.
Richmond, N. 30° 05′, E. 126° 07′*	30.27	768.8	42	5.6	91	nw.			7		8		nw.	0	0	r'gh	nw.	cloudy.
Saratoga, New York, N. Y	30.12	765.0	35	1.7	80	wnw.			2		5		nw.	0	0	sm'h		fair.
St. Louis, League Island, Pa	30.47	772.4	32	0.0	100	nw.			2		2		nw.	0	0			clear.
Tennessee, N. 19° 12′, W. 60° 33′	30.09	764.3	78	25.6	86	e.	15	6.7			5?			0	0	sm'h		clear.?
Vandalia, N. 20° 11′, W. 61° 41′*	30.07	763.8	76	24.4	77	ene.			2		8		calm			sm'h		fair.
Wabash, Boston, Mass	30.08	764.0	28	— 2.2	76	nw.	3	1.3			2		nw.	0	0			fair.
Wachusetts, Mare Island, Cal*	30.21	767.3	44	6.7	84	e.			3		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.45	773.4	43	6.1	91	nw.			2		10		nw.	0	0			cloudy.
Yantic, N. 18° 47′, W. 60° 43′	30.18	766.6	75	23.9	85	e.			3		10					sm'h		cloudy.
Merchant Marine.																		
S. S. Grecian, Harve, France*	29.79	756.7	55	12.8	93	wsw.			5		10			24 h'r	24 h'r			overcast.
S. S. Nova Scotian, N. 52° 16′ W. 34° 15′	29.22	742.2	40	4.4		nnw.			4		8		wsw.			long	nne.	cloudy.
S. S. Scandinavian, N. 54° 44′, W. 17° 07′	28.95	735.3	50	10.0		sw.			9		9		sw.	sh'rs	sh'rs	high	ssw.	showery.
S. S. British Crown, N. 45° 32′, W. 41° 28′†	29.37	746.0	49	9.4		nnw.			6		9		nnw.	3 h'r	3 h'r	h'vy	nw.	cloudy.
S. S. British Prince, N. 51° 46′ W. 24° 17′ †	29.33	745.0	48	8.9		wnw.			8		4?		wsw.	0	0	h'vy	sw.	cloudy.?
S. S. Indiana, Philadelphia, Pa			34	1.1	90	w.			3		2		w.					fine.
S. S. Lord Gough, N. 41° 57′, W. 64° 20′	29.86	758.4	33	0.6		nnw.			4		10			snow	snow	sm'h		snowing.
S. S. Ohio, Liverpool, England	29.40	746.7	54	12.2	93	sw.			4		5		sw.					misty.
S. S. Pennsylvania, N. 51° 21′ W. 13° 58′†	29.46	748.3	55	12.8		sw.			5		8		sw.			long	sw.	hazy.
S. S. Jason, N. 40° 34′, W. 68° 13′	30.08	764.0	42.8	6.0		nw.			5		7k					4	nw.	gloomy.
S. S. Bolivia, N. 40° 20′, W. 70° 55′*†	30.10	764.5	40	4.4	91	nw.			4		0			0	0	sm'h		clear.
S. S. Dorian, N. 36° 31′, W. 1° 56′*	30.16	766.1	62	16.7		wsw.			3		6		n.	0	0	sm'h		fair.
S. S. Galatia, N. 36° 07′, W. 8° 12′					?	w			1		7		n;w.	0	0	sm'h	wsw.	hazy.
S. S. Utopia, N. 33° 12′, W. 25° 20′†	30.16	769.1	69	20.6	80	s.			6		7		s.	0	0	hv'y	ssw.	squally.
S. S. Ailsa, N. 17° 58′, W. 76° 40′†	30.10	764.5	79	26.1	100	ene.			2		10		ene.	0	0	sm'h		fair.
S. S. Antillas, N. 25° 52′, W. 69° 20′			78	25.6		sw.			1		1		sw.			sm'h	sw.	fine.
S. S. Carroll, Halifax, N. S†	30.02	762.5	81	27.2		e.			2		5?		e.	2 h'r	2 h'r	2	e.	cloudy.?
S. S. Auckland, S. 50° 26′, W. 153° 40′	29.95	760.7	26	— 3.3		n.			3		10		n.	0	0			cloudy.
S. S. City of Agra, S. 52° 37′, W. 148° 10′	30.17	766.3	53	11.7	93	sw.			4		10							misty.
S. S. Commewyne, N. 39° 37′, W. 38° 40′	29.95	760.7	48	8.9	100	w.			5		10							misty.
S. S. Caldew, S. 9° 23′, E. 109° 39′	29.49	749.0	59.2	15.1	82	wnw.			5		5							showery.
S. S. Gordon Castle, N. 12° 42′, E. 47° 03′	29.92	760.0	80	26.7		sse.			3		3							d. clouds.
Inchkeith, S. 2° 10′, E. 89° 51′	30.01	762.2	83.5	28.6	64	ene.			2		1							blue sky.
S. S. Mexico, N. 36° 49′ W. 122° 16′†	29.89	759.2	81.6	27.6	91	ene.			2		2							d. clouds.
S. S. Gallia, N. 48° 58′, W. 28° 12′	30.26	768.6	54	12.2	61	ne.			2		0					long	wnw.	clear
S. S. Scythia, N. 49° 20′, W. 29° 03′	29.30	744.2	58	14.4	82	w.			3		2		w.	light	light	high	w.	fine.
S. S. Colina, St. Johns, N. F†	29.37	746.0	56	13.3		se.			1		4		var.	1 h'r	1 h'r	h'vy	ssw.	light haze.
France N. 48° 27′, W. 30° 42′	29.72	754.9				wnw.			1		2		nw.	0	0			clear.
S. S. Labradore, N. 41° 20′, W. 73° 51′*†	29.32	744.7	55.4	13		se.			3	ck	0	sse.					se.	
S. S. Arizona, N. 50° 15′, W. 33° 25′	30.32	770.1	37.4	3.0		wnw.			6		5		w.	0	0	sm'h		fair.
	29.32	744.7	47	8.3		nne.			3		8		nw.	6 h'r	6 h'r	long	n.	cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																	
S. S. Wisconsin, N. 47° 57′ W. 39° 38′	29.28	742.4	48	8.9		nne.			6		8		ne.	4 h'r	4 h'r	cross	ne.	showery.
S. S. Wyoming, New York, N. Y	30.16	766.1	29	— 1.7		sw.			1		1		wsw.	0	0			fair.
S. S. Bohemia, N 48° 24′, W. 19° 32′†	29.70	754.4	56	13.3		ssw.			5		10		sw.	0	0	h'vy	ssw.	squally.
S. S. Frisia, N. 46° 30′, W. 37° 58′	29.21	741.9	50	10.0		nne.			8		8		ne.	3 h'r	3 h'r	h'vy	n	drizzling.
S. S. Geilert N. 51° 00′, W. 15° 46′	29.42	747.3	60	15.6		sw.			6		6		wsw.	5 h'r	5 h'r	long	sw.	stormy.
S. S. Silesia, N. 41° 04′, W. 68° 17′†	30.00	762.0	27.5	3.1	93	w.			4		7		nnw.	4 h'r	4 h'r	2	nnw.	d. clouds.
S. S. Vandalia, N. 41° 49′, W. 57° 40′	29.90	759.4	42.8	6.0	97	ene.			2		10		ene.	0	0			cloudy.
S. S. Archimedes, N. 30° 37′, W. 17° 11′	30.18	766.6				se.			3		10		se.	0	0	light	se.	overcast.
S. S. Hevelius, Liverpool, Eng *†	29.54	750.3	43	6.1		sw.			6		9		ssw.	3 h'r	3 h'r			cloudy.
S. S. Sirius, Santos, Brazil *	29.97	761.2				s.			3		4		s.	1 h'r	1 h'r			clear.
S. S. Bulgarian, N. 51° 42′ W. 22° 12′ *	29.37	746.0				wsw.			6		10		w.	3 h'r	3 h'r	high	w.	
S. S. Virginian, N. 41° 28′, W. 65° 10′*	29.92	760.0	38	3.3		nne.			3		8		ne.	snow	snow	sli't	sw.	clearing.
S. S. Colorado, Galveston, Texas†	30.28	769.1	45	7.2		n.			5		8		n.	0	0			cloudy.
S. S. Rio Grande, Matanzas, Mexico†	30.05	763.3	79	26.1		ne.			2		1		ne.	0	0			
S. S. San Marcos, off Jupiter Light, Fla			68	20.0		nw.			4		5		wsw.			sm'h	ne.	fine.
S. S. Archimede, N. 36° 12′, W. 16° 03′†	30.24	768.1	67	19.4	69	sse.			3		6		se.	0	0	sm'h	s.	cloudy.
S. S. John Hopkins, Baltimore, Md *†	30.30	769.6	40	4.4		n.			2		4		ne.	0	0			fair.
S. S. Glenfyne, Para Rirer, Brazil *†	29.58	751.3				ne.			2		2		ne.	0	0			clear.
S. S. Brooklyn, N. 50° 55′, W. 41° 01′	29.36	745.7	42	5.6		n.			4				wnw.			5	ne.	cloudy.
S. S. Chalmette, New York, N. Y†	30.11	764.8	44	6.7		wnw.			2		1		nnw.	3 h'r	3 h'r			clear.
S. S. Lone Star, N. 28° 35′, W. 88° 30′ †	30.19	766.8	63	17.2		ne.			4		10			0	0	sm'h		cloudy.
S. S. Denmark, N. 43° 31′, W. 57° 24′†	29.77	756.1	32	0.0		var.			1		8		nnw.	shr's	shr's	mod.	nw.	raining.
S. S. Erin, N. 51° 05′, W. 19° 54′			50	10.0		sw.			9		8		sw.	18 h'r	18 h'r	h'vy	ssw.	fine.
S. S. Helvetia, N. 47° 20′, W. 45° 00′	29.47	748.5	45	7.2		nne.			6		5		nne.	3 h'r	3 h'r	long	ne.	fine.
S. S. The Queen, N. 48° 30′, W. 30° 10′*.	29.43	747.5	52	11.1		ssw.			3		2		ssw.	shr's	shr's	h'vy	ssw.	squally.
S. S. City of Alexandria, Havana, Cuba, W. I †	30.32	770.1	74	23.3		calm			0		4		ne.	2 h'r	2 h'r			fair.
S. S. City of Merida, N. 34° 10′, W. 76° 15′						ene.			4		5?		nne.	0	0	light	ne.	cloudy.?
S. S. City of Chester, N. 46° 14′, W. 48° 40′			34	1.1		nne.			2								ne.	hazy.
S. S. Braunschweig, N. 2° 06′, W. 30° 07′	29.97	761.2	80.0	26.7	87	ene.			4		7		e.	10 h'r	10 h'r	mod.	e.	rainy.
S. S. Donau, N. 49° 50′, W. 4° 46′	29.83	757.7				sw.			6		10		sw.	12 h'r	12 h'r	cross	sw.	misty.
S. S. Oder, N. 45° 27′, W. 50° 01′	29.81	757.2	33.8	1.0		nnw.			3		8		nnw.	0	0	long	ne.	cloudy.
S. S. Rhein, N 45° 04′ W. 49° 51′	29.87	758.7				ne.			2		8		ene.	snow	snow	long	ne.	cloudy.
S. S. Salier, N. 49° 39′, W. 10° 27′	29.74	755.4	55.4	13.0		wsw.			6		10		wsw.	1 h'r	1 h'r	h'vy	wsw.	foggy.
S. S. Belgic, San Francisco, Cal †	30.10	767.1	53	11.7	73	se.			3		7		se.	0	0			misty
S. S. Gaelic, N. 35° 13′, W. 158° 16′ *	29.90	759.4	53	11.7	86	w.			6		5		w.			con.	w.	showery.
S. S. Oceanic, N. 30° 44′. E. 132° 25′ *	30.02	762.5	48	8.9	92	nw.			7		6		sw.			4	ne.	fine.
S. S. Mississippi, Seattle, Wash. Ter*†	30.32	770.1	46	7.8	84	s.			1		10		sw.					cloudy.
S. S. Willamette, Seattle, Wash. Ter.†	30.34	770.6	43	6.1	92	s.			2		10		s.	0.06	1.5			overcast.
S. S. Oregon, Portland, Oregon†	30.23	767.8	50	10.0	93	calm			0		10							raining.
S. S. Ancon, N. 35° 26′, W. 121° 08′†	30.19	766.8	52	11.1	66	e.			2		0					long	sw.	clear.
S. S. City of Chester, San Francisco, Cal *†	30.28	769.1	47	8.3	85	calm			0		5							fair.
S. S. Dakota, Tacoma, Wash. Ter.†	30.18	760.6	44	6.7	68	se.			2		10		se.	12 h'r	12 h'r			cloudy.
S. S. State of California, San Francisco, Cal *†	30.20	767.1	54	12.2		calm			0		0			0	0			clear.
S. S. City of New York, Sydney, N. S. W †	30.13	765.3	73	22.8	58	calm			0		0			0	0			clear.
S. S. City of Pekin, N. 42° 10′, W. 138° 00′†	30.35	770.9	52	11.1	54	e.			2		0			0	0	large	w.	clear.
S. S. City of Rio de Janeiro, N. 27° 59′, W. 115° 32′†	30.10	764.5	62	16.7	61	nne.			3		0			0	0	mod.	cross	clear.
S. S. City of Sydney, N. 19° 12′, W. 158° 31′†	30.05	763.3	75	23.9	60	e.			2		5		ne.	0	0	mod.	ne.	hazy.
S. S. City of Tokei, N. 34° 27′, E. 139° 40′ †	29.45	748.0	42	5.6		n.			5		5		s.	light	light	sm'h	s.	dense fog.
S. S. Colima, Panama Panama†	29.98	761.5	78	25.6	91	nw.			2		4		calm	0	0			clear.
S. S. San José, N. 15° 48′, W. 94° 52′†	29.98	761.5				nne.			2	c	0	ene.		0	0	long	ese.	clear.
S. S. Zealandia, Sydney, N. S. W	30 22	767.0	73	22.8	50	calm			0		1		se.			mod.	e.	fine.
S. S. Claudius, N. 27° 15′, W. 74° 30′ †	30.19	766.8				n.			6		8		n.	sq 'lls	sq 'lls	short	n.	cloudy.
S. S. Valencia, La Guayra, Venezuela†	30.02	762.5	77	25.0	83	calm			0		3		calm	0	0	light	ne.	fine.
S. S. Belgenland, N. 43° 29′, W. 52° 30′			36	2.2	80	calm			0		0			0	0	r'gh	ene.	squally.
S. S. Nederland, N. 50° 08′, W. 16° 54′			54	12.2		sw.			4		10		sw.	10 h'r	10 h'r	r'gh	sw.	overcast.
S. S. Rhyniand, Antwerp, Belgium	29.59	751.6	49	9.4	71	sw.			7		10		sw.	24 h'r	24 h'r			rainy.
S. S. Waesland, N. 41° 20′, W. 64° 40′	29.97	761.2	36	2.2	90	n.			4		10		nw.	snow	snow	light	n.	light snow.
S. S. P. Oaland, 46° 20′, W. 38° 14′	29.32	744.7	52.3	11.3	90	n.			6		7		nne.			6	n.	squally.
S. S. W. A. Scholten, N. 49° 49′. W. 5° 23′	29.87	758.7	54.8	12.7	97	sw.			6		10		sw.	6 h'r	6 h'r	high	w.	
S. S. State of Florida, Glasgow, Scotland	29.24	742.7	50	10.0		wnw.			3		10			sleet	sleet			overcast.
S. S. State of Indiana, N. 40° 57′, W. 64° 36′†	29.54	757.9	38	3.3		nnw.			5		8		w.	2 h'r	2 h'r	sm'h		snowy.
S. S. Hekla, N. 41° 20′, W. 65° 00′*	29.85	758.3	41.4	5.2		nnw.			3		2		nw.	snow	snow	sm'h		snowy.
S. S. Iowa, N. 47° 51′, W. 35° 21′*†	29.36	745.7	52	11.1		n.			4		8		nnw.	1 h'r	1 h'r	long	con.	cloudy.
S. S. Plantyn, N. 44° 30′, W. 54° 22′									4		4		wnw.	0	0	mod	wnw.	clear.
S. S. Britannic, N. 47° 16′, W. 46° 51′ †	29.67	753.6	38	3.3		n.			4		5		n.	0	0	mod.	e.	fair.
S. S. Celtic, N. 47° 22′, W. 34° 34′†	29.27	743.4	55	12.8		nne.			6		10		ne.	sh'rs	sh'rs	h'vy	nne.	showery.
S. S. Lepanto, N. 42° 33′, W. 61° 10′*	29.88	758.9	36	2.2		nnw.			4		8		n.	sleet	sleet			sleeting.
S. S. Marengo, N. 49° 34′, W. 10° 05′	29.78	756.4				sw.			7		10		sw.	16 h'r	16 h'r	r'gh	sw.	rainy.
S. S. Salerno, N. 49° 38′, W. 9° 34′ *	29.69	754.1	56	13.3		w.			6		10		w.	3 h'r	3 h'r	r'gh	w.	raining.
S. S. Aries, N. 39° 40′, W. 72° 55′*†	30.10	764.5				nw.			5		0			0	0	mod.	nw.	
S. S. Catherine Whiting, Philadelphia, Pa†	30.26	768.6	80	26.7		nw.			1		0			0	0			
S. S. Saxon, Boston, Mass†	30.03	762 7	29	— 1.7		nw.			5		0							fine.
MISCELLANEOUS																		
Bk. Adelaide, N. 28° 15′, W. 47° 55′*†	30.10	764.5	70	21.1		nnw.			3				nne.	0	0	mod.	n.	clear.
Bk. Alpha, N. 20° 20′, W. 33° 30′ †	30.03	762.7	78	25.6		sw.			1		1		s.	0	0	sm'h		clear.
Schr. Annie Lewis, Cedar Keys, Fla†	30.29	769.4	58	14.4		ne.			1		10			0	0			misty.
Bk. Anna Thormann, S. 33° 00′, E. 29° 14′*	30.20	767.1	72.9	22.7	74	se.			1		1 k		se.	0	0	mod.	sw.	clear.
S. S. Antonio Lopez, Cadiz, Spain *	30.32	770.1	49.5	9.7	93	ssw.			3		10			0	0			misty.
Bk. Aquidneck, N. 3° 33′, W. 44° 02′*†	30.10	764.5	86	30.0		ese.			2				se.	0	0	light	ne.	clear.
Bgt. Arthur, N. 5° 27′, W. 19° 24′*†	30.00	762.0				ene.			2		0			0	0		nne.	
Schr. Anna A. Holton, N. 35° 21′, W. 90° 52′†	30.13	765.3	76	24.4		ne.			5		8		ne.	0	0	mod.	ne.	fair.
Bg. Belle of the Bay, Galveston, Texas						nne.			3		0			0	0			clear.
S. S. Burswell, N. 25° 18′, W. 84° 55′*†	30.15	765.8	72	22.2		ene.			3		7		e.	0	0	sli't	con.	fine.
Bk. Champion, N. 35° 33′, W. 73° 05′ –			58.0	14.4		n.			5		5		nnw.	driz	driz	mod.	nnw.	fair.
Bg. Clara M. Goodrich, Key Francis, W. I *†	30.00	762.0				e.			1		5		e.	0	0			fair.
Schr. C. R. Flint, N. 36° 00′, W. 75° 08′			44	6.7		n.			3		4		nne.	2 h'r	2 h'r	r'gh	nne.	clear.
Bkt. David Preston, Pensacola, Fla			58.0	14.4		nne.					10		nne.	0	0			
Bk. E. L. Pettingill, S. 11° 39′, W. 125° 40′ *†	30.00	762.0	78	25.6		e.			4				e.	0	0	sm'h	ese.	
Schr. Edith R. Seward, N. 33° 51′, W. 78° 04′*†	30.28	769.1	45	7.2		nnw.			1		7		n.	4 h'r	4 h'r	r'gh		cloudy.
S. S. E. J. Spicer, Liverpool, Eng *	29.44	747.8	50	10.0		sw.			5		10		sw.	18 h'r	18 h'r			overcast.
Bk. E. D. Bigelow, Verdon, France *†	30.12	765.0				wsw.			6		10		wsw.					gloomy.
Bk. Essex, S. 6° 49′, E. 46° 50′ *†	29.88	758.9	84	28.9		sse.			2					rain	rain		sse.	
Schr. F. E. McDonald, Belfast, Maine †	30.05	763.3				nnw.			1					0	0			threatening.
S. S. Foscolia, N. 42° 44′, W. 39° 02′						n.			9		5		n.	12 h'r	12 h'r	high	nnw.	fair.
Bk. Freya, Matanzas, Cuba	29.53	750.0	72	22.2		ne.			1		1		ne.	2 h'r	2 h'r			fair.
Bg. George, N. 17° 50′, W. 66° 26′ *†	30.12	765.0				ene.			5		2		e.	0	0	sm'h		fair.
S. George Stetson, N. 36° —′, W. 47° —′ *†	30.00	762.0	62	16.7	88	nw.			6		4?		nw	0	0	h'vy	nw.	cloudy.?
Bk. Gronsvaer, S. 36° 22′, E. 175° 25′ †	29.76	755.8	66.2	19.0		nw.			4		4		nw.	0	0	mod.	ne.	
Bk. Godeffroy, S. 41° 30′, W. 77° 40′†	30.16	766.1	53.1	11.7	75	s.			3		10		s.	0	0	mod.	s.	cloudy.
Bk. Great Surgeon, S. 27° 45′, E. 53° 09′ *†	30.12	765.0	81	27.2		nw.			4		4		wsw.	¼ h'r	¼ h'r	long	sw.	fair.
Bk Hattie G. McFarland, N. 23° 00′, W. 58° 17′ †	30.23	767.8	74	23.3		e.			4		3		e	3 h'r	3 h'r	long	ene.	
S. Hedwig, N. 39° 36′, W. 72° 29′	30.16	766.0	40.6	4.8	85	nw.			4		6		nw.	0	0	short	nw.	fine.
Schr. Isabel Alberto, Hoboken, N. J.†	30.26	768.6				wnw.			4		1		w.	sli't	sli't			clear.
Schr. Jennie N. Huddell, Baltimore, Md †	30.21	767.3				nnw.			1		2			0	0			clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bk. Joseph A. Ropes, S. 15° 27′, E. 46° 15′ *†	29.95	760.7	86	30.0	72	nw.			1		8			0	0	sm'h		cloudy.
Bkt. Josephine, N. 18° 01′, W. 30° 58′†	30.08	764.0	79	26.1	66	se.			2		0			2 h'r	2 h'r	mod	e.	hazy.
S. S. J. W. Wilson, Port Eads, La.†	30.21	767.3	53	11.7		nne.			2		0			0	0			clear.
Light House Tender, Laurel, Key West, Fla†	30.09	764.3	70	21.1		ene.			1		9		ne.	0	0	sm'h		cloudy.
Bg. Lilian, N. 33° 30′, W. 70° 15′†	30.17	766.3	63	17.2		nnw.			5		8		n.	5 h'r	5 h'r	mod.	ssw.	threatening.
Bk. Louise Adelaide, Campeachy Bay, C. A						e.			1		10		se.	3 h'r	3 h'r	short	ne.	showery.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.04	763.0				calm			0		0			0	0			clear.
S. S. Madrid, N. 51° 45′, E. 3° 54′ *†	29.58	751.3	48	8.9		sw.			6–8		10			14 h'r	14 h'r	sm'h		misty.
Schr. Minnie A. Bonsall, Jacksonville, Fla†	30.28	769.1	62	16.7		n.			1									cloudy.
S. Minnie N. Gerow, N. 27° 40′, W. 60° 17′ *†	30.05	763.3				wsw.			3		2		nw.			mod.	nw.	fine.
S. M. P. Grace. S. 53° 42′, W. 89° 20′ *†	29.40	746.7	49	9.4		nnw.			8		10		nnw.	rain	rain	mod.	wnw.	raining.
Bg. Myrtle, Clements Port, Nova Scotia*†	29.85	758.2				n.			3		10		n.	0	0			fair.
Bg. O. C. Clary, Miragoane, Hayti, W. I.*†	30.08	764.0	86	30.0	92	calm			0		1		e.	0	0			
Bk. Ottawa, N. 38° 05′, W. 14° 40′*	30.15	765.8	59	15.0		sw to s			3		7		sw.	½ h'r	½ h'r	sm'h	w.	cloudy.
S Paramita, San Francisco, Cal			48	8.9		n.			2					0	0			
Bk. Pilgrim, N. 32° 40′, W. 73° 50′*†	30.10	764.5				nne.			6		57		nne.	1 h'r	1 h'r	chop	nne.	cloudy.
S. S. Radnorshire, N. 32° 42′. E. 134° 35′*†	29.90	759.4				nw.			8		0			0	0	h'vy	nnw.	clear.
S. S. Raleigh, N. 29° 50′, W. 73° 30′*†	30.01	762.2	66	18.9		n.			4		5		ene.	3 h'r	3 h'r	mod.	nw.	
Schr. S. B. Hubbard, N. 32° 42′, W. 79° 04′†	30.32	770.1	51	10.6		nw.			5		8		nw.	0	0	long	w.	clearing.
Bk. Southern Belle, N. 38° 45′, W. 16° —*†	30.15	765.8	60	15.6		ssw.			4		5		w.	0	0	mod.	wsw.	fair.
S. S. Strathleven, N. 17° 50′, E. 113° 42′	29.99	761.7	72.5	22.5	97	ne.			6		10		ne.	0	0	6	ne.	overcast.
Bk. Sunbeam, N. 40° 13′, W. 41° 55′	29.57	751.1	58	14.4	82	wnw.			7		8		wnw	2 h'r	2 h'r	cross	var.	cloudy.
U. S. F. C. S. S. FishHawk, Washington, D. C†.	30.37	771.4	36	2.2	80	calm			0		2		calm	0	0			fair.
Bk. Vincenzo Accame, N. 30° 20′, W. 62° 47′†	30.10	764.5	69.8	21.0		sw.			4		0			0	0		n.	clear.
Schr. Viola Reppard, New York, N. Y†	30.11	764.8	50	10.0		w.			2		5		nw.	0	0			fair.
Bk. Wandering Jew, Montevideo, Uruguay †	29.73	755.1	73	22.8		nw.			5		2		nw.	0	0			clear.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.04	763.0				calm			0		0					sm'h	s.	fair.

International Chart I. December 27, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA,

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 28, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.26	768.7	60.1	15.6	83	n.	.....	.....	1	.....	1	.....	.....	0	0	very fair.....	Malaterre.
Algiers	.....	.....	30.25	768.4	58.6	14.8	87	sw.	.....	.....	1	.....	8	.....	.....	0	0	very cloudy	Thève.
La Calle	.....	.....	30.26	768.7	64.0	17.8	74	sw.	.....	.....	1	.....	3	.....	.....	0	0	pretty fair...	Fonfréde.
Tunis	.....	.....	30.24	768.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.30	769.5	59.4	15.2	87	w.	.....	.....	2	.....	0	.....	.....	0	0	clear.....	Pérès.
Tebessa	.....	.....	30.32	770.0	57.6	14.2	67	sw.	.....	.....	1	.....	1	.....	.....	0	0	very fair.....	Dognon.
Geriville	.....	.....	.....	.....	58.6	14.8	33	sw.	.....	.....	0	.....	3	.....	.....	0	0	pretty fair...	Louchamp.
Laghouat	.....	.....	30.35	770.9	57.9	14.4	38	nw.	.....	.....	1	.....	2	.....	.....	0	0	fair.....	Abraham.
Biskra	.....	.....	30.35	770.8	64.0	17.8	32	nw.	.....	.....	1	.....	4	.....	.....	0	0	Cloudy..	Malau.
Australian.																			
Melbourne, Victoria	29.86	758.4	29.95	760.7	61.0	16.1	81	ssw.	5	2.2	.....	.....	3	.....	.....	0	0	fine.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.35	745.6	29.90	759.4	57.6	14.2	61	nw.	.....	.....	6	.....	10	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.88	733.5	29.66	753.3	39.6	4.2	92	w.	13.0	5.8	.....	.....	10	.....	.....	0.327	8.3	.....	Dr. Wierzbicki.
Eperies	28.82	732.0	29.72	755.0	35.2	1.8	95	s.	.....	.....	2	.....	10	.....	.....	0.311	7.9	.....	Julius Mikolik.
Gratz	28.63	727.2	29.90	759.5	43.0	6.1	81	se.	.....	.....	1	.....	3	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.40	721.4	29.87	758.8	37.0	2.8	96	sw.	.....	.....	4	.....	10	.....	.....	0.197	5 0	raining.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.53	724.7	29.87	758.7	52.2	11.2	81	sw.	.....	.....	5	.....	10	.....	.....	0.126	3.2	rainy	The Staff.
Lemberg	28.67	728 3	29.70	754 3	32.2	0.1	87	s.	.....	.....	1	.....	10	.....	.....	0.157	4.0	.....	Dr. T. Stanecki.
Pola	29.92	759.9	30.03	762 8	53.6	12.0	90	sw.	.....	.....	1	.....	7	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.29	744.0	29.76	755.6	32.2	0.1	94	e.	.....	.....	2	.....	10	.....	.....	0.236	6.0	.....	Joseph Midlinszky, S. J.
Szegedin	29.58	751 4	29.87	758.7	45.0	7.2	96	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	29.95	760.8	30.06	763.4	52.5	11.4	83	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy.....	Royal Academy.
Vienna	29.04	737.7	29.75	755.7	56.5	13.6	70	w.	.....	.....	6	.....	3	.....	.....	0.071	1.8	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.23	742.4	29.33	745.0	43.5	6.4	88	wnw.	15	6.7	.....	.....	7	.....	.....	0.635	16.1	showery	W. Boswell
Armagh, Observatory	29.23	742.4	29.46	748.3	48.9	9.4	95	ssw.	7	3.1	.....	.....	10	.....	.....	.....	.....	raining.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.52	749.8	52.8	11.6	83	sw.	29	13.0	.....	.....	10	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	28.99	736.3	29.52	749.8	49.6	9.8	89	sw.	24	10.7	.....	.....	10	.....	.....	.....	.....	raining.....	Thomas Mackereth.
Bradford, Yorkshire	29.11	739.4	29.50	749.3	51.3	10.7	92	sw.	.....	.....	1	.....	10	.....	.....	0.04	1.0	raining.....	McLandsborough&Preston
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	81.0	27.2	74	ne.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H C.
Cardington	.....	.....	.....	.....	55.0	12.8	78	w.	.....	.....	4.0	.....	10	.....	.....	.....	.....	overcast.....	John McLaren.
Chatham, School M. E	29.65	753.1	29.78	756.4	53.7	12.1	83	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	gloomy.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.61	752.1	29.84	757.9	52.5	11.4	84	ssw.	.....	.....	5	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Fort Napier, Natal	27.74	704.6	29.96	761.0	78.4	25.8	64	n.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.75	755.6	29.98	761.5	78.0	25.6	74	ne.	.....	.....	6	.....	2	.....	.....	.....	.....	blue sky.....	Sergt. John Robinson.
Gibraltar, Mediterranean	30.20	767.1	30.25	768.3	65.0	18.3	94	sw.	.....	.....	.....	.....	4	.....	.....	.....	.....	d. clouds	Corpl. F. Norris, A. H.C.
Glasgow, Observatory	29.20	741.7	29.40	746.7	48.2	9.0	83	sw.	.....	.....	5	.....	10	.....	.....	.....	.....	d. clouds.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.60	751.8	29.77	756.1	54.5	12.5	77	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Guernsey	29.64	752.8	29.94	760.5	53.0	11.7	93	w.	.....	.....	3	.....	9	.....	.....	blank	blank	d. clouds.....	A. Collenette, F. M. S.
Kew, Observatory	29.74	755.4	29.77	756.1	54.9	12.7	80	sw.	22	9.8	.....	.....	10	.....	.....	.....	.....	threatening.	The Staff.
Leicester, Museum	29.38	746.2	29.63	752.6	55.0	12.8	80	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterranean	30.03	762.7	30.10	764.5	62.0	16.7	78	nw.	.....	.....	2	.....	8	.....	.....	.....	.....	overcast.....	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.06	763.5	30.10	764.5	73.5	23.1	73	ne.	.....	.....	2	.....	4	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	29.08	738.6	29.60	751.8	53.4	11.9	83	sw.	.....	.....	6	.....	9	.....	.....	.....	.....	threatening.	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.51	749.5	29.74	755.4	53.6	12.0	85	sw.	.....	.....	6	.....	9	.....	.....	.....	.....	threatening.	The Staff.
Plymouth	29.77	756.1	29.85	758.2	52.0	11.1	94	ssw.	.....	.....	4	.....	10	.....	.....	.....	.....	gloomy.....	John Merrifield.
Sandwick Manse, Orkneys	29.26	743.2	29.36	745.7	37.8	3.2	92	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	d. clouds	Rev. C. Clouston, L L D.
Scutari Cemetery, Turkey	29.89	759.2	29.95	760.7	51.4	10.8	81	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	gloomy.....	W. H. Lyne.
Sheffield	29.27	743.4	29.55	750 6	53.9	12.2	87	sw.	.....	.....	2	.....	10	.....	.....	0.02	0.5	overcast.....	W. F. Cooper.
Silloth Rectory	29.40	746.7	29.43	747.5	48.1	8.9	93	wsw.	.....	.....	4	.....	8	.....	.....	0.450	11.4	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.52	749.8	48.4	9.1	96	wsw.	29	13.0	.....	.....	10	.....	.....	.....	.....	gloomy.....	I. New.
Stratfield Turgiss	29.56	750.8	29.78	756.4	53.8	12.1	89	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	showery.....	Rev. O. H. Griffiths, F.M.S.
Truro, Royal Institution	29.78	756.4	29.84	757.9	54	12.2	87	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining.....	W. Newcombe.
Valencia, Observatory	29.46	748.3	29.48	748.8	53.6	12.0	88	s.	51	22.8	.....	.....	10	.....	.....	.....	.....	drizzling	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.90	759.4	29.94	760.5	22	— 5.6	83	nw.	16	7.2	.....	.....	10 n	.....	calm	0.120	3.0	light snow ..	H. J. Cundall, C E.
Chatham, N. B*	30.01	762.2	30.08	764.0	8	—13.3	91	W.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	G. A. Blair.
Father Point, Quebec*	30.16	766.1	30.18	766.6	10	—12.2	87	nw.	6	2.7	.....	0	5 s	.....	nw.	0	0	fair	J. McWilliams.
Fort Garry, Manitoba*	29.16	740.7	30.06	763.5	7	—13.9	80	s.	25	11.2	.....	0	0	.....	.....	0	0	clear.....	James Stewart.
Halifax, N. S*	29.84	757.9	29.97	761.2	22	— 5.6	88	nw.	11	4.9	.....	10 k	0	n.	.....	inap.	inap.	cloudy	A. Allison.
Kingston, Ontario*	29.94	760.5	30.31	769.9	20	— 6.7	87	nw.	5	2.2	.....	.....	10 s	.....	.....	inap.	inap.	cloudy.....	A. P. Knight, M A.
Montreal, Quebec*	29.98	761.5	30.20	767.1	18	— 7.8	83	W.	4	1.8	.....	.....	10 n	.....	.....	0.03	0.8	cloudy.....	C. H. McLeod, C E.
Parry Sound, Ontario*	29.59	751 6	30.35	770.9	17	— 8.3	83	n.	5	2.2	.....	8 k	5 ks	nw.	nw.	0	0	cloudy.....	Rev. R. Mosley.
Port Dover, Ontario	29.60	751 8	30.34	770.6	24	— 4.4	100	calm	0	0	.....	5 c	5 cs	e.	sw.	0	0	cloudy.....	H. Morgan.
Port Stanley, Ontario	29.64	752.8	30.33	770.4	24	— 4.4	92	ne.	2	0.9	.....	.....	10 n	.....	ne.	0	0	cloudy.....	M. Payne.
Quebec, Quebec*	29.85	758.2	30.20	767.1	11	—11.7	80	nw.	.....	.....	5	.....	8 k	.....	nw.	0.01	0.3	cloudy.	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.81	757 2	30.32	770.1	15	— 9.4	83	nw.	3	1.3	.....	.....	10 s	.....	nw.	inap.	inap.	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.62	752.3	30.39	771.9	22	— 5.6	100	w.	4	1.8	.....	.....	10 ks	.....	.....	0.02	0.5	cloudy	
St. Andrews, N .B	30.05	763.3	30.10	764.5	18	— 7.8	80	nnw.	4	1.8	.....	.....	10 n	.....	.....	0	0	cloudy.....	
Sydney, C. B*	29.72	754.9	29 79	756.7	21	— 6.1	87	w.	1	0.4	.....	8 c	2 k	.....	.....	0.10	2.5	fair.....	T. C. Hill, C. E
Toronto, Ontario*	29.94	760.5	30.35	770 9	21	— 6.1	87	n.	3	1.3	.....	.....	10 s	.....	nw.	0	0	cloudy.....	Magnetic Observatory.
Yarmouth, N. S*	29.98	761.5	30.05	763.3	22	— 5.6	76	ne.	1	0.4	.....	.....	10 k	.....	n.	0.04	1.0	cloudy.....	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.81	731.8	30.31	769.9	22.0	— 5.6	86	calm	.....	.....	0	.....	10kn	.....	wnw.	0	0	overcast.....	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	28	— 2.2	100	w.	1	0.4	.....	.....	10	.....	.....	0	0	misty.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.90	759.4	29.93	760.2	72.0	22.2	89	e.	17.2	7.7	.....	0	2 k	.....	.....	0	0	hazy..	John Duthie.
Cape Town, C G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D Gill.

STATIONS.	BAROMETER. Corrected for instrumental error and for temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	WIND. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	CLOUDS. Amount and kind. Upper 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	WEATHER.	OBSERVERS
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.20	614.6	.....	.....	13.3	—10.4	.....	w.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.31	769.8	30.42	772.6	20.8	— 6.2	40	se.	4.7	2.1	.....	0	0	.....	.....	0	0	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai	30.41	772.3	30.43	773.0	33.6	0.9	83	ene.	4.0	1.8	.....	.....	10 k	.....	ene.	0	0	covered	M. Marc Dechevrens, S.J.
DANISH.																			
Copenhagen	29.22	742.3	29.27	743.5	39.6	4.2	93	w.	20	9	.....	.....	10	.....	.....	.....	.....	rain & fog	Oversergent Fischer.
Fanoe	29.32	744.7	29.34	745.2	39.7	4.3	97	w.	.....	.....	6	.....	9	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.84	758.0	29.89	759.1	9.3	—12.6	73	nne.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Ivigtut, Greenland	29.74	755 5	29.76	756.0	12.9	—10.6	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.89	759.3	29.94	760.5	—2.9	—19.4	.....	e.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.68	753.9	29.72	755.0	21.2	— 6.0	90	e.	.....	.....	2	.....	8	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.45	748.0	29.48	748.9	32.4	0.2	90	n.	9	4	.....	.....	3	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	29.08	738.7	29.18	741.1	38.3	3.5	97	wsw.	.....	.....	6	.....	9	.....	.....	.....	.....	.....	Loearer Oesterboi.
Upernavik, Greenland	29.89	759.1	29.93	760.3	— 2.6	—19.2	.....	e.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.60	751.7	30.24	768,2	55.8	13.2	93	se.	.....	.....	1	0	0	.....	.....	0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.52	749.7	30.07	763.7	51.6	10.9	82	sse.	.....	.....	1	.....	kn	nnw.	nnw	0	0	.....	M. Nicot, Director.
Arras, Engineer School	29.70	754.4	29.95	760.7	58.5	14.7	99	.....	.....	.....	4	.....	10 k	.....	.....	0	0	covered	M. Fénéon, Commandt.
Avignon, Normal School	30.02	702.0	30.10	764.6	59.7	15.4	64	n.	.....	.....	3	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.55	750.6	30.11	764.8	51.4	10.8	86	w.	.....	.....	2	.....	10	.....	wsw.	0.173	4.4	covered	M. Saillard, Director.
Beauvais, Normal School	29.73	755.2	30.00	762.0	54.1	12.3	81	w.	.....	.....	2	.....	10	.....	w	0.024	0.6	covered	M. Frère Eugène Marie.
Besançon, Normal School	29.13	740.0	30.04	763.1	48.2	9	88	s.	.....	.....	3	.....	cn	.....	sw.	0.47	12.	.....	M. Gobin, Director.
Bordeaux, Observatory	29.89	759.2	30.15	765.9	54.3	12.4	67	se.	.....	.....	1	.....	2	.....	sw.	0.004	0.1	slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.58	751.4	30.14	765.5	51.8	11.	86	sw.	.....	.....	2	.....	k	.....	sw.	0.047	1.2	.....	M. Malet, Director.
Brest, Naval Observatory	29.76	756.0	30.01	762 2	52.2	11.2	97	sw.	.....	.....	4	.....	10	.....	sw.	0.346	8.8	.....	M. de Kermaréc, Dir.
Caen, Normal School	29.89	759.3	29.97	761.2	53.8	12.1	93	sw.	.....	.....	1	.....	8	.....	sw.	0.39	10.	very cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.020	0.5	.....	M. Jadot, Director.
Charleville, Normal School	29.50	749 2	30.00	762.0	51.1	10.6	93	n.	.....	.....	3	.....	10	.....	nw.	0.453	11.5	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.79	731.2	30.14	765.5	57.6	14.2	55	ne.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.32	744.0	30.18	766.5	52.9	11.6	67	sw.	.....	.....	1	.....	10	.....	sw.	0.020	0.5	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.21	741.8	30.08	764.0	47.8	8.8	97	w.	.....	.....	1	.....	kn	w.	w.	0.004	0.1	.....	Dr. Coulet, Director.
Gap, Normal School	27.58	700.6	30.14	765.6	48.2	9	73	e.	.....	.....	2	.....	1	.....	sw.	0.138	3.5	.....	M. Jeangirard, Director.
Gréasque, du Rhone	28 95	735.3	30.08	763.9	56.7	13.7	73	w.	.....	.....	2	.....	1	.....	w.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.40	740.8	30.19	766.8	48.2	9	92	sse.	.....	.....	1	.....	kn	.....	.....	0.504	12.8	.....	M. Ablard, Director.
Guéret	28.37	720.7	29.96	761.0	47.5	8.6	94	wsw.	.....	.....	4	.....	0	.....	.....	0	0	clear	M. Delorme, Dir.
Lamballe, Normal School	29.82	757.5	30.10	764.4	53.2	11.8	83	sw	.....	.....	3	.....	10	.....	sw.	0	0	covered	M. Ollitrault, Director.
Lescar, Normal School	29.54	750.3	30.10	764.6	59.4	15.2	58	wsw.	.....	.....	1	2 cs	0	.....	.....	0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.98	701.4	30.08	764.0	55.4	13.0	98	sw.	.....	.....	3	.....	10	w.	sw.	0.067	1.7	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.11	739.3	30.17	766.4	53.6	12.0	73	nnw.	.....	.....	1	.....	10 cn	.....	sw.	0.008	0.2	covered	M. André, Director.
Mans, Normal School	29.76	755.8	30.07	763.7	52.3	11.3	96	w.	.....	.....	4	.....	5	.....	sw.	0.244	6.2	cloudy	M. Piboën, Director.
Marseille, Observatory	29.80	757.0	30.08	763.9	59.5	15.3	78	wnw.	.....	.....	2	.....	2	.....	nw.	0	0	.....	M. Stephan, Director.
Montlouis	24.95	633.6	29.79	756.6	45.5	7.5	42	sw.	9.4	4.2	.....	.....	6	w.	.....	0	0	.....	M. Caré for Dr. Finsa.
Montpellier, Normal School	29.96	761.0	30.15	765.7	64.4	18	72	calm	.....	.....	0	.....	0	.....	.....	0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.19	741.4	29.98	761.4	51.8	11.0	83	sw.	.....	.....	2	.....	n	.....	w.	0.528	13.4	.....	M. Hasse, Director.
Nantes, Observatory	29.98	761.4	30.14	765.6	55.8	13.2	79	ssw.	.....	.....	1–2	0	gkn;n	.....	.....	0.098	2.5	.....	M. Lareeque, Director.
Perpignan, Observatory	30.04	763.0	30.15	765.9	59.0	15.0	61	s.	5.6	2.5	.....	.....	2	wsw.	.....	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.34	542.1	.....	.....	33.4	0.8	.....	w.	.....	.....	2	.....	5	.....	w.	0	0	cloudy	M. Vaussenat.
Privas, Normal School	29.07	738.4	30.14	765.5	56.5	13.6	73	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Taffieu.
Puy de Dôme Obs'y, Summit	25.25	641.3	.....	.....	37.9	3.3	95	ssw.	.....	.....	1	.....	2	.....	ssw.	0.378	9.6	light fog	M. Allnard, Director.
Rochefort, Naval Obs'y	30.11	764.7	30.14	765.5	49.6	9.8	96	wsw.	.....	.....	1	.....	hz	.....	sw.	0.08	2.	hazy	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.91	759.6	30.12	765.1	51.8	11	93	sw.	.....	.....	1	.....	5	.....	sw.	0.020	0.5	cloudy	M. Brotier, Director.
Rodez, Normal School	28.07	713.0	30.22	767.6	46.4	8	46	nw.	.....	.....	1	.....	fg	.....	nw.	0.028	0.7	foggy	M. Seger, Director.
Rouen, Normal School	29.96	761.0	30.01	762.2	56.1	13.4	81	sw.	.....	.....	2	.....	5	w.	.....	0.31	8.	cloudy	M. Mouillot.
Saint Lô	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Delaplanche, Dir.
Saint Maur, Observatory	29.87	758.7	30.04	762 9	53.4	11.9	82	ssw.	.....	.....	2	.....	10	.....	w.	0.051	1.3	.....	M. Renou, Director.
Toulouse, Observatory	29.52	749 9	30.25	768.4	54.1	12.3	77	se.	.....	.....	1	.....	2	s.	.....	0	0	slightly cl'dy	M. Baillaud, Director.
Tours	29.93	760.2	30.11	764.7	55.4	13.0	72	sw.	.....	.....	1	.....	5	w.	wsw.	0.067	1.7	cloudy	M. de Tastes.
Versailles, Observatory	29.54	750.4	30.03	762.8	52.2	11.2	97	w	.....	.....	2	.....	.....	.....	.....	0.012	0.3	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	29.99	761.8	30.14	765.6	54.0	12.2	63	n.	7.8	3.5	.....	4 c	0	w.	.....	0	0	.....	M. Curtier, Director.
GERMAN.																			
Ansbach	28.45	722.6	29.90	759.5	50.4	10.2	86	w.	.....	.....	6	.....	10	w.	.....	0.532	13.5	.....	Prof. Jnedt.
Bamberg	28.98	736.1	29.82	757.4	52.2	11.2	84	w.	.....	.....	1	.....	10 n	w.	.....	0.157	4.0	raining	Prof. Dr. Hoh.
Berlin	29.36	745.7	29.54	750.2	48.9	9.4	75	sw.	.....	.....	2	.....	9	.....	.....	0.417	10.6	.....	Prof. Dr. Arndt.
Breslau	29.11	739.4	29.63	752.7	44.2	6.8	94	w.	.....	.....	2	.....	10	.....	.....	0.181	4.6	.....	Royal University Obs'y.
Carlsruhe	29.53	750.1	29.97	761.3	54.3	12.4	79	sw.	.....	.....	5	.....	10	sw.	.....	0	0	.....	Albert Senz.
Cassel	28.99	736.4	29.71	754.5	51.1	10.6	93	sw.	.....	.....	4	.....	10	s.	.....	0.398	10.1	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.50	749.4	29.87	758.7	53.6	12	82	sw.	.....	.....	2	.....	10	.....	.....	0.134	3.4	.....	Physical Society.
Friedrichshafen	28.66	727.9	30.11	764.7	50.7	10.4	88	sw.	.....	.....	5	.....	10	w.	.....	0	0	.....	Wilhelm, Chief Tel.
Hamburg	29.44	747.8	29.53	750.1	49.3	9.6	89	wsw.	.....	.....	6	.....	8	.....	.....	0.205	5.2	hazy	E. Preller.
Kiel	29.41	747.1	29.43	747.5	44.8	7.1	90	w.	.....	.....	6	.....	7	.....	.....	0.295	7.5	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.28	743.6	29.70	754.3	47.8	8.8	92	sw.	.....	.....	3	.....	10	wsw.	.....	0.406	10.3	raining	H. Leppig, Asst.
Magdeburg	29.41	746.9	29.60	751.7	50.2	10.1	82	wsw.	.....	.....	5	.....	8 ks	.....	w.	0.197	5.0	.....	Weather Observatory.
Memel	29.54	750.2	29.58	751.4	33.1	0.6	87	ssw.	.....	.....	3	7 ck	0	.....	.....	0	0	.....	Iessermann.
Munich	28.16	715 3	30.02	762.6	51.6	10.9	77	nw.	.....	.....	8	.....	9	w.	.....	0.157	4.0	.....	Central Station.
Neufahrwasser	29.52	749 9	29.54	750.3	28.9	— 1.7	94	se.	.....	.....	2	.....	10	.....	.....	0.102	2.6	.....	A. Lothes.
Neustadt, Palatinate	29.39	746.6	29.92	760 0	53.6	12.0	100	w.	.....	.....	6	.....	10	w.	.....	0.224	5.7	.....	Dicknether.
Stuttgart	29.02	737.2	29.91	759.8	55.9	13.3	68	w.	.....	.....	4	.....	5	w.	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	29.41	747.1	29.44	747.7	39.9	4.4	96	sw.	.....	.....	6	.....	10	.....	.....	0.161	4.1	.....	Profs. Brandes & Reimer.
GREEK.																			
Athens	29.67	753.7	30.06	763.5	59.5	15.3	.....	nw.	.....	.....	0.5	.....	0	.....	.....	0.004	0.1	clear	Schmidt & Wourlisch.
INDIAN.																			
Kurrachee	30.04	762.9	30.09	764.5	74.1	23.4	84	wsw.	19.0	8.5	.....	.....	3	.....	.....	0	0	d. clouds	
Deesa	29.52	749.8	30.00	761.9	80.2	26.8	33	w.	.....	.....	.....	.....	2	nnw.	.....	0	0	d. clouds	
Bombay	29.93	760.2	29.97	761.1	79.8	26.6	63	wnw.	9.0	4.0	.....	.....	1	w.	.....	0	0	d. clouds	
Poona, Yarrowda	28.12	714.1	29.97	761.3	80.4	26.9	17	e.	7.0	3.1	.....	.....	2	se.	.....	0	0	d. clouds	
Trichinopoly	29.69	754.1	29.97	761 3	76.3	24.6	69	ne.	1.0	0.4	.....	.....	10	.....	.....	0.14	3.6	overcast	
Belgaum	29.39	695.8	29.95	760.8	73.5	23.1	28	ene.	10.0	4.5	.....	.....	8	s.	.....	0	0	d. clouds	
Lahore	29.22	742.3	30.00	762.0	60.6	15.9	50	calm	0	0	.....	.....	2	.....	.....	0	0	blue sky	
Roorkee	29.06	738.0	29.99	761.7	65.2	18.4	40	calm	0.1	0.04	.....	.....	4	w.	.....	0	0	.....	
Agra	29.44	747.9	30.02	762,6	70.7	21.5	28	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Nagpur	28.95	735.2	30.00	762,0	76.9	24.9	33	ssw.	6.0	2.7	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.65	727.6	30.03	762,8	73.0	22.8	53	ne.	4.0	1.8	.....	.....	2	.....	ne.	0	0	d. clouds	
Lucknow	29.64	752.7	30.03	762.8	60.3	15.7	52	wsw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.69	754.1	30.02	762.4	62.8	17.1	72	calm	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.81	757.3	30.01	762.1	68.5	20.3	56	w.	2.7	1.2	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.95	709.9	30.02	762.5	64.7	18.2	51	nnw.	6.4	2.9	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.93	760.2	30.01	762.3	71.0	21.7	64	calm	0	0	.....	.....	3	.....	.....	0	0	d. clouds	
Calcutta, Alipore	29.99	761.7	30.01	762.2	65.3	18.5	76	n.	0.5	0.2	.....	.....	1	.....	.....	0	0	d. clouds	
Dhubri	29.89	759.2	30.01	762,3	66.1	18.9	75	calm	0.7	0.3	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.90	759.5	30.00	761.9	66.1	18.9	81	calm	1.4	0.6	.....	.....	6	.....	.....	0	0	d. clouds	
Sibsagar	29.69	754.0	30.04	762.9	62.4	16.9	90	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Jeypore	28.56	725.5	30.05	763.2	67.7	19.8	57	nw.	3.3	1.5	.....	.....	5	nw.	.....	0	0	d. clouds	
ITALIAN.																			
Udine	29.63	752.7	30.06	763.4	48.4	9.1	73	.....	.....	.....	.....	.....	5	.....	.....	0	0	.....	Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	29.54	750.3	30.08	763.9	42.8	6.0	79	se.	3.1	1.4			1	n.		0	0		Prof. Schiapparelli.
Padua	29.95	760.8	30.07	763.7	44.8	7.1	71	n.	0.7	0.3			3	n.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.12	739.7	30.06	763.6	45.5	7.5	80	w.	0.7	0.3			0			0	0		Prof. F. F. Denza.
Genoa	29.89	759.2	30.09	764.2	55.8	13.2	87	e.	0.7	0.3			10	se.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.11	713.9	30.08	763.9	53.1	11.7	64	se.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.88	758.9	29.93	760.2	48.6	9.2	89	w.	5.6	2.5			10			0	0		Prof. Luigi Guidi.
Florence	29.84	757.9	30.10	764.5	53.2	11.8	82	sw.			2		10			0	0		Prof. Costantino Pittei.
Leghorn	29.97	761.1	30.05	763.3	57.4	14.1	80	s.	2.5	1.1			10	s.		0	0		Prof. P. Monte.
Rome	29.91	759.8	30.09	764.3	52.9	11.6	83	n.	0.7	0.3			10			0	0		Prof. P. Tachini.
Lecce	29.65	758.5	30.11	764.7	59.5	15.3	83	ssw.	7.4	3.3			3			0	0		Prof. C. de Giorgi.
Cosenza	29.22	742.3	30.13	765.4	55.8	13.2	77	wsw.	2.5	1.1			4	sw.		0	0		Prof. D. Conti.
Cagliari	29.94	760.4	30.13	765.4	57.7	14.3	77	nw.			2		4	w.		0	0		Prof. A. Pacinotti.
Palermo	29.88	759.0	30.14	765.5	64.0	17.8	56	sw.	6.9	3.1			4			0	0		Prof. G. Caccíatore
Syracuse	30.06	763.6	30.11	764.7	59.0	15.0	77	ne.	4.3	1.9			1	nne.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.58	751.2	30.11	764.7	56.3	13.5	92	w.	1.3	0.6			10	w.		0.043	1.1		Prof. F. Brioschi.
Stelvio	22.20	564.0			34.3	1.3	76	e.			1		8			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.22	564.4			28.4	— 2.0	75	ne.			2		3			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.95	760.7	29.98	761.5	28.6	— 1.9	89	nw.			4		10 ck,n		nw.	0.098	2.5	cloudy	Hattori.
Awomori	29.86	758.4	29.90	759.4	26.0	— 3.3	95	wnw.	21.5	9.6			10 n			0.004	1.0	light snow	K. Ogawa.
Hakodate	29.82	757.4	29.83	757.6	26.0	— 3.3	64	nw.	12.0	5.4		1	0			0	0	clear	
Hamamatsu	30.16	766.0	30.19	766.8	30.0	— 1.1	62	w.			7	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					30.6	— 0.8	90	wnw.	3.7	1.6			10 ks		nw.	0	0	cloudy	
Kanazawa	30.18	766.7	30.29	769.5	30.0	— 1.1	54	nnw.	12.4	5.5		1	0			0.640	16.3	cloudy	S. Endo.
Kioto	30.14	765.5	30.33	770.4	29.8	— 1.2	83	wsw.	2.7	1.2		0	8 s;ck			0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	30.20	767.0	30.42	772.6	30.5	— 0.8	66	ne.	0.9	0.4		0	0			0	0	clear	S. Takehayashi.
Niigata	30.07	763.8	30.10	764.5	31.0	— 0.6	76	w.	26.5	11.8		0	4 ck		w.	0.015	0.4	fair	M. Morita.
Nobiru	29.95	760.7	29.97	761.1	28.1	— 2.2	79	w.	19.8	8.8		0	0			0.010	0.2	clear	H. Midzushina.
Numazu	30.07	763.7	30.10	764.6	26.8	— 2.9	86	ene.			2	0	0			0	0	clear	R. Kaneda.
Osaka	30.32	770.1	30.33	770.5	30.3	— 0.9	80	nnw.	2.1	0.9			10 s			0	0	cloudy	H. Omura.
Supporo					25.0	— 3.9	87	w.	22.2?	9.4?			10		nw.	0.435	11.0	snowing	
Tokei Obs'y, Yeddo	30.02	762.6	30.11	764.7	29.9	— 1.2	34	wnw.	11.2	5.0		0	0			0	0	clear	The Staff.
Wakayama	30.26	768.5	30.32	770.1	34.1	1.2	70	n.	4.4	2.0		0	1 ck		nw.	0.003	0.1	clear	Y. Kuwamuea.
MAURITIUS.																			
Mauritius Observatory	29.85	758.2	30.04	763.0	80.2	26.8	70	sw.	11.0	4.9			8 ks;kn			0.03	0.8	cloudy	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.68	601.5	29.90	759.5	47.5	8.6	89	wsw.	inap.	inap.			10 kn		wsw.	0.070	2 0	rainy	Prof. Vicente Fernandez.
Leon	24.36	618.7	30.11	764.8	52.0	11.1	91	nw.			1		10 n			0.591	15.0	heavy rain	Prof. M. Leal.
Mazatlan	29.76	755.8	30.02	762.5	66.5	19.2	74	e.	0.9	0.4		2 0	0	sw.		0	0	clear	F. Quijano, U. E.
Mexico, Central Obs'y	23.11	586.8	30.24	767.9	48.7	9.3	86	calm	0	0			10 kn			0.008	0.2	covered	The Staff.
Morelia	24.18	614.1	29.97	761.3	41.0	5.0	57	se.			2	3 c	5 k	e.	s.	0.445	11.3	cloudy	M. Tena, M. D.
Pabellon, Aguascallentes																			M. V. de Leon, M. E.
Puebla, Catholic Institute	23.39	594.2	30.14	765.2	54.9	12.7	43	ne.	0.4?	0.4?			10		s.	0	0	covered	Prof. P. Spina.
Zacatecas	22.46	570.5	30.19	766.7	45 9	0.7	90	se.	4.6	2.1			10 kn		wsw.	0	0	covered	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.79	756.8	29.79	756.7	48.7	9.3		wsw.			6					0.083	2.1		
Groningen	29 53	750.1	29.59	751.5	49.3	9.6		w.			5					0.004	0.1		
Helder	29.61	752.1	29.61	752.1	47.8	8.8		sw.			4					0.035	0.9		
Hellevoetsluis	29.73	755.1	29.73	755.1	48.2	9.0	95	wsw.			5					0.059	1.5		
Utrecht	29.68	753.8	29.72	755.0	50.9	10.5	90	wsw.			5		10			0.283	7.2	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.02	737.2	29.09	738.8	33.8	1.0	96	calm	0	0			10			0.039	1.0	snowing	
Brono	29.21	741.8	29.24	742.8	30.2	— 1.0	76	w.	9	4			10			0.335	8.5		
Christiania	29.10	739.1	29.25	743.0	23.5	— 4.7	86	ne.	9	4			10					snowing	
Gjæsvær	29.20	741.6	29.22	742.2	25.3	— 3.7		ne.			6		10						
Lodingen	29.19	741.4	29.24	742.6	22.6	— 5.2	85	calm			0		5			0	0		
PORTUGUESE.																			
Angra, Azores	29.62	752.3	29.78	756.3	60.8	16.0	77	w.	18.6	8.3			4			0.181	4.6		Dr. J. A. Sampaio.
Ompo Major	29.24	742.6	30.28	769.2	41.0	5.0	100	ne.	0.7	0.3			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.10	764.4	30.18	766.6	66.9	19.4	64	sw.	5.6	2.5			8	w.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.91	759.6	30.28	769.1	43.7	6.5	99	ne.	13.0	5.8			10			0	0		The Staff.
Ponta Delgada, Azores	29.77	756.1	29.84	757.9	64.4	18.0	62	w.	11.9	5.3			3			0.331	8.4		
Saint Paul de Loando	29.71	754.5	29.90	759.5	83.5	28.6	76	w.	1.3	0.6			8			0	0		
Serra da Estrella	25.38	644.7	30.17	766.3	45.0	7.2	50	sse.	3.1	1.4			1			0	0	foggy	
RUSSIAN.																			
Akmolinski	29.43	747.6	30.70	779.7	—13.2	—25.1	85	se.	7	3		7 c	0					light clouds	Major K. Lasarew.
Archangel	29.42	747.3	29.44	747.8	14.4	— 9.8	87	sse.	9	4			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.03	762.8	29.95	760.8	27.7	— 2.4	87	sw.	2	1			9 s			blank	blank	light clouds	Capt. Wisganow.
Barnaul	30.33	770 3	30.93	785.6	—20.9	—29.4	80	sw.	4	2			4			0	0	light clouds	Meteorological Obs'y.
Bielosersk	28.99	736.4	29.49	749.1	12.0	—10.8	93	ese.	0	0			10 n			0.047	1.2	snow & fog	
Dorpat	29.22	742.2	29.47	748.6	23.4	— 4.8	95	sw.	7	3			10 n			0.130	3.3	light snow	Observatory.
Ekaterinburg	29.32	744.8	30.40	772.1	2.7	—16.3	73	ssw.	9	4		3 c	0			0	0		Meteorological Obs'y.
Elissawetgrad	29.39	746.4	29.86	758.5	23.9	— 4.5	79	w.	0	0		0	1 s			0	0		
Kasan	29.58	751.3	29.87	758.8	9.9	—12.3	82	sse.	20	9			10					snowing	Observatory.
Kem	29.24	742.0			14.5	— 9.7	97	s.	4	2			9			0.059	1.5	heavy clouds	
Kertch	29.87	758.6	29.89	759.1	34.2	1.2	89	calm	0	0		0	7 n			0	0		Lagorio & Snatyrez.
Kieff	29.02	737.2	29.09	754.0	26.6	— 3.0	87	w.	9	4		c;ck	9 ks						Observatory.
Libau	29.50	749.2	29.52	749.8	27.1	— 2.7	86	sse.			1		8			0	0		E. Quaas.
Lugan	29.00	751.7	29.81	757.2	22.0	— 5.2	76	sw.	2	1			0			0	0		Meteorological Obs'y.
Moscow	28.96	735.5	29.47	748.4	16.2	— 8.8	90	se.	5.6	2.5		0	9 ks			0	0		
Nikolaiev	29.84	757.9	29.91	759.8	33.1	0.6	82	s.	9	4		0	0			0	0		Capt. Kurdakow.
Pekin, China	30.27	768.9	30.41	772.5	16.3	— 8.7	42	calm	0	0		0	1 k						Physical Observatory.
Petrozavodsk	29.11	739.4	29.32	744.6	19.9	— 6.7	86	s.	16	7			10			0.024	0.6		Dr. Bergmann.
Pinsk	29.20	741.7			25.9	— 3.4	82	w.	13	6		0	1 s			0	0		
St. Petersburg	29.37	745.9	29.38	746.3	17.4	— 8.1	85	w.	4	2		0	5 ks			0.004	0.1		Central Physical Obs'y.
Sevastopol	29.03	752.6	29.80	756.8	39.4	4.1	82	nw.	7	3			10 n			0.268	6.8	heavy clouds	
Semipalatinsk	30.20	767.1	30.99	787.2	—22.4	—30.2	85	e.	9	4			0			0	0		Major Lasarew.
Staroi Bykhov	29.18	741.1	29.66	753.3	23.9	— 4.5	79	sw.	9	4			10			0.035	0.9	light snow	
Tashkend, Laboratory	28.17	715.4	29.76	755.8	45.3	7.4	73	ne.	9	4			10			0.035	0.9	raining	Teich, A. M.
Tiflis	28.59	726.3	30.03	762.8	49.3	9.6	42	n.	11	5		3 cs	0			0	0		Physical Observatory.
Tomsk	30.47	773.9	30.80	782.3	—17.7	—27.6	83	s.	4	2		0 c	5						
Vladivostock	30.36	771.1	30.43	772.8	— 1.7	—18.7	33	n.	11	5		0	0			0	0		
Warsaw	29.21	741.9	29.65	753.0	30.0	— 1.1	80	s.	9	4			10						Astronomical Obs'y.
Wilna	29.21	741 9	29.65	753.1	25.9	— 3.4	93	sw.	4	2			10					heavy clouds	Berg, Assistant.
Yeniseisk	30.31	769.8	30.64	778.3	—12.0	—24.8	87	w.	4	2			10						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.35	745.5	45	7.2	92	e.			4		10			1.0	25.4	sleeting	J. Youngclause.
North Unst			29.32	744.7				ne.			6		5						Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.09	764.4	30.20	767.0	55.4	13.0	73	sw.	2.2	1.0		0	3			0	0	solar halo	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.08	763.9	30.13	765.4	59.7	15.4	55	s.	2.0	0.9		6	2	w.		0	0	almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.23	691.7	30.33	770.4	39.7	4.3	92	w.	2.0	0.9			6			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.00	711.2	30.30	769.5	44.8	7.1	92	calm	0.4	0.2			9			0.016	0.4	almost cov'd	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
SPANISH.																			
Murcia, Met. Obs'y	30.07	763.8	30.19	766.9	56.7	13.7	81	wsw.	1.3	0.6	.....	4	5	ene.	.....	0	0	almost cov'd	Olayo Diaz, Director.
Oviedo	29.29	743.9	30.17	766.2	39.2	4.0	82	nw.	5.8	2.6	.....	0	0	.....	.....	0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.17	741.0	30.08	764.1	51.3	10.7	78	s.	6.3	2.8	.....	.....	10	.....	.....	0	0	covered	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.91	759.7	29.97	761.2	76.9	24.9	79	nw.	0	0	.....	.....	9 kn	.....	e.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.17	766.3	30.27	768 9	58.1	14.5	83	calm	0	0	.....	.....	9	.....	nw.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.98	761.6	30.08	763.9	74.5	23.6	90	calm	0	0	.....	3 cs	4 kn	se.	se.	0.020	0.5	cloudy	Manuel Maese.
Tuguegarao, Philippine Id's	29.97	761.2	30.10	764.5	68.7	20.4	89	nnw.	5.8	2.6	.....	.....	10 kn	.....	.....	0	0	covered	José L. Yrastorza.
SWEDISH.																			
Hapsranda	29.26	743.2	29.30	744.2	—11.6	—24.2	100	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	
Umea	29.22	742.1	29.27	743.4	— 2.6	—19.2	88	calm	.....	.....	0	.....	1	.....	.....	0	0	.....	
Hernosand	29.24	742.6	29.29	743.9	15.8	— 9.0	88	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	
Stockholm	29.20	741.7	29.38	746.2	19.4	— 7.0	94	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	
Wisby	29.34	745.3	29.40	746.8	30.2	— 1.0	88	s.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Sub-series.																			
Upsala	29.28	743.6	29.36	745.8	12.6	—10.8	100	ssw.	2.2	1.0	.....	.....	7	wnw.	.....	0.043	1.1	.....	S. G. Fineman.
SWISS.																			
Geneva	28.73	729.8	30.16	766.1	54.1	12.3	75	ne.	.....	.....	1	.. ..	1	.....	.....	0.055	1.4	clear	The Observatory.
TURKISH.																			
Constantinople	.....	.....	29.98	761.6	52.5	11.4	77	sw.	15	6.5	.....	.....	10	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	30.11	764.9	59.2	15.1	.....	ne.	.....	.....	1	.....	2	.....	.....	0	0	slightlycl'dy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.11	764.7	60.8	16.0	67	sw.	.....	.....	1	.....	10 n	.....	sw.	0.22	5.6	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.17	766.3	30.26	768.6	31	— 0.6	74	nw.	8	3.6	.....	.....	10 s	.....	nw.	0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.65	753.1	30.36	771.1	26	— 3.3	88	nw.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.26	641.6	30.34	770.6	10	—12.2	48	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	27.30	693.4	30.33	770.4	25	— 3.9	64	sw.	4	1.8	.....	3 k	0	sw.	.....	0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.03	737.3	30.26	768.6	34.0	1.1	72	nw.	13	5.8	.....	4 cs	0	nw.	.....	0	0	fair	H. C. Smith.
Atlantic City, New Jersey	30.24	768.1	30.24	768.1	30	— 1.1	78	nw.	2	0.9	.....	9 k	0	n.	.....	0	0	cloudy	Jas. M. Watson.
Augusta, Georgia	30.04	763.0	30.24	768.1	44	6.7	83	nw.	2	0.9	.....	.....	10 s	.....	nw.	0	0	cloudy	John Healy.
Baltimore, Maryland	30.26	768.6	30.31	769 9	39	3.9	54	nw.	4	1.8	.....	.....	10 s	.....	n.	0	0	cloudy	Geo W Felger.
Barnegat, New Jersey	30.22	767.6	30.24	768.1	31.0	— 0.6	68	n.	8	3.6	.....	0	3 k	.....	nw.	0	0	clear	G. A. Hill.
Behring Id., Behring Sea	29.68	753.9	29.70	754.4	35.3	1.8	.....	s.	13	5.8	.....	.....	10 n	.....	.....	0.01	0.3	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.63	727.2	30.39	771.9	6	—14.4	76	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.31	693.7	30.31	769.9	24	— 4.4	04	calm	0	0	.....	0	0	.....	.....	0	0	clear	S. Wheaton.
Bismarck, Dakota	28.28	718.3	30.29	769.4	9	—12.8	80	e.	4	1.8	.....	0	0	.....	.....	0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	30.17	766.3	30.20	767.1	29	— 1.7	67	n.	24	10.7	.....	0	0	.....	.....	0	0	clear	J. T. Elker.
Boise City, Idaho	27.44	697.0	30.42	772.7	11	—11.7	87	n.	1	0.4	.....	0	2 s	.....	.....	0	0	clear	B. E. Light.
Boston, Massachusetts	30.02	762.5	30.18	766.6	29.0	— 1.7	67	nw.	10	4.5	.....	0	4 s	.....	w.	0	0	fair	O. B. Cole.
Brownsville, Texas	30.29	769.4	30.34	770.6	48.0	8.9	79	n.	12	5.4	.....	.....	10 s	.....	n.	0.45	11.4	cloudy	M. McCarty.
Buffalo, New York	29.53	750.0	30.33	770 4	23.8	— 4.6	85	nw.	8	3.6	.....	.....	10 s	.....	nw.	0	0	cloudy	W. Finn.
Buford, Fort, Dakota	28.13	714.5	30.37	771.4	7	—13.9	80	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	F. A. Mellen.
Burlington, Vermont	29.95	760.7	30.26	768.6	23.0	— 5.0	61	n.	7	3.1	.....	.....	10 n	.....	nw.	0.02	0.5	light snow	G. C. Schaeffer.
Cairo, Illinois	29.98	761.5	30.40	772.1	36.8	2.7	81	ne.	2	0.9	.....	.....	10 s	.....	ne.	0	0	threatening	W. H. Ray.
Cape Henry, Virginia	30.25	768.3	30.27	768.8	38	3.3	82	n.	6	2.7	.....	.....	10 ks	.....	nw.	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.23	767.8	30.26	768.6	35.5	1.9	69	n.	6	2.7	.....	.....	10 s	.....	n.	0	0	cloudy	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	30.18	766.6	30.20	767.1	52	11.1	72	n.	11	4.9	.....	.....	10 s	.....	.....	0	0	cloudy	F. W. Mixer.
Champaign, Illinois	29.46	748.3	30.33	770.4	25.0	— 3.9	70	nw.	10	4.5	.....	.....	10 s	.....	nw.	0.02	0.5	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.13	765.3	30.19	766.8	45	7.2	93	nw.	5	2.2	.....	.....	10s;fg	.....	.....	0	0	threatening	J. H. Smith.
Charlotte, N. Carolina	29.30	744.2	30.20	767.1	38.0	3.3	82	e.	6	2.7	.....	.....	10 s	.....	se.	0	0	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.46	748.3	30.32	770.1	34.5	1.4	65	n.	10	4.5	.....	.....	10 s	.....	n.	0	0	cloudy	B. L. Goulding.
Cheyenne, Wyoming	24.11	612.4	30.39	771.9	26.6	— 3.0	40	nw.	16	7.2	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.59	751.6	30.35	770 9	29.4	— 1.4	82	nw.	4	1.8	.....	.....	10 n	.....	.....	inap.	inap.	light snow	J. Mitchell.
Chincoteague, Virginia	30.24	768.1	30.26	768.6	36	2.2	69	n.	10	4.5	.....	.....	10 ks	.....	n.	0	0	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.64	752 8	30.34	770.6	37	2.8	89	n.	2	0.9	.....	.....	10 n	.....	.....	0.02	0.5	light snow	R. B. Watkins.
Cleveland, Ohio	29.56	750.8	30.35	770.9	31.8	— 0.1	90	nw.	2	0.9	.....	.....	10 s	.....	nw	0.01	0.3	cloudy	J. B. Newlin.
Coleman City, Texas	28.55	725.2	30.45	773 4	35	1.7	89	nw.	3	1.3	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	L. Dorman.
Columbus, Ohio	29.40	746.7	30.31	769.9	35	1.7	89	w.	2	0.9	.....	.....	10 n	.....	.....	0.03	0.8	light snow	D. Cuthbertson.
Concho, Fort, Texas	28.43	722.1	30.45	773.4	28.0	— 2.2	77	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	26.99	685.5	30.39	771.9	8	—13.3	58	e.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. B. Lamar.
Davenport, Iowa	29.71	754.6	30.42	772.7	26	— 3.3	64	ne.	3	1.3	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	R. R. Martin.
Davis, Fort, Texas	25.42	645.7	30.36	771.1	21	— 6.1	76	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington Ty	28.51	724.1	30.34	770.6	28	— 2.2	96	sw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	D. Moore.
Deadwood, Dakota	25.44	646.2	30.43	772.9	21	— 6.1	87	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. Willson.
Delaware Breakwater, Del	30.24	768.1	30.26	768.6	36	2.2	61	nw.	14	6.3	.....	0	4 k	.....	nw.	0	0	fair	T. S. Townsend.
Denison, Texas	29.59	751.6	30.44	773.2	33.0	0.6	88	n.	4	1.8	.....	.....	9 s	.....	.....	inap.	inap.	cloudy	J. W. Byram.
Denver, Colorado	24.85	631.2	30.37	771.4	16.0	— 8.9	70	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.49	749.0	30.47	773.9	13	—10.6	80	n.	2	0.9	.....	.....	10 n	.....	n.	inap.	inap.	light snow	F. W. Conrad.
Detroit, Michigan	29.60	751.8	30.36	771.1	36.0	2.2	79	n.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.68	703.1	30.48	774.2	13	—10.6	66	w.	7	3.1	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Dubuque, Iowa	29.64	752.8	30.41	772.4	23.5	— 4.7	67	n.	1	0.4	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	J. Harvey Smith.
Duluth, Minnesota	29.55	750.6	30.36	771.1	24	— 4.4	73	sw.	17	7.6	.....	.....	10 s	.....	sw.	0	0	cloudy	N. B. Conger.
Eagle Pass, Texas	29.67	753.6	30.51	774.9	40.4	4.7	65	nw.	7	3.1	.....	.....	10 s	.....	nw.	0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25.50	647.7	30.42	772.7	— 6	—21.1	83	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	30.03	762.7	30.10	764.5	20.0	— 6.7	76	n.	14	6.3	.....	.....	10 s	.....	n.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.47	697.7	30.43	772.9	18	— 7.8	58	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.56	674.6	30.42	772.7	21.0	— 6.1	87	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.56	750.8	30.33	770.4	32	0.0	78	n.	2	0.9	.....	.....	10 s	.....	nw.	0.02	0.5	cloudy	Peter Wood.
Escanaba, Michigan	29.65	753.1	30.37	771.4	30.0	— 1.1	85	calm	0	0	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	George Heathcote.
Fredericksburg, Texas	28.60	726.4	30 42	772.7	39	3.9	100	nw.	3	1.3	.....	10 c	0	n.	.....	0	0	cloudy	Frank Halwegler.
Galveston, Texas	30.31	769.9	30.36	771.1	45	7.2	76	ne.	20	8.9	.....	10 cs	0	w.	.....	0.07	1.8	cloudy	E. O'C. Macinernay.
Grand Haven, Michigan	29.63	752 6	30.34	770 6	34.0	1.1	78	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.43	645.9	30.31	769.9	26	— 3.3	84	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	Robert O. Lord.
Hatteras, North Carolina	30.21	767.3	30.23	767.8	40	4.4	73	ne.	16	7.2	.....	6 k	3 s	e.	ne.	0	0	cloudy	R. M. Crawford.
Helena, Montana	25.93	658.6	30.31	769.9	16	— 8.9	70	calm	0	0	.....	0	0	.....	.....	0	0	clear	N. C. Smith.
Henrietta, Texas	29.38	740.2	30.46	773.7	37	2.8	89	calm	0	0	.....	.....	10ks	.....	.....	inap.	inap.	cloudy	J. P. Sherry.
Huron, Dakota	28.85	732.8	30.39	771.9	3.8	—15.7	52	se.	11	4.9	.....	0	0	.....	.....	0	0	clear	S. W. Glenn.
Indianapolis, Indiana	29.49	749.0	30.34	770.6	33	0.6	81	nw.	4	1.8	.....	.....	10 s	.....	nw.	0.01	0.3	cloudy	O. Schutze.
Indianola, Texas	30.35	770.9	30.38	771.6	46.4	8.0	64	n.	21	9.4	.....	.....	10 k	.....	e.	0.13	3.3	cloudy	I. A. Reed.
Jacksboro, Texas	29.24	742.7	30.48	774.2	38	3.3	72	n.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	D. J. Carr.
Jacksonville, Florida	30.15	765.8	30.20	767.1	50	10.0	86	n.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.64	702.0	30.34	770.6	9	—12.8	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	A. Schneider.
Keokuk, Iowa	29.70	754.4	30.41	772 4	20.5	— 6.4	76	ne.	3	1.3	.....	.....	10 s	.....	.....	inap	inap.	cloudy	F. Z. Gosewisch.
Key West, Florida	30.05	763.3	30.07	763.8	70.0	21.1	90	ne.	9	4.0	.....	.....	10 s	.....	ne.	0.02	0.5	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	30.25	768 3	30.27	768.8	37.5	3.1	77	n.	11	4.9	.....	0	6 ks	.....	n.	0	0	fair	H. Mc P. Baldwin.
Knoxville, Tennessee	29.23	742 4	30.31	769.9	34	1.1	72	n.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.56	750 8	30.41	772.4	27	— 2.8	77	calm	0	0	.....	.....	10 s	.....	e.	inap	inap.	cloudy	S. C. Emery.
Leavenworth, Kansas	29 52	749.8	30.48	774.4	17	— 8.3	83	nw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	A. W. Browne.
Lewiston, Idaho	29.48	748.8	30 36	771.1	30.0	— 1.1	83	e.	2	0.9	.....	10 cs	0	.....	.....	0	0	cloudy	W. Bell.
Little Rock, Arkansas	30.06	763.5	30.39	771.9	34	1.1	78	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. U. Simons.
Los Angeles, California	29.79	756.7	30.19	766.8	51	10.6	27	ne.	12	5.4	.....	0	0	.....	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.72	754.9	30.32	770.1	35	1.7	79	nw.	5	2.2	.....	.....	10 e	.....	.....	inap.	inap.	cloudy	L. M Dey.

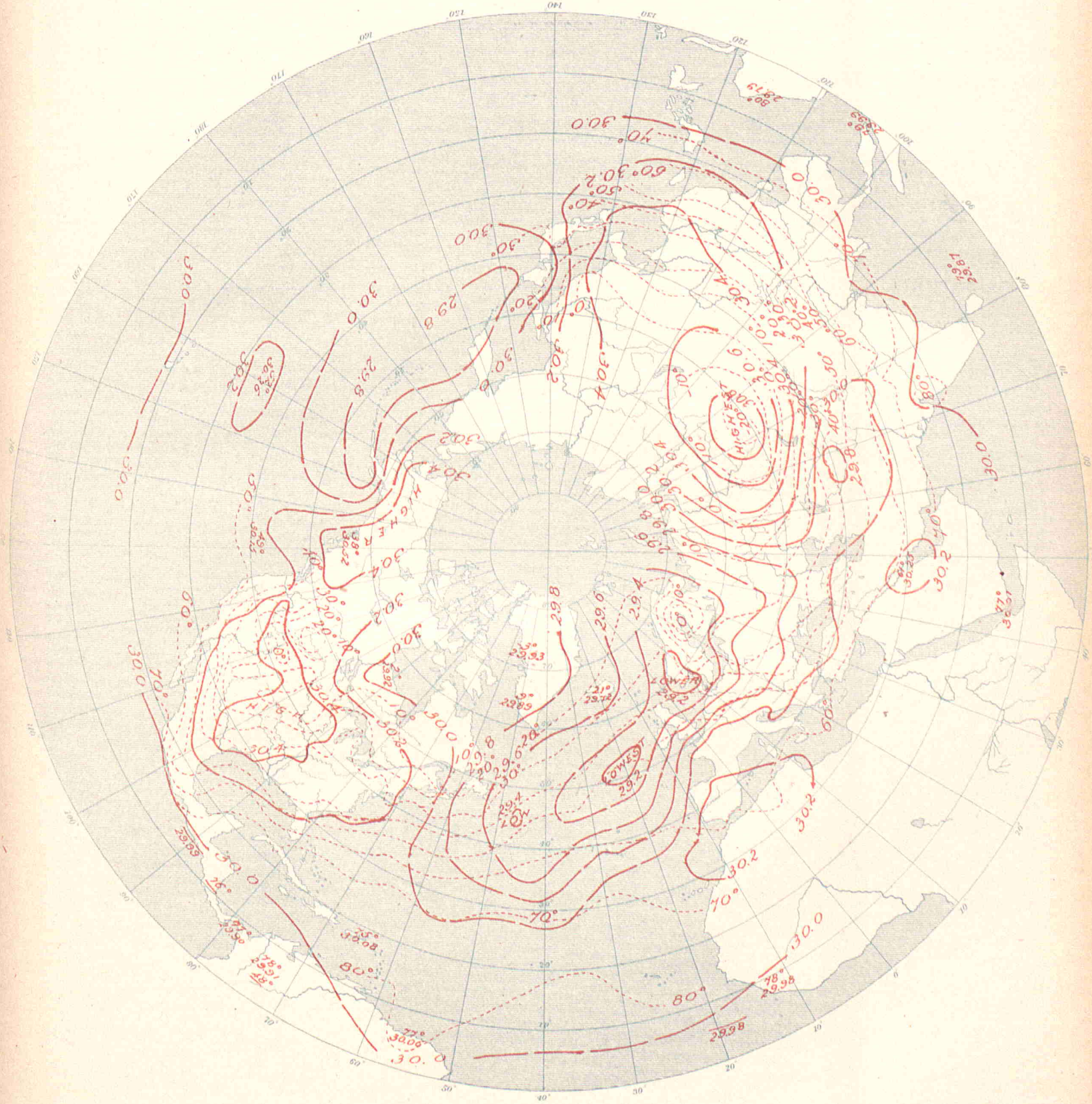
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.55	750.6	30.28	769.1	36	2.2	75	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.65	753.1	30.35	770.9	28.5	— 1.9	82	w.	6	2.7	.....	.....	10 s	.....	nw.	0	0	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.22	767.6	30.23	767.8	39.0	3.0	82	ne.	14	6.3	.....	.....	10 k	.....	w.	0	0	cloudy	C. A. Shaw.
Madison, Wisconsin	29.31	744.5	30.41	772.4	27	— 2.8	88	n.	1	0.4	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.67	652.0	30.21	767.3	36	2.2	49	w.	6	2.7	.....	0	4 s	.....	.....	0	0	fair	F. Burke.
McKavett, Fort, Texas	28.11	714.0	30.49	774.4	27	— 2.8	88	n.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	J. E. Thatcher.
Marquette, Michigan	29.54	750.3	30.32	770.1	30	— 1.1	78	nw.	7	3.1	.....	.....	10 s	.....	.....	0.05	1.3	cloudy	J. Gilligan.
Memphis, Tennessee	30.03	762.7	30.39	771.9	37	2.8	82	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	D. T. Flannery.
Milwaukee, Wisconsin	29.56	750.8	30.37	771.4	33	0.6	68	nw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	W. Line.
Missoula, Fort, Montana	26.91	683.5	30.37	771.4	14	—10.9	67	calm	0	0	.....	0	5 s	.....	.....	0	0	fair	J. H. Young.
Mobile, Alabama	30.26	768.6	30.30	769.6	38.5	3.6	66	n.	12	5.4	.....	.....	10 s	.....	n.	0	0	cloudy	O. A. Read.
Montgomery, Alabama	30.05	763.3	30.29	769.4	35	1.7	82	nw.	3	1.3	.....	.....	10 s	.....	nw.	0	0	cloudy	J. B. McLaughlin.
Moorhead, Minnesota	29.23	742.4	30.34	770.6	1	—17.2	72	s.	12	5.4	.....	0	0	.....	.....	0	0	clear	H. Bessant.
Morgantown, W. Virginia	29.24	742.7	30.31	769.9	35.5	1.9	89	sw.	1	0.4	.....	.....	10 n	.....	.....	inap.	inap.	light snow	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.54	597.9	30.17	766.3	0.0	—17.8	75	nw.	30	13.4	.....	0	5 ks	.....	nw.	0.14	3.6	fair	B. S. Pague.
Nashville, Tennessee	29.72	754.9	30.33	770.4	35.5	1.9	89	n.	4	1.8	.....	.....	10 ks	.....	nw.	inap.	inap.	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.10	764.5	30.22	767.6	25	— 3.9	70	n	5	2.2	.....	0	0	.....	.....	0	0	clear	J. H. Sherman.
New London, Connecticut	30.19	766.8	30.24	768.1	28	— 2.2	64	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.26	768.6	30.32	770.1	44.5	6.9	78	ne.	10	4.5	.....	.....	10 n	.....	.....	0.02	0.5	light rain	L. Dunne.
Newport, Rhode Island	30.14	765.5	30.18	766.6	28.5	— 1.9	72	nw.	12	5.4	.....	1 k	0	nw.	.....	0	0	clear	W. McGillivray.
New York, New York	30.07	763.8	30.26	768.6	32	0.0	71	calm	0	0	.....	5 cs	0	.....	.....	0	0	fair	J. B. Merrill.
Norfolk, Virginia	30.25	768.3	30.28	769.1	40	4.4	73	n.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.31	693.7	30.47	773.9	8.6	—13.0	82	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y.	30.14	765.5	30.18	766.6	42.0	5.6	82	ne.	6	2.7	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	J. Dascomb.
Omaha, Nebraska	29.21	741.9	30.50	774.7	1.6	—16.9	67	nw.	1	0.4	.....	0	7 s	.....	.....	0	0	fair	A. Pollak.
Oswego, New York	29.93	760.2	30.28	769.1	30.5	— 0.8	72	e.	2	0.9	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	J. G. Linsley.
Palestine, Texas	29.86	758.4	30.44	773.2	35.0	1.7	74	n.	9	4.0	.....	5 ck	0	n.	.....	0	0	fair	L. M. Pindell.
Pensacola, Florida	30.24	768.1	30.27	768.8	40.7	4.8	74	n.	11	4.9	.....	.....	10 s	.....	nw.	0	0	cloudy	M. McGauran.
Philadelphia, Pa	30.16	766.1	30.28	769.1	36.5	2.5	61	nw.	6	2.7	.....	0	8 ks	.....	nw.	0	0	cloudy	T. T. Townsend.
Pike's Peak, Colorado	17.80	452.1	30.46	773.7	8	—13.3	69	ne.	12	5.4	.....	0	0	.....	.....	inap.	inap.	clear	H. Hall.
Ploche, Nevada	24.15	613.4	30.32	770.1	27	— 2.8	61	s.	10	4.5	.....	0	0	.....	.....	0	0	clear	O. N. Kitchel.
Pittsburg, Pennsylvania	29.45	748.0	30.31	769.9	34.0	1.1	83	n.	1	0.4	.....	.....	10 s	.....	n.	inap.	inap.	cloudy	W. A. Reid.
Poplar River, Montana	28.09	713.5	30.45	773.4	.....	.....	.....	w.	.....	.....	1	0	0 s	.....	.....	0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.26	768.6	30.27	768.8	49.3	9.6	86	n.	24	10.7	.....	.....	10 s	.....	n.	0	0	cloudy	H. B. Boyer.
Port Huron, Michigan	29.62	752.3	30.35	770.9	30.0	— 1.1	93	nw.	1	0.4	.....	.....	10 s	.....	nw	0	0	cloudy	W. O. Bailey.
Portland, Maine	30.10	764.5	30.16	766.1	27.0	— 2.8	64	n.	8	3.6	.....	0	0	.....	.....	inap.	inap.	clear	W. W. Eichelberger.
Portland, Oregon	30.03	762.7	30.10	764.5	40.0	4.4	65	e.	10	4.5	.....	.....	10 s	.....	e.	0.11	2.8	cloudy	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	40	4.4	89	ne.	.....	.....	4	4 k	4 ks	sw.	e.	0	0	cloudy	F. S. Coburn.
Prescott, Arizona	24.94	633.5	30.31	769.9	17.5	— 8.1	87	s.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.10	764.5	30.12	765.0	32	0.0	88	n.	12	5.4	.....	0	9 s	.....	n.	0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.10	764.5	30.10	764.5	60.5	15.8	90	ne.	14	6.3	.....	.....	10 ks	.....	nw.	0	0	cloudy	W. J. Evans.
Red Bluff, California	29.72	754.9	30.09	764 3	41	5.0	100	n.	2	0.9	.....	.....	10 ks	.....	w.	0	0	cloudy	J. R. Williams.
Rochester, New York	29.60	751.8	30.31	769.9	26	— 3.3	88	nw.	8	3.6	.....	.....	10 k	.....	nw.	0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.49	749.0	30.06	763.5	42.5	5.8	87	s.	1	0.4	.....	.....	10 s	.....	s.	0.39	9.9	threatening	J. J. Nanry.
Sacramento, California	30.03	762.7	30.11	764.8	43.8	6.6	83	sw.	7	3.1	.....	.....	8 s	.....	se.	0	0	cloudy	J. A. Barwick.
St. Louis, Missouri	29.75	755.6	30.40	772.1	30.0	— 1.1	93	w.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	30.40	772.1	30.44	773.2	—20	—28.9	100	calm	.....	.....	0	0	0	.....	.....	0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.46	748.3	30.42	772.7	19.0	— 7.2	84	sw.	3	1.3	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.18	741.2	30.17	766.3	5	—15.0	87	s.	17	7.6	.....	0	0	.....	.....	0	0	clear	C. B Dilley.
Salt Lake City, Utah	25.91	658.1	30.45	773.4	18	— 7.8	57	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Craig.
San Antonio, Texas	29.69	754.1	30.41	772.4	35.5	1.9	72	n.	4	1.8	.....	1 c	0	.....	.....	0	0	clear	T. J. Kenan.
San Diego, California	30.08	764.0	30.15	765.8	43.2	6.2	36	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	A. C. Dobbins.
Sandusky, Ohio	29.61	752.1	30.34	770.6	35.2	1.8	89	se.	2	0.9	.....	.....	10 s	.....	.....	0.05	1.3	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.22	767.6	30.25	768.3	32.0	0.0	78	n.	13	5 8	.....	3 k	0	n.	.....	0	0	clear	B. A. Blundon.
San Francisco, California	30.02	762.5	30.09	764.3	49.5	9.7	86	se.	11	4.9	.....	.....	10 n	.....	sw.	0.04	1.0	light rain	N. Gorom.
Santa Fé, New Mexico	23.35	593.1	30.34	770.6	14	—10.0	61	ne.	3	1.3	.....	0	0	.....	.....	inap.	inap.	clear	H. U. Jones.
Savannah, Georgia	30.13	765.3	30.23	767.8	45.5	7 5	82	nw.	5	2.2	.....	.....	fg.	.....	.....	0	0	dense fog	H. W. Ford.
Shaw, Fort, Montana	26.46	672.1	30.29	769.4	26	— 3.3	67	ne.	4	1.8	.....	6 ck	0	w.	.....	0	0	fair	A. L. Mathews.
Shreveport, Louisiana	30.15	765.8	30.40	772.1	33	0.6	88	calm	0	0	.....	0	0	.....	.....	0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.14	740.1	30.47	773.9	30.5	— 0.8	83	n.	8	3.6	.....	.....	fg.	.....	.....	0.15	3.8	dense fog	W. M. Mattingly.
Silver City, New Mexico	24.49	622.0	30.33	770.4	13.5	—10.3	82	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	30.45	773.4	30.52	775.2	38.1	3.4	82	ne.	8	3.6	.....	6 k	0	ne.	.....	0.28	7.1	fair	F. W. Fickett.
Smith, Fort, Arkansas	29.94	760.5	30.44	773.2	29.0	— 1.7	88	n.	2	0.9	.....	.....	10 s	.....	n.	0	0	cloudy	J. B. Campbell.
Smithville, North Carolina	30.15	765.8	30.19	766.8	45	7.2	76	ne.	11	4.9	.....	.....	10 s	.....	sw.	0	0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.21	716.5	30.34	770.6	30.3	— 0.9	80	n.	1	0.4	.....	.....	10 n	.....	.....	0.22	5.6	light snow	H. Clifford.
Springfield, Illinois	29.65	753.1	30.38	771.6	30	— 1.1	72	nw.	8	3.6	.....	.....	10 s	.....	nw.	0	0	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.20	767.1	30.34	770.6	24	— 4.4	80	calm	.....	.....	0	1 c	4 n	w.	nw.	0	0	fair	Charles Mayr.
Springfield, Mo	28.88	733.5	30.42	772.7	28	— 2.2	88	nw.	8	3.6	.....	.....	10 ks	.....	nw.	0	0	cloudy	J. B. Marbury.
Starkville, Miss	29.85	758.2	30.35	770.9	36	2.2	79	n.	10	4.5	.....	.....	10 s	.....	n.	0	0	cloudy	C. Dill.
Stevenson, Fort, Dakota	28.22	716.8	30.28	769.1	4	—15.6	78	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. Burrows.
Stockton, Fort, Texas	27.30	693.4	30.44	773.2	22	— 5.6	87	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	30.15	765.8	30.21	767.3	29.0	— 1.7	73	n.	18	8.0	.....	.....	10 k	.....	n.	0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.53	699.2	30.35	770.9	35.5	1.9	65	e.	.....	.....	2	0	0	.....	.....	0	0	clear	J. T. Fitzgerald.
Toledo, Ohio	29.58	751.3	30.32	770.1	35	1.7	79	n.	1	0.4	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	A. Buell.
Tucson, Arizona	27.76	705.1	30.26	768.6	43	6.1	53	se.	11	4.9	.....	0	0	.....	.....	0	0	clear	J. L. Whiteside.
Umatilla, Oregon	30.02	762.5	30.41	772.4	34	1.1	89	w.	1	0.4	.....	.....	10 s	.....	.....	0.04	1.0	cloudy	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	21.4	— 5.9	61	nw.	.....	.....	1	0	0	.....	.....	0	0	clear	D. Brooks.
Vicksburg, Mississippi	30.11	764.8	30.38	771.6	31.8	— 0.1	85	calm	0	0	.....	1 cs	0	.....	.....	0	0	clear	James Kenealy.
Visalia, California	29.77	756.1	30.15	765 8	38.0	3.3	92	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	O. D. Stewart.
Washakie, Fort, Wyoming	24.65	626.1	30.42	772.7	— 7.0	—21.7	82	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	T. M. Ambler.
Washington, D. C.	30.18	766.6	30.30	769.6	36.0	2.2	69	calm	0	0	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	B. M. Purssell.
West Las Animas, Colorado	26.24	666.5	30.40	772.1	2.5	—16.4	91	w.	4	1.8	.....	0	0	.....	.....	inap.	inap.	clear	F. H. Brandenburg.
Williamsport, Pa	29.64	752 8	30.27	768.8	36	2.2	61	nw.	3	1.3	.....	.....	10 ks	.....	nw.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.16	766.1	30.22	767.6	42	5.6	74	ne.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.68	652 3	30.21	767.3	25	— 3.9	82	ne.	12	5.4	.....	0	8 s	.....	sw.	0	0	cloudy	J. Grover.
Yankton, Dakota	29.02	737.1	30.45	773.4	0	—17.8	68	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. H. Atfield.
Yuma, Arizona	30.04	763.0	30.18	766.6	41.8	5.4	58	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.02	559.3	.....	.....	48.0	8.9	75	calm	0	0	.....	0	0	.....	.....	0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I.	29.96	761.0	30.02	762.5	66.7	19.3	94	calm	0	0	.....	c	1k; s	w.	sw.	0	0	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762,2	70	21.1	71	n.	1	0.4	.....	9 cs	1 s	.....	e.	0	0	.....	Robert Johnston.
Paramaribo, S. A.	30.06	763.5	30.06	763.5	77	25.0	91	se.	.....	.....	2	.....	8 ks	se.	se.	2.820	71.6	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	78	25.6	84	calm	.....	.....	0	6 c	1 k	calm	calm	0	0	fair	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	76	24.4	94	ne.	.....	.....	3	0	9 ks	.....	ne.	0	0	cloudy	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.62	752.3	29.68	753.9	34	1.1	78	ne.	.....	.....	5	.....	10 n	.....	.....	0.42	10.7	cloudy	W. J. Fisher.
St. Thomas, W. I.	29.96	761.0	30.08	764.0	76	24.4	74	ne.	.....	.....	.....	2 c	3 ks	.....	ne.	0.05	1.3	flue	Aug. Walloe.
York Factory B. A.	29.86	758.4	29.92	760.0	1.5	—16.9	86	nw.	11	4.9	.....	1 c	0	nw.	.....	0	0	fair	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.04	763.0	66	18.9	84	s.	.....	.....	6	.....	5	.....	.....	.....	.....	5	s.	d. clouds.
H. M. S. Audacious, Labuan Island, Borneo, Oceanic.	29.69	754.1	80	26.7	91	calm	.....	.....	0	.....	10	s.	.....	.....	.....	.....	.....	overcast.
H. M. S. Beacon, Lake Timsah, Egypt	.....	.....	68	20.0	60	wsw.	.....	.....	1	.....	.....	.....	.....	.....	.....	1	wsw.	overcast.
H. M. S. Boadicea, Simon's Bay, Cape Colony	29.83	757.7	.....	.....	.....	w.	.....	.....	1–2	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.15	765.8	70	21.1	75	s.	.....	.....	3	.....	3	sse.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Champion, Singapore, Malay peninsula	29.99	761.7	79	26.1	90	nne.	.....	.....	3	.....	5	calm	.....	.....	.....	1	ne.	d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.41	772.4	36	2.2	80	nne.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	overcast.
H. M. S. Comus, Esquimalt, Vancouver Island, B. A.	30.29	769.4	42	5.6	83	n.	.....	.....	1–2	.....	3	ene.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Constance, Maderia	.....	.....	69	20.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
H. M. S. Curacoa, Yokohama, Japan	29.91	759.7	35.5	1.9	80	n.	.....	.....	3–4	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Dido, N. 24° 28′, W. 62° 44′	30.08	764.0	75	23.9	.....	wsw.	.....	.....	2	.....	3	wnw.	.....	.....	.....	sm'h	.....	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.78	756.4	70	21.1	71	calm	.....	.....	0	.....	3	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. Dock-Yard, Bermuda, W. I.	30.03	762.7	60	15.6	68	wnw.	.....	.....	2–3	.....	5	wnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Eclipse, N. 8° 33′, E. 81° 13′	.....	.....	75	23.9	.....	ne.	.....	.....	3–5	.....	10	.....	.....	.....	.....	.....	.....	raining.
H. M. S. Gannet, S. 30° 40′, W. 71° 55′	29.83	757.7	60	15.6	88	sse.	.....	.....	2	.....	0	.....	.....	.....	.....	4	s.	misty.
H. M. S Heroine, N. 23° 19′, W. 22° 14′	30.17	766.3	72	22.2	80	ene.	.....	.....	1	.....	2	ese.	.....	.....	.....	2	ese.	d. clouds.
H. M. S. Iron Duke, N. 6° 18′ E. 84° 11′	29.87	758.7	79	26.1	95	s.	.....	.....	3–4	.....	8	s.	.....	.....	.....	2	se.	d. clouds.
H. M. S. Lark, S. 33° 52′, E. 151° 14′	30.01	762.2	70.3	21.3	77	nne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.81	757.2	65	18.3	.....	n.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Magpie, N. 34° 24′, E. 134° 25′	30.35	770.9	38.5	3.6	63	nw.	.....	.....	2–4	.....	4	.....	.....	.....	.....	2	nw.	squally.
H. M. S. Rambler, Port Belgrano, La Plata, S. A.	30.12	765.0	63	17.2	94	se.	.....	.....	3–5	.....	8	sse.	.....	.....	.....	.....	.....	squally.
H. M. S. Starling, S. 7° 33′, W. 13° 43′	30.01	762.2	72.7	22.6	.....	ese.	.....	.....	2	.....	5	.....	.....	.....	.....	1	sse.	d. clouds.
H. M. S Superb, N. 36° 45′ E. 35° 45′*	30.17	766.3	65	18.3	78	e.	.....	.....	2	.....	4	wnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.91	759 7	65	18.3	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	misty.
H. M. S. Sylvia, Cordova Inlet. Patagonia	29.76	755.9	51	10.6	93	var.	.....	.....	2–3	.....	10	.....	.....	.....	.....	.....	.....	squally.
H. M. S. Tourmaline, Bombay, India	29.95	760.7	.....	.....	.....	w.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky
H. M. S. Woodlark, Shat-el Arab river	30.25	768.3	60.5	15.8	66	nw.	.....	.....	2–3	.....	5	wnw.	.....	.....	.....	.....	.....	d. clouds.
H. M. S. Zephyr, Chee-foo, China	30.40	772.1	21.5	— 5.8	.....	se.	.....	.....	2	.....	0	.....	.....	.....	.....	1	e.	blue sky.
Portuguese Naval.																		
Tamega, Macao, China	30.22	767.7	59.9	15.5	68	nne.	.....	.....	2	.....	10	.....	nne.	.....	.....	.....	.....	d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.17	766.3	42	5.6	75	n.	9	4.0	.....	.....	10	.....	n.	0	0	.....	.....	cloudy.
Navy Yard, Portsmouth, N. H.	30.15	765.8	25	— 3.9	?	nw.	7	3.1	.....	.....	2	.....	nw.	0	0	.....	.....	fair.
Naval Hospital, Yokohama, Japan*	29.94	760.5	31.5	— 0.3	45	n.	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	clear.
Adams, Sitka, Alaska *†	30.58	776.7	37	2.8	80	ene.	.....	.....	1	.....	5	.....	calm	.....	.....	.....	.....	fair.
Alaska, Mare Island, Cal.	30.02	762.5	47	8.3	85	ene.	.....	.....	1	.....	10	e.	0	0	.....	.....	.....	cloudy.
Alliance, N. 18° 30′, W. 61° 53′	30.14	765.5	76	24.4	?	ene.	.....	.....	2–3	.....	5?	.....	.....	light	light	sm'h	.....	cloudy.?
Ashuelot, Shanghai, China	30.46	773.7	39	3.9	81	ne.	.....	.....	1	.....	10	.....	nw.	.....	.....	.....	.....	cloudy.
Brooklyn, Montevideo, Uruguay	29.89	759.2	66	18.9	90	s.	22	9.8	.....	.....	8	.....	s.	0.36	9.1	mod.	s.	fair.
Colorado, New York, N. Y.	30.33	770.4	33	0.6	43	nw.	8	3.6	.....	.....	1	.....	nw.	0	0	.....	.....	clear.
Enterprise, Lynn Haven Bay, Va	30.29	769.4	41	5.0	73	n.	.....	.....	2	.....	10	.....	nw.	.....	.....	.....	.....	cloudy.
Essex, Callao, Peru	29.91	759.7	65	18.3	89	calm	.....	.....	0	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy
Franklin, Norfolk, Va	30.26	768.6	41	5.0	65	nnw.	9	4.0	.....	.....	10	.....	nnw.	0	0	.....	.....	cloudy.
Galena, Montevideo, Uruguay	29.89	759.2	65	18.3	89	ssw.	.....	.....	5	.....	8	.....	.....	.....	.....	r'gh	ssw	fair.
Hartford, Valparaiso, Chili*	29.80	756.9	64	17.8	94	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear.
Independence, Mare Island, Cal.	30.09	764.3	46	7.8	92	ene.	.....	.....	2	.....	10	.....	.....	0.05	1.3	.....	.....	cloudy.
Iroquois, Callao, Peru	29.92	760.0	64	17.8	94	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
Jamestown, Boston, Mass	30.13	765.3	27	— 2.8	100	nw.	.....	.....	2	.....	2	.....	calm	0	0	.....	.....	fair.
Juniata, Fayal, Azores Islands*	29.83	757.7	62	16.7	83	w.	.....	.....	5	.....	5?	.....	w.	h'vy	h'vy	long	sw.	clear.?
Kearsarge, N. 17° 49′, W. 59° 48′	30.03	762.7	76	24.4	100	ese.	.....	.....	2	.....	8	.....	ese.	.....	.....	sm'h	.....	cloudy.
Lackawanna, S. 4° 42′, W. 103° 55′*	29.88	758.9	73	22.8	85	se.	.....	.....	2	.....	8	.....	se.	.....	.....	sm'h	se.	cloudy.
Lancaster, Genoa, Italy*	29.99	761.7	59	15.0	100	ese.	.....	.....	3	.....	10	.....	calm	.....	.....	sm'h	.....	cloudy.
Michigan, Erie, Pa	30.24	768.1	32	0.0	69	se.	.....	.....	2	.....	10	.....	se.	.....	.....	.....	.....	cloudy.
Minnesota, New York, N. Y.	30.28	769.1	31	— 0.6	60	n.	3	1.3	.....	.....	8	.....	wnw.	.....	.....	.....	.....	fair.
Monocacy, Nagasaki, Japan	30.38	771.6	34	1.1	90	var.	.....	.....	1	.....	2	.....	calm	.....	.....	.....	.....	fair.
New Hampshire, Newport, R. I.	30.22	767.6	30	— 1.1	100	nnw.	.....	.....	4–5	.....	2	.....	calm	.....	.....	sm'h	.....	clear.
Nipsic, Lisbon, Portugal*	30.24	768.1	49	9.4	85	ene.	.....	.....	2	.....	10	.....	.....	.....	.....	sm'h	.....	foggy.
Onward, Callao, Peru†	30.03	762.7	64	17.8	94	calm	.....	.....	0	.....	10	.....	n.	.....	.....	long	w.	cloudy.
Palos, Tientsin, China*	30.39	771.9	19	— 7.2	100	se.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
Pensacola, Panama, U. S. C*	29.80	756.9	77	25.0	90	n.	1	0.4	.....	.....	8	.....	n.	0	0	sm'h	.....	cloudy.
Powhatan, Boston, Mass	30.17	766.3	24	— 4.4	86	nw.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	fair.
Quinnebaug, Genoa, Italy*	30.05	763.3	58	14.4	87	ese.	.....	.....	2	.....	10	.....	calm	.....	.....	sm'h	.....	overcast.
Ranger, N. 17° 05′, W. 100° 48′	29.99	761.7	78	25.6	90	n.	.....	.....	2	.....	8	.....	calm	.....	.....	sm'h	.....	cloudy
Richmond, N. 27° 58′ W. 123° 28′*	30.28	769.1	53	11.7	73	nne.	.....	.....	4	.....	10	.....	nne.	0	0	.....	.....	cloudy.
Saratoga, New York, N. Y.	30.17	766.3	32	0.0	69	nw.	.....	.....	2	.....	5	.....	w.	0	0	sm'h	.....	fair.
St. Louis, League Island, Pa.	30.48	774.2	34	1.1	51	nw.	.....	.....	1	.....	8	.....	nw.	0	0	.....	.....	cloudy.
Tennessee, N. 17° 22′, W. 60° 38′	30.06	763.5	79	26.1	82	e.	4	1.8	.....	.....	8?	.....	e.	sli't	sli't	sm'h	.....	cloudy.?
Vandalia, N. 18° 30, W. 63° 45′*	30.06	763.5	77	25.0	82	ne.	.....	.....	2	.....	8	.....	nne.	.....	.....	sm'h	.....	cloudy.
Wabash, Boston, Mass.	30.16	766.1	24	— 4.4	74	nw.	5	2.2	.....	.....	2	.....	nw.	0	0	.....	.....	clear.
Wachusetts, Mare Island, Cal*	30.06	763.5	46	7.8	100	ese.	.....	.....	2	.....	10	.....	calm	0	0	sm'h	.....	cloudy.
Wyandotte, Washington, D. C	30.43	772.9	44	6.7	84	nw.	.....	.....	2	.....	2	.....	n.	0	0	.....	.....	fair.
Yantic, N. 16° 57′, W. 60° 03′	30.13	765.3	76	24.4	86	se.	.....	.....	3	.....	2	.....	se.	.....	.....	sm'h	.....	clear.
Merchant Marine.																		
S. S. Grecian, Havre, France*	29.93	760.2	57	13.9	87	sw.	.....	.....	4	.....	9	.....	sw.	6 h'r	6 h'r	.....	.....	cloudy.
S. S. Nova Scotian, N. 50° 34′ W. 41° 17′	29.49	749.0	37	2.8	.....	ne.	.....	.....	2	.....	5	.....	w.	.....	.....	long	nne.	showery.
S. S. Scandinavian, N. 55° 08′, W. 10° 06′	29.32	744.7	49	9.4	.....	se.	.....	.....	3	.....	10	.....	se.	2 h'r	2 h'r	long	sw.	raining.
S. S. British Crown, N. 47° 15′, W. 36° 09′†	29.34	745.2	49	9.4	.....	nne.	.....	.....	4	.....	6	.....	n.	3 h'r	3 h'r	h'vy	n.	fine.
S. S. British Prince, N. 51° 09′, W. 31° 30′†	29.39	746.5	42	5.6	.....	nnw.	.....	.....	4–5	.....	3	.....	nw.	0	0	h'vy	var.	clear.
S. S. Indiana, N. 39° 53′ W. 70° 32′	.....	.....	36	2.2	80	e.	.....	.....	4	.....	2	.....	nw.	.....	.....	mod.	nw.	fine.
S. S. Lord Gough, N. 40° 00′, W. 70° 44′	30.11	764.8	34	1.1	.....	nw.	.....	.....	5	.....	10	.....	nw.	snow	snow	sm'h	.....	cloudy.
S. S. Ohio, Liverpool, Eng †	29.44	747.8	54	12.2	93	ssw.	.....	.....	5	.....	10	.....	.....	.....	.....	.....	.....	cloudy.
S. S. Pennsylvania, St George Channel†	29.61	752.1	51	10.6	.....	sw.	.....	.....	4	.....	1	.....	sw.	.....	.....	sm'h	sw.	misty.
S. S. Anchoria, N. 40° 44′ W. 67° 10′†	30.00	762.0	.....	.....	.....	n.	.....	.....	5	.....	10	.....	nne.	sh's	sh's	sm'h	.....	gloomy.
S. S. Bolivia, New York, N. Y*†.	30 31	769.9	36	2.2	100	nw.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	.....	clear.
S. S. Dorian, N. 37° 32′, E. 2° 32′*	30.12	765.0	59	15.0	.....	calm	.....	.....	0	.....	6	.....	.....	0	0	sm'h	.....	cloudy.
S. S. Galatia, N. 39° 14′, W. 9° 40′	.....	.....	56	13.3	?	ese.	.....	.....	2	.....	8	.....	se.	0	0	sm'h	nw.	hazy.
S. S. Utopia, N. 33° 11′ W. 28° 56′†	30.22	767.6	69	20.6	70	w.	.....	.....	4	.....	3	.....	w.	4 h'r	4 h'r	h'vy	w.	clear.
S. S. Ailsa, N. 17° 58′, W. 76° 46′	.....	.....	75	23.9	95	ene.	.....	.....	2	.....	10	.....	ene.	4 h'r	4 h'r	sm'h	.....	cloudy.
S. S. Antillas, N. 22° 30′, W. 68° —	.....	.....	78	25.6	.....	s.	.....	.....	1	.....	1	.....	.....	.....	.....	sm'h	.....	fine.
S. S. Ambrose, Para river, Brazil†	29.94	760 5	83	28.3	.....	e.	.....	.....	3	.....	9	.....	e.	0	0	3	e.	fine.
S. S. Carroll, N. 43° 12′, W. 66° 20′*†	30.11	764.8	29	— 1.7	.....	nnw.	.....	.....	4	.....	2	.....	nnw.	snow	snow	short	nnw.	cloudy.
S. S. Auckland, S. 50° 58′, W. 148° 38′	29.83	757.7	52	11.1	93	sw.	.....	.....	5	.....	10	.....	.....	.....	.....	.....	.....	drizzling.
S. S. City of Agra, S. 52° 45′, W. 142° 07′	29.54	750.3	47.2	8.4	100	wsw.	.....	.....	5	.....	10	.....	.....	.....	.....	.....	.....	misty.
S. S. Commewyne, N 41° 11′, W. 35° 49′	29.56	750.8	57.6	14.2	63	wsw.	.....	.....	3	.....	9	.....	.....	.....	.....	.....	.....	d. clouds.
S. S. Gordon Castle, N. 13° 13′, E. 43° 03′	30.01	762.2	76.5	24.7	84	s.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.
Inchkeith, S. 1° 54′, E. 89° 28′	29.93	760.2	82.2	27.9	87	var.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky.
S. S. Bothnia, N. 40° 20′, W. 66° 56′	30.06	763.5	40	4.4	82	ne.	.....	.....	5	.....	8?	.....	n.	shr's	shr's	mod.	n.	clear.?
S. S. Gallia, N. 46° 58′, W. 36° 05′	29.41	747 0	48	8.9	?	nw.	.....	.....	5	.....	8	.....	ne.	rain	rain	mod	n.	fair.
S. S. Scythia, N. 50° 30′, W. 21° 11′	28.94	735.1	54	12.2	.....	sse.	.....	.....	1	.....	10	.....	.....	10 h'r	10 h'r	h'vy	se.	overcast.
S. S. Colina, St. John's, N. F †	29.52	749.8	.....	.....	.....	ene.	.....	.....	1	.....	2	.....	ene.	0	0	.....	.....	clear.
S. S. France, N. 49° 23′, W. 22° 27′†	29.28	743.7	53.6	12	.....	ese.	.....	.....	4	ck	0	.....	ese.	.....	.....	sm'h	sw.	
S.S. Arizona, N. 47° 56′, W 42° 40′	29.54	750.3	45	7.2	.....	nne.	.....	.....	4	.....	3	.....	n.	0	0	mod.	nne.	fair.
S. S. Wisconsin, N. 49° 11′, W. 33° 34′	29.21	741.9	42	5.6	.....	nne.	.....	.....	5	.....	8	.....	ene.	5 h'r	5 h'r	mod.	ne.	showery.
S. S. Bohemia, N. 49° 00′, W. 12° 20′ †	29.68	753.9	.....	.....	.....	ssw.	.....	.....	6	.....	10	.....	sw.	4 h'r	4 h'r	h'vy	ssw.	misty.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Direction from.	
								Force.	Upper.	Lower.	Upper.	Lower.					
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	From.	From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																	
S. S. Frisia, N. 47° 23′, W. 31° 47′	29.29	744.0	51	10.6		nne.			7		9		nne.	8 h'r	8 h'r	mod.	n.	cloudy.
S. S. Gellert, N. 50° 34′, W. 22° 48	29.20	741.7	55	12.8		nnw.			5		10		nw.	10 h'r	10 h'r	r'gh	nnw.	drizzling.
S. S. Silesia, N. 40° 30′, W. 72° 58′†	30.22	767.6	34	1.1	79	nw.			2		3		nw.	0	0	2–3		fair.
S. S. Vandalia, N. 42° 30′, W. 52° 30′	29.70	754.4	41.4	5.2	88	n.			6		10		n.	0	0	h'vy	n.	cloudy.
S. S. Archimedes, N. 27° 31′ W. 18° 55′	30.17	766.3				calm			0		1		calm	0	0	light	n.	clear.
S. S. Hevelius, Liverpool, Eng*†	29.50	749.3	50	10.0		wsw.			6		8		sw.	4 h'r	4 h'r			cloudy.
S. S. Bulgarian, N. 51° 07′, W. 27° 44′*	29.36	745.7				wnw.			5		8		wnw.	0	0	light	nnw.	cloudy.
S. S. Virginian, N. 42° 32′, W. 59° 30′*	29.78	756.4	32	0.0		n.			6		10		n.	snow	snow	r'gh	n.	cloudy.
S. S. Colorado, Galveston, Texas†	30.32	770.1	46	7.8		n.			5		10		n.	7 h'r	7 h'r			cloudy.
S. S. Rio Grande, Matanzas, Cuba, W. I†	30.07	763.8	79	26.1		ne.			1		1		ne.	0	0			hazy.
S. S. San Marcos, Key West, Fla	30.22	767.6	72	22.2		nne.			4		5		ne.			sm'h	ne.	fine.
S. S. Archimede, N. 35° 37′, W. 10° 13′ †	30.27	768.8	66	18.9	74	sse.			3		4		se.	0	0	sm'h	s.	fair.
S. S. John Hopkins, Baltimore, Md			38	3.3		nne.			2		4		ne.	0	0			fair.
S. S. Glenfyne, Para, Brazil *†	29.59	751.6				e.			1		2		ene.	0	0			fair.
S. S. Brooklyn, N. 48° 58′, W. 47° 50′*	29.34	745.2	35	1.7		nnw.			3				n.			5	une.	cloudy.
S. S. Chalmette, New York, N. Y†	30.15	765.8	34	1.1		w.			1		1		wnw.	0	0			clear.
S. S. New York, N. 38° 05′, W. 74° 35′†	30.29	769.4	42	5.6		n.			2		10		ne.			sm'h		cloudy.
S. S. Denmark, N. 42° 09′, W. 62° 31′			30	—1.1		n.			6		8		w.			mod.	nw.	raining.
S. S. Erin, N. 51° 19′, W. 13° 39′	29.38	746.2	48	8.9		wsw.			7		10		wsw.	12 h'r	12 h'r	h'vy	nw.	rainy.
S. S. Helvetia, N. 45° 26′, W. 50° 30′	29.45	748.0	36	2.2		nne.			5		10		nne.	snow	snow	short	ne.	overcast.
S. S. The Queen, N. 47° 43′, W. 36° 26′*	29.51	749.5	46	7.8		n.			6		5		n.	shr's	shr's	mod	n.	fair.
S. S. City of Alexandria, N. 22° 41′, W. 85° 30′†	30.07	763.8	78	25.6		e.			3		5		e.	3 h'r	3 h'r	small	e.	squally
S. S. City of Merida, N. 37° 55′, W. 74° 35′ *†	30.16	766.1				ene.			3		5?		nne.	0	0	light	nne.	cloudy.†
S. S. City of Chester, N. 48° 10′ W. 41° 42′			46	7.8		ene.			3								ene.	clear.
S. S. Braunschweig, S. 1° 43′, W. 31° 32′	29.99	761.7	82.0	27.8	83	wsw.			4		8		e.	5 h'r	5 h'r	mod.	e.	cloudy.
S. S. Donau, N. 49° 27′, W. 11° 08′	29.68	753.9				s.			6		8		wsw.	8 h'r	8 h'r	high	ssw.	cloudy.
S. S. Oder, N. 43° 40′, W. 56° 52′	29.69	754.1	33.8	1.0		nnw.			5		7		nw.	snow	snow	mod.	n.	squally.
S. S. Rhein, N. 46° 44′, W. 43° 25′	29.47	748.5				ne.			4		5		e.	0	0	long	e.	cloudy.
S. S. Salier, N. 50° 17′, W. 3° 10′	29.86	758.4	54.5	12.5		sw.			6		10		sw.	½h'r	½h'r	cross	sw.	cloudy
S. S. Belgic, San Francisco, Cal.	30.03	762.7	51	10.6	86	n.			2		3		ne.	3 h'r	3 h'r	r'gh	w.	clear.
S. S. Gaelic, N. 34° 37′, W. 162° 08′ *	30.26	768.6	52	11.1	93	n.			4		9		nw.				nw.	overcast.
S. S. Oceanic, N. 33° 46′, E. 137° 10′*	30.23	767.8	39	3.9	91	nw.			7		5		wnw.			4	nnw.	hailing.
S. S. Mississippi, Seattle, Wash. Ter *†	30.26	768.6	43	6.1	83	n.			2		7		n.					fair.
S. S. Willamette, Seattle, Wash. Ter †	30.28	769.1	43	6.1	83	e.			2		6		ene.	0	0			cloudy.
S. S. Columbia, N. 43° 04′, W. 124° 52′†	30.02	762.5	48	8.9	78	e.			2		10		se.			long	wnw.	hazy.
S. S. Oregon, Portland, Oregon†	30.03	762.7	45	7.2	92	e.			4		8		s.					threatening.
S. S. Ancon, N. 35° 52′, W. 118° 45′†	30.12	765.0	55	12.8	68	e.			2		0					sm'h		clear.
S. S. City of Chester, off Mendocino, Cal*†	30.05	763.3	50	10.0	72	nw.			4		10					h'vy	nw.	rainy.
S. S. Dakota, Seattle, Wash. Ter †	30.18	766.6	43	6.1	75	s.			1		2		se.	1 h'r	1 h'r	sm'h		clear.
S. S. State of California, San Francisco, Cal*†	30.08	764.0	50	10.0		sw.			2		4		s.	0	0			fair.
S. S. City of New York, S. 33° 55′, E. 152° 35′†	29.98	761.5	73	22.8	72	n.			4		0			0	0			clear.
S. S. City of Pekin, N. 40° 52′, W. 133° 09′†	30.25	768.3	49	9.4	64	e.			2		2		e.	0	0	light	w.	clear.
S. S. City of Rio de Janeiro, N. 31° 41′, W 117° 48′			60	15.6	76	nw.			3		0			0	0	long	wnw.	clear.
S. S. City of Sydney, N. 14° 21′ W. 160° 57′ †	29.93	760.2	74	23.3	81	ene.			4		8		ne.			mod	ne.	drizzling.
S. S. City of Tokei, N. 34° 27′, E. 139° 40′†	29.27	743.4	32	0.0		n.			3				n.	light	light		s.	clear.
S. S. Colima, Panama, Panama†	29.91	759.7	77	25.0	95	n.			2		7		nw.	0	0			cloudy.
S. S. San José, N. 13° 55′, W. 91° 05′†	29.99	761.7				se.			2	c	0	se.		0	0	long	ese.	clear.
S. S. Zealandia, Sydney, N. S. W	30.04	763.0	67	19.4	95	n.			6		1		se.			mod.	e.	fine.
S. S. Claudius, N. 31° 30′, W. 75° 25′ †	30.19	766.8				ne.					8		nw.	light	light	cross	var.	rainy.
S. S. Valencia, La Guayra, Venezuela†	30.01	762.2	79	26.1	76	calm			0		1		ese.	0	0	light	ne.	fine
S. S. Belgenland, N. 45° 00′, W. 46° 40′	29.39	746.5	46	7.8	54	ne.			6		10			15 h'r	15 h'r	r'gh		gloomy.
S. S. Nederland, N. 50° 21′, W. 22° 59′			50	10.0		nnw.			5		8		nnw.	10 h'r	10 h'r	cross	sw	cloudy.
S. S. Pennland, N. 50° 05′, W 5° 45	29.87	758.7	53	11.7	93	ssw.			5		10			4 h'r	4 h'r	high	sse.	cloudy.
S. S. Rhynland, Antwerp, Belgium	29.73	755.1	50	10.0	79	sw.			7		10		sw.	24 h'r	24 h'r			rainy.
S. S. Waesland, N. 40° 37′ W. 71° 32′	30.22	767.6	35	1.7	70	nnw.			5		2		nw.	0	0	light	nnw.	clear.
S. S. P. Caland, N. 47° 32′, W. 32° 59′	29.39	746.5	49.1	9.5	89	n.			5		9		nne.			5	nne.	cloudy.
S. S. W. A. Scholten, N. 49° 34′, W. 8° 51′			53.2	11.8	93	s.			7		10		ssw.			high	wsw.	rainy.
S. S. State of Florida, Glasgow, Scotland	29.32	744.6	53	11.7		wsw.			6		8		w.	16 h'r	16 h'r			cloudy.
S. S. State of Indiana, N. 40° 28′, W. 70° 48′†	30.14	765.5	32	0.0		nnw.			4		4		sw.	0	0	sm'h		fine.
S. S. Hekla, N. 40° 30′, W. 71° 00′*	30.17	766.2	39.2	4.0		n.			4		2		nw.	0	0			fair.
S. S. Iowa, N. 45° 52′, W. 41° 38′*†	29.38	751.3	51	10.6		se.			5		3		e.	2 h'r	2 h'r	mod.	ese.	fair.
S. S. Plantyn, N. 42° 54′, W. 59° 36′	29.80	756.9							4		4		nw.	snow	snow	mod.	nw.	hazy.
S. S. Britannic, N. 44° 49′, W. 54° 58′†	29.67	753.6	27	—2.8		n.			3		6		nw.	snow	snow	sm'h	n	sleeting.
S. S. Celtic, N. 49° 17′, W. 27° 30′ †	29.29	744.0	57	13.9		ne.			4		10		ne.	12 h'r	12 h'r	h'vy	ne.	cloudy.
S. S. Lepanto, N. 42° 24′, W. 66° 44′ *	30.07	763.8	32	0.0		nnw.			6		8		n.	sleet	sleet			sleeting.
S. S. Marengo, N. 50° 10′, W. 4° 15′	29.68	753.9				sw.			6		8?		sw.	5 h'r	5 h'r	r'gh	sw.	cloudy.†
S. S. Salerno, N. 49° 38′, W., 13° 30′*	29.48	748.8	55	12.8		sw.			6		10		sw.	2 h'r	2 h'r	rg'h	sw.	raining.
S. S. Catherine Whiting, Barnegat, N. J†	30.30	769.6	80	26.7		n.			5				e.	0	0	short	n.	
S. S. Saxon, N. 41° 10′, W. 71° 25′†	30.13	765.3	33	0.6		n.			6		0							fine.
MISCELLANEOUS.																		
Bk. Adelaide, N. 27° 11′, W. 45 37′*†	30.07	763.8	73	22.8		wsw.			5		3		wsw.	0	0	mod.	w.	fair.
Bk. Alpha, N. 20° 15′, W. 33° 35′†	30.09	764.3	80	26.7		sse.			1		0			0	0	sm'h		clear.
Schr. Annie Lewis, Cedar Keys, Fla†	30.29	769.4	59	15.0		ne.			1		10			0	0	sm'h		misty.
Bk. Anna Thormann, S. 34° 59′ E. 27° 10′*	30.04	762.9	74.1	23.4	76	ene.			6		9 k		e.	0	0	mod.	e.	cloudy.
S. S. Antonio Lopez, Cadiz, Spain*	30.24	768.1	58.5	14.7	88	n.			1		9			0	0			hazy.
Bk. Aquidneck, N. 5° 46′, W. 46° 10′*†	30.10	764.5	86	30.0		ese.			4				se.	1½h'r	1½h'r	h'vy	e.	cloudy.
Bgt. Arthur, N. 4° 56′, W. 19° 56′ *†	30.08	764.0				var.			1		0			0	0	mod.	ne.	
Schr. Anna Holton, N. 24° 13′, W. 92° 57′†	30.07	763.8	76	24.4		ene.			4		10		ne.	8 h'r	8 h'r	mod.	ne.	drizzling.
Bg. Belle of the Bay, Galveston, Texas*†	30.05	763.3				n.			4		10		n.	14 h'r	14 h'r			overcast.
S. S. Burswell, N. 24° 30′, W. 80° 49′.*†	30.09	764.3	76	24.4		ne.			3		8		ene.	4 h'r	4 h'r	slt	ene.	light rain.
Bk. Champion, N. 35° 52′, W. 74° 09′			50.0	10.0		n.			4		10		nnw.	0	0	mod.	nnw.	cloudy.
Bg. Clara M. Goodrich, Key Francis, W. I.*†	30.01	762.2				e.			4		5		e.	0	0			fair.
Bk. Commerce, N. 39° 31′, W. 69° 57′ †	30.11	764.8	39	3.9		nw.			5		8		nw.	0	0	long	nw.	fine.
Schr. C. R. Flint, N. 36° 20′, W. 75° 32′			42	5.6		n.			2		6		nne.	0	0	long	ne.	fair.
Bkt. David Preston, Pensacola, Fla			64.0	17.8		nne.					10		nne.	4 h'r	4 h'r			
Bk. E. L. Pettingill, S. 14° 11′, W. 125° 30′*†	30.00	762.0	78	25.6		e.			4				e.	0	0	sm'h	e.	
Schr. Edith R. Seward, N. 34° 14′, W. 77° 57′ *†	30.27	768.8	43	6.1		n.			1		8		n.	0	0			cloudy.
S. E. J. Spicer, Liverpool, Eng*†	29.53	750.0	54	12.2		sw.			5		10		sw.	12 h'r	12 h'r			raining.
Bk. E. D. Bigelow, Verdon Roads, France*†	30.15	765.8				sse.			3		2		sse.					fair.
Bk. Essex, S. 7° 32′ E. 45° 53′ *†	29.90	759.4	84	28.9		sse.			3		10			rain	rain		s.	
Schr. F. E. McDonald, N. 43° 02′, W. 69° 41′†	30.19	766.8	32	0.0		n.			1					0	0			
S. S. Foscolia, N. 43° 59′, W. 35° 53′																		threatening.
Bk. Freya, Matanzas, Cuba, W. I.			71	21.7		ne.			7		5		ne.	0	0	long	n.	fair.
S. Geo. Stetson, N. 35° —, W. 44° —* †	29.50	749.3	67	19.4	87	n.			1		5		ne.	1 h'r	1 h'r			fair.
Bk. Gronsvaer, S. 36° 35′, E. 175° 00′†	29.25	753.1	62.5	16.9		w.			6		5?		sw.			cross	w.	cloudy.†
Bk. Godeffroy, S. 39° 16′, W. 76° 21′†	30.17	766.3	56.3	13.5	88	sse.			6		7		nw.	2 h'r	2 h'r	sm'h		
Bk. Great Surgeon, S. 28° 10′, E. 50° 35′*†	30.18	766.6	77	25.0		s.			5		5		sse.	0	0	mod.	s.	cloudy.
Bk. Hattie G. McFarland, N. 22° 07′, W. 57° 09′	30.21	767.3	76	24.4		calm			5		9		w.	1 h'r	1 h'r	r'gh	ssw.	hazy.
S. Hedwig, N. 39° 08′, W. 68° 07′	30.12	765.1	42.1	5.6	85	nnw.			0		2			0	0	long	ene.	clear.
Schr. Isabel Alberto, Hoboken, N. J. †	30.31	769.9				nw.			5		9		nnw.	snow	snow	short	nw.	snowy.
Schr. Jennie N. Huddell, Baltimore, Md†	30.26	768.6				nne.			2		1		w.	0	0			clear.
Bk. Joseph A. Ropes, Majunga, Madagascar *†	29.95	760.7	89	31.7	73	nw.			1		10			0	0			cloudy.
Bkt. Josephine, N. 17° 20′, W. 30° 37′†	30.13	765.3	78	25.6	73	ene.			4		3		nw.	0	0	sm'h		fair.
S. S. J. W. Wilson, Port Eads, La†	30.11	764.8	49	9.4		n.			3		0			0	0	sm'h		hazy.
									6		10			0	0			cloudy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Light House Tender, Laurel, Key West, Fla†	30.06	763.5	70	21.1	.....	ene.	.....	.....	2	.....	9	.....	ene.	3 h'r	3 h'r	sm'h	.....	threatening.
Bg. Lilian, N. 31° 45′, W. 68° 00′†	30.17	766.3	64	17.8	.....	nnw.	.....	.....	4	.....	5	.....	nw.	o	o	mod.	var.	clearing.
Bk. Louise Adelaide, N. 21° 40′, W. 93° 10′	.....	.....	.....	.....	.....	nw.	.....	.....	4	.....	9	.....	nw.	2 h'r	2 h'r	short	nw.	cloudy.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.06	763.5	.....	.....	.....	calm	.....	.....	0	.....	0	.....	.....	o	o	.....	.....	clear.
S. S. Madrid, Brouwershaven, Germany*†	29.84	757.9	50	10.0	.....	wsw.	.....	.....	6	.....	10	.....	.....	16 h'r	16 h'r	.....	.....	overcast.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.20	767.1	59	15.0	.....	nne.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	cloudy.
S. Minnie N. Gerow, N. 28° 29′, W. 61° 58′*†	30.01	762.2	.....	.....	.....	nnw	.....	.....	3	.....	2	.....	n.	.....	.....	sm'h	nw.	fine.
S. M. P. Grace, S. 54° 47′, W. 82° 41′*†	29.60	751.8	46	7.8	.....	wnw.	.....	.....	5	.....	10	.....	nnw.	o	o	mod.	wnw.	cloudy.
Bg. O. C. Clary, Miragoane, Hayti, W. I.*†	30.08	764.0	86	30.0	92	calm	.....	.....	0	.....	1	.....	e.	o	o	.....	.....	
Bk. Ottawa, N. 37° 13′, W. 12° 45′*	30.10	764.5	62	16.7	.....	sw.	.....	.....	4	.....	3	.....	sw.	o	o	sm'h	wnw.	clear.
S. Paramita, San Francisco, Cal†	30.01	762.2	48	8.9	.....	w.	.....	.....	2	.....	.....	.....	.....	o	o	.....	.....	
Bk. Pilgrim, N. 32° 51′, W. 74° 55′*†	30.15	765.8	.....	.....	.....	ne.	.....	.....	2	.....	.....	.....	e.	o	o	chop	nnw.	cloudy.
S. S. Radnorshire, N. 34° 40′, E. 139° 02′*†	30.04	763.0	.....	.....	.....	ne.	.....	.....	4	.....	3	.....	n.	o	o	mod.	n.	cloudy.
S. S. Raleigh, N 26° 40′, W. 73° 16′*†	30.02	762.5	70	21.1	.....	ese.	.....	.....	3	.....	2	.....	e.	½h'r	½h'r	sm'h	ese.	fine.
Schr. S. B. Hubbard, N. 31° 35′, W. 80° 15′†	30.28	769.1	55	12.8	.....	nw.	.....	.....	1	.....	10	.....	.....	light	light	long	nw.	threatening.
Bk. Southern Belle, N. 38° 49′, W. 180 —′*†	29.85	758.2	62	16.7	.....	sw.	.....	.....	5	.....	5	.....	w.	1 h'r	1 h'r	r'gh	wsw.	fair.
S. S. Strathleven, N. 20° 40′, E. 113° 28′	30.04	763.0	67.2	19.6	99	ene.	.....	.....	6	.....	4	.....	ne.	o	o	6	ene.	d. clouds.
Bk. Sunbeam, N. 40° 45′, W. 39° 45′	.....	.....	57	13.9	87	se.	.....	.....	6	.....	10	.....	wnw.	4 h'r	4 h'r	cross	con.	rainy.
U. S. F. C. S. S. Fish Hawk, Washington, D. C†	30.42	772.7	41	5.0	82	calm	.....	.....	0	.....	6?	.....	calm	o	o	.....	.....	cloudy.?
Bk. Vincenzo Accame, N. 29° 42′, W. 64° 15′†	30.20	767.1	69.8	21.0	.....	wnw.	.....	.....	4	.....	4	.....	wnw.	2½h'r	2½h'r	.....	n.	
Schr. Viola Reppard, N. 37° 51′, W. 74° 30′†	30.14	765.5	39	3.9	.....	nw.	.....	.....	2	.....	10	.....	nw.	o	o	.....	.....	cloudy.
Bk. Wandering Jew, Montevideo, Uruguay †	29.95	760.7	69	20.6	.....	s.	.....	.....	7	.....	7	.....	s.	10 h'r	10 h'r	short	s.	cloudy.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.03	762.7	.....	.....	.....	s.	.....	.....	1	.....	2	.....	s.	.....	.....	sm'h	s.	fair.

International Chart I. December 28, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 29, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.23	767.8	59.7	15.4	83	n.	.....	.....	1	.....	1	.....	.....	0	0	very fair....	Malaterre.
Algiers	.....	.....	30.21	767.4	57.2	14.0	82	calm	.....	.....	0	.....	4	.....	.....	0	0	cloudy.....	Thève.
La Calle	.....	.....	30.24	768.0	61.5	16.4	73	sw.	.....	.....	2	.....	2	.....	.....	0	0	fair.....	Fonfréde.
Tunis	.....	.....	30.22	767.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.26	768.5	61.5	16.4	64	sw.	.....	.....	1	.....	1	.....	.....	0	0	very fair....	Pérés.
Tebessa	.....	.....	30.27	768.9	55.8	13.2	60	sw.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	Dognon.
Geriville	.....	.....	.....	.....	57.6	14.2	41	nw.	.....	.....	0	.....	1	.....	.....	0	0	very fair....	Loncharnp.
Laghouat	.....	.....	30.37	771.3	54.7	12.6	50	nw.	.....	.....	2	.....	3	.....	.....	0	0	pretty fair...	Abraham.
Biskra	.....	.....	30.31	769.8	62.2	16.8	37	nw.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	Malau.
Australian.																			
Melbourne, Victoria	29.79	756.6	29.88	758.9	55.0	12.8	77	s.	3	1.3	.....	.....	10	.....	.....	0.05	1.3	dull.....	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.49	749.1	30.05	763.2	52.2	11.2	82	sw.	.....	.....	2	.....	4	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.12	739 6	29.89	759.3	46.9	8.3	66	sw.	6.3	2.8	.....	.....	8	.....	.....	0.079	2.0	.....	Dr. Wierzbiski.
Eperies	29.08	738.6	29.99	761.8	35.6	2.0	100	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.77	730.7	30.05	763.3	41.4	5.2	88	se.	.....	.....	1	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.62	727.0	30 06	763.6	52.5	11.4	88	nw.	.....	.....	4	.....	2	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.65	727.8	30.00	762.1	48.9	9.4	70	w.	.....	.....	1	.....	7	.....	.....	0	0	clearing.....	The Staff.
Lemberg	28.87	733.3	29.87	758.8	42.3	5.7	94	nw.	.....	.....	3	.....	10	.....	.....	0.051	1.3	.....	Dr. T. Stanecki.
Pola	30.03	762.7	30.14	765.6	53.2	11.8	82	w.	.....	.....	1	.....	10	.....	.....	0	0	.....	I. R.Hydrographic Office.
Szathmar	29.53	750.1	29.99	761.8	40.3	4.6	96	se.	.....	.....	2	.....	7	.....	.....	0.224	5.7	.....	Joseph Midlinszky, S. J.
Szegedin	29.79	756 6	30.07	763.8	49.3	9.6	94	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.06	763.5	30.16	766.1	49.3	9.6	84	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy.....	Royal Academy.
Vienna	29.29	743.9	30.00	762.1	53.6	12.0	65	s.	.....	.....	1	.....	1	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.01	736.8	29.11	739.4	39.6	4.2	96	ssw.	6	2.7	.....	.....	9	.....	.....	0.260	6.6	misty.....	W. Boswell
Armagh, Observatory	28.93	734.8	29.17	740.9	47.9	8.8	78	sw.	30	13.4	.....	.....	10	.....	.....	.....	.....	squally.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.37	746.0	52.0	11.1	76	sw.	16	7.2	.....	.....	9	.....	.....	.....	.....	overcast.....	John Hartnup.
Bolton, Sharples	28.84	732.5	29.36	745.7	50.8	10.4	80	sw.	13	5.8	.....	.....	10	.....	.....	.....	.....	overcast.....	Thomas Mackereth.
Bradford, Yorkshire	28.93	734.8	29.33	745.0	51.1	10.6	87	sw.	.....	.....	5	.....	7	.....	.....	0.07	1.8	raining.....	McLandsborough&Preston
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	81.0	27.2	72	ne.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds....	Corpl.J.Surgenor, A.H.C.
Cardington	.....	.....	.....	.....	53.4	11.9	91	sw.	.....	.....	3.0	.....	10	.....	.....	.....	.....	overcast.....	John McLaren.
Chatham, School M. E	29.47	748.5	29.60	751.8	50.7	10.4	97	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	misty.....	Corpl. G. A. Pickles.
Falmouth, Observatory	29.38	746.2	29.61	752.1	52.4	11.3	93	sw.	.....	.....	5	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Fort Napier, Natal	27.50	698.5	29.71	754.6	86.4	30.2	44	nw.	.....	.....	2	.....	8	.....	.....	.....	.....	overcast.....	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.76	755.9	29.99	761.7	81.0	27.2	66	ne.	.....	.....	3	.....	2	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterraneum	30.20	767.1	30.25	768.3	61.2	16.2	94	ne.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky.....	Corpl. F. Norris, A.H.C.
Glasgow, Observatory	28 89	733 8	29.09	738.9	47.6	8.7	85	ssw.	.....	.....	6	.....	.....	.....	.....	.....	.....	squally.....	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.40	746.7	29.58	751.3	53.2	11.8	88	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	overcast.....	The Staff.
Guernsey	29.40	746.7	29.70	754.4	52.0	11.1	96	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	raining.....	A. Collenette, F. M. S.
Kew, Observatory	29.54	750.3	29.58	751.3	53.5	11.9	88	sw.	26	11.6	.....	.....	10	.....	.....	.....	.....	drizzling.....	The Staff.
Leicester, Museum	29.18	741.2	29.44	747.8	54.2	12.3	87	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	overcast.....	J. C. Smith.
Malta, Mediterraneum	.....	.....	.....	.....	65.0	18.3	96	w.	.....	.....	2	.....	6	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.04	763.0	30.09	764 3	74.0	23.3	81	ne.	.....	.....	1	.....	4	.....	.....	.....	.....	d. clouds....	C. S. Duncombe
Oscott, St. Mary's College	28.88	733.5	29.40	746.7	52.6	11.4	86	sew.	.....	.....	7	.....	10	.....	.....	.....	.....	threatening.	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.30	744 2	29.53	750.0	54.7	12.6	84	sw.	.....	.....	6	.....	9	.....	.....	.....	.....	squally.....	The Staff.
Plymouth	29.51	749.5	29.59	751.6	53.0	11.7	96	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	drizzling..	John Merrifield.
Sandwick Manse, Orkneys	29.16	740 7	29.27	743.4	35.2	1.8	88	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	misty.....	Rev. C. Clouston, L L D.
Scutari Cemetery, Turkey	30.06	763.5	30.13	765.3	56.4	13.6	96	sw.	.....	.....	1	.....	6	.....	.....	.....	.....	d. clouds	W. H. Lyne.
Sheffield	29.11	739.4	29.39	746.5	53.5	11.9	83	sw.	.....	.....	4	.....	9	.....	.....	0.01	0.3	raining.....	W. F. Cooper.
Silloth Rectory	29.18	741.2	29.21	741.9	49.0	9.4	89	sw.	.....	.....	6	.....	8	.....	.....	0.036	0.9	showery.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.38	746.2	50.0	10.0	86	sw.	15	6.7	.....	.....	10	.....	.....	.....	.....	gloomy.....	I. New.
Strathfield Turgiss	29.38	746.2	29.59	751.6	52.6	11.4	90	w.	.....	.....	3	.....	10	.....	.....	.....	.....	showery.....	Rev.C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.58	751.3	29.64	752.8	54	12.2	87	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining.....	W. Newcombe.
Valencia, Observatory	29.44	747.8	29.46	748.3	50.2	10.1	86	w.	18	8.0	.....	.....	7	.....	.....	.....	.....	misty.....	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.06	763.5	30.10	764.5	17	— 8.3	88	nw.	5	2.2	.....	.....	10 n	.....	calm	0.060	1.5	light snow...	H. J. Cundall, C E
Chatham, N. B*	30.14	765.5	30.22	767.6	—17	—27.2	100	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	G. A. Blair.
Father Point, Quebec*	30.14	765.5	30.16	766.1	7	—13.9	91	w.	5	2.2	.....	.....	10 s	.....	calm	0	0	threatening.	J. McWilliams.
Fort Garry, Manitoba*	29.30	744.2	30.21	767.3	5	—15.0	100	sw.	8	3.6	.....	.....	8 ks	.....	sw.	0	0	cloudy.....	James Stewart.
Halifax, N. S*	30.02	762.5	30.16	766.1	14	—10.0	100	w.	4	1.8	.....	5 k	0	n.	.....	0	0	fair.....	A. Allison.
Kingston, Ontario*	29.89	759.2	30 24	768.1	30	— 1.1	78	sw.	8	3.6	.....	.....	10 s	.....	w.	Inap.	Inap.	cloudy.....	A. P. Knight, M A
Montreal, Quebec*	29.99	761.7	30.21	767.3	19	— 7.2	84	sw.	6	2.7	.....	.....	10 n	.....	.....	0.01	0.3	cloudy.....	C. H. McLeod, C E.
Parry Sound, Ontario*	29.43	747.5	30.15	765.8	34	1.1	92	sw.	17	7.6	.....	.....	10 n	.....	w.	0.03	0.8	cloudy.....	Rev. R. Mosley.
Port Dover, Ontario	29.57	751 1	30.30	769.6	31	— 0.6	89	sw.	5	2.2	.....	.....	10 cs	.....	sw.	0	0	cloudy.....	H. Morgan.
Port Stanley, Ontario	29.63	752.6	30.30	769.6	32	0.0	78	w.	8	3.6	.....	.....	10 n	.....	w.	Inap.	Inap.	cloudy	M. Payne.
Quebec, Quebec*	29.87	758 7	30.23	767.8	9	—12.8	100	nw.	.....	.....	3	.....	10 n	.....	nw.	.....	.....	light snow...	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.58	751.3	30.08	764.0	20	— 6.7	87	w.	2	0.9	.....	.....	10 cs	.....	w.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.45	748.0	30.20	767.1	33	0.6	81	sw.	25	11.2	.....	5 cs	0	w.	.....	0	0	fair.....	
St. Andrews, N. B	30.14	765.5	30.19	766.8	8	—13.3	98	nw.	6	2.7	.....	.....	10 n	.....	.....	0	0	cloudy.....	
Sydney, C. B*	29.95	760.7	30.02	762.5	18	— 7.8	91	nw.	9	4.0	.....	5 k	0	nw.	.....	0.15	3.8	fair.....	T. C. Hill, C. E
Toronto, Ontario*	29.87	758.7	30.27	768.8	31	— 0.6	78	w.	12	5.4	.....	.....	10 k	.....	w.	0	0	cloudy.....	Magnetic Observatory.
Yarmouth, N.S*	30.12	765.0	30.19	766.8	23	— 5.0	76	n.	5	2.2	.....	.....	10 k	.....	n.	0.01	0.3	cloudy	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.76	730.5	30.23	767.8	28.0	— 2.2	77	w.	.....	.....	3	.....	10 ks	.....	w.	0	0	overcast.....	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	25	— 3.9	100	nw.	2	0.9	.....	.....	10	.....	.....	.....	.....	snowing.....	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	29.82	757.4	29.85	758.2	71.0	21.7	78	w.	13.5	6.0	.....	0	4 s	.....	.....	0	0	hazy.....	John Duthie.
Cape Town, C G.H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	BAROMETER. Corrected for instrumental error and for temperature.		BAROMETER. Reduced to sea-level.		Temperature of the air.		Relative humidity	WIND. Direction.	WIND. Velocity.		WIND. Force.	CLOUDS. Amount and kind. Upper	CLOUDS. Amount and kind. Lower.	CLOUDS. Direction Upper.	CLOUDS. Direction Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.72	628.0	.....	.....	8.1	—13.3	.....	nnw.	.....	.....	3	.....	fg	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.23	767.8	30.34	770.6	28.4	— 2.0	70	n.	4.9	2.2	.....	.....	10	.....	s.	0	0	covered.....	**Mission, S. J.**
Zi-Ka-Wei, near Shanghai	30.26	768.5	30.28	769.1	48.2	9.0	86	se.	10.5	4.7	.....	.....	3	.....	.....	0	0	.....	**M. Marc Dechevrens .S.J**
DANISH.																			
Copenhagen	29.35	745.6	29.40	746.8	44.2	6.8	94	w.	18	8	.....	.....	10	.....	.....	.....	.....	raining.....	**Oversergent Fischer.**
Fanoe	29.40	746.7	29.42	747.2	41.2	5.1	98	wsw.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	**Overloerer Lauridsen.**
Godthaab, Greenland	29.74	755.5	29.79	756.6	7.2	—13.8	63	nne.	.....	.....	2	.....	1	.....	.....	.....	.....	.....	**S. Kleinschmidt.**
Ivigtut, Greenland	29.65	753.0	29.67	753.5	20.8	— 6.2	.....	calm	.....	.....	0	.....	5	.....	.....	.....	.....	.....	
Jacobshavn, Greenland	29.90	759.5	29.95	760.7	— 6.5	—21.4	.....	e.	.....	.....	4	.....	3	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.52	749.7	29.56	750.8	23.2	— 4.9	90	e.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	**A. O. Thorlacius.**
Thorshavn	29.37	746.0	29.41	746.9	34.2	1.2	77	n.	9	4	.....	.....	3	.....	.....	.....	.....	.....	**Overloerer Bergh.**
Vestervig	29.20	741.6	29.29	744.0	34.3	1.3	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	rain & fog...	**Loerrer Oesterboi.**
Upernavik, Greenland	29.95	760.6	29.99	761.8	— 5.8	—21.0	.....	e.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.37	746.1	30.04	762.9	50.0	10	95	ssw.	.....	.....	1	.....	n	.....	w.	0	c	.....	**M. Labroue, Director.**
Alençon, Normal School	29.33	745.0	29.88	759.0	47.5	8.6	96	sse.	.....	.....	1	.....	fg	ssw.	ssw.	0.110	2.8	foggy.....	**M. Nicot, Director.**
Arras, Engineer School	29.48	748.9	29.75	755.6	43.5	6.4	97	nnw.	.....	.....	3	.....	10 k	.....	nnw.	0	0	covered.....	**M. Fénéon, Command't.**
Avignon, Normal School	30.06	763.5	30.14	765.5	48.9	9.4	84	n.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	**M. Giraud, Director.**
Bar-sur-Seine	29.38	746.3	29.94	760.5	50.4	10.2	64	s.	.....	.....	1	0	5 cn	.....	.....	0	0	cloudy.....	**M. Saillard, Director.**
Beauvais, Normal School	29.57	751.1	29.84	757.9	48.7	9.3	81	s.	.....	.....	2	.....	8	.....	wsw.	0	0	very cloudy	**M. Frère Eugène Marie.**
Besançon, Normal School	29.06	738.0	29.97	761.1	48.2	9	94	s.	.....	.....	3	.....	n	.....	sw.	0	0	.....	**M. Gobin, Director.**
Bordeaux, Observatory	29.74	755.4	30.01	762.2	43.7	6.5	86	se.	.....	.....	1	.....	8	.....	.....	0.244	6.2	very cloudy	**M. Rayet, Director.**
Bourges, Normal School	29.36	745.7	29.90	759.4	57.2	14	89	s.	.....	.....	2	.....	k	.....	s.	0	0	.....	**M. Malet, Director.**
Brest, Naval Observatory	29.56	750.7	29.80	756.9	53.2	11.8	97	sw.	.....	.....	4	.....	10	.....	sw.	0.374	9.5	.....	**M. de Kermaide, Dir.**
Caen, Normal School	29.69	754.1	29.76	756.0	50.4	10.2	77	sw.	.....	.....	2	.....	8	.....	sw.	0	0	very cloudy.	**M. Berson, Director.**
Châlons-sur-Marne, N.Sch'l	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	**M. Jadot, Director.**
Charleville, Normal School	29.29	743.9	29.84	757.8	48.9	9.4	92	sw.	.....	.....	1	.....	2	.....	.....	0	0	¼ covered...	**M. Grimard, Director.**
Clermont-Ferrand Obs'y	28.61	726.6	29.96	761.0	52.9	11.6	56	e.	.....	.....	1	2 c	0	.....	.....	0	0	hazy.....	**M. Allnard, Director.**
Cluny, Normal School	29.15	740.3	30.02	762.4	48.9	9.4	86	sw.	.....	.....	1	.....	1	.....	sw.	0	0	foggy.....	**M. de Villemontée, Dir.**
Commercy, Normal School	29.08	738.7	29.96	761.0	43.5	6 4	97	sw.	.....	.....	1	08	.....	sw.	sw.	0.130	3.3	.....	**Dr. Coulet, Director.**
Gap, Normal School	27.60	701.1	30.20	767.1	41.7	5.4	63	n.	.....	.....	1	.....	1	.....	s.	0	0	.....	**M. Jeangirard, Director.**
Gréasque, du Rhone	28.99	736.3	30.12	765.1	54.5	12.5	80	s.	.....	.....	1	.....	5	.....	s.	0	0	foggy	**M. Kina, Director.**
Grenoble, Normal School	29.31	744.4	30.10	764.5	47.1	8.4	83	sse.	.....	.....	1	2 c	0	.....	.....	0.016	0.4	slightly cl'dy	**M. Ablard, Director.**
Guéret	28.36	720.4	29.95	760.7	51.8	11	49	sw.	.....	.....	3	0	5 cn	.....	sw.	0	0	cloudy.....	**M. Delorme, Dir.**
Lamballe, Normal School	29.59	751.5	29.86	758.5	53.6	12	93	sw.	.....	.....	4	.....	10	.....	sw.	0	0	hazy.....	**M. Ollitrault, Director.**
Lescar, Normal School	29.44	747.8	30.00	762.1	54.7	12.6	52	e.	.....	.....	1	0	2 k	.....	w.	0	0	slightly cl'dy	**M. Chauvin, Director.**
Lorient, Naval Observatory	29.72	755.0	29.83	757.6	53.4	11.9	95	sw.	.....	.....	6	.....	10	.....	.....	0.315	8.0	raining.....	**Lt. T. Carré, Director.**
Lyon, St. Genis-Laval	28.97	735.9	30.04	763.0	49.8	9.9	75	sse.	.....	.....	1	2 c;cs	0	.....	.....	0	0	slightly cl'dy	**M. André, Director.**
Mans, Normal School	29.59	751.6	29.99	761.8	47.1	8.4	98	sw.	.....	.....	1	.....	8	.....	sw.	0	0	very cloudy	**M. Piboën, Director.**
Marseille, Observatory	29.84	757.8	30.10	764.6	58.6	14.8	77	e.	.....	.....	3	.....	8	.....	ese.	0	0	.....	**M. Stephan, Director.**
Montlouis	24.86	631.5	29.71	754.5	47.8	8.8	39	wsw.	5.6	2.5	.....	.....	0	.....	.....	0	0	.....	**M. Caré for Dr. Finas.**
Montpellier, Normal School	29.97	761.2	30.15	765.7	47.5	8.6	100	w.	.....	.....	1	.....	10	ne.	.....	0	0	covered.....	**M. Galzin, Director.**
Nancy, Normal School	29.06	738.1	29.85	758.1	50.4	10.2	82	s.	.....	.....	1	c	0	.....	.....	0.110	2.8	.....	**M. Basse, Director.**
Nantes, Observatory	29.78	756.5	29.95	760.6	52.2	11.2	94	ssw.	.....	.....	1-2	.....	10	.....	.....	.....	.....	light rain...	**M. Lacrocque, Director.**
Perpignan, Observatory	29.98	761.4	30.09	764.3	50.5	10.3	93	ne.	7.4	3.3	.....	.....	10	.....	ne.	0	0	.....	**Dr. Fines, Director.**
Pic-du-Midi, Summit	21.24	539.4	.....	.....	33.4	0.8	.....	w.	.....	.....	2-3	.....	.....	.....	w.	0	0	.....	**M. Vaussenat.**
Privas, Normal School	29.03	737.4	30.11	764 8	52.5	11.4	86	n.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	**M. Taillen.**
Puy de Dôme Obs'y, Summit	25.10	637.6	.....	.....	44.1	6.7	28	sw.	.....	.....	.....	.....	2	.....	.....	0.004	0.1	¼ covered...	**M. Allnard, Director.**
Rochefort, Naval Obs'y	29.93	760.1	29.96	760.9	47.1	8.4	99	s.	.....	.....	1	.....	10	.....	s.	0.24	6.	covered.....	**Lt. E. Decante, Director.**
Roche-sur-Yon, N. School	29.68	753.9	29.92	759 9	47.3	8.5	92	sse.	.....	.....	1	.....	10	.....	.....	0.177	4.5	light rain....	**M. Brotier, Director.**
Rodez, Normal School	27.88	708.1	30.05	763.2	50.7	10.4	89	e.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	**M. Seger, Director.**
Rouen, Normal School	29.78	756.4	29.83	757.6	48.9	9.4	86	s.	.....	.....	1	.....	10	s.	.....	0	0	covered.....	**M. Mouillot.**
Saint Lô	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	**M. Delaplanche, Dir.**
Saint Maur, Observatory	29.72	754.8	29.88	759.0	49.3	9.6	82	ssw.	.....	.....	1	.....	7	sw.	sw.	0.004	0.1	.....	**M. Renou, Director.**
Toulouse, Observatory	29.35	745.4	30.07	763.8	51.8	11.0	82	sse.	.....	.....	3	.....	2	se.	.....	0	0	slightly cl'dy	**M. Baillaud, Director.**
Tours	29.74	755.5	29.92	760.0	57.2	14.0	86	ssw.	.....	.....	1	.....	5	wsw.	sw.	0	0	cloudy.....	**M. de Tastes.**
Versailles, Observatory	29.41	747.0	29.90	759.5	46.4	8.0	86	sw.	.....	.....	2	.....	.....	.....	.....	0.031	0.8	.....	**Dr. A. Bérigny, Director.**
Sub-series.																			
St. Martin du Hinx	29.89	759.3	30.04	763.1	55.9	13.3	64	w.	9.8	4.4	.....	.....	7 k	.....	w.	0	0	.....	**M. Cartier, Director.**
GERMAN.																			
Ansbach	28 53	724.6	30.01	762.2	45.5	7.5	69	sw.	.....	.....	2	.....	2	sw.	.....	0.126	3.2	.....	**Prof. Jnedt.**
Bamberg	29.13	739.8	29.97	761.2	50.0	10.0	64	w.	.....	.....	1	0	2 8	.....	.....	0.039	1.0	.....	**Prof. Dr. Hoh.**
Berlin	29.52	749.7	29.69	754.2	49.8	9.9	69	sw.	.....	.....	2	.....	10	.....	.....	0.071	1.8	.....	**Prof. Dr. Arndt.**
Breslau	29.35	745.4	29.87	758.8	48.6	9.2	61	w.	.....	.....	2	.....	10	.....	.....	0.098	2.5	.....	**Royal University Obs'y.**
Carlsruhe	29.51	749.5	29.95	760.7	50.0	10.0	72	sw.	.....	.....	3	.....	2	se.	.....	0.028	0.7	.....	**Albert Senz.**
Cassel	29.05	737 9	29.76	756.0	47.5	8.6	81	sw.	.....	.....	5	.....	5	sw.	.....	0.189	4.8	.....	**Dr. H. Möhl.**
Frankfort-on-the-Main	29.54	750.4	29.91	759.7	50.2	10.1	71	ssw.	.....	.....	1	.....	4	.....	.....	0.008	0.2	.....	**Physical Society.**
Friedrichshafen	28.59	726.1	30.04	763.1	47.5	8.6	84	sse.	.....	.....	2	.....	4	ese.	.....	0.031	0.8	.....	**Wilhelm, Chief Tel.**
Hamburg	29.50	749.2	29.59	751.5	48.2	9.0	83	sw.	.....	.....	1	.....	10	.....	.....	0.051	1.3	.....	**E. Preller.**
Kiel	29.52	749.7	29.53	750.1	46.6	8.1	95	sw.	.....	.....	5	.....	10	.....	.....	0.185	4.7	.....	**Prof. Dr. G. Karsten.**
Leipsic, Astrom'l Obs'y	29.41	747.1	29.84	757.9	47.8	8.8	73	sw.	.....	.....	3	.....	9	wsw.	.....	0.024	0.6	.....	**H. Leppig, Asst.**
Magdeburg	29.56	750.7	29.74	755.5	49.8	9.9	71	ssw.	.....	.....	4	.....	10 k8	.....	w.	0.020	0.5	.....	**Weather Observatory.**
Memel	29.51	749.5	29.55	750.6	34.0	1.1	81	nnw.	.....	.....	2	.....	10 8	.....	.....	.....	.....	foggy.....	**Issermann.**
Munich	28.18	715 8	30.04	763.1	46.2	7.9	73	w.	.....	.....	1	.....	4	nw.	.....	0	0	.....	**Central Station.**
Neufahrwasser	29.59	751.5	29.60	751.9	41.7	5.4	94	sw.	.....	.....	1	.....	10	.....	.....	0.102	2.6	.....	**A. Lothes.**
Neustadt, Palatinate	29.39	746 4	29.91	759.8	49.6	9.8	89	calm	.....	.....	0	.....	1	.....	.....	0	0	.....	**Dicknether.**
Stuttgart	29.00	736.5	29.90	759.4	50.0	10.0	66	sw.	.....	.....	1	.....	1	w.	.....	0	0	.....	**Prof. Dr. Schoder.**
Wustrow	29.54	750.3	29.56	750.9	42.3	5.7	98	sw.	.....	.....	5	.....	10	.....	.....	0.024	0.6	.....	**Profs. Brandes & Reimer.**
GREEK.																			
Athens	29.76	756.0	30.15	765.8	61.3	16.3	.....	sw.	.....	.....	0.5	.....	0	.....	.....	0.028	0.7	clear.....	**Schmidt & Wourlisch.**
INDIAN.																			
Kurrachee	29.98	761.6	30.04	762.9	74.0	23.3	89	wsw.	19.0	8.5	.....	.....	8	sw.	.....	0	0	d. clouds....	
Deesa	29.50	749.2	29.97	761.3	79.3	26.3	22	sw.	10.0	4.5	.....	.....	5	n.	.....	0	0	d. clouds....	
Bombay	29.91	759.8	29 95	760.8	80.0	26.7	48	w.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky.....	
Poona, Yarrowda	28.07	713.0	29.92	760.0	81.8	27.7	20	e.	4.0	1.8	.....	.....	1	s.	.....	0	0	d. clouds....	
Trichinopoly	29.68	754.0	29.97	761.2	78.6	25.9	63	ene.	2.0	0.9	.....	.....	10	.....	.....	0	0	overcast.....	
Belgaum	27.40	696.0	29.93	760.3	78.8	26.0	20	ne.	5.0	2.0	.....	.....	0	.....	.....	0	0	blue sky.....	
Lahore	29.24	742.7	30.02	762.4	60.4	15.8	57	calm	0	0	.....	.....	2	.....	.....	0	0	d. clouds....	
Roorkee	29.04	737.7	29.98	761.5	61.8	16.6	56	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.44	747.7	30.02	762.4	71.2	21.8	27	calm	0	0	.....	.....	2	.....	.....	0	0	d. clouds....	
Nagpur	28.91	734.2	29.96	760.9	78.2	25.7	35	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Jubbulpore	28.64	727.4	30.02	762.4	74.4	23.6	50	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Lucknow	29.61	752.1	30.00	762.0	68.3	20.2	45	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Allahabad	29.68	753.9	30.01	762.2	60.9	16.1	70	calm	0	0	.....	.....	1	.....	.....	0	0	d. clouds....	
Patna	29.80	756.9	29.99	761.8	67.4	19.7	53	w.	2.2	1.0	.....	.....	2	w.	w.	0	0	.....	
Hazaribagh	27.94	709.7	30.02	762.4	63.7	17.6	50	nw.	3.8	1.7	.....	.....	0	.....	.....	0	0	blue sky.....	
Cuttack	29.91	759.6	29.99	761.8	73.0	22.8	67	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Calcutta, Allpore	29.97	761.2	29.99	761.7	68.0	20.0	66	nne.	0.5	0.2	.....	.....	0	.....	.....	0	0	blue sky.....	
Dhubri	29.86	758.3	29.98	761.4	66.3	19.1	71	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Chittagong	29.90	759.3	29.99	761.7	61.6	16.4	69	nw.	1.8	0.8	.....	.....	0	.....	.....	0	0	blue sky.....	
Sibsagar	29.68	753 9	30.03	762.8	61.3	16 3	85	ne.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky.....	
Jeypore	28.54	724.8	30.02	762.4	69.4	20.8	59	wsw.	2.0	0.9	.....	.....	4	w.	.....	0	0	d. clouds....	
ITALIAN.																			
Udine	29.74	755.4	30.16	766.1	46.2	7.9	94	.....	.....	.....	.....	.....	10	.....	.....	0	0	.....	**Prof. Giovanni Clodig.**

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ITALIAN.—Continued.																			
Milan	29.65	753.0	30.18	766.6	45.3	7.4	89	w.	1.8	0.8			10			0	0		Prof. Schiapparelli.
Padua	30.04	762.9	30.15	765.8	41.7	5.4	91	ne.	0.7	0.3			10	wsw.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.24	742.6	30.18	766.5	43.2	6.2	97	e.	0	0			10			0	0		Prof. F. F. Denza.
Genoa	29.94	760.5	30.14	765.5	55.8	13.2	77	calm	0	0			10	s.		0.043	1.1		Prof. G. M. Garibaldi.
Mondovi	28.21	716.5	30.18	766.5	43.0	6.1	88	w.			2		10			0	0		Prof. D. C. Bruno.
Pesaro	30.03	762.7	30.08	764.0	48.6	9.2	89	n.	1.8	0.8			5			0	0		Prof. Luigi Guidi.
Florence	29.90	759.5	30.16	766.1	53.1	11.7	94	wsw.			2		10	wsw.		0.039	1.0		Prof. Costantino Pittei.
Leghorn	30.02	762.4	30.10	764.6	56.8	13.8	83	w.	0	0			10			0.055	1.4		Prof. P. Monte.
Rome	30.00	761.9	30.17	766.4	58.1	14.5	69	n.	0	0			10			0	0		Prof. P. Tachini.
Lecce	29.93	760.2	30.19	766.8	58.8	14.9	86	sw.	9.4	4.2			10			0.016	0.4		Prof. C. de Giorgi.
Cosenza	29.29	744.0	30.20	767.1	56.1	13.4	77	sw.	1.8	0.8			9	w.		0	0		Prof. D. Conti.
Cagliari	29.95	760.6	30.14	765.6	57.9	14.4	72	nw.			2		1			0	0		Prof. A. Pacinotti.
Palermo	29.95	760.6	30.20	767.1	61.2	16.2	62	calm	0	0			2			0	0		Prof. G. Caccintore
Syracuse	30.14	765.5	30.18	766.6	58.3	14.6	78	s.	3.1	1.4			8	s.		0	0		Sig. Vincenzo Giuliano.
Sub-alpine.																			
Naples, S. R	29.65	753.2	30.18	766.6	57.7	14.3	77	wsw.	3.8	1.7			10	w.		0.028	0.7		Prof. F. Brioschi.
Stelvio	22.20	564.0			24.8	— 4.0	41	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.20	564.0			29.5	— 1.4	51	ne.			2		4			0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.36	771.2	30.39	772.0	30.8	— 0.7	66	nw.			4		10 ckm		nw.	0.055	1.4	snowing	Hattori.
Awomori	30.27	768.8	30.31	769.9	26.3	— 3.2	83	w.	10.8	7.5			10 n			0.010	0.2	light snow	K. Ogawa.
Hakodate	30.22	767.6	30.23	767.9	23.5	— 4.7	83	n.	3.0	1.3			10					snowing	
Hamamatsu	30.38	771.6	30.41	772.4	34.0	1.1	62	w.			2	0	0			0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y					35.3	1.8	73	nne.	0.4	2.9		0	0			0	0	clear	
Kanazawa	30.43	773.0	30.54	775.8	32.6	0.3	78	ese.	4.0	1.8			10			0.040	1.0	cloudy	S. Endo.
Kioto	30.34	770.6	30.52	775.2	34.9	1.6	78	wnw	0.1	0.04			10 s;ck			0	0	cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	30.24	768.0	30.45	773.5	37.5	3.1	65	calm	0	0		0	0 s			0	0	cloudy	S. Takehayashi.
Niigata	30.47	773.9	30.50	774.7	36.6	2.6	94	w.	18.3	8.1			10 ck		wnw	0.010	0.2	covered	M. Moritta.
Nobiru	30.27	768.8	30.28	769.2	30.6	— 0.8	98	w.	23.8	10.6		0	0			0	0	clear	H. Midzushima.
Numazu	30.35	770.9	30.39	771.8	32.1	0.1	65	ne.			2	0	0			0	0	clear	R. Kaneda.
Osaka	30.51	774.9	30.52	775.3	35.2	1.8	73	nw.	4.5	2.0			10 s			0	0	cloudy	H. Omura.
Sapporo					23.0	— 5.0	52	sw.	13.8	6.2			10			0.030	0.8	covered	
Tokei Obs'y, Yeddo	30.30	769.7	30.38	771.7	38.0	3.3	57	nw.	19.6	8.7		0	0			0	0	clear	The Staff.
Wakayama	30.47	773.9	30.53	775.5	35.5	1.9	72	nne.	5.1	2.3		0	0			0	0	clear	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.86	758.4	30.05	763.3	81.8	27.7	57	e.	14.0	6.3		2 cs	2 k		e.	0.06	1.5	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.68	601.5	29.90	759.5	45.9	7.7	96	wsw.	inap.	inap.			10 kn		sw.	0.950	24.1	foggy	Prof. Vicente Fernandez.
Leon	24.34	618.2	30.19	766.8	45.9	7.7	94	se.			1		10 n			0.821	20.9	covered	Prof. M. Leal.
Mazatlan	29.74	755.5	30.01	762.1	66.0	18.9	92	e.	0.9	0.4		0	6 n		s.	0	0	hazy	F. Quijano, C. E.
Mexico, Central Obs'y	23.07	585.9	30.25	768.3	41.5	5.3	94	n.	4.9	2.2		10 n	0			0.178	4.5	covered	The Staff.
Morelia	24.23	615.3	30.02	762.5	39.6	4.2	58	s.			3	2 c	4 ck	se.	s.	1.005	25.5	½ cloudy	M. Tena, M. D.
Pabellon, Aguascallentes																			M. V. de Leon, M. E.
Puebla, Catholic Institute	23.35	593.0	30.06	763.4	53.3	12.0	55	ese.	0.47	0.47			10		s.	0	0	covered	Prof. P. Spina.
Zacatecas	22.46	570.6	30.21	767.3	40.1	4.7	93	sw.	5.4	2.4			10		sw.	0.060	1.5	covered	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.70	754.4	29.70	754.4	47.5	8.6		ssw.			5					0	0		
Groningen	29.54	750.2	29.59	751.6	46.6	8.1		sw.			5					0	0		
Helder	29.57	751.0	29.57	751.0	46.0	7.8		ssw.			5					0.013	0.3		
Hellevoetsluis	29.69	754.0	29.69	754 0	46.2	7.9	93	sw.			4					0.020	0.3		
Utrecht	29.63	752.7	29.68	753.9	48.0	8.9	89	ssw.			4		8			0.130	3.3	very cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.25	743.0	29.32	744.6	30.2	— 1.0	84	sw.	2	1			10			0	0		
Brono	29.32	744.6	29.35	745.6	26.2	— 3.2	61	e.	9	4			2			0	0		
Christiania	29.33	745.0	29.49	749.0	16.0	— 8.9	94	e.	9	4			10			0.039	1.0	foggy	
Gjæsvær	29.53	750.0	29.55	750.6	16.7	— 8.5		ne.			4		10						
Lodingen	29.39	746.6	29.44	747.8	24.6	— 4.1	55	calm			0		4			0	0		
PORTUGUESE.																			
Angra, Azores	29.47	748.5	29.63	752.5	62.2	16.8	85	wsw.	18.6	8.3			4			0.669	17.0		Dr. J. A. Sampaio.
Campo Major	29.26	743.3	30.30	769.6	46.8	8.2	94	ese.	3.8	1.7			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.12	765.0	30.21	767.2	70.9	21.6	61	sw.	7.4	3.3			1	w.		0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.87	758.7	30.24	768.0	57.6	14.2	99	ssw.	13.0	6.1			10			0.161	4.1		The Staff.
Ponta Delgada, Azores	29.04	752.8	29.71	754.6	62.6	17.0	90	sw.	11.2	5.0			10			1.098	27.9		
Saint Paul de Loando	29.73	755.2	29.93	760.3	81.1	27.3	72	wsw.	2.5	1.1			8			0	0		
Serra da Estrella	25 33	643 4	30.15	765.9	41.9	5.5	97	wsw.	17.4	7.8			10			0.346	8.8	foggy	
RUSSIAN.																			
Akmollinski	29.30	744.2	30.51	774.9	4.8	—15.1	59	e.	11	5		0	0						Major K. Lasarew.
Archangel	29.34	745.3	29.30	745 8	2.8	—16.2	88	ese.	2	1			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.22	767.5	30.14	765.5	28.9	— 1.7	90	calm	0	0			10			0	0	heavy cl'ds.	Capt. Wisganow.
Barnaul	30.44	773.2	31.04	788.3	—15.5	—26.4	76	ne.					0			0	0		Meteorological Obs'y.
Bielosersk	28.97	735.8	29.46	748.3	20.1	— 6.6	96	sse.	9	4			10 n			0.012	0.3	snowing	
Dorpat	29.17	740.8	29.42	747.3	19.4	— 7.0	100	wnw	4	2		0	0			0.016	0.4		Observatory.
Ekaterinburg	29.17	740 9	30.28	769.0	—12.5	—24.7	73	se.	16	7			10			0.020	0.5		Meteorological Obs'y.
Elisawetgrad	29.43	747.6	29.90	759.4	36.0	2.2	85	w.	7	3			10 n			0.016	0.4		
Kasan	29.01	752.1	29.90	759.4	18.9	— 7.3	82	sse.	16	7			10					light snow	Observatory.
Kem	29.28	743.8			17.6	— 8.0	94	ne	9	4			10 n			0.031	0.8		
Kertch	30.01	702.3	30.03	762.8	33.4	0.8	94	calm	0	0			10 n			0	0		Lagorio & Sastyrez.
Kieff	29.02	737.0	29.07	753.6	30.7	2.6	96	w.	11	5			10k;n						Observatory.
Libau	29.49	749.0	29.51	749.6	32.2	0.1	80	ene.			1		10			0.063	1.6		E. Quaas.
Lugan	29.73	755.1	29.95	760.7	23.5	— 4.7	77	ssw.	9	4			3			0	0		Meteorological Obs'y.
Moscow	29.06	738.0	29.50	750.9	19.2	— 7.1	87	s.	10.1	4.5			10 n			0.063	1.6		
Nikolaiev	29.89	759.2	29.97	761.1	37.9	3.3	88	s.	9	4		0	8 ks;n			0	0		Capt. Kurdakow.
Pekin, China	30.16	766.1	30.30	769.7	24.6	— 4.1	55	calm	0	0			9 n						Physical Observatory.
Petrozavodsk	29.13	739.8	29.34	745.1	11.3	—11.5	85	nnw.	7	3		9 ck	0			0.055	1.4		Dr. Bergmann.
Pinsk	29.15	740.4			39.6	4.2	100	w.	22	10			10 n			0.063	1.6		
St. Petersburg	29.34	745.3	29.36	745 7	21.7	— 5.7	87	ssw.	2	1			10 n			0.024	0.6		Central Physical Obs'y.
Sevastopol	29.82	757.4	29.98	761.6	47.7	8.7	84	ssw.	16	7		0	7 s			0.059	1.5		
Semipalatinsk	30.22	767.7	31.03	788.1	—25.6	—32.0	84	e.	9	4			0			0	0		Major Lasarew.
Staro-Bykhov	29.00	736 7	29.47	748.5	30.5	2.5	89	sw.	20	9			10			0.028	0.7		
Tashkend, Laboratory	28.45	722.7	30.07	763.8	41.5	5.3	86	calm	0	0			9			0.024	0.6	raining	Teich, A. M.
Tiflis	28.60	726.5	30.04	763.0	50.0	10.0	41	nnw.	18	8		0	6 k			0	0		Physical Observatory.
Tomsk	30.68	779.2	31.01	787.6	—14.0	—25.9	81	s.	11	5		0	0						
Vladivostock	30.33	770.3	30.39	772.0	9.0	—12.8	50	calm	0	0		0	5 k			0	0		
Warsaw	29.32	744.0	29.74	755.5	42.4	5.8	99	w.	20	9			10					heavy cl'ds.	Astronomical Obs'y.
Wilna	29.08	738.5	29.50	749.4	35.6	2.0	87	e.	4	2			10					heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.58	776.8	30.92	785.3	— 9.4	—23.0	85	w.	4	2			3						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.04	737.6	38	3.3	90	ne.			8		10			1.0	25.	sleeting	J. Youngclause.
North Unst			29.21	741.9				nw.			3	5	3	w.		blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.00	762.0	30.10	764.6	54.1	12.3	82	sw.	2.5	1.1		0	0			0.031	0.8	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.05	763.3	30.11	764.8	54.3	12.4	72	w.	2.9	1.3			10			0	0	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.17	690.1	30.29	769.3	30.1	2.3	94	s.	5.6	2.5			10					raining	Domingo Martin.
Madrid, Royal Obs'y	27.98	710.7	30.34	770.5	36.1	2.3	100	se.	1.3	0.6			10			0.016	0.4	misty	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p. sec	Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Lower. 0–10	Direction. Upper. From	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
SPANISH.																			
Murcia, Met. Obs'y	30.02	762.4	30.16	766.0	59.7	15.4	67	w.	1.3	0.6	.....	2	3	ene.	.....	0	0	clouds	Olayo Diaz, Director.
Oviedo	29.17	740.8	30.02	762.5	42.8	6.0	89	s.	8.9	4.0	.....	0	0	.....	.....	0	0	clear	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.11	739.3	30.01	762.3	53.4	11.9	96	ssw.	7.4	3.3	.....	.....	10	.....	.....	0.835	21.2	covered	R. Gil Villanueva, Dir.
SPANISH.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.93	760.2	29.99	761.7	76.0	24.4	75	ne.	5.5	2.5	.....	0	1 k	.....	.....	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.19	766.9	30.30	769.5	56.7	13.7	76	ene.	4.0	1.8	.....	.....	10	.....	w.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.00	762.0	30.09	764.3	75.2	24.0	89	calm	0	0	.....	4 k	6 ku	se.	se.	0.177	4.5	raining	Manuel Mæse.
Tuguegarao, Philippine Id's	29.95	760.6	30.08	764.0	70.2	21.2	94	se.	0.7	0.3	.....	0	7 ks	.....	se.	inap.	inap.	cloudy	José L. Yrastorza.
SWEDISH.																			
Haparanda	29.43	747.5	29.47	748.5	— 5.1	—20.6	100	ne.	.....	.....	2	.....	8	.....	.....	0	0	.....	
Umea	29.47	748.6	29.52	749.9	— 9.8	—23.2	83	nw.	.....	.....	2	.....	5	.....	.....	0	0	.....	
Hernosand	29.49	749.0	29.54	750.3	1.8	—16.8	90	calm	.....	.....	0	.....	8	.....	.....	0	0	.....	
Stockholm	29.32	744.7	29.50	749.2	24.8	— 4.0	93	nnw.	.....	.....	2	.....	10	.....	.....	0.114	2.9	.....	
Wisby	29.38	746.3	29.44	747.8	33.1	0.6	89	e.	.....	.....	2	.....	10	.....	.....	0.071	1.8	.....	
Sub-series.																			
Upsala	29.40	746.8	29.49	749.0	21.6	— 5.8	100	nw.	2.9	1.3	.....	.....	10	.....	.....	0.098	2.5	.....	S. G. Fineman.
SWISS.																			
Geneva	28.66	727.9	30.10	764.4	50.7	10.4	71	ssw.	.....	.....	2	.....	2	.....	.....	0	0	clear	The Observatory.
TURKISH.																			
Constantinople	.....	.....	30.17	766.2	59.2	15.1	74	wsw.	8	3.5	.....	.....	5	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	30.20	767.1	58.3	14.6	.....	w.	.....	.....	1	.....	2	.....	.....	0	0	slightly cld'y	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.22	767.5	66.9	19.4	73	sw.	.....	.....	1	.....	1 k	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
UNITED STATES.																			
Albany, New York	30.24	768.1	30.33	770.4	27	— 2.8	70	w.	6	2.7	.....	0	1 s	.....	.....	0	0	clear	J. O. Barnes.
Alpena, Michigan	29.46	748.3	30.17	766.3	29	— 1.7	88	sw.	8	3.6	.....	3 k	2 s	w.	w.	inap.	inap.	fair	Jas. J. Fitzgerald.
Apache, Fort, Arizona	25.03	635.8	30.11	764.8	11	—11.7	50	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	W. O. Barnes.
Assinnaboine, Ft., Montana	27.54	699.5	30.57	776.5	16	— 8.9	70	w.	1	0.4	.....	.....	10 n	.....	nw.	0.65	16.5	light snow	B. O. Lenoir.
Atlanta, Georgia	29.06	738.1	30.29	769.4	37.0	2.8	82	e.	13	5.8	.....	.....	10 s	.....	.....	0	0	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.36	771.1	30.30	771.1	24	— 4.4	73	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	Jas. M. Watson.
Augusta, Georgia	30.12	765.0	30.32	770.1	42	5.6	74	ne	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	John Healy.
Baltimore, Maryland	30.37	771.4	30.42	772.7	32	0.0	78	n.	2	0.9	.....	0	8s;fg	.....	w.	0	0	cloudy	Geo W Felger.
Barnegat, New Jersey	30.32	770.1	30.34	770 6	26.0	— 3.3	70	n.	10	4.5	.....	1 ck	0	.....	.....	0	0	clear	G. A. Hill.
Behring Id., Behring Sea	28.49	723.6	28.51	724.1	33.6	0.9	.....	e.	11	4.9	.....	.....	10 n	.....	.....	0.49	12.4	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.56	725.4	30.32	770.1	12	—11.1	73	calm	0	0	.....	4 c	4 s	nw.	.....	0	0	cloudy	A. Pritchard.
Benton, Fort, Montana	27.55	699 8	30.55	776.0	12	—11.1	100	calm	0	0	.....	.....	10 n	.....	ne.	0.50	12.7	heavy snow	S. Wheaton.
Bismarck, Dakota	28.34	719.8	30.35	770.9	21	— 6.1	87	n.	14	6.3	.....	.....	10 s	.....	.....	0	0	cloudy	Cyrus Cramer.
Block Island, Rhode Island	30.28	769.1	30.30	769.6	27	— 2.8	77	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. T. Elker.
Boise City, Idaho	27.29	693 2	30.27	768.8	16	— 8.9	91	nw.	1	0.4	.....	.....	10 s	.....	.....	0.11	2.8	cloudy	B. E. Light.
Boston, Massachusetts	30.13	765.3	30.29	769.4	23.0	— 5.0	61	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	O. B. Cole.
Brownsville, Texas	30.23	767.8	30.28	769.1	42.2	5.7	82	n.	6	2.7	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	M. McCarty.
Buffalo, New York	29.52	749.8	30.32	770.1	32	0.0	68	sw.	11	4.9	.....	.....	10 s	.....	sw.	0	0	cloudy	W. Finn.
Buford, Fort, Dakota	28 30	718.8	30.54	775.7	16	— 8.9	100	nw.	10	4.5	.....	.....	10 n	.....	.....	inap.	inap.	light snow	F. A. Mellen.
Burlington, Vermont	29.97	761 2	30.28	769.1	20.0	— 6.7	84	s.	3	1.3	.....	.....	10 s	.....	s.	inap.	inap.	cloudy	G. C. Schaeffer.
Cairo, Illinois	29.95	760.7	30.37	771.4	30.0	— 1.1	88	ne.	3	1.3	.....	.....	10 s	.....	ne.	inap.	inap.	cloudy	W. H. Ray.
Cape Henry, Virginia	30.35	770.9	30.37	771.4	35	1.7	69	n.	7	3.1	.....	0	8 s	.....	.....	0	0	cloudy	A. K. Alderson.
Cape May, New Jersey	30.35	770 9	30.38	771.6	30.0	— 1.1	61	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	W. E. Smith.
Cape Mendocino, California	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. McLean.
Cedar Keys, Florida	30.08	764 0	30.10	764.5	51	10.6	86	n.	16	7.2	.....	.....	10 s	.....	e.	0	0	threatening	F. W. Mixer.
Champaign, Illinois	29.47	748.5	30.34	770.6	25.0	— 3.9	67	se.	3	1.3	.....	0	5 s	.....	se.	0	0	fair	L. A. Welsh.
Charleston, S. Carolina	30.19	766.8	30.25	768.3	44	6.7	83	ne.	9	4.0	.....	.....	10 s	.....	ne.	0.03	0.8	threatening	J. H. Smith.
Charlotte, N. Carolina	29.43	747 5	30.32	770.1	36.0	2.2	79	e.	2	0.9	.....	.....	10 s	.....	e.	0	0	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.42	747.3	30.28	769.1	36.0	2.2	66	n.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	B. L. Goulding.
Cheyenne, Wyoming	23.91	607.3	30.19	766.8	16.2	— 8.8	44	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	E. McGovern.
Chicago, Illinois	29.58	751.3	30.34	770.6	28.1	— 2.2	80	sw.	5	2.2	.....	6 k	0	sw.	.....	inap	inap.	fair	J. Mitchell.
Chincoteague, Virginia	30.34	770.6	30.30	771.1	31	— 0.6	78	ne.	13	5.8	.....	.....	10ks;s	.....	w.	0	0	cloudy	C. F. Dickens.
Cincinnati, Ohio	29.68	753.9	30.38	771.6	37	2.8	89	calm	0	0	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	R. B. Watkins.
Cleveland, Ohio	29.60	751.8	30.38	771.6	30.8	— 0.7	89	sw.	4	1.8	.....	.....	10s;fg	.....	.....	inap.	inap.	cloudy	J. B. Newlin.
Coleman City, Texas	28.42	721.9	30.42	770.1	24	— 4.4	88	calm	0	0	.....	0	0	.....	.....	0	0	clear	L. Dorman.
Columbus, Ohio	29.45	748.0	30.30	771.1	32	0.0	78	n.	2	0.9	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	D. Cuthbertson.
Concho, Fort, Texas	28.20	717.8	30.28	769.1	20.0	— 6.7	73	w.	5	2.2	.....	0	0	.....	.....	0	0	clear	J. McGlone.
Custer, Fort, Montana	27.03	686.5	30.43	772.9	23	— 5.0	100	n.	8	3.6	.....	.....	10 n	.....	.....	0.02	0.5	light snow	W. B. Lamar.
Davenport, Iowa	29.63	752.6	30.34	770.6	25	— 3.9	64	sw.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.28	642.1	30.22	767.6	21	— 6.1	64	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. Williams.
Dayton, Washington T'y	28.42	721.9	30.25	768.3	26	— 3.3	88	sw.	5	2.2	.....	.....	10 s	.....	.....	0.04	1.0	cloudy	D. Moore.
Deadwood, Dakota	25.37	644.4	30.30	771.1	17	— 8.3	87	calm	0	0	.....	.....	10 s	.....	w.	0	0	cloudy	F. Willson.
Delaware Breakwater, Del	30.36	771.1	30.38	771.6	30	— 1.1	68	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	T. S. Townsend.
Denison, Texas	29.48	748.8	30.33	770.4	31.0	— 0.6	78	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	J. W. Byram.
Denver, Colorado	24.63	625.6	30.15	765.8	17.0	— 8.3	73	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	F. M. Neal.
Des Moines, Iowa	29.34	745.2	30.32	770.1	21	— 6.1	70	sw.	8	3.6	.....	.....	10 s	.....	sw.	0.01	0.3	cloudy	F. W. Conrad.
Dodge City, Kansas	27.44	697.0	30.24	768.1	21	— 6.1	73	calm	0	0	.....	.....	10 k	.....	sw.	0	0	cloudy	C. F. R. Wappenhans.
Dubuque, Iowa	29.54	750 3	30.31	769.9	22.8	— 5.1	73	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	V. P. Temple.
Duluth, Minnesota	29.38	746.2	30.19	766.8	17	— 8.3	83	sw.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	J. Harvey Smith.
Eagle Pass, Texas	29.51	749 5	30.35	770.9	26.2	— 3.2	77	calm	0	0	.....	0	0	.....	.....	0	0	clear	F. Belford.
Eagle Rock, Idaho	25.26	641.6	30.18	766.6	1	—17.2	79	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. M. Clifford.
Eastport, Maine	30.14	765 5	30.21	767.3	8.0	—13.3	76	nw.	10	4.5	.....	0	3 s	.....	nw.	inap.	inap.	clear	D. C. Murphy.
Elliott, Fort, Texas	27.34	694.4	30.30	769.6	16	— 8.9	53	calm	0	0	.....	0	0	.....	.....	0	0	clear	W. J. Cundall.
El Paso, Texas	26.36	669 5	30.22	767.6	14.0	—10.0	66	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.57	751.1	30.34	770 6	33	0.6	78	sw.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.46	748.3	30.18	766.6	21.0	— 6.1	70	sw.	2	0.9	.....	0	2 s	.....	sw	0	0	clear	George Heathcote.
Fredericksburg, Texas	28.48	723.4	30.30	769.6	25	— 3.9	88	calm	0	0	.....	0	0	.....	.....	0	0	clear	Frank Halwegler.
Galveston, Texas	30.24	768.1	30.29	769.4	43	6.1	74	ne.	13	5.8	.....	2 c	5 ks	sw.	s.	0	0	fair	E. O'C. MacInernay.
Grand Haven, Michigan	29.58	751.3	30.29	769.4	33.0	0.6	68	s.	14	6.3	.....	.....	10 ks	.....	s.	0	0	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25 21	640.3	30.09	764.3	23	— 5.0	76	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	Robert O. Lord.
Hatteras, North Carolina	30.31	769.9	30.33	770.4	39	3.9	89	ne.	18	8.0	.....	6 k	3 s	nw.	.....	0	0	cloudy	R. M. Crawford.
Helena, Montana	26.08	662.4	30.40	773.7	15	— 9.4	83	sw.	7	3.1	.....	.....	10 s	.....	.....	0.12	3.0	cloudy	N. O. Smith.
Henrietta, Texas	29.24	742 7	30.32	770.1	27	— 2.8	77	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. P. Sherry.
Huron, Dakota	28.09	728.7	30.23	767.8	2.3	—16.5	52	n.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.49	749 c	30.34	770.6	33	0.6	81	nw.	2	0.9	.....	.....	10s;fg	.....	nw.	0.01	0.3	cloudy	O. Schutze.
Indianola, Texas	30.28	769 1	30.31	769.9	42.5	5.8	69	n.	12	5.4	.....	4 cs	0	w.	.....	0	0	fair	I. A. Reed.
Jacksboro, Texas	29.06	738.1	30.30	769.6	30	— 1.1	47	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	D. J. Carr.
Jacksonville, Florida	30.10	764 5	30.15	765 8	50	10.0	93	n.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	J. W. Smith.
Keogh, Fort, Montana	27.72	704 1	30.12	772 7	23	— 5.0	88	n.	17	7.6	.....	.....	10 n	.....	n.	0.02	0.5	light snow	A. Schneider.
Keokuk, Iowa	29.64	752 8	30.35	770.9	24.0	— 4.4	80	s.	4	1.8	.....	.....	10 s	.....	s.	inap.	inap.	cloudy	F. Z. Gosewisch.
Key West, Florida	29.95	760.7	29.97	761.2	72.0	22.2	90	se.	7	3.1	.....	3 ck	2 k	.....	se.	0.07	1.8	fair	R. H. Paxton.
Kittyhawk, North Carolina	30.33	770 4	30.35	770.9	39	3.9	65	ne.	20	8.9	.....	8cs;ck	0	nw.	.....	0	0	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.23	742 4	30.31	769.9	32	0.0	88	ne.	2	0.9	.....	.....	10s;fg	.....	nw.	0	0	cloudy	J. A. Cody.
La Crosse, Wisconsin	29.43	747.5	30.28	769.1	23	— 5.0	73	s.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	S. C. Emery.
Leavenworth, Kansas	29.37	740.0	30.33	770.4	28	— 2.2	77	s.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	A. W. Browne.
Lewiston, Idaho	29.37	746 0	30.25	768.3	28.5	— 1.9	94	e.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	W. Bell.
Little Rock, Arkansas	30.00	762 0	30.33	770.4	32	0.0	78	calm	0	0	.....	.....	10 n	.....	.....	0.42	10.7	light snow	W. U. Simons.
Los Angeles, California	29.68	753 9	30.08	764.0	41	5.0	73	ne.	8	3.6	.....	3 cs	0	n.	.....	0	0	clear	T. S. Collins.
Louisville, Kentucky	29.70	754.4	30.30	769.6	36	2.2	79	nw.	4	1.8	.....	.....	10 s	.....	.....	0	0	clear	L. M Dey.
																0.01	0.3	cloudy	

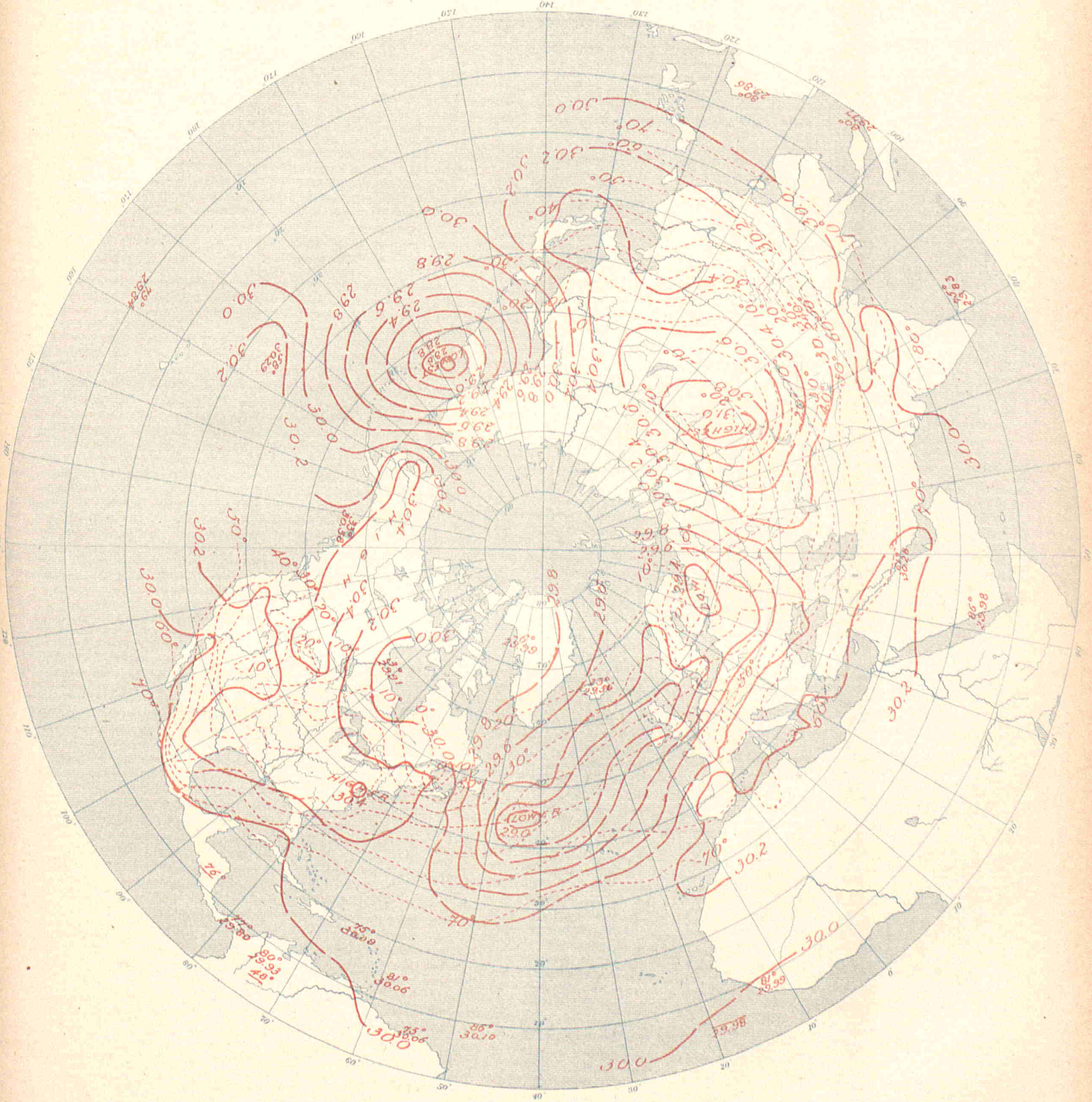
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		WEATHER.	OBSERVERS
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.65	753.1	30.38	771.6	33.5	0.8	76	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	Lewis Duane.
Mackinaw City, Michigan	29.43	747.5	30.13	765.3	34.0	1.1	71	sw.	24	10.7	.....	7 k	0	sw.	.....	0	0	fair	F. R. Day.
Macon, Fort, North Carolina	30.31	769.9	30.32	770.1	36.0	2.2	89	n.	10	4.5	.....	.....	10 s	.....	n.	0.08	2.0	cloudy	C. A. Shaw.
Madison, Wisconsin	29.22	742.2	30.32	770.1	26	— 3.3	88	sw.	9	4.0	.....	.....	10 s	.....	.....	0	0	cloudy	F. P. Chaffee.
Maginnis, Fort, Montana	25.78	654.8	30.32	770.1	15	— 9.4	67	nw.	4	1.8	.....	.....	10 n	.....	nw.	0.25	6.3	light snow	F. Burke.
McKavett, Fort, Texas	27.94	709.7	30.32	770.1	24	— 4.4	53	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. E. Thatcher.
Marquette, Michigan	29.37	746.0	30.15	765.8	22	— 5.6	73	nw.	6	2.7	.....	3 c	0	.....	.....	0	0	clear	J. Gilligan.
Memphis, Tennessee	29.95	760.7	30.31	769.9	35	1.7	79	nw.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	D. T. Flannery
Milwaukee, Wisconsin	29.49	749 0	30.30	769.6	27	— 2.8	88	sw.	16	7.2	.....	.....	10 s	.....	.....	0	0	cloudy	W. Line.
Missoula, Fort, Montana	26.89	683.0	30.35	770.9	20	— 6.7	73	n.	3	1.3	.....	.....	8 s	.....	.....	0.07	1.8	cloudy	I. H. Young.
Mobile, Alabama	30.18	766.6	30.22	767.6	37	2.8	89	ne.	7	3.1	.....	.....	10 n	.....	ne.	0.15	3.8	light rain	C. A. Read.
Montgomery, Alabama	30.00	762.0	30.24	768.1	35.4	1.9	87	ne.	1	0.4	.....	.....	10 n	.....	.....	inap	inap.	light snow	J. B. McLaughlin.
Moorhead, Minnesota	29.11	739.4	30.22	767.6	0	—17.8	68	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	H. Bessant.
Morgantown, W. Virginia	29.32	744.7	30.39	771.9	36.0	2.2	69	sw.	2	0.9	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	J. C. Sprigg, jr.
Mt. Washington, N. H	23.57	598.7	30.20	767.1	2.0	—16.7	76	nw.	48	21.5	.....	0	2 ks	.....	nw.	0	0	clear	B. S. Pague.
Nashville, Tennessee	29.08	753 9	30.29	769.4	34.5	1.4	83	nw.	1	0.4	.....	.....	10 ks	.....	se.	inap.	inap.	cloudy	L. N. Jesunofsky.
New Haven, Connecticut	30.18	766.6	30.30	769.6	20	— 6.7	84	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	J. H. Sherman.
New London, Connecticut	30.27	768.8	30.32	770.1	24	— 4.4	73	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. G. Lynch.
New Orleans, Louisiana	30.19	766.8	30.25	768.3	41.5	5.3	69	ne.	9	4.0	.....	.....	10 s	.....	ne.	0.07	1.8	cloudy	L. Dunne.
Newport, Rhode Island	30.24	768.1	30.30	769.6	25.0	— 3.9	73	nw.	2	0.9	.....	0	sk.	.....	.....	0	0	clear	W. McGillivray.
New York, New York	30.16	766.1	30.35	770.9	26	— 3.3	88	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. B. Merrill.
Norfolk, Virginia	30.34	770.6	30.37	771.4	36	2.2	79	n	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	Wm. Davis.
North Platte, Nebraska	27.08	687.8	30.24	768.1	8.6	—13.0	71	w.	4	1.8	.....	0	0	.....	.....	0	0	clear	E. F. Brady.
Olympia, Washington T'y	30.21	767.3	30.25	768.3	37.0	2.8	82	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. Dascomb.
Omaha, Nebraska	28.99	736.3	30.28	769.1	23.6	— 4.7	82	s.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	A. Pollak.
Oswego, New York	29.92	760.0	30.27	768.8	34.5	1.4	73	sw.	7	3.1	.....	.....	10 s	.....	w.	0	0	cloudy	J. G. Linsley.
Palestine, Texas	29.75	755.6	30.33	770.4	37.0	2.8	66	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	L. M. Pindell.
Pensacola, Florida	30.20	767.1	30.22	767.6	38.8	3.8	89	n.	6	2.7	.....	.....	10 n	.....	.....	0.07	1.8	light rain	M. McGauran.
Philadelphia, Pa	30.27	768.8	30.38	771.6	30.5	— 0.8	72	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	T. T. Townsend.
Pike's Peak, Colorado	17.64	448.0	30.30	769.6	9	—12.8	48	w.	30	13.4	.....	3 cs	0	w.	.....	0	0	clear	H. Hall.
Pioche, Nevada	23.88	606.5	30.06	763.5	23	— 5.0	50	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	C. N. Kitchel.
Pittsburg, Pennsylvania	29.53	750.0	30.39	771.9	34.0	1.1	74	s.	1	0.4	.....	.....	10 s	.....	sw.	0	0	cloudy	W. A. Reid.
Poplar River, Montana	28.14	714.7	30.50	774.7	.....	.....	.....	ne.	.....	.....	1	.....	10 s	.....	.....	0	0	cloudy	W. D. Maxwell.
Port Eads, Louisiana	30.18	766.6	30.19	766.8	45.4	7.4	94	n	23	10.3	.....	.....	10 n	.....	n.	0.29	7.4	light rain	H. B. Boyer.
Port Huron, Michigan	29.59	751.6	30.32	770.1	27.0	— 2.8	93	sw.	8	3.6	.....	0	8 s	.....	sw.	0	0	cloudy	W. O. Bailey.
Portland, Maine	30.21	767.3	30.26	768.6	16.5	— 8.6	67	n.	4	1.8	.....	0	fg.	.....	.....	0	0	clear	W. W. Eichelberger.
Portland, Oregon	30.15	765.8	30.22	767.6	34.0	1.1	89	ne.	2	0.9	.....	1 c	0	.....	.....	0	0	clear	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	39	3.9	89	ne.	.....	.....	2	.....	10 s	.....	ne.	0	0	cloudy	F. S. Coburn.
Prescott, Arizona	24.67	626.6	30.04	763.0	18.8	— 7.3	73	s.	1	0.4	.....	0	0	.....	.....	0	0	clear	W. H. Clendenon.
Provincetown, Mass	30.23	767 8	30.26	768.6	24.5	— 4.2	73	nw.	12	5.4	.....	0	2 s	.....	nw.	0	0	clear	P. T. Jenkins.
Punta Rassa, Florida	30.00	762.0	30.01	762.2	61.5	16.4	90	ne.	13	5.8	.....	10 cs	0	sw.	.....	0.02	0.5	cloudy	W. J. Evans.
Red Bluff, California	29.87	758.7	30.24	768.1	33	0.6	100	nw.	3	1.3	.....	.....	fg.	.....	.....	0.10	2.5	dense fog	J. R. Williams.
Rochester, New York	29.60	751.8	30.31	769.9	30	— 1.1	78	w.	8	3.6	.....	10kmk	.....	.....	w.	inap.	inap.	cloudy	E. W. McGann
Roseburg, Oregon	29.64	752.8	30.21	767.3	42.3	5.7	87	sw.	5	2.2	.....	10 s	.....	.....	w.	inap.	inap.	cloudy	J. J. Nanry.
Sacramento, California	30.17	766.3	30.25	768.3	38.4	3.6	95	n.	2	0.9	.....	.....	fg.	.....	.....	0.03	0.8	dense fog	J. A. Barwick.
St. Louis, Missouri	29.73	755.1	30.38	771.6	25.0	— 3.9	93	n.	2	0.9	.....	0	sk.	.....	.....	inap.	inap.	clear	J. H. Weber.
St. Michael, Fort, Alaska	30.41	772.4	30.45	773.4	—17	—27.2	100	e	.....	.....	2	0	3 s	.....	.....	0	0	clear	A. P. Leavitt.
St. Paul, Minnesota	29.26	743.2	30.22	767 6	11.0	—11.7	80	se.	4	1.8	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	P. F. Lyons.
St. Vincent, Minnesota	29.28	743.7	30.26	768.6	9	—12.8	87	n.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.55	649.0	30.09	764.3	16	— 8.9	54	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. Craig.
San Antonio, Texas	29.58	751.3	30.30	769 6	30.5	— 0.8	68	calm	0	0	.....	0	0	.....	.....	0	0	clear	T. J. Kenan.
San Diego, California	30.00	762.0	30.07	763.8	46.3	7.9	65	ne.	4	1.8	.....	10 k	0	w.	.....	0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.63	752.6	30.36	771.1	31.8	— 0.1	68	sw.	11	4.9	.....	.....	10 s	.....	w.	0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.31	769.9	30.34	770.6	28.0	— 2.2	77	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	B. A. Blundon.
San Francisco, California	30.19	766.8	30.26	768.6	45.5	7.5	80	nw.	2	0.9	.....	0	0	.....	.....	0.10	2.5	clear	N. Gorom.
Santa Fé, New Mexico	23.15	588.0	30.14	765.5	17	— 8.3	58	ne.	9	4.0	.....	0	0	.....	.....	0	0	clear	H. U. Jones.
Savannah, Georgia	30.13	765.3	30.23	767.8	45	7.2	70	ne.	8	3.6	.....	.....	10 n	.....	ne.	0.06	1.5	light rain	H. W. Ford.
Shaw, Fort, Montana	26.67	677.4	30.50	774.7	16	— 8.9	100	n.	12	5.4	.....	.....	10 n	.....	.....	0.24	6.1	light snow	A. L. Mathews.
Shreveport, Louisiana	30.05	763.3	30.30	769.6	31	— 0.6	88	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	E. N. Meekins.
Sill, Fort, Indian Territory	29.00	736.6	30.32	770.1	28.8	— 1.8	85	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	W. M. Mattingly.
Silver City, New Mexico	24.33	618.0	30.17	766.3	12.0	—11.1	91	n.	2	0.9	.....	3 c	0	.....	.....	0	0	clear	N. D. Lane.
Sitka, Alaska	30.31	769 9	30.38	771.6	32.5	0.3	78	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	F. W. Fickett.
Smith, Fort, Arkansas	29.82	757.4	30.32	770.1	25.0	— 3.9	88	calm	0	0	.....	0	0	.....	.....	0	0	clear	J. B. Campbell.
Smithville, North Carolina	30.30	769.6	30.34	770.6	40	4.4	65	ne.	9	4.0	.....	10 cs	0	sw.	.....	0	0	cloudy	O. Parker.
Spokane Falls, Wash. Ter.	28.16	715.3	30.29	769.4	28.8	— 1.8	81	ne.	14	6.3	.....	.....	10 s	.....	.....	0.10	2.5	cloudy	H. Clifford.
Springfield, Illinois	29.63	752.6	30.36	771.1	28	— 2.2	77	calm	0	0	.....	0	hz.	.....	.....	inap.	inap.	clear	T. B. Jennings.
Springfield, Massachusetts	30.12	765.0	30.26	768.6	27.0	— 2.8	97	nw.	.....	.....	1	0	0	.....	.....	0	0	clear	Charles Mayr.
Springfield, Mo	28.79	731.3	30.32	770.1	22	— 5.6	73	e.	4	1.8	.....	0	0	.....	.....	0	0	clear	J. B. Marbury.
Starkville, Miss	29.79	756.7	30.29	769.4	32	0.0	78	n.	6	2.7	.....	0	5 s	.....	.....	0	0	fair	C. Dill.
Stevenson, Fort, Dakota	28.36	720 3	30.42	772.7	20	— 6.7	87	ne.	15	6.7	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	W. Burrows.
Stockton, Fort, Texas	27.10	688.3	30.24	768.1	24	— 4.4	70	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear	J. F. Marshall.
Thatcher's Island, Mass	30.23	767.8	30.29	769 4	22.0	— 5.6	80	nw.	11	4.9	.....	0	0	.....	.....	0	0	clear	G. Liebmann.
Thomas, Camp, Arizona	27.31	693 7	30.13	765 3	26.5	— 3.1	78	calm	.....	.....	0	4 cs	0	.....	.....	0	0	fair	J. T. Fitzgerald.
Toledo, Ohio	29.60	751.8	30.34	770.6	32	0.0	78	w.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	A. Buell.
Tucson, Arizona	27.57	700 3	30.07	763.8	40	4.4	50	s.	8	3.6	.....	9 cs	0	.....	.....	0	0	cloudy	J. L. Whiteside.
Umatilla, Oregon	29.89	759.2	30.28	769.1	32	0.0	94	w.	8	3.6	.....	.....	10 n	.....	.....	0.04	1.0	light snow	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	21.9	— 5.6	48	n.	.....	.....	1	0	0	.....	.....	0	0	clear	D. Brooks.
Vicksburg, Mississippi	30.05	763.3	30.32	770.1	31.9	— 0.1	87	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	James Kenealy.
Visalia, California	29.81	757 2	30.19	766.8	34.3	1.3	95	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	O. D. Stewart.
Washakie, Fort, Wyoming	24.47	621.5	30.24	768.1	5.5	—14.7	85	s.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	T. M. Ambler.
Washington, D. C	30.29	769.4	30.41	772.4	26.3	— 3.2	88	calm	0	0	.....	0	1s;fg	.....	.....	0	0	clear	B. M. Purssell.
West Las Animas, Colorado	25.97	659.6	30.13	765.3	3	—16.1	87	w.	4	1.8	.....	1 c	0	.....	.....	0	0	clear	F. H. Brandenburg.
Williamsport, Pa	29.72	754 9	30.35	770.9	32.2	0.1	68	nw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.28	769.1	30.34	770.6	37	2.8	72	ne.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.00	650.2	30.13	765.3	28	— 2.2	82	sw.	0	2.7	.....	0	8 s	.....	sw.	0.30	7.6	cloudy	J. Grover.
Yankton, Dakota	28.80	731.5	30.23	767.8	7	—13.9	80	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	J. H. Attfield.
Yuma, Arizona	29.82	757 4	29.97	761.2	40.0	4.4	57	e.	2	0.9	.....	0	0	.....	.....	0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.03	559.6	.....	.....	48.0	8.9	69	ne.	1	0.4	.....	0	1 ks	.....	w.	0	0	clear	Joaquin Gomez.
Havana, Cuba, W. I	29.90	759.4	29.96	761.0	69.1	20.6	93	se.	3	1.3	.....	2 ck	7k;ks	w.	se.	0.51	13.0	cloudy	Benito Vines, S. J.
Kingston, Jamaica, W. I	30.00	762.0	30.01	762.2	74	23.3	70	calm	0	0	.....	.....	10 s	.....	e.	0	0	cloudy	Robert Johnston.
Paramaribo, S. A	30.06	763.5	30.06	763.5	75	23.9	90	se.	.....	.....	2	.....	10 n	se.	se.	0.850	21.6	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.93	760.2	80	26.7	89	calm	.....	.....	0	5 c	5 ks	calm	calm	0	0	cloudy	Francisco J. Cisneros.
Rivas, Nicaragua, C. A	.....	.....	.....	.....	75.5	24 2	95	ne.	.....	.....	1	ck	5 ks	.....	ne.	0	0	cloudy	Earl Flint.
St. Paul, Kodiak Id., Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. J. Fisher.
St. Thomas, W. I	29.99	761.7	30.11	764.8	75	23 9	85	e.	.....	.....	.....	2 c	2 ks	.....	e.	0	0	fine	Aug. Walloe.
York Factory, B. A	29.84	757.9	29.91	759.7	3.0	—16.1	100	nw.	13	5.8	.....	.....	10 n	.....	nw.	0.13	3.3	snowing	Fortescue & Wood.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
							Miles p. hr.	Mtrs. p. sec		Upper.	Lower.	Upper.	Lower.			Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.			0–10	0–10	0–10	From.	From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay †	30.30	769.6	64	17.8	73	ese.			2		3							d. clouds.
H. M. S. Audacious, Labuan Island, Borneo, Oceanica	29.76	755.9	80	26.7	91	sww.			2		10	sw.						drizzling.
H. M. S. Beacon, Lake Timsah, Egypt			66	18.9	68	calm			0									overcast.
H. M. S. Boadicea, Simon's Bay, Cape Colony	29.96	761.0				se.			1–2		3							d. clouds.
H. M. S. Carysfort, Gulf of Suez, Egypt	30 27	768.8	69	20.6	84	nne.			2		1	nne.						blue sky.
H. M. S. Champion, Singapore, Malay Peninsula	29.77	756.1	80	26.7	95	calm			0		10							foggy.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.26	768.6	49	9.4	85	calm			0		0							blue sky.
H. M. S. Comus, Esquimalt, Vancouver Island, B. A.	30.37	771.4	33.4	0.8	84	n.			1		1							blue sky.
H. M. S. Constance, Madeira. Madeira Islands			72	22.2														
H. M. S. Curacoa, Yokohama, Japan	30.19	766.8	42.5	5.8	83	nnw.			1–2		0							blue sky.
H. M. S. Dido, N. 26° 42′, W. 63° 19′	30.07	763.8	70	21.1		nne.			1		4	nnw.				4	nne	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.56	750.8	74	23.3	59	s.			2–7		4	s.						squally.
H. M. Dock-Yard, Bermuda, W. I.	30.04	763.0	59	15.0	81	nnw.			3–4		10	nnw.						raining.
H. M. M. Eclipse, N. 8° 33′ E. 81° 13′	29.73	755.1	75	23.9		ne.			2		10							raining.
H. M. S. Gannet, S. 33° 00′, W. 72° 00′	29.84	757.9	59	15.0	94	ne.			2		10					3	s.	misty.
H. M. S Heroine, N. 21° 11′, W. 23° 06′	30.15	765.8	70	21.4	72	ene.			1		0					1	ene.	blue sky
H. M. S Iron Duke, N. 5° 56′, E. 82° 09′	29.82	757.4	84	28.9	83	s.			1		5	s.						d. clouds.
H. M. S. Lark, S. 34° 08′, E. 151° 52′	29.80	756.9	72.3	22.4	88	n.			5		2					3	n.	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.89	759.2	65	18.3		n.			2							2	n.	d. clouds.
H. M. S. Magpie, N. 34° 41′ E. 135° 12′	30.54	775.7	38.5	3.6	73	calm			0		0							misty.
H. M. S. Rambler, Port Belgrano, La Plata, S. A	30.06	763 5	72	22.2	75	nne.			4		0							blue sky.
H. M. S. Serapis, N. 29° :3′, E. 32° 44′	30.21	767.3	80	26.7	53	nw.			3		0							blue sky.
H. M. S. Superb, N. 36° 45′, E. 35° 45′*	30.22	767.6	61	16.1	77	ne.			2		4	nw.						d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.96	761.0	66	18.9	94	s.			1		5							d. clouds.
H. M. S. Sylvia, Cordova Inlet, Patagonia	29.61	752.1	53	11.7	93	wnw.			3–5		10							raining.
H. M. S. Tourmaline, Bombay, India	29.93	760.2				ne.			2		2	ne.						d. clouds.
H. M. S. Woodlark, Shat-el Arab river	30.18	766.6	60.5	15.8	61	nw.			2–3		0							blue sky.
H. M. S. Zephyr, Chee-fo , China	30.32	770.1	22.5	— 5.3		e.			1–2		10	e.				2	nw.	overcast.
Portuguese Naval																		
Tamega, Macao, China	30.15	765.7	64.4	18.0	71	ne.			2		1							blue sky.
Swedish Naval.																		
Vanadis, N. 31° 39′, E. 29° 23′	30.26	768.7	69.4	20.8	65	nnw.			2		6							d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.16	766.1	39	3.9	72	nne.	3	1.3			10		nne.	0.2	5.			cloudy
Navy Yard, Portsmouth, N. H	30.31	769.9	14	—10.0	?	nw.	4	1.8			0			0	0			clear.
Naval Hospital, Yokohama, Japan*	30.23	767.8	35.5	1.9	75	nw.			1		0			0	0			clear.
Adams, Sitka, Alaska*†	30.45	773.4	30	— 1.1	89	ne.			1		0							clear.
Alaska, Mare Island, Cal	30.18	766 6	44	6.7	84	calm			0		0			0.025	0.6			clear.
Alliance, N. 17° 25′, W. 62° 05′	30.04	763.0	77	25.0	95	ese.			2		5			light	light	sm'h		fair.
Ashuelot, Shanghai, China	30.27	768.8	59	10.0	86	se.			1		2	se.						clear.
Brooklyn, Montevideo, Uruguay	30.14	765.5	66	18.9	90	sse.	8	3.6			8	se.		0.01	0.3	sm'h		fair.
Colorado, New York, N. Y	30.27	768.8	26	— 3.3	100	wnw.	1	0.4			0			0	0			clear.
Enterprise, Lynn Haven Bay, Va	30.26	768.6	39	3.9	63	n.			2		5		nw.					fair.
Essex, Callao, Peru	29.93	760.2	67	19.4	90	calm			0		8					sm'h		cloudy.
Franklin, Norfolk, Va	30.37	771.4	36	2.2	80	calm	0	0			10		calm	0	0			cloudy.
Galena, Montevideo, Uruguay	30.16	766.1	63	17.2	83	s.			2		5		sw.			mod.	s.	fair.
Hartford, Valparasio Chili*	29.82	757.4	68	20.0	60	nne.			1		10			0	0	sm'h		cloudy.
Independence, Mare Island, Cal	30.29	769.4	39	3.9	91	calm			0		2			0	0			clear.
Iroquois, Callao, Peru	29.99	761.0	66	18.9	90	se.			1		8							cloudy.
Jamestown, Boston. Mass	30.26	768.6	20	— 6.7	100	nw.			1		0			0	0			misty.
Juniata, Fayal, Azores Islands*	29.61	752.1	61	16.1	94	wsw.			5		10		calm	hv'y	hv'y	mod.	s;w	rainy.
Kearsarge, N. 10° 43′, W. 60° 11′	30.09	764.3	77	25.0	100	e.			4		10		e.			sm'h		cloudy.
Lackawanna, S. 4° 17′ W. 106° 09′*	29.87	758 7	73	22.8	81	se.			5		8		se.			mod.	se.	cloudy.
Lancaster, Genoa, Italy*	30.03	762.7	58	14.4	100	calm			0		10		calm			sm'h		cloudy.
Michigan, Erie, Pa	30.17	766.3	36	2.2	90	sw.			4		5		w.					fair.
Minnesota, New York, N. Y	30.37	771.4	29	— 1.7	78	nnw.	2	0.9			2							fair.
Monocacy, Nagasaki, Japan	30.43	772.9	40	4.4	82	var.			1		2		calm					fair.
New Hampshire, Newport, R. I	30.32	770 1	29	— 1.7	100	wnw.			2		0					sm'h		clear.
Nipsic, Lisbon, Portugal*	30.18	766.6	60	15.6	94	sw.			3		10		wsw.			sm'h		rainy.
Onward, Callao, Peru	30.05	763.3	65	18.3	89	sse.			2		10		n.			long	w.	cloudy.
Palos, Tientsin, China*	30.22	767.6	29	— 1.7	100	ne.			1		10		calm					cloudy.
Pensacola, Panama, U. S. C*	29.80	756.9	77	25.0	90	nnw.	3	1.3			2			0	0	sm'h		clear.
Powhatan, Boston, Mass	30.27	768.8	19	— 7.2	84	nw.			0–1		5							fair.
Quinnebaug, Genoa, Italy*	30.11	764.8	58	14.4	81	calm			0		8		se.			sm'h		cloudy.
Ranger, N. 17° 48′, W. 100° 30′	29.97	761.2	74	23.3	81	ene.			2		8		n.			sm'h		cloudy.
Richmond, N. 36° 40′, E. 121° 45′*	30.11	764.8	67	19.4	84	s.			4		2		s.	0.2	5.	mod.	sw.	squally.
Saratoga, New York, N. Y	30.19	766.8	27	— 2.8	77	w.			1		0			0	0	sm'h		clear.
St. Louis, League Island, Pa	30.53	775.4	24	— 4.4	87	nw.			1		0			0	0			clear.
Tennessee, N. 14° 50′ W. 61° 12′	30.08	764.0	80	26.7	82	se.	16	7.2			8			sli't	sli't	sm'h		cloudy.
Vandalia, St. Thomas, W. I*	30.06	763.5	77	25.0	90	ne.			1		5		ne.					fair.
Wabash, Boston, Mass	30.26	768.6	19	— 7.2	84	calm	0	0			2			0	0			hazy.
Wachusetts, Mare Island, Cal*	30.18	766.0	38	3.3	100	sw.			0–1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.53	775.4	43	6.1	75	calm			0		5		w.	0	0			fair.
Yantic, N. 16° 05′, W. 60° 07′	30.16	766.1	78	25.6	86	e.			4		5		e.			sm'h		fair.
Merchant Marine.																		
S. S. Grecian, Havre, France*..	29.75	755.6	57	13.9	81	s.			4		10		s.	0	0			cloudy.
S. S. Nova Scotian, N. 48° 41′, W. 48° 07′	29.37	746.0	36	2.2		ne.			4		10		n.			mod.	ne.	cloudy.
S. S. Polynesian, Moville, Ireland			52	11.1		sw.			6		8		sw.	0	0			cloudy.
S. S. British Crown, N. 48° 53′ W. 29° 41′†	29.13	739.9	46	7.8		ne.			5		8		nne.	4 h'r	4 h'r	hv'y	nne.	squally.
S. S. British Prince, N. 50° 09, W. 38° 54′†	29.44	747.8	41	5.0		nne.			4–5		3		nne.	0	0	h'vy	n.	clear.
S. S. Indiana, N. 41° 26′, W. 64° 40′			33	0.6	89	w.			3		10		n.			mod.	n.	overcast.
S. S. Lord Gough, Delaware river	30.34	770.6	31	— 0.6		nw.			3		2			0	0			fair.
S. S. Ohio, N. 51° 47′, W. 7° 45′†	29.37	746.0	49	9.4	93	wsw.			5		4		sw.			mod.	wsw.	cloudy.
S. S. Pennsylvania, Liverpool, Eng†	29.37	746.0	52	11.1		sw.			4		10		sw.					cloudy.
S. S. Anchoria, N. 41° 54′, W. 61° 39′†	30.03	762.7				n.			5		2		nw.	0	0	sm'h		clear.
S. S. Dorian, N. 38° 31′ E. 7° 18′*	30.07	763 8	61	16.1		s.			2		3			0	0	sm'h		clear.
S. S. Galatia, N. 42° 53′, W. 9° 41′			62	16.7	100	sw.			3		6		sw.	light	light	mod.		dense mist.
S. S. Utopia, N. 33° 03′, W. 32° 09 †	30.11	764.8	70.5	21.4	?	sw.			5		9		wsw.	o	o	high	wsw.	overcast
S. S. Ailsa, N. 17° 58′, W. 70° 46′			77	25.0	91	ene.			5		8		ene.	4 h'r	4 h'r	mod.	ene.	cloudy.
S. S. Antillas, N. 18° 04′, W. 66° —			78	25.6		ne.			2		2					sm'h		fine.
S. S. Ambrose, Para, Brazil†	30.00	762.0	83	28.3		calm			0					3 h'r	3 h'r			fine.
S. S. Auckland, S. 50° 42′, W. 142° 16′	29.83	757.7	44	6.7	84	ssw.			6		8							squally.
S. S. City of Agra, S. 52° 45′, W. 135° 30′	29.54	750.3	39.2	4.0	98	s.			6		9							squally.
Bk. Commewyne, N. 42° 51′ W. 33° 28′	29.09	738.9	56.6	13.7	69	sw.			7		9							d. clouds.
S. S. Caldew, S. 11° 23′, E. 97° 10′	29.92	760.0	79	26.1		sse.			4		5							d. clouds.
S. S. Gordon Castle, N. 16° 47′, E. 41° 03′	29.98	761.5	85.5	29.7	72	sse.			1–2		2							d. clouds.
S. S. Inchkeith, S. 1° 36′, E. 89° 31′	29.92	760.0	81.8	27.7	87	nw.			2		3							d. clouds.
S. S. Bothnia, N. 40° 58′, W. 59° 43′	30.02	762.5	39	3.9	91	nnw.			6		8		n.	hail	hail	mod.	nnw.	squally.
S. S. Gallia, N. 44° 59′, W. 44° 10′	28.77	730.7	64?	17.87	62	e.			6		10		e.	rain	rain	r'gh	e.	squall y.
S. S. Scythia, N. 51° 11′, W. 12° 28′	29.49	749.0	55	12.8		sw.			1		7		var.	1 h'r	1 h'r	mod.	sw.	cloudy.
S. S. Colina, St. John's, N. F†	29.58	751.3				nne.			2		7		ne.	o	o	long	ne.	cloudy.
S. S. France, N. 49° 41′, W. 14° 34′†	29.52	749.7	53.6	12		sw.			4	ck	0	se.		o	o	sm'h	se.	clear.
S. S. Arizona N. 45° 30′, W. 51° 36′	29.48	748.8	34	1.1		nne.			6		10		n.	snow	snow	mod.	nne.	snowy.
S. S. Wisconsin, N. 50° 34′, W. 26° 34′	29.13	739.9	46	7.8		ene.			4		8		e.	2 h'r	2 h'r	sli't	e.	cloudy
S. S. Bohemia, N. 49° 52′, W. 4° 28′ †	29.74	755.4	56	13.3		ssw.			6		10		ssw.	o	o	long	ssw.	misty.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Frisia, N. 49° 16′, W. 25° 00′	29.23	742.4	55	12.8	.....	sw.	.....	.....	6	.....	10	.....	s.	3 h'r	3 h'r	mod	n.	cloudy.
S. S. Gellert N. 49° 17′, W. 29° 26′	29.21	741.9	49	9.4	.....	nnw.	.....	.....	3	.....	7	.....	nw.	o	o	long	nw.	covered.
S. S. Silesia, New York, N. Y †	30.32	770.1	25	--3.9	100	wsw.	.....	.....	3	.....	0	.....	.....	o	o	.....	.....	fair.
S. S. Vandalia, N. 43° 40′, W. 48° 16′	29.13	739.9	39.2	4.0	93	nw.	.....	.....	8-9	.....	10	.....	nw.	6 h'r	6 h'r	hv'y	nw.	.....
S. S. Mentmore, Tuskar, Ireland*	29.62	752.3	.....	.....	.....	w.	.....	.....	5	.....	.....	.....	.....	o	o	sm'h	.....	squally.
S. S. Archimedes, N. 24° 24′, W 20° 40′	30.16	766.1	.....	.....	.....	nne.	.....	.....	2	.....	.....	.....	.....	o	o	mod.	nw.	clear.
S. S. Hevelius, Liverpool, Eng *†	29.52	749.8	52	11.1	.....	sw.	.....	.....	6	.....	9.	.....	ssw.	5 h'r	5 h'r	.....	.....	cloudy.
S. S. Bulgarian, N. 50° 25′ W. 34° 46′ *	29.32	744.7	.....	.....	.....	nne.	.....	.....	5	.....	8	.....	nne.	sleet	sleet	mod.	ne.	cloudy.
S. S. Virginian, N. 43° 27′, W. 53° 12′*	29.66	753.4	34	1.1	.....	n.	.....	.....	6	.....	8	.....	nne.	snow	snow	r'gh	cross	cloudy.
S. S. Colorado, Galveston, Texas†	30.30	769.6	38	3.3	.....	ne.	.....	.....	4	.....	2	.....	ne.	o	o	.....	.....	fair.
S. S. Rio Grande, Matanzas, Cuba, W. I†	30.05	763.3	79	26.1	.....	se.	.....	.....	1	.....	1	.....	e.	3 h'r	3 h'r	.....	.....	hazy.
S. S. San Marcos, N. 26° 14′, W. 87° 00′	30.09	764.3	62	16.7	.....	e.	.....	.....	6	.....	.....	.....	ese.	.....	.....	h'vy	.....	raining.
S. S. Archimede, Gibraltar, Mediterranean †	30.29	769.4	68	20.0	74	sw.	.....	.....	2	.....	2	.....	ssw.	o	o	sm'h	.....	clear.
S. S. Hermod, N. 49° 50′, W. 4° 10′ †	29.62	752.3	53.6	12.0	.....	w.	.....	.....	6	.....	10	.....	w.	6 h'r	6 h'r	long	w.	threatening.
S. S. John Hopkins, Norfolk, Va *†	30.50	774.7	30	2.2	.....	e.	.....	.....	2	.....	8	.....	s.	o	o	.....	.....	cloudy.
S. S. Glenfyne, Para, Brazil*†	29.56	750.8	.....	.....	.....	nne.	.....	.....	1	.....	1	.....	ene.	o	o	.....	.....	fair.
S. S. Brooklyn, N. 46° 20′, W. 54° 20′	.....	.....	28	—2.2	.....	nw.	.....	.....	4	.....	.....	.....	wnw.	.....	.....	3	nw.	cloudy.
S. S. Chalmette, New York, N. Y†	30.23	767.8	29	— 1.7	.....	nnw.	.....	.....	1	.....	1	.....	w.	o	o	.....	.....	clear.
S. S. New York, N. 34° 35′ W. 76° 15′†	30.31	769.9	47	8.3	.....	nne.	.....	.....	5	.....	10	.....	ne.	.....	.....	sm'h	.....	cloudy.
S. S. Denmark, N. 40° 27′, W. 68° 50′†	30.28	769.1	33	0.6	.....	w.	.....	.....	4	.....	5?	.....	w.	o	o	sm'h	.....	clear?
S. S. Erin, N. 51° 52′, W. 7° 35′	29.36	745.7	50	10.0	.....	w.	.....	.....	5	.....	4	.....	w.	o	o	mod.	wsw.	flue.
S. S. Helvetia, N. 43° 30′, W. 57° 00′	29.76	755.9	33	0.6	.....	nne.	.....	.....	6	.....	5	.....	nne.	snow	snow	short	nne.	snowy.
S. S. The Queen, N. 47° 01′, W. 43° 29′*	29.32	744.7	44.5	6.9	.....	ne.	.....	.....	7	.....	10	.....	.....	shr's	shr's	r'gh	ene.	overcast.
S. S. City of Alexandria, Progresso Roads, C. A†	30.01	762.2	75	23.9	.....	ssw.	.....	.....	3	.....	6	.....	w.	2 h'r	2 h'r	small	e.	threatening.
S. S. City of Merida, N. 40° 44′, W. 74° 01′*†	30.38	771.6	.....	.....	.....	sw.	.....	.....	3	.....	0	.....	.....	o	o	light	.....	fine.
S. S. City of Washington, N. 37° 32′, W. 74° 40′ †	30.43	772.9	43	6.1	.....	n.	.....	.....	4	.....	10	.....	n.	o	o	sm'h	.....	cloudy.
S. S. City of Chester, N. 49° 46′, W. 33° 50′	.....	.....	46	7.8	.....	ne.	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	ene.	clear.
S. S. Braunschweig, S. 5° 46′, W. 32° 26′	29.99	761.7	82.5	28.1	81	ese.	.....	.....	3	.....	3	.....	se.	o	o	mod.	se.	cloudy.
S. S. Donau, N. 49° 52′. W. 17° 45′	29.58	751.3	.....	.....	.....	wsw.	.....	.....	2	.....	2	.....	w.	22 h'r	22 h'r	mod.	sw.	fair.
S. S. Oder, N. 41° 35′, W. 63° 45′	30.17	766.3	30.2	—1.0	.....	nw.	.....	.....	4	.....	8	.....	nw.	snow	snow	sm'h	nnw.	squally.
S. S. Rhein, N 48° 25′ W. 36° 40′	29.16	740.7	.....	.....	.....	ene.	.....	.....	6	.....	8	.....	ene.	1 h'r	1 h'r	r'gh	ene.	cloudy.
S. S. Salier, N. 51° 53′, E. 2° 30′	29.62	752.3	50.0	10.0	.....	ssw.	.....	.....	6	.....	10	.....	ssw.	2 h'r	2 h'r	cross	ssw.	misty
S. S. Belgic, N. 37° 39′, W. 125° 17′†	30.25	768.3	56	13.3	75	w.	.....	.....	2	.....	2	.....	w.	o	o	r'gh	nw.	clear.
S. S. Gaelic, N. 34° 33′, W. 166° 29′ *	30.29	769.4	58	14.4	100	var.	.....	.....	3	.....	3	.....	w.	.....	.....	.....	nw.	d. clouds.
S. S. Oceanic, Yokohama, Japan*	30.19	766.8	43	6.1	75	ne.	.....	.....	4	.....	3	.....	nw.	.....	.....	.....	.....	clear.
S. S. Mississippi, Seattle, Wash. Ter*†	30.37	771.4	34	1.1	80	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear.
S. S. Willamette, Seattle, Wash. Ter.†	30.39	771.9	34	1.1	71	ne.	.....	.....	1	.....	1	.....	ne.	o	o	.....	.....	clear.
S. S. Columbia, N. 37° 55′ W. 122° 49′ †	30.24	768.1	50	10.0	79	nw.	.....	.....	3	.....	2	.....	.....	.....	.....	long	w.	clear.
S. S. Oregon, Portland, Oregon†	30.15	765.8	55	12.8	93	calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	hazy
S. S. Ancon, N. 32° 38′, W. 117° 15′†	30.03	762.7	51	10.6	79	ese.	.....	.....	3	.....	10	.....	wnw.	.....	.....	mod.	sw.	cloudy.
S. S. City of Chester, Eureka, Cal*†	30.24	768.1	50	10.0	93	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	rainy.
S. S. Dakota, Seattle, Wash. Ter†	30.24	768.1	37	2.8	71	s.	.....	.....	2	.....	5?	.....	se.	o	o	sm'h	.....	clear?
S. S. State of California, San Francisco, Cal *†	30.20	767.1	44	6.7	.....	n.	.....	.....	2	.....	0	.....	.....	o	o	.....	.....	clear.
S. S. City of New York, S. 34° 11′, E. 158° 37′†	29.95	760.7	72	22.2	62	n.	.....	.....	4	.....	5	.....	nne.	o	o	.....	.....	fair.
S. S. City of Pekin, N. 39° 11′, W. 128° 10′†	30.31	769.9	50	10.0	65	calm	.....	.....	0	.....	0	.....	.....	o	o	sm'h	.....	clear.
S. S. City of Rio de Janeiro, N. 34° 31′, W. 120° 36′†	30.10	764 5	54	12.2	74	nw.	.....	.....	6	.....	0	.....	.....	o	o	mod.	nw.	clear.
S. S. City of Sydney, N. 9° 49′, W. 163° 08′†	29.84	757.9	79	26.1	82	ne.	.....	.....	4	.....	8	.....	ne.	.....	.....	r'gh	ne.	drizzling.
S. S. City of Tokei, N. 34° 32′, E. 137° 13′ †	30.35	770 9	44	6.7	.....	nnw.	.....	.....	7	.....	5	.....	nw.	o	o	.....	nnw.	clear.
S. S. Colima, Panama Panama†	29.91	759.7	78	25.6	91	nw.	.....	.....	3	.....	5?	.....	n.	o	o	.....	.....	cloudy.?
S. S. San José, N. 13° 18′, W. 89° 22′	.....	.....	.....	.....	.....	se.	.....	.....	2	0	0	se.	.....	1 h'r	1 h'r	long	ese.	clear.
S. S. Zealandia, Sydney, N. S. W	29.70	754.4	67	19.4	89	s.	.....	.....	4	.....	5	.....	se.	.....	.....	mod.	e.	fine.
S. S. Claudius, N. 34° 50′, W. 75° 45′	.....	.....	.....	.....	.....	n.	.....	.....	4	.....	6	.....	n.	o	o	short	n.	fair.
S. S. Valencia, La Guayra, Venezuela†	30.07	763.8	82	27.8	67	calm	.....	.....	0	.....	2	.....	calm	o	o	light	ne.	fine.
S. S. Belgenland, N. 46° 07′, W. 41° 50′	29.04	737.6	54	12.2	87	nne.	.....	.....	9	.....	10	.....	nne.	2 h'r	2 h'r	h'vy	.....	gloomy.
S. S. Nederland, N. 50° 39′, W. 29° 11′	.....	.....	43	6.1	.....	nne.	.....	.....	1	.....	10	.....	wsw.	3 h'r	3 h'r	cross	ne.	cloudy.
S. S. Rhynland, Antwerp, Belgium	29.78	756.4	50	10.0	93	sw.	.....	.....	9	.....	8	.....	sw.	8 h'r	8 h'r	.....	.....	rainy.
S. S. Waesland, Jersey City, N. J	30.34	770.6	27	— 2.8	100	w.	.....	.....	3	.....	1	.....	w.	o	o	.....	.....	clear.
S. S. P. Caland, N. 48° 34′, W. 27° 26′	29.18	741.2	50.5	10.3	95	ene.	.....	.....	3	.....	8	.....	e.	.....	.....	3	ne.	cloudy.
S. S. W. A. Scholten, N. 49° 40′, W. 14° 13′	29.62	752.3	53.9	12.2	87	w.	.....	.....	5	.....	2	.....	w.	4 h'r	4 h'r	long	w.	
S. S. State of Florida, Glasgow, Scotland	29.08	738.6	52	11.1	.....	ssw.	.....	.....	5	.....	10	.....	sw.	18 h'r	18 h'r	.....	.....	overcast.
S. S. State of Georgia, N. 40° 26′, W. 68° 37′ †	30.25	708.3	33	0.5	.....	wnw.	.....	.....	4	.....	6	.....	ne.	o	o	sm'h	.....	fine.
S. S. Iowa, N. 44° 11′, W. 47° 04′*†	29.07	738.4	53	11.7	.....	nnw.	.....	.....	9	.....	10	.....	nnw.	rain	rain	h'vy	con.	cloudy.
S. S. Plantyn, N. 40° 17′, W. 68° 50′	30.30	769.6	.....	.....	.....	.....	.....	.....	3	.....	3	.....	nw.	o	o	mod.	wnw.	fine.
S. S. Britannic, N. 42° 36′, W. 62° 57′ †	30.22	767.6	25	—3.9	.....	n.	.....	.....	3	.....	8	.....	nnw.	snow	snow	sm'h	n.	fair.
S. S. Celtic, N. 50° 33′, W. 18° 54′†	29.49	749.0	55	12.8	.....	s.	.....	.....	2	.....	0	.....	.....	o	o	mod.	ssw.	fine.
S. S. Lepanto, N. 42° 30′, W. 70° 20′*	30.16	766.1	30	—1.1	.....	nnw.	.....	.....	5	.....	2	.....	.....	o	o	sli't	w.	clear.
S. S. Marengo, N. 51° 30′, E. 0° 05′	29.65	753.1	.....	.....	.....	sw.	.....	.....	6	.....	10	.....	sw.	5 h'r	5 h'r	r'gh	sw.	overcast.
S. S. Salerno, N. 49° 57′, W. 17° 57′ *	29.43	747.5	56	13.3	.....	w.	.....	.....	4	.....	6	.....	w.	o	o	r'gh	sw.	fine.
S. S. Catherine Whiting, Providence, R. I†	30.26	768.6	40	4.4	.....	calm	.....	.....	0	.....	0	.....	.....	o	o	.....	.....	
S. S. Saxon, N. 39° 30′, W. 75° 34′ †	30.27	768.8	30	—1.1	.....	n.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	fine.
MISCELLANEOUS																		
Bk. Adelaide, N. 25° 02′, W. 42° 01′*†	30.15	765.8	77	25.0	.....	w.	.....	.....	6	.....	.....	.....	w.	o	o	mod.	wnw.	clear.
Bk. Alpha, N. 19° 35′, W. 34° 00′ †	30.12	765.0	78	25.6	.....	ese.	.....	.....	3	.....	0	.....	.....	o	o	long	nw.	clear.
Schr. Annie Lewis, Cedar Keys, Fla†	30.17	766.3	52	11.1	.....	ne.	.....	.....	1	.....	10	.....	.....	o	o	sm'h	.....	misty.
Bk Anna Thormann, S. 35° 18′, E. 24° 16′*	29.92	760.0	69.3	20.7	85	sse.	.....	.....	4	.....	10 n	.....	s.	4 h'r	4 h'r	mod.	e.	thund'r st'm
S. S. Antonio Lopez, Cadiz, Spain *	30.26	768.6	50	13.3	90	ne.	.....	.....	1	.....	0	.....	.....	o	o	.....	.....	misty.
Bk. Aquidneck, N. 8° 03′, W. 48° 09′*†	30.20	767.1	80	30.0	.....	e.	.....	.....	3	.....	.....	.....	e.	o	o	h'vy	e.	clear.
Bgt. Arthur, N. 4° 34′, W. 19° 00′*†	30.08	764.0	.....	.....	.....	wnw.	.....	.....	.....	.....	.....	.....	.....	1 h'r	1 h'r	.....	.....	
Schr. Anna A. Holton, N. 23° 32′, W. 93° 34′†	30.11	764.8	68	20.0	.....	nne.	.....	.....	8	.....	10	.....	n.	4 h'r	4 h'r	r'gh	n.	cloudy.
S. S. Burswell, N. 28° 20′, W. 79° 25′*†	30.09	764.3	73	22.8	.....	ene.	.....	.....	3	.....	10	.....	.....	5 h'r	5 h'r	str'g	nne.	overcast.
Bk. Champion, N. 36° 22′, W. 73° 30′	.....	.....	46.0	7.8	.....	n.	.....	.....	4	.....	10	.....	nnw.	o	o	sm'h	.....	cloudy.
Bg. Clara M. Goodrich, Key Francis, W. I *†	30.00	762.0	.....	.....	.....	e.	.....	.....	4	.....	7	.....	e	o	o	.....	.....	fair.
Bk. Commerce, N. 38° 42′, W. 67° 46′ †	30.15	765.8	39	3.9	.....	nw.	.....	.....	4	.....	8	.....	nw.	o	o	long	nw.	fine.
Schr. C. R. Flint, N. 36° 45′, W. 75° 45′	.....	.....	40	4.4	.....	ne.	.....	.....	3	.....	10	.....	ne.	o	o	long	ne.	cloudy.
Bkt. David Preston, Pensacola, Fla	.....	.....	56.0	13.3	.....	n.	.....	.....	.....	.....	5	.....	n.	4 h'r	4 h'r	.....	.....	
Bk. E. L. Pettingill, S. 16° 14′, W. 124° 52′ *†	30.10	764.5	80	20.7	.....	e.	.....	.....	3	.....	0	.....	.....	o	o	sm'h	.....	
Schr. Edith R. Seward, Wilmington, N. C*†	30.36	771.1	42	5.6	.....	nne.	.....	.....	1	.....	6	.....	wsw.	o	o	.....	.....	fair.
S. E. J. Spicer, Liverpool, Eng *.	29.43	747.5	56	13.3	.....	sw.	.....	.....	3	.....	7	.....	wsw.	20 h'r	20 h'r	.....	.....	cloudy.
Bk. E. D. Bigelow, Verdon, France *†	30.05	763.3	.....	.....	.....	s.	.....	.....	3	.....	10	.....	wnw.	.....	.....	.....	.....	foggy.
Bk. Essex, S. 8° 21′, E. 45° 10′ *†	29.90	759.4	85	29.4	.....	ssw.	.....	.....	2	.....	.....	.....	.....	sh'rs	sh'rs	.....	.....	
Schr. F. E. McDonald, Vineyard Haven, Mass	30.33	770.4	25	—3.9	.....	nnw.	.....	.....	1	.....	0	.....	.....	o	o	.....	.....	fine.
S. S. Foscolia, N. 44° 59′, W. 33° 27′	.....	.....	.....	.....	.....	sw.	.....	.....	7	.....	10	.....	sw.	6 h'r	6 h'r	r'gh	.....	drizzling.
Bk. Freya, Matanzas, Cuba, W. I	.....	.....	72	22.2	.....	se.	.....	.....	1	.....	1	.....	se.	o	o	.....	.....	fine.
S. George Stetson, N. 31° —′, W. 41° —′ *†	29.80	756.9	70	21.1	90	wsw.	.....	.....	7	.....	7	.....	wsw.	light	light	h'vy	sw.	cloudy.
Bk. Gronsvaer, Auckland, N. Z †	29.71	754.5	66.8	19.3	.....	w.	.....	.....	5	.....	5	.....	w.	1 h'r	1 h'r	.....	.....	fine.
Bk. Godeffroy, off Santa Maria Island, Chili †	29.75	755.6	58.8	14.9	78	s.	.....	.....	6	.....	0	.....	.....	o	o	mod.	sw.	hazy.
Bk. Great Surgeon, S. 28° 24′, E. 49° 33′ *†	30.23	767.8	70	24.4	.....	e.	.....	.....	4	.....	4	.....	w.	o	o	r'gh	ssw.	fair.
Bk Hattie G. McFarland, N. 21° 40′, W. 57° 00′ †	30.20	768.6	74	23.3	.....	calm	.....	.....	0	.....	2	.....	.....	o	o	long	ene	clear.
S. Hedwig, N. 38° 33′, W. 65° 08′	30.18	766.6	45.7	7.6	85	nnw.	.....	.....	6	.....	9	.....	nnw.	rain	rain	short	nnw.	rain & sleet.
Schr. Isabel Alberto, Hoboken, N. J.†	30.39	771.9	.....	.....	.....	wnw.	.....	.....	2	.....	0	.....	.....	o	o	.....	.....	clear.
Schr. Jennie N. Huddell, Baltimore, Md †	30.28	769.1	.....	.....	.....	nw.	.....	.....	1	.....	5?	.....	nw.	o	o	.....	.....	cloudy?
Bk. Joseph A. Ropes, Majunga, Madegascar*†	29.97	761.2	86	30.0	76	nw.	.....	.....	3	.....	3	.....	nw.	o	o	.....	.....	fair.
Bkt. Josephine, N. 15° 07′, W. 28° 54′†	30.13	765.3	78	25.6	65	ene.	.....	.....	5	.....	8	.....	.....	o	o	mod.	ne.	cloudy.
S. S. J. W. Wilson, Port Eads, La †	30.06	763.5	48	8.9	.....	n.	.....	.....	6	.....	10	.....	n.	10 h'r	10 h'r	.....	.....	cloudy.
S. S. Laurel, Sombrero Light, Fla †	29.98	761.5	72	22.2	.....	ese	.....	.....	2	.....	9	.....	se.	3 h'r	3 h'r	sm'h	.....	threatening.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Bg. Lilian, N. 30° 15′, W. 66° 17′ †	30.17	766.3	67	19.4		w.			4		9		w.	0	0	mod.	var.	clearing.
Bk. Louise Adelaide, N. 21° 10′, W. 94° 00′						nw.			4		10		nw.	3 h'r	3 h'r	long	nw.	misty.
Bg. L. & W. Armstrong, Pointe a Pitre, Guadeloupe*†	30.06	763.5				ne.			1		1		ne.	0	0			light haze.
S. S. Madrid, Browershaven, Netherlands*†	29.74	755.4	48	8.9		wsw.			4		8			driz	driz			overcast.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.17	766.3	59	15.0		n.			1									light rain.
S. Minnie N. Gerow, N. 28° 05′, W. 63° 04′*†	30.08	764.0				wnw.			2		3		nw.			sm'h	n.	fine.
S. M. P. Grace, S. 56° 00′, W. 76° 00′ *†	29.30	744.2	46	7.8		nw.			7		10		nw.	light	light	r'gh	nw.	cloudy.
Bg. O. C. Clary, Miragoane, Hayti, W. I. *†	30.06	763.5	84	28.9	91	se.			2		0			0	0			
Bk. Ottawa, N. 36° 30′, W. 10° 00′*	30.17	766.3	62	16.7		sw.			2		6		wsw.	1 h'r	1 h'r	long	wnw.	cloudy.
S. Paramita, San Francisco, Cal			48	8.9		w.			1					0	0			
Bk. Pilgrim, N. 33° 50′, W. 76° 15′ *†	30.21	767.3				nne.			5				nne.	2 h'r	2 h'r	chop	nne.	cloudy.
S. S. Radnorshire, Yokohama, Japan*†	30.20	767.1				n.			3		0			0	0			
S. S. Raleigh, N. 23° 40′, W. 74° 45′*†	30.02	762.5	75	23.9		se.			2		1		se.	0	0	light	se.	clear.
Bk. Reindeer, N. 39° 50′, W. 73° 15′						nw.			1		2			0	0	sm'h		
Bk. Samuel B. Hale, N. 26° 00′, W. 34° 00′						sw.					1		sw.			sm'h	n.	clear.
Bk. Southern Belle, N. 38° 20′, W. 17° 50′*†	29.90	759.4	60	15.6		ssw.			6		10			rain	rain			raining.
Bk. Sunbeam, N. 41° 13′, W. 37° 06′	29.07	738.4	58	14.4	82	wsw.			9		10		w.	3 h'r	3 h'r	hv'y	w.	rainy.
U. S. F. C. S. S. Fish Hawk, Washington, D. C †	30.47	773.9	31	— 0.6		calm			0		8		calm	0	0			cloudy.
Bk. Vincenzo Accame, N. 29° 14′, W. 64° 45′ †	30.21	767.3	71.6	22.0		w.			3		5		w.	0	0		n.	
Schr. Viola Reppard, N. 35° 30′, W. 75° 05′†	30.23	767.8	46	7.8		nne.			3		8		ne.	0	0			fair.
Bk. Wandering Jew, Montevideo, Uruguay †	30.05	763.3	66	18.9		s.			3		9		s.	0	0			cloudy.
Bk. Warden Law, Tocapilla, Peru, S. A *	30.04	763.0				calm			0		3		s.			sm'h	s.	fair.

International Chart I. December 29, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 30, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
Algerian.																			
Nemours	.....	.....	30.34	770.6	61.9	16.6	94	s.	.....	.....	3	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.28	769.2	59.0	15.0	78	w.	.....	.....	5	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.24	768.0	64.0	17.8	65	sw.	.....	.....	3	.....	3	.....	.....	0	0	pretty fair	Fonfréde.
Tunis	.....	.....	30.27	768.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.30	769.5	63.7	17.6	74	wsw.	.....	.....	2	.....	2	.....	.....	0	0	fair	Pérès.
Tebessa	.....	.....	30.31	769.8	53.2	11.8	74	wsw.	.....	.....	1	.....	2	.....	.....	0	0	fair	Dognon.
Geriville	.....	.....	.....	.....	52.9	11.6	40	nw.	.....	.....	2	.....	0	.....	.....	0	0	clear	Louchamp.
Laghouat	.....	.....	30.37	771.3	56.8	13.8	53	nne.	.....	.....	0	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.31	769.8	66.2	19.0	32	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malau.
Australian.																			
Melbourne, Victoria	29.47	748 5	29.56	750.8	63.0	17.2	67	sw.	1	0.4	.....	.....	1	.....	.....	0	0	fine	R. L. J. Ellery.
Austro-Hungarian.																			
Agram	29.49	749.0	30.04	763.0	54.9	12.7	52	sw.	.....	.....	4	.....	3	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.04	737.5	29.81	757.2	46.6	8.1	72	wsw.	15.0	6.7	.....	.....	8	.....	.....	0.012	0.3	.....	Dr. Wierzbiski.
Eperies	28.99	736.4	29.89	759.3	39.7	4.3	96	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.76	730 5	30.04	763.1	40.5	4.7	77	s.	.....	.....	1	.....	0	.....	.....	0	0	.....	Andreas Rospini.
Hermannstadt	28.58	725.8	30.03	762.8	45.1	7.3	88	n.	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.69	728.6	30.04	763.0	48.9	9.4	69	w.	.....	.....	2	.....	3	.....	.....	0.079	2.0	almost clear	The Staff.
Lemberg	28.77	730 8	29.77	756.2	43.5	6.4	84	sw.	.....	.....	2	.....	9	.....	.....	0.039	1.0	.....	Dr. T. Stanecki.
Pola	30.05	763 1	30.16	766.0	52.5	11.4	91	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	I. R. Hydrographic Office.
Szathmar	29.44	747.8	29.89	759 2	48.9	9.4	78	sw.	.....	.....	5	.....	1	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.75	755.6	30.03	762.8	51.4	10.8	72	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.07	763.8	30.17	766.4	51.1	10.6	91	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy	Royal Academy.
Vienna	29.29	743.9	30.01	762.1	53.1	11.7	57	w.	.....	.....	5	.....	1	.....	.....	0	0	.....	I. R. Central Met. Obs'y.
British.																			
Aberdeen	29.66	753.4	29.76	755.9	37.8	3.2	78	n.	8	3.6	.....	.....	4	.....	.....	0.030	0.8	blue sky	W. Boswell
Armagh, Observatory	29.38	746.2	29.62	752.3	40.6	4.8	76	ene.	10	4.5	.....	.....	10	.....	.....	.....	.....	squally	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.62	752.3	34.3	1.3	71	ene.	27	12.1	.....	.....	10	.....	.....	.....	.....	snowing	John Hartnup.
Bolton, Sharples	29.09	738.9	29.62	752.3	36.3	2.4	72	e.	18	8.0	.....	.....	10	.....	.....	.....	.....	snowing	Thomas Mackereth.
Bradford, Yorkshire	29.37	746.0	29.76	755.9	37.7	3.2	74	se.	.....	.....	3	.....	10	.....	.....	0.04	1.0	overcast	McLandsborough&Preston
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	82.0	27.8	69	se.	.....	.....	2	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	42.2	5.7	98	e.	.....	.....	0.6	.....	10	.....	.....	.....	.....	raining	John McLaren.
Chatham, School M. E	29.52	749.8	29.65	753.1	50.7	10.4	97	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	Corpl. G. A. Pickles.
Falmouth, Observatory	29.43	747.5	29.66	753.4	53.0	11.7	93	wsw.	.....	.....	5	.....	10	.....	.....	.....	.....	overcast	The Staff.
Fort Napier, Natal	27.55	699.8	29.76	755.9	79.0	26.1	47	n.	.....	.....	1	.....	3	.....	.....	.....	.....	blue sky	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.74	755 4	29.97	761.2	82.0	27.8	75	n.	.....	.....	1	.....	2	.....	.....	.....	.....	blue sky	Sergt. John Robinson.
Gibraltar, Mediterranean	30.34	770.6	30.39	771.9	69.0	20.6	88	e.	.....	.....	.....	.....	5	.....	.....	.....	.....	d. clouds	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29 50	749.3	29.70	754.4	35.9	2.2	77	e.	.....	.....	4	.....	10	.....	.....	blank	blank	foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.45	748.0	29.62	752.3	51.3	10.7	93	ssw.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	The Staff.
Guernsey	29.44	747 8	29.74	755.4	53.5	11.9	97	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	A. Collenette, F. M. S.
Kew, Observatory	29.59	751.6	29.62	752.3	51.7	10.9	93	sw.	23	10.3	.....	.....	10	.....	.....	.....	.....	raining	The Staff.
Leicester, Museum	29.46	748.3	29.49	749.0	40.8	4.9	93	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	J. C. Smith.
Malta, Mediterranean	30.14	765.5	30.20	767.1	64.8	18.2	68	sw.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.03	762.7	30.07	763.8	75.5	24.2	93	sw.	.....	.....	2	.....	7	.....	.....	.....	.....	d. clouds	C. S. Duncombe
Oscott, St. Mary's College	29.07	738.4	29.60	751.8	39.1	3.9	98	ene.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.36	745.7	29.59	751.6	47.0	8.3	96	n.	.....	.....	1	.....	10	.....	.....	.....	.....	drizzling	The Staff.
Plymouth	29.58	751.3	29.65	753.1	53.3	11.8	96	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	gloomy	John Merrifield.
Sandwick Manse, Orkneys	29.66	753.4	29.77	756.1	35.2	1.8	90	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.02	762.5	30.09	764.3	55.6	13.1	79	calm	.....	.....	0	.....	2	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.43	747.5	29.72	754.9	35.4	1.9	98	ne.	.....	.....	2	.....	10	.....	.....	0.47	11.9	rain & snow	W. F. Cooper.
Silloth Rectory	29.65	753.1	29.68	753.9	35.0	1.7	81	e.	.....	.....	1	.....	10	.....	.....	0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.66	753.4	37.5	3.1	67	e	20	8.9	.....	.....	10	.....	.....	.....	.....	gloomy	I. New.
Strathfeld Turgiss	29.42	747.3	29.64	752.8	51.8	11.0	96	sw.	.....	.....	2–3	.....	10	.....	.....	.....	.....	raining	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.64	752.8	29.70	754.4	55	12.8	87	sw.	.....	.....	4	.....	8	.....	.....	.....	.....	gloomy	W. Newcombe.
Valencia, Observatory	29.44	747.8	29.47	748.5	51.9	11.1	90	sw.	23	10.3	.....	.....	10	.....	.....	.....	.....	raining	The Met'g'l Office.
Canadian.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.95	760.7	30.00	762.0	25	— 3.9	82	sw.	5	2.2	.....	.....	10 n	.....	calm	Imp.	Imp.	snowy	H. J. Cundall, C. E
Chatham, N. B*	29.92	760.0	29.99	761.7	22	— 5.6	96	sw.	5	2.2	.....	.....	10 s	.....	sw.	0	0	cloudy	G. A. Blair.
Father Point, Quebec*	29.83	757.7	29.86	758.4	26	— 3.3	88	sw.	17	7.6	.....	5 k	5 s	w.	w.	0.03	0.8	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.61	752.1	29.52	749.8	—10	—23.3	74	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	James Stewart.
Halifax, N. S*	29.96	761.0	30.10	764.5	24	— 4.4	96	sw.	8	3.6	.....	10 k	0	nw.	.....	0	0	cloudy	A. Allison.
Kingston, Ontario*	29.78	756.4	30.13	765.3	32	0.0	88	sw.	7	3.1	.....	.....	1c s	.....	w.	0	0	cloudy	A. P. Knight, M. A.
Montreal, Quebec*	29.84	757.9	30.05	763.3	31	— 0.6	81	sw.	17	7.6	.....	.....	10 n	.....	.....	Imp.	Imp.	cloudy	C. H. McLeod, C. E.
Parry Sound, Ontario*	29.40	746 7	30.13	765.3	31	— 0.6	88	w.	9	4.0	.....	.....	10 k	.....	sw.	0	0	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.49	749.0	30.21	767 3	29	— 1.7	89	w.	8	3.6	.....	.....	10 cs	.....	sw.	0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.55	750.6	30.23	767.8	29	— 1.7	77	w.	10	4.5	.....	0	2 k	.....	w.	0	0	clear	M. Payne.
Quebec, Quebec*	29.66	753.4	30.01	762.2	28	— 2.2	100	calm	.....	.....	0	.....	10 n	.....	.....	0.02	0.5	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.60	751.8	30.08	764.0	29	— 1.7	84	w.	1	0.4	.....	.....	10 cs	.....	sw.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.41	747.0	30.16	766.1	32	0.0	100	w.	10	4.5	.....	.....	10 ks	.....	.....	0	0	cloudy	.....
St. Andrews, N. B	30.01	762.2	30.07	763.8	28	— 2.2	87	w.	8	3.6	.....	.....	10 n	.....	.....	0	0	cloudy	.....
Sydney, C. B*	29.97	761.2	30.04	763.0	20	— 6.7	91	sw.	13	5.8	.....	.....	10 s	.....	.....	0	0	cloudy	T. C. Hill, C. E
Toronto, Ontario*	29.80	756.9	30.20	767.1	30	— 1.1	78	w.	7	3.1	.....	.....	10 ks	.....	w.	0	0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	30.05	763.3	30.12	765.0	33	0.6	85	w.	2	0.9	.....	10 k	0	w.	.....	0	0	cloudy	Lt. F. E. Wilmot, R. N.
Sub-series.																			
Mount Forest	28.70	729.0	30.17	766.3	27.0	— 2.8	88	wnw.	.....	.....	3	.....	10 s	.....	wnw.	0	0	overcast	Wm. Wylie.
St. Johns, Newfoundland	29.78	756.4	30.05	763.3	20	— 6.7	100	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	John Delany.
Cape Colony.																			
Cape St. Francis Lt. House	30.02	762.5	30.05	763.3	72.0	22.2	84	s.	9.2	4.1	.....	.....	9 s	.....	.....	0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the air. Fah.	Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Velocity. Miles p. hr.	Mtrs. p sec	Force. 0–10	Clouds. Amount and kind. Upper 0–10	Lower. 0–10	Direction. Upper. From.	Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
CHINESE (*Sub-series*).																			
Sung-shu-chwang	24.93	633.3	.....	.....	1.4	—17.0	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.50	774.8	30.61	777.6	24.8	— 4.0	45	ne.	8.1	3.6	.....	0	8 k	.....	sw.	0	0	covered	**Mission, S. J.**
Zi-Ka-Wei, near Shanghai	30.27	768.9	30.30	769.5	46.0	7.8	96	nw.	8.9	4.0	.....	.....	10 k	.....	.....	0	0	covered.....	**M.Marc Dechevrens ,S.J**
DANISH.																			
Copenhagen	29.20	741.6	29.24	742.8	37.6	3.1	73	wnw.	36	16	.....	.....	9	... .	.....	.....	.....	rain & snow	**Oversergent Fischer.**
Fanoe	29.47	748.6	29.49	749.1	38.3	3.5	70	w.	.....	.....	6	.....	7	.....	.....	.....	.....	.....	**Overloerer Lauridsen.**
Godthaab, Greenland	29.61	752.1	29.65	753.2	9.5	—12.5	100	nne.	.....	.....	4	.....	2	.....	.....	.....	.....	.....	**S. Kleinschmidt.**
Ivigtut, Greenland	29.61	752.0	29.63	752.5	16.9	— 8.4	.....	calm	.....	.....	0	.....	9	.....	.....	.....	.....	snowing.....	
Jacobshavn, Greenland	29.75	755.7	29.80	756.9	—11.6	—24.2	.....	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	
Stykkisholm, Iceland	29.24	742.6	29.28	743.7	32.9	0.5	92	se.	.....	.....	7	.....	10	.....	.....	.....	.....	snowing.....	**A. O. Thorlacius.**
Thorshavn	29.55	750.5	29.58	751.4	29.5	— 1.4	82	sw.	7	3	.....	.....	2	.....	.....	.....	.....	.....	**Overloerer Bergh.**
Vestervig	29.23	742.5	29.33	744.9	32.5	0.3	92	nnw.	.....	.....	6	.....	9	.....	.....	.....	.....	.....	**Loerer Oesterboi.**
Upernavik, Greenland	29.82	757.5	29.87	758.7	—12.5	—24.7	.. ..	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
FRENCH.																			
Agen, Normal School	29.57	751.0	30.23	767.9	55.4	13	93	calm	.....	.....	0	c	2k	.....	.....	0.012	0.3	....	**M. Labroue, Director.**
Alençon, Normal School	29.42	747.2	29.97	761.2	50.7	10.4	90	sw.	.....	.....	3	.....	10 n	ne.	ne.	0.362	9.2	light rain....	**M. Nicot, Director.**
Arras, Engineer School	29 60	751.7	29.85	758.3	51.4	10.8	99	sw.	.....	.....	3	.....	10 k	.....	sw.	0	0	covered.....	**M. Fénéon, Command't.**
Avignon, Normal School	30.14	765.5	30.22	767.5	45.0	7.2	100	n.	.....	.....	1	.....	fg	.....	.....	0	0	dense fog....	**M. Giraud, Director.**
Bar-sur-Seine	29.51	749.5	30.07	763.7	51.8	11.0	85	s.	.....	.....	1	.....	8	.....	wsw.	0.039	1.0	very cloudy	**M. Saillard, Director.**
Beauvais, Normal School	29.65	753.0	29.91	759.8	52.0	11.1	86	ssw.	.....	.....	2	.....	10	.....	wsw.	0.087	2.2	covered.....	**M. Frère Eugène Marie.**
Besançon, Normal School	28.97	735.9	29.91	759.7	47.8	8.8	95	s.	.....	.....	1	.....	10 n	.....	sw.	.....	.....	raining.....	**M. Gobin, Director.**
Bordeaux, Observatory	29.86	758.5	30.13	765.2	53.4	11.9	65	sse.	.....	.....	2	.....	8	.....	.....	0.028	0.7	almost cov...	**M. Rayet, Director.**
Bourges, Normal School	29.56	750.7	30.11	764.8	51.8	11	86	s.	.....	.....	3	.....	10 n	.....	s.	0.04	1.	raining.....	**M. Malet, Director.**
Brest, Naval Observatory	29.64	752.8	29.88	759 0	54.7	12.6	98	sw.	.....	.....	4	.....	10	.....	sw.	0.236	6.0	.....	**M. de Kermaréc, Dir.**
Caen, Normal School	29.71	754.5	29.78	756.4	53.2	11.8	74	sw.	.....	.....	1	.....	2	.....	sw.	0.47	12.	slightly cl'dy	**M. Berson, Director.**
Châlons-sur-Marne, N.Sch'	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.094	2.4	.....	**M. Jadot, Director.**
Charleville, Normal School	29.43	747.6	29.95	760.7	50.0	10	81	w.	.....	.....	3	.....	10	.....	w.	0.31	8.	raining.....	**M. Grimard, Director.**
Clermont-Ferrand Obs'y	28.78	731.0	30.14	765.5	55.4	13.0	62	se.	.....	.....	1	.....	5	.....	.....	0	0	½ covered...	**M. Allnard, Director.**
Cluny, Normal School	29.30	744.2	30.16	766.1	56.5	13.6	58	sw.	.....	.....	1	.....	3	.....	sw.	0	0	.....	**M. de Villemontée, Dir.**
Commercy, Normal School	29.21	742.0	30.09	764 2	48.9	9.4	89	w.	.....	.....	3	.....	kn	w.	w.	0.16	4.	.....	**Dr. Coulet, Director.**
Gap, Normal School	27.63	701.9	30.25	768.3	40.3	4.6	65	.....	.....	.....	.....	.....	1	.....	ne.	0	0	.....	**M. Jeangirard, Director.**
Gréasque, du Rhone	29.06	738.2	30.20	767.1	55.9	13.3	64	sw.	.....	.....	1	.....	2	.....	sw.	0	0	.....	**M. Klun, Director.**
Grenoble, Normal School	29.44	747 8	30.24	768.0	45.1	7.3	84	e.	.....	.....	1	.....	0	.....	.....	0	0	.....	**M. Ablard, Director.**
Guéret	28.57	725.7	30.16	766.0	49.1	9.5	85	sw.	.....	.....	2	0	5 cn	.....	sw.	0	0	cloudy.....	**M. Delorme, Dir.**
Lamballe, Normal School	29.67	753.5	29.94	760.5	55.6	13.1	90	sw.	.....	.....	4	.....	hz	....	sw.	0.059	1.5	hazy	**M. Ollitrault, Director.**
Lescar, Normal School	29.56	750.9	30.13	765.2	59.2	15.1	56	ese.	.....	.....	1	2 c	0	w.	.....	0.091	2.3	slightly cl'dy	**M. Chanvin, Director.**
Lorient, Naval Observatory	29.80	756.8	29.90	759.4	55.4	13.0	93	sw.	.....	.....	4	.....	10	.....	.....	0.874	22.2	raining.....	**Lt. T. Carré, Director.**
Lyon, St. Genis-Laval	29.11	739.4	30.19	766.7	49.3	9.6	79	ne.	.....	.....	1	1 c	0	ne.	.....	0	0	light haze...	**M. André, Director.**
Mans, Normal School	29.63	752.6	29.94	760.4	52.5	11.4	93	ssw.	.....	.....	4	.....	10	.....	sw.	0.201	5.1	covered	**M. Piboën, Director.**
Marseille, Observatory	29.91	759 7	30.18	766.6	56.1	13.4	77	w.	.....	.....	1	.....	3	.....	w.	0	0	.....	**M. Stephan, Director.**
Montlouis	24.95	633.7	29.79	756.7	44.2	6.8	63	w.	7.4	3.3	.....	.....	4	w.	.....	0	0	.....	**M. Caré for Dr. Fines.**
Montpellier, Normal School	30.06	763.4	30.24	768.0	56.1	13.4	84	calm	.....	.....	0	.....	0	.....	.....	0	0	clear.....	**M. Galzin, Director.**
Nancy, Normal School	29.12	739.6	29.91	759.6	51.4	10.8	82	sw.	.....	.....	2	.....	10 n	.. ..	sw.	0.134	3.4	light rain.....	**M. Husse, Director.**
Nantes, Observatory	29.85	758.3	30.02	762.4	56.3	13.5	74	ssw.	.....	.....	2-3	.....	10 n	.....	sw.	0.28	7.	....	**M. Larocque, Director.**
Perpignan, Observatory	30.10	764.6	30.22	767.5	57.2	14.0	59	calm	.....	.....	0	.....	4	nnw.	.....	0	0	.....	**Dr. Fines, Director.**
Pic-du-Midi, Summit	21.32	541.5	.....	.....	35.2	1.8	.....	w.	.....	.....	2	.....	5	.....	w.	0.118	3.0	cloudy.....	**M. Vaussenat.**
Privas, Normal School	29.13	739.8	30.21	767.4	48.9	9.4	84	se.	.....	.....	1	.....	2	nw.	nw.	0	0	slightly cl'dy	**M. Tailleu.**
Puy de Dôme Obs'y, Summit	25.23	640.8	.....	.....	37.0	2.8	75	wsw.	.....	.....	3	.....	5	.....	.....	0.071	1.8	½ covered...	**M. Allnard, Director.**
Rochefort, Naval Obs'y	30.06	763.6	30.10	764.4	51.4	10.8	92	s.	.....	.....	2	.....	10	.....	.....	1.22	31.	covered.....	**Lt. E. Decante, Director.**
Roche-sur-Yon, N. School	29.77	756.1	29.98	761.6	52.7	11.5	85	s.	.....	.....	3	.....	5	.....	s.	0	0	cloudy.....	**M. Brotier, Director.**
Rodez, Normal School	28.06	712.6	30.24	768.1	46.0	7.8	88	se.	.....	.....	1	.....	5	.....	.....	0	0	cloudy.....	**M. Seger, Director.**
Rouen, Normal School	29.80	757.0	29.85	758.2	53.6	12	87	sw.	.....	.....	1	.....	10	sw.	.....	.....	.....	raining.....	**M. Mouillot.**
Saint Lô	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	**M. Delaplanche, Dir.**
Saint Maur, Observatory	29.81	757.1	29.97	761.3	52.2	11.2	89	sw.	.....	.....	3	.....	10	.....	sw.	0.055	1.4	.....	**M. Renou, Director.**
Toulouse, Observatory	29.50	749.2	30.22	767.7	55.0	12.8	79	se.	.....	.....	1	.....	5	n.	.....	0	0	cloudy.....	**M. Baillaud, Director.**
Tours	29.84	757.9	30.02	762.4	53.2	11.8	78	sse.	.....	.....	2	.....	10	.....	sw.	0.047	1.2	covered	**M. de Tastes.**
Versailles, Observatory	29.46	748.3	29.95	760.8	50.7	10.4	95	sw.	.....	.....	1	.....	.....	.....	.....	0.055	1.4	.....	**Dr. A. Bérigny, Director.**
Sub-series.																			
St. Martin du Hinx	30.02	762.5	30.17	766.3	57.4	14.1	58	s.	7.8	3.5	.....	.....	8 k	....	sw.	0.067	1.7	....	**M. Cartier, Director.**
GERMAN.																			
Ansbach	28.54	725.0	30.02	762.6	47.5	8.6	74	w.	.....	.....	4	.....	8	w.	.....	0.043	1.1	.....	**Prof. Jnedt.**
Bamberg	29.11	739.3	29.95	760.7	52.0	11.1	66	w.	.....	.....	2	0	8 k	.....	w.	0.024	0.6	raining..	**Prof. Dr. Hoh.**
Berlin	29.44	747.8	29.62	752.4	44.6	7.0	91	w.	.....	.....	3	.....	10	....	.....	0.280	7.1	.....	**Prof. Dr. Arndt.**
Breslau	29.23	742.4	29.75	755.7	50.9	10.5	63	wsw.	.....	.....	4	.....	2	.....	.....	0.012	0.3	.....	**Royal University Obs'y.**
Carlsruhe	29.57	751.1	30.01	762.3	52.2	11.2	74	sw.	.....	.....	5	.....	10	sw.	.....	0.102	2.6	raining.	**Albert Senz.**
Cassel	29.02	737.1	29.73	755.2	49.3	9.6	82	sw.	.....	.....	4	.....	10	s.	.....	0.559	14.2	.....	**Dr. H. Möhl.**
Frankfort-on-the-Main	29.54	750.3	29.91	759.6	51.6	10.9	79	ssw.	.....	.....	2	.....	10	....	.....	0.024	0.6	.....	**Physical Society.**
Friedrichshafen	28.66	728.0	30.12	765.1	47.8	8.8	80	s.	.....	.....	3	.....	3	wsw.	.....	0	0	.....	**Wilhelm, Chief Tel.**
Hamburg	29.56	750.8	29.65	753.1	42.8	6.0	74	wsw.	.....	.....	8	.....	3	.....	.....	0.232	5.9	....	**E. Preller.**
Kiel	29.52	749.8	29.54	750.2	41.2	5.1	75	w.	.....	.....	8	.....	1	.....	.....	0.240	6.1	.....	**Prof. Dr. G. Karsten.**
Leipsic, Astron'l Obs'y	29.34	745.2	29.76	755.8	50.9	10.5	97	wsw.	.....	.....	5	.....	9	wsw.	.....	0.028	0.7	stormy.....	**H. Leppig, Asst.**
Magdeburg	29.50	749.2	29.69	754.0	45.7	7.6	86	w.	.....	.....	5	.....	10 ks	.....	w.	0.154	3.9	raining	**Weather Observatory.**
Memel	29.25	743.0	29.30	744.1	37.2	2.9	100	sw.	.....	.....	5	.....	10	....	.....	.....	.....	rain & fog ...	**Issermann.**
Munich	28.23	717.1	30.10	764.5	49.1	9.5	62	nw.	.....	.....	6	.....	3	sw.	....	0.004	0.1	.....	**Central Station.**
Neufahrwasser	29.38	746.2	29.39	746.6	45.7	7.0	83	sw.	.....	.....	5	.....	9	....	.....	0.098	2.5	.....	**A. Lothes.**
Neustadt, Palatinate	29.47	748.6	30.00	762.0	50.0	10.0	98	sw.	.....	.....	1	.....	10	.....	.....	0.091	2.3	.....	**Dicknether.**
Stuttgart	29.05	737.9	29.95	760.8	50.9	10.5	71	sw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining.....	**Prof. Dr. Schoder.**
Wustrow	29.46	748.3	29.48	748.9	39.9	4.4	77	wnw.	.....	.....	6	0	5 s	....	.....	0	0	.....	**Profs. Brandes & Reimer.**
GREEK.																			
Athens	29.75	755.7	30.14	765.5	61.5	16.4	.....	sw.	.....	.....	1.0	0	4 k	.....	.....	0.004	0.1	.....	**Schmidt & Wourlisch.**
INDIAN.																			
Kurrachee	30.00	762.1	30.05	763.4	75.7	24.3	69	ssw.	11.0	4.9	.....	.....	6	.....	wsw.	0	0	d. clouds	
Deesa	29.52	749.9	30.00	761.9	79.7	26.5	38	wsw.	3.0	1.3	.....	.....	7	sw.	....	0	0	d. clouds.....	
Bombay	29.94	760.4	29.98	761.4	79.9	26.0	66	nw.	9.0	4.0	.....	.....	0	.....	.....	0	0	blue sky.....	
Poona, Yarrowda	28.10	713.8	29.96	760.8	82.0	27.8	20	ene.	5.0	2.2	.....	.....	1	s.	..... .	0	0	d. clouds.....	
Trichinopoly	29.71	754.5	29.99	761.7	82.3	27.9	60	ne.	2.0	0.9	.....	.....	5	.....	.....	0	0	d. clouds,....	
Belgaum	27.41	696.2	29.94	760.5	79.4	26.3	25	ene.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky.....	
Lahore	29.28	743 6	30.05	763.2	63.6	17.6	50	calm	0	0	.....	.....	6	.....	.....	0	0	d. clouds.....	
Roorkee	29.08	738.7	30.01	762.3	65.8	18.8	37	calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Agra	29.45	748.0	30.03	762.8	71.2	21.8	38	calm	0	0	.....	.....	5	w.	.....	0	0	.....	
Nagpur	28.95	735.4	30.01	762.1	78.2	25.7	41	calm	3 0	1.3	.....	.....	2	.....	.....	0	0	blue sky.....	
Jubbulpore	28.65	727 8	30.03	762.7	76.1	24.5	44	calm	0	0	.....	.....	3	sw.	.....	0	0	d. clouds	
Lucknow	29.64	752.8	30.03	762 7	70.2	21.2	39	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Allahabad	29 71	754.6	30.04	762.9	62.3	16.8	69	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Patna	29.85	758 2	30.04	763.1	65.2	18.4	58	w.	3.6	1.6	.....	.....	0	.....	.....	0	0	blue sky.....	
Hazaribagh	27.98	710.8	30.06	763.6	63.7	17.6	46	nw.	4.7	2.1	.....	.....	0	.....	.....	0	0	blue sky.....	
Cuttack	29.92	760.1	30.01	762 2	73.9	23.3	67	calm	0	0	.....	.....	1	.....	.....	0	0	blue sky.....	
Calcutta, Alipore	30.02	762.4	30.04	762 9	69.5	20.8	70	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Dhubri	29.94	760.4	30.06	763.5	66.8	19.3	66	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky.....	
Chittagong	29.94	760.6	30.04	763.0	66.8	19.3	74	calm	1.9	0.8	.....	.....	0	....	.....	0	0	blue sky.....	
Sibsagar	29.74	755.4	30.10	764 4	60.1	15.6	88	ne.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky.....	
Jeypore	28.56	725.4	30.04	763.0	69.9	21.1	64	sw.	.....	.....	.....	.....	6	sw.	.....	0	0	d. clouds....	
ITALIAN.																			
Udine	29.75	755.6	30.17	766.3	48.0	8.9	83	se.	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	**Prof. Giovanni Clodig.**

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	29.67	753.5	30.20	767.1	47.8	8.8	80	w.	1.6	0.7	.....	.....	8	sw.	.....	0	0	.....	Prof. Schiapparelli.
Padua	30.04	763.1	30.16	766.0	45.1	7.3	88	nnw.	1.3	0.6	.....	.....	9	w.	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.26	743.2	30.20	767.1	39.7	4.3	95	e.	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	Prof. F. F. Denza.
Genoa	29.98	761.6	30.18	766.6	57.2	14.0	80	se.	4.9	2.2	.....	.....	10	se.	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.24	717.2	30.21	767.2	47.1	8.4	57	w.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	30.11	764.8	30.16	766.1	49.3	9.6	89	wsw.	5.6	2.5	.....	.....	9	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.95	760.7	30.21	767.3	55.0	12.8	79	w.	.....	.....	2	.....	8	ssw.	.....	0.030	1.0	.....	Prof. Costantino Pittei.
Leghorn	30.07	763.7	30.15	765.9	57.2	14.0	82	s.	0.7	0.3	.....	.....	2	.....	.....	0	0	.....	Prof. P. Monte.
Rome	30.06	763.4	30.23	767.9	56.1	13.4	77	nne.	0	0	.....	.....	7	.....	.....	0	0	.....	Prof. P. Tachini.
Lecce	29.96	761.0	30.22	767.6	58.3	14.6	69	ese.	4.3	1.9	.....	.....	6	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.34	745.2	30.25	768.3	55.6	12.8	77	ssw.	2.5	1.1	.....	.....	2	sw.	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.99	761.8	30.19	766.8	58.8	14.9	63	nw.	.....	.....	2	.....	2	.....	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	30.01	762.2	30.26	768.5	58.1	14.5	63	ne.	1.8	0.8	.....	.....	2	.....	.....	0	0	.....	Prof. G. Cacciatore.
Syracuse	30.18	766.6	30.22	767.7	57.9	14.4	81	se.	1.8	0.8	.....	.....	8	wsw.	.....	c	0	.....	Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.72	755.0	30.26	768.5	57.7	14.3	73	wsw.	0	0	.....	.....	7	sw.	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.19	563.5	.....	.....	23.9	— 4.5	81	se.	.....	.....	2	.....	0	.....	.....	0	0	misty	Prof. P. F. Denza.
Valdobbia	22.21	563.8	.....	.....	29.7	— 1.3	66	e.	.....	.....	2	.....	1	.....	.....	0	0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	30.07	763.8	30.10	764.6	39.7	4.3	81	s.	.....	.....	2	.....	10 n	.....	sw.	0.535	13.6	raining	Hattori.
Awomori	29.90	759.4	29.94	760.5	39.4	4.1	74	sw.	24.5	11.0	.....	.....	10 ks	.....	.....	0.502	12.7	overcast	K. Ogawa.
Hakodate	29.86	758.3	29.87	758.6	39.5	4.2	84	wsw.	27.5	12.2	...	.....	10	.....	.....	0.042	1.1	rainy	
Hamamatsu	30.31	769.9	30.34	770.6	38.7	3.7	70	calm	.....	.....	0	0	0	.....	.....	0	0	clear	Y. Miwa.
Hiroshima, I. M. Obs'y	.....	.....	.....	.....	37.7	3.2	80	nne.	5.1	2.2	.....	0	2 ck	.....	w.	0	0	clear	
Kanazawa	30.24	768.2	30.35	770.9	46.0	7.8	55	s.	11.1	4.9	.....	0	6	.....	.....	0.029	0.7	cloudy	S. Endo.
Kioto	30.20	767.1	30.39	771.9	29.7	— 1.3	..	nw.	0.6	0.3	.....	0	0	.....	.....	0	0	clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.14	765.6	30.35	770.9	51.1	10.6	80	se.	0.9	0.4	.....	0	8 s	.....	.....	0	0	.....	S. Takehayashi.
Nigata	30.19	766.8	30.23	767.8	31.0	— 0.6	69	sw.	6.0	2.7	.....	.....	10 ck	.....	w.	0	0	overcast	M. Morita.
Nobiru	30.08	763.9	30.09	764.3	29.3	— 1.5	80	nnw.	7.4	3 3	.....	0	0	.....	.....	0	0	clear	H. Midzushima.
Numazu	30.19	766.9	30.23	767.8	45.1	7.3	73	nw.	.....	.....	4	0	0	.....	.....	0	0	clear	R. Kaneda.
Osaka	30.38	771.6	30.39	772.0	33.0	0.6	89	n.	1.7	0.7	.....	0	0	.....	.....	0	0	clear	H. Omura.
Sapporo	.....	.....	.....	.....	33.3	0.7	89	e.	18.0	8.0	.....	.....	10	.....	.....	0	0	covered	
Tokei Obs'y, Yeddo	30.12	765.0	30.20	767.1	33.4	0.8	85	nw.	3.3	1.4	.....	0	0	.....	.....	0	0	clear	The Staff.
Wakayama	30.33	770.5	30.39	772.0	35.9	2.2	82	ne.	3.6	1.6	.....	0	0	.....	.....	0	0	clear	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.90	759.4	30.08	764.0	82.4	28.0	58	e.	17.5	7.8	.....	0	4 k	.....	ese.	0	0	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.68	601.5	29.90	759.5	43.0	6.1	96	sw.	inap.	inap.	.....	3 c	0	.....	.....	0.151	3.8	foggy	Prof. Vicente Fernandez
Leon	24.34	618.2	30.24	768.1	41.4	5.2	94	calm	.....	.....	0	0 c	0	.....	.....	0	0	½ cloudy	Prof. M. Leal.
Mazatlan	29.77	756.0	30.03	762.7	64.5	18.1	86	nnw.	1.6	0.8	.....	0	3 n	.....	sw.	0	0	hazy	F. Quijano, C. E.
Mexico, Central Obs'y	23 09	586.4	30.30	769.5	38.7	3.7	99	calm	0	0	.....	.....	10	.....	.....	0.308	7.8	covered	The Staff.
Morelia	24.26	616.2	30.08	764.1	41.5	5.3	59	ne.	.....	.....	1	0	0	.....	.....	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.3	30.19	766.9	50.9	10.5	93	calm	0	0	.....	.....	10	.....	s.	0	0	covered	Prof. P. Spina.
Zacatecas	22.47	570.6	30.21	767.3	40.6	4.8	82	ssw.	5.1	2.3	.....	2 c	0	se.	.....	0.040	1.0	clear	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.78	756.4	29.78	756.4	49.3	9.6	.....	sw.	.....	.....	5	.....	.....	.....	.....	0.055	1.4	.....	
Groningen	29.67	753.7	29.73	755.1	43.3	6.3	.....	wnw.	.....	.....	3	.....	.....	.....	.....	0.098	2.5	.....	
Helder	29 75	755.6	29.75	755.6	43.3	6.3	.....	w.	.....	.....	2	.....	.....	.....	.....	0.083	2.1	.....	
Hellevoetsluis	29.78	756.4	29.78	756.4	44.1	6.7	91	nnw.	.....	.....	2	.....	.....	.....	.....	0.700	19.3	.....	
Utrecht	29.75	755 6	29.80	756.8	45.5	7.5	91	wsw.	.....	.....	2	.....	8	.....	.....	0.700	18.0	very cloudy	H. van der Brink.
NORWEGIAN.																			
Bergen	29.45	748.0	29.51	749.6	32.4	0.2	43	n.	13	6	.....	.....	1	.....	.....	0	0	.....	
Brono	29.34	745.2	29.38	746 2	24.4	— 4.2	80	se.	18	8	.....	.....	10	.....	.....	.....	.....	snowing	
Christiania	29.16	740.6	29.31	744.5	25.0	— 3.9	84	ne.	27	12	.....	.....	10	.....	.....	0.083	2.1	snowing	
Gjæsvær	29.31	744.4	29.33	745.0	14.2	— 9.9	.....	so.	.....	.....	7	.....	0	.....	.....	.....	.....	.....	
Lodingen	29.19	741.5	29.24	742.7	25.2	— 3.8	70	s.	.....	.....	6	.....	10	.....	.....	0.138	3.5	.....	
PORTUGUESE.																			
Angra, Azores	29.39	746.4	29.54	750.4	62.6	17.0	90	ssw.	16.8	7.5	.....	.....	6	.....	.....	0.276	7.0	.....	Dr. J. A. Sampaio.
Campo Major	29.31	744.4	30.32	770.2	56.3	13.5	78	calm	0	0	.....	.....	10	ese.	.....	0.030	1.0	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	30.14	765.5	30.23	767.8	68.9	20.5	72	sw.	4.9	2.2	.....	.....	8	nw.	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.90	761.0	30.33	770.3	57.9	14.4	83	sw.	13.6	6.1	.....	.....	8	w.	.....	0.012	0.3	.....	The Staff.
Ponta Delgada, Azores	29.52	749.9	29.66	751.7	64.0	17.8	92	ssw.	20.6	9.2	.....	.....	10	.....	.....	1.256	31.9	.....	
Saint Paul de Loando	29.74	755.4	29.94	760.5	76.6	24.8	80	wsw.	1.8	0.8	.....	.....	8	.....	.....	0	0	.....	
Serra da Estrella	25.41	645.3	30.18	766.5	46.8	8.2	95	wsw.	11.2	5.0	.....	.....	10	.....	.....	0.268	6.8	foggy	
RUSSIAN.																			
Akmolinski	28.77	730.8	29.94	760.4	12.4	—10.9	86	sse.	9	4	.....	.....	10 n	.....	.....	.....	.....	.....	Major K. Lasarew.
Archangel	29.50	750.7	29.38	751.2	6.1	—14.4	87	sse.	2	1	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	30.04	763.1	29.97	761.1	36.3	2.4	94	wsw.	13	6	.....	.....	10	.....	.....	0.138	3.5	heavy cl'ds.	Capt. Wisganow.
Barnaul	30.00	762.1	30.58	776.6	— 4.0	—20.0	74	e.	2	1	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Bielosersk	29.12	739.7	29.62	752.4	15.1	— 9.4	96	sse.	2	1	.....	.....	10 n	.....	.....	0.016	0.4	light snow	
Dorpat	29.13	739.9	29.39	746.4	20.3	— 6.5	100	e.	9	4	.....	.....	10 n	.....	.....	0.508	12.9	light snow	Observatory.
Ekaterinburg	28.78	731.0	29.85	758.1	— 2.7	—19.3	84	so.	9	4	.....	.....	10	.....	.....	0.024	0.6	...	Meteorological Obs'y.
Elisawetgrad	29.45	748.1	29.91	759.7	41.2	5.1	87	s.	7	3	.....	3 c	2 s	.....	.....	0	0	.....	
Kasan	29.10	739.0	29.38	746.2	20.3	— 6.5	59	calm	0	0	.....	.....	10	.....	.....	.....	.....	light snow	Observatory.
Kem	29.57	751.1	.....	.....	1.9	—16.7	90	nnw.	9	4	.....	.....	9 ks	.....	.....	0	0	.....	
Kertch	29.99	761.7	30.01	762.2	48.6	9.2	95	calm	0	0	.....	.....	9 n	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	29.09	738 8	29.73	755.2	39.0	3.9	84	sw.	11	5	.....	c;cs	9 ks	.....	.....	.....	.....	.....	Observatory.
Libau	29.17	740.8	29.19	741.4	30.9	2.7	94	sw.	.....	.....	2	.....	10	.....	.....	0.287	7.3	rain & fog	E. Quaas.
Lugan	29.66	753 3	29.87	758.6	38.3	3.5	88	wsw.	9	4	.....	.....	9	.....	.....	0.024	0.6	.....	Meteorological Obs'y.
Moscow	29.22	742.1	29.73	755.2	14.7	— 9.0	92	nw.	3.4	1.5	.....	.....	10 n	.....	.....	0.059	1.5	light snow	
Nikolaiev	29.88	758.9	29.95	760.8	39.2	4.0	95	s.	4	2	.....	.....	10	.....	.....	0.012	0.3	foggy	Capt. Kurdakow.
Pekin, China	30.45	773.4	30.59	777.0	25.3	— 3.7	36	nw.	38	17	.....	0	5 k	.....	.....	.....	.....	.....	Physical Observatory.
Petrozavodsk	29.37	740.1	29.60	751.7	— 5.3	—20.7	86	nnw.	7	3	.....	.....	10	.....	.....	inap.	inap.	light clouds	Dr. Bergmann.
Pinsk	29.09	738.8	.....	.....	43.2	6.2	72	sw.	22	10	.....	8 cs	0	.....	.....	0.004	0.1	light clouds	
St. Petersburg	29.54	750.2	29.55	750.6	3.6	—15.8	90	e.	4	2	.....	cs	9 s	.....	.....	0.028	0.7	.....	Central Physical Obs'y.
Sevastopol	29.80	757.0	29.97	761.2	51.4	10.8	94	ssw.	27	12	.....	.....	10 n	.....	.....	0	0	.....	
Semipalatinsk	29.77	756.2	30.53	775 4	—10.1	—23.4	75	e.	16	7	.....	.....	2	.....	.....	c	0	.....	Major Lasarew.
Staroi Bykhov	29.11	739.5	29.58	751.4	30.5	2.5	93	s.	18	8	.....	.....	10	.....	.....	0.083	2.1	light rain	
Tashkend, Laboratory	28.57	725.6	30.21	767.3	36.0	2.2	96	nw.	2	1	.....	.....	10	.....	.....	0.059	1.5	snowing	Telch, A. M.
Tiflis	28.80	731.6	30.25	768.3	49.1	9.5	52	w.	13	6	.....	1 cs	0	.....	.....	0	0	.....	Physical Observatory.
Tomsk	30.39	771.9	30.71	785.1	— 6.7	—21.5	80	e.	2	1	.....	0	0	.....	.....	.....	.....	.....	
Vladivostock	30.01	762.2	30.08	763.9	21.2	— 6.0	45	ne.	11	5	.....	.....	10 k	.....	.....	0	0	.....	
Warsaw	29.17	741.0	29.60	751 8	42.1	5.6	93	w.	25	11	.....	.....	10	.....	.....	.....	.....	heavy cl'ds.	Astronomical Obs'y.
Wilna	28.96	735 6	29.39	746.4	37.0	2.8	94	sww.	4	2	.....	.....	10	.....	.....	.....	.....	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.71	780.1	31.06	788.8	—19.3	—28.4	86	calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH.																			
Monach Lt	.....	.....	29.67	753.6	42	5.6	91	ese.	.....	.....	4	.....	10	.....	.....	0	0	overcast	J. Youngclause.
North Unst	.....	.....	29.27	743.4	.....	.....	.....	n.	.....	.....	6	2	4	.....	.....	.....	.....	.....	Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.06	763.6	30.17	766.3	55.8	13.2	66	sw.	3.8	1.7	.....	0	0	.....	.....	0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.12	765.1	30.18	766.6	62.6	17.0	56	s.	4.3	1.9	.....	.....	10	.....	.....	0	0	covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.29	693.1	30.35	770.8	45.9	7.7	90	s.	12.5	5.6	.....	.....	10	.....	.....	0.098	2.5	raining	Domingo Martin.
Madrid, Royal Obs'y	28.13	714.4	30.45	773.5	42.6	5.9	93	ne.	5.4	2.4	.....	.....	10	.....	.....	0.012	0.3	covered	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Spanish.																			
Murcia, Met. Obs'y	30.18	766.6	30.31	769.8	62.8	17.1	73	sw.	3.1	1.4		2	2	e.		0	0	clouds	Olayo Diaz, Director.
Oviedo	29.24	742.7	30.09	764.3	53.6	12.0	78	s.	4.9	2.2		6 n	6 n	n.	n.	0	0	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.15	740.3	30.04	768.1	56.5	13.6	90	ssw.	23.7	10.6		10				0.161	4.1	raining	R. Gil Villanueva, Dir.
Spanish.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.89	759.3	29.95	760.7	75.8	24.3	75	n.	4.4	2.0		1 c	3 ks			0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.27	768.9	30.38	771.5	59.2	15.1	74	e.	1.6	0.7		5	3	w.	w.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.05	763.3	30.14	765.6	75.6	24.2	83	calm	0	0		2 s	3 k	e.	se.	0.008	0.2		Manuel Maese.
Tuguegarao, Philippine Id's	29.91	759.7	30.04	763.1	71.3	21.8	92	nnw.	0	0		0	7 ks			0	0	covered	José L. Yrastorza.
Swedish.																			
Hapsaranda	29.61	752 1	29.65	753.1	— 8.7	—22.6	100	se.			2		10			0	0		
Umea	29.57	751.0	29.62	752.3	6.8	—14.0	100	calm			0		10			0.071	1.8		
Hernosand	29.55	750.5	29.60	751.8	14.0	—10.0	94	calm			0		10			0	0		
Stockholm	29.04	737.6	29.22	742.1	26.2	— 3.2	90	e.			7		10			0.075	1.9	snowing	
Wisby	29.02	737.0	29.08	738.5	37.0	2.8	90	sw.			1		10			0.177	4.5	snow & rain	
Sub-series.																			
Upsala	29.20	741.7	29.29	743.9	22.1	— 5.5	99	ne.	14.8	6.6			10			0.236	6.0	snowing	S. G. Fineman.
Swiss.																			
Geneva	28.75	730.3	30.17	766.4	55.8	13.2	56	e.			1		2			0	0	clear	The Observatory.
Turkish.																			
Constantinople			30.13	765.3	57.4	14.1	69	w.	10	4.5			3		sw.	0	0		The Observatory.
Valona			30.23	767.8	59.4	15.2		nw.			1		5			0	0	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.26	768.5	65.8	18.8	68	w.			1		0			0	0		Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.13	765 3	30.22	767.6	31	— 0.6	68	sw.	3	1.3			10 s			0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.50	749.3	30.21	767.3	27	— 2.8	88	w.	7	3.1			10 s			inap.	inap.	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.92	633.0	30.00	762.0	12	—11.1	50	ne.	2	0.9		0	0			0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.75	704.8	30.78	781.8	10	—12.2	01	sw.	6	2.7			10 s		w.	0.05	1.3	cloudy	B. O. Lenoir.
Atlanta, Georgia	28.95	735.3	30.18	766 6	35.0	1.7	89	nw.	12	5.4			10 s		nw.	0.39	9.9	cloudy	H. C. Smith.
Atlantic City, New Jersey	30.17	766.3	30.18	766.6	31	— 0.6	88	s.	3	1.3			10 n			0.02	0.5	sleeting	Jas. M. Watson.
Augusta, Georgia	29.94	760.5	30.14	765.5	38	3.3	89	nw.	3	1.3			10 s		nw.	1.13	28.7	cloudy	John Healy.
Baltimore, Maryland	30.18	766.6	30.23	767.8	36	2.2	69	ne.	2	0.9			10s;fg			0	0	cloudy	Geo W Felgar.
Barnegat, New Jersey	30.18	766.6	30.20	767.1	32.0	0.0	85	w.	4	1.8			10 s			0	0	cloudy	G. A. Hill.
Behring Id., Behring Sea	28.80	731.5	28.82	732.0	33.8	1.0		e.	9	4.0			10 n			0.14	3.6	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.89	733.8	30.65	778.5	10	—12.2	80	nw.	13	5.8			10 s		nw.	0.01	0.3	threatening	A. Pritchard.
Benton, Fort, Montana	27.79	705.9	30.79	782.1	10	—12.2	80	calm	0	0			10 s			0.40	10.2	cloudy	S. Wheaton.
Bismarck, Dakota	28.64	727.4	30.65	778.5	9	—12.8	80	n.	6	2.7			10 s			0	0	cloudy	Cyrus Cramor.
Block Island, Rhode Island	30.18	766.6	30.20	767.1	33	0.6	78	calm	0	0		0	8 s		nw.	0	0	cloudy	B. E. Light.
Boise City, Idaho	27.30	693.4	30.28	769.1	12	—11.1	91	calm	0	0			10 s			0.55	14.0	cloudy	J. T. Elker.
Boston, Massachusetts	30.01	762.2	30.17	766.3	28.0	— 2.2	04	w.	6	2.7		0	4s;fg			0	0	fair	O. B. Cole.
Brownsville, Texas	30.11	764.8	30.16	766.1	41.3	5.2	91	n.	3	1.3		0	0			0	0	clear	M. McCarty.
Buffalo, New York	29.43	747.5	30.23	767.8	29.8	— 1.2	79	sw.	12	5.4		2 ck	4 s	sw.	sw.	0	0	fair	W. Finn.
Buford, Fort, Dakota	28.58	725.9	30.82	782.8	2	—16.7	70	nw.	4	1.8			10 s		n.	0.02	0.5	cloudy	F. A. Mellen.
Burlington, Vermont	29.83	757.7	30.14	765.5	31.3	— 0.4	83	s.	4	1.8			10 s		w.	0	0	cloudy	G. C. Schaeffer.
Cairo, Illinois	29.97	761.2	30.39	771.9	27.5	— 2.5	94	calm	0	0			fg.			0	0	dense fog	W. H. Ray.
Cape Henry, Virginia	29.98	761.5	30.00	762.0	39	3.9	100	ne.	40	17.9			10 n			1.00	25.4	heavy rain	A. K. Alderson.
Cape May, New Jersey	30.16	766.1	30.19	766.8	32.5	0.3	94	ne.	6	2.7			10 s			0.17	4.3	cloudy	W. E. Smith.
Cape Mendocino, California																			J. J. McLean.
Cedar Keys, Florida	30.12	765 0	30.14	765.5	47	8.3	83	nw.	12	5.4			10 s		nw.	0.72	18.3	cloudy	F. W. Mixer.
Champaign, Illinois	29.45	748.0	30.32	770.1	24.3	— 4.3	07	sw.	6	2.7		0	0			0	0	clear	L. A. Welsh.
Charleston, S. Carolina	29.90	759.4	29.96	761.0	37	2.8	89	nw.	12	5.4			10 s		nw.	0.64	16.3	threatening	J. H. Smith.
Charlotte, N. Carolina	29.17	740.9	30.06	763.5	32.0	0.0	88	n.	5	2.2			10 s		n.	1.15	29.2	cloudy	D. O'Donoghue.
Chattanooga, Tennessee	29.39	746.5	30.25	768.3	37.0	2.8	82	nw.	5	2.2		0	4 ks		n.	0.24	6.1	fair	B. L. Goulding.
Cheyenne, Wyoming	24.09	611.9	30.37	771.4	4.0	—15.6	79	n.	4	1.8			10 s			inap.	inap.	cloudy	E. McGovern.
Chicago, Illinois	29.54	750.3	30.30	769.6	24.2	— 4.3	80	sw.	3	1.3			10 s			0	0	cloudy	J. Mitchell.
Chincoteague, Virginia	30.10	764.5	30.12	765.0	33	0.6	100	ne.	20	8.9			10 n		ne.	0.20	5.1	heavy rain	C. F. Dickens.
Cincinnati, Ohio	29.63	752.6	30.33	770.4	34	1.1	78	calm	0	0		3 c	4 s	sw.		0	0	fair	R. B. Watkins.
Cleveland, Ohio	29.49	749.0	30.28	769.1	29.8	— 1.2	84	w.	7	3.1		1 k	2 s	w.	w.	0	0	clear	J. B. Newlin.
Coleman City, Texas	28.29	718.6	30.19	766.8	26	— 3.3	100	s.	3	1.3		6 c	0			0	0	fair	L. Dorman.
Columbus, Ohio	29.37	746.0	30.28	769.1	32	0.0	78	e.	2	0.9		3 ck	4 s			0	0	fair	D. Cuthbertson.
Concho, Fort, Texas	28.14	714.7	30.16	766.1	30.0	— 1.1	81	s.	4	1.8		5 cs	0			0	0	fair	J. McGlone.
Custer, Fort, Montana	27 36	694.9	30.76	781.3	2	—16.7	57	nw.	3	1.3			10 s			0.11	2.8	cloudy	W. B. Lamar.
Davenport, Iowa	29.62	752.3	30.33	770.4	28	— 2.2	77	n.	4	1.8			10 s			0	0	cloudy	R. R. Martin.
Davis, Fort, Texas	25.16	639.1	30.10	764.5	34	1.1	74	calm	0	0		0	0			0	0	clear	J. Williams.
Dayton, Washington T'y	28.58	725.9	30.41	772.4	20.5	— 6.4	93	ne.	8	3.6		7 k	0	ne.		0.04	1.0	fair	D. Moore.
Deadwood, Dakota	25.00	650.2	30.59	777.0	5	—15.0	100	ne.	2	0.9			10 n			0.26	6.6	light snow	F. Willson.
Delaware Breakwater, Del	30.16	766.1	30.18	766.6	32	0.0	100	ne.	17	7.6			10 n		ne.	0.16	4.1	sleeting	T. S. Townsend.
Denison, Texas	29.41	747.0	30.26	768.6	33.0	0.6	68	s.	4	1.8		0	0			0	0	clear	J. W. Byram.
Denver, Colorado	24.84	630.9	30.36	771.1	15.0	— 9.4	87	calm	0	0			10 n			0.24	6.1	light snow	F. M. Neal.
Des Moines, Iowa	29.38	746 2	30.36	771.1	24	— 4.4	73	n.	6	2.7			10 s		n.	0	0	cloudy	F. W. Conrad.
Detroit, Michigan	29.51	749.5	30.27	768.8	28.3	— 2.1	88	sw.	6	2.7			10 s			0	0	cloudy	C. F. R. Wappenhans.
Dodge City, Kansas	27.49	698.2	30.29	769.4	19	— 7.2	87	n.	20	8.9			10 s			0	0	threatening	V. P. Temple.
Dubuque, Iowa	29.57	751.1	30.34	770.6	22.8	— 5.1	80	nw.	2	0.9			10 n			inap.	inap.	light snow	J. Harvey Smith.
Duluth, Minnesota	29.58	751.3	30.38	771.6	12	—11.1	80	w.	3	1.3			10 s			inap.	inap.	cloudy	N. B. Conger.
Eagle Pass, Texas	29.38	746.2	30.22	767.6	31.0	— 0.6	08	calm	0	0		0	0			0	0	clear	F. Belford.
Eagle Rock, Idaho	25.34	643.6	30.26	768.6	5	—15.0	60	n.	12	5.4		0	0			0.13	3.3	clear	J. M. Clifford.
Eastport, Maine	30.01	762.2	30.08	764.0	29.0	— 1.7	77	sw.	8	3.6			10 s		sw.	inap.	inap.	cloudy	D. O. Murphy.
Elliott, Fort, Texas	27.26	692.4	30.22	767.6	19	— 7.2	58	n.	12	5.4		0	0			0	0	clear	W. J. Cundall.
El Paso, Texas	26.16	664.5	30.02	762.5	25.0	— 3.9	76	calm	0	0		0	0			0	0	clear	J. O'Dowd.
Erie, Pennsylvania	29.47	748.5	30.24	768.1	33	0.6	88	sw.	1	0.4			10 s			0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.56	750.8	30.28	769.1	24.5	— 4.2	86	nw.	4	1.8			10 s			0	0	cloudy	George Heathcote.
Fredericksburg, Texas	28.36	720.3	30.18	766.6	31	— 0.6	88	calm	0	0		0	0			0	0	clear	Frank Halwegler.
Galveston, Texas	30.21	767.3	30.26	768.6	46	7.8	83	e.	8	3.6		0	fg.			0	0	clear	E. O'C. MacInerney.
Grand Haven, Michigan	29.53	750.0	30.24	768.1	30.0	— 1.1	88	sw.	8	3.6			10 s		sw.	0	0	cloudy	J. E. Mueller.
Grant, Fort, Arizona	25.05	636.3	29.93	760.2	32	0.0	74	ne.	3	1.3		0	0			0	0	clear	Robert C. Lord.
Hatteras, North Carolina	29.77	756.1	29.79	756.7	45	7.2	100	ne.	32	14.3			10 s		ne.	1.73	43.9	threatening	R. M. Crawford.
Helena, Montana	26.25	666.7	30.63	778.0	5	—15.0	79	sw.	3	1.3		0	0			0.03	0.8	clear	N. C. Smith.
Henrietta, Texas	29.15	740.4	30.23	767.8	31	— 0.6	88	se.	10	4.5		0	0			0	0	clear	J. P. Sherry.
Huron, Dakota	28.98	736.1	30.52	775.2	11	—11.7	61	nw.	13	5.8			10 s			inap.	inap.	cloudy	S. W. Glenn.
Indianapolis, Indiana	29.47	748.5	30.32	770.1	29	— 1.7	88	ne.	1	0.4		c	hz.			0	0	dense haze	O. Schutze.
Indianola, Texas	30.18	766.6	30.21	767.3	50.2	10.1	70	e.	16	7.2		0	0			0	0	clear	I. A. Reed.
Jacksboro, Texas	28.98	736.1	30.22	767.6	30	— 1.1	57	se.	4	1.8		0	0			0	0	clear	D. J. Carr.
Jacksonville, Florida	30.04	763.0	30.10	764.5	47	8.3	86	nw.	4	1.8			10 s			0.56	14.2	cloudy	J. W. Smith.
Keogh, Fort, Montana	28.02	711.7	30.72	780.3	10	—12.2	80	nw.	10	4.5			10 n		nw.	0.09	2.3	light snow	A. Schneider.
Keokuk, Iowa	29.63	752.6	30.34	770.6	27.0	— 2.8	80	nw.	8	3.6			10 s		nw.	0	0	cloudy	F. Z. Gosewisch.
Key West, Florida	30.03	762 7	30.05	763.3	69.0	20.6	84	n.	11	4.9			10 s		n.	0.07	1.8	cloudy	R. H. Paxton.
Kittyhawk, North Carolina	29.88	758.9	29.90	759.4	42	5.6	100	ne.	50	22.4			10 n		ne.	1.25	31.7	heavy rain	H. Mc P. Baldwin.
Knoxville, Tennessee	29.17	740.9	30.25	768.3	33	0.6	100	ne.	4	1.8		0	2 s;sk			0.23	5.8	clear	J. A. Cody.
La Crosse, Wisconsin	29.48	748.8	30.34	770.6	20	— 6.7	84	nw.	4	1.8			10 n			inap.	inap.	light snow	S. C. Emery.
Leavenworth, Kansas	29.37	746.0	30.33	770.4	26	— 3.3	88	e.	4	1.8			10 s			0	0	cloudy	A. W. Browne.
Lewiston, Idaho	29.01	752.1	30.49	774.4	8.5	—13.1	87	e.	1	0.4		0	0			0.09	2.3	clear	W. Bell.
Little Rock, Arkansas	30.02	762.5	30.35	770.9	29	— 1.7	88	calm	0	0		0	0			0	0	clear	W. U. Simons.
Los Angeles, California	29.61	752.1	30.01	762.2	41	5.0	65	ne.	10	4.5		0	0			0	0	clear	T. S. Collins.
Louisville, Kentucky	29.69	754.1	30.29	769.4	32	0.0	68	n.	4	1.8		0	0			inap.	inap.	clear	L. M Dey.

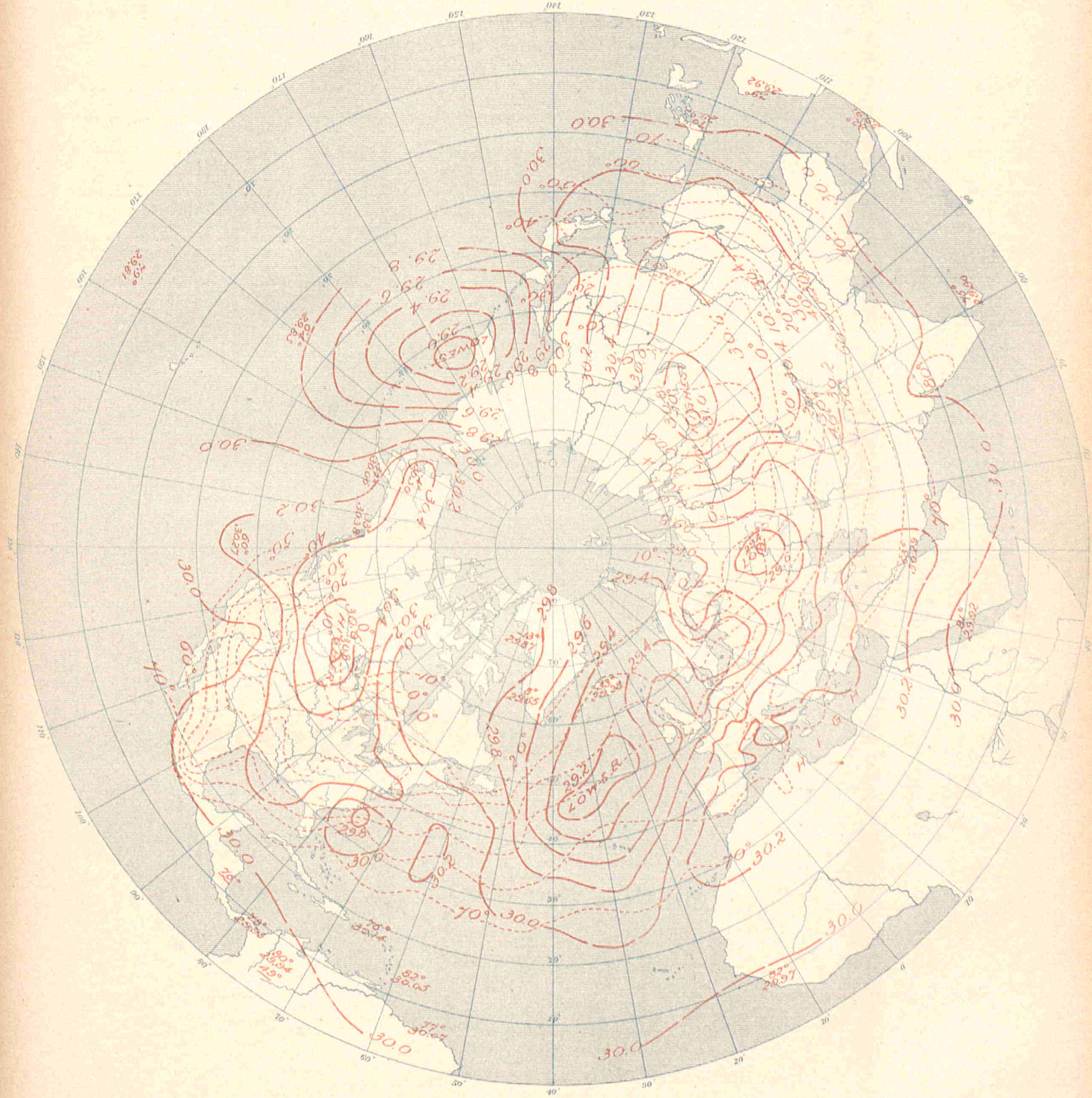
STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	OBSERVERS
UNITED STATES.—Cont'd.																			
Lynchburg, Virginia	29.40	746.7	30.13	765.3	33	0.6	88	n.	1	0.4	.....	.....	10 n	.....	.....	0.35	8.9	light snow...	Lewis Duane.
Mackinaw City, Michigan	29.55	750.6	30.25	768.3	28.0	— 2.2	77	nw.	10	4.5	.....	.....	10 s	.....	nw.	0.01	0.3	cloudy	F. R. Day.
Macon, Fort, North Carolina	29.75	755.6	29.76	755.9	42.0	5.6	100	n.	38	17.0	.....	.....	10 n	.....	n.	1.07	27.2	light rain....	C. A. Shaw.
Madison, Wisconsin	29.22	742.2	30.32	770.1	21	— 6.1	84	nw.	4	1.8	.....	.....	10 s	.....	nw.	0	0	cloudy.....	F. P. Chaffee.
Maginnis, Fort, Montana	25.98	659.9	30.52	775.2	4	—15.6	52	w.	5	2.2	.....	.....	10 s	.....	w.	0.03	0.8	cloudy.....	F. Burke.
McKavett, Fort, Texas	27.80	706.1	30.18	766.6	29	— 1.7	80	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	J. E. Thatcher.
Marquette, Michigan	29.46	748 3	30.24	768.1	26	— 3.3	64	w.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. Gilligan.
Memphis, Tennessee	30.00	762.0	30.36	771.1	28	— 2.2	88	calm	0	0	.....	0	sk	.....	.....	0	0	clear.....	D. T. Flannery.
Milwaukee, Wisconsin	29.49	749.0	30.30	769.6	22	— 5.6	88	w.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy.....	W. Line.
Missoula, Fort, Montana	27.11	688.6	30.57	776.5	6	—14.4	58	ne.	3	1.3	.....	0	4 s	.....	.....	0	0	fair.....	J. H. Young.
Mobile, Alabama	30.23	767.8	30.27	768.8	31	— 0.6	79	n	6	2.7	.....	0	0	.....	.....	inap.	inap.	clear.....	C. A. Read.
Montgomery, Alabama	29.99	761.7	30.23	767.8	32.6	0.3	90	nw.	6	2.7	.....	0	0	.....	.....	0.23	5.8	clear.....	J. B. McLaughlin.
Moorhead, Minnesota	29.43	747.5	30.54	775.7	— 3	—19.4	100	n.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy.....	H. Bessant.
Morgantown, W. Virginia	29.23	742.4	30.30	769.6	34.0	1.1	79	ne.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.58	598.9	30.21	767.3	16.0	— 8.9	70	nw.	60	26.8	.....	0	3 ks	.....	nw.	0	0	clear.....	B. S. Pague.
Nashville, Tennessee	29.71	754.6	30.32	770.1	31.5	— 0.3	88	w.	7	3.1	.....	0	0	.....	.....	inap.	inap.	clear.....	L. N. Jesunofsky.
New Haven, Connecticut	30.10	764.5	30.22	767.6	22.5	— 5.3	91	nw.	1	0.4	.....	5 ck	3s;sk	sw.	sw.	0	0	cloudy.....	J. H. Sherman.
New London, Connecticut	30.18	766.0	30.23	767.8	25	— 3.9	88	calm	0	0	.....	5 ck	fg.	w.	.....	0	0	fair.....	J. G. Lynch.
New Orleans, Louisiana	30.23	767.8	30.29	769.4	38.2	3.4	58	ne.	7	3.1	.....	0	sk.	.....	.....	0	0	clear.....	L. Dunne.
Newport, Rhode Island	30.15	765.8	30.20	767.1	30.7	— 0.7	79	sw.	7	3.1	.....	4 cs	6 s	w.	sw.	0	0	cloudy.....	W. McGillivray.
New York, New York	30.04	763 0	30.24	768.1	29	— 1.7	77	calm	0	0	.....	3 cs	5 s	w.	.....	0	0	cloudy.....	J. B. Merrill.
Norfolk, Virginia	29.98	761.5	30.01	752.2	36	2.2	100	ne.	21	9.4	.....	.....	10 n	.....	ne.	0.21	5.3	light rain....	Wm. Davis.
North Platte, Nebraska	27.28	692.9	30.44	773.2	14.6	— 9.7	85	nw.	14	6.3	.....	.....	10 n	.....	.....	0.04	1.0	light snow...	E. F. Brady.
Olympia, Washington T'y.	30.41	772.4	30.45	773 4	34.0	1.1	72	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	J. Dascomb.
Omaha, Nebraska	29.11	739.4	30.40	772.1	14.5	— 9.7	78	n.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy.....	A. Pollak.
Oswego, New York	29.82	757.4	30.16	766.1	36.0	2.2	61	sw.	6	2.7	.....	.....	10 s	.....	w.	0	0	cloudy	J. G. Linsley.
Palestine, Texas	29.71	754.6	30.29	769.4	32.0	0.0	72	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear.....	L. M. Pindell.
Pensacola, Florida	30.23	767.8	30.26	768.6	35.3	1.8	81	n.	8	3.6	.....	0	1 s	.....	.....	0.18	4.6	clear.....	M. McGauran.
Philadelphia, Pa	30.12	765.0	30.23	767.8	34	1.1	60	nw.	8	3.6	.....	.....	10 s	.....	sw.	0	0	cloudy.....	T. T. Townsend.
Pike's Peak, Colorado	17.44	443.0	30.10	764.5	— 7	—21.7	74	sw.	36	16.1	.....	3 cs	0	.....	.....	0	0	clear.....	H. Hall.
Ploche, Nevada	23.80	604.5	29.96	761.0	21	— 6.1	64	s.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	C. N. Kitchel.
Pittsburg, Pennsylvania	29.41	747.0	30.27	768.8	33.0	0.6	68	n.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy.....	W. A. Reid.
Poplar River, Montana	28.39	721.1	30.75	781.0	.....	.....	....	nw.	.....	.....	1	0	0	.....	.....	0	0	clear.....	W. D. Maxwell.
Port Eads, Louisiana	30.25	768.3	30.26	768.6	43.3	6.3	74	n.	19	8.5	.....	0	0	.....	.....	0.10	2.5	clear.....	H. B. Boyer.
Port Huron, Michigan	29.52	749.8	30.25	768.3	27.8	— 2.3	85	w.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy.....	W. O. Bailey.
Portland, Maine	30.10	764.5	30.14	765.5	20.0	— 6.7	70	sw.	4	1.8	.....	0	hz.	.....	.....	0	0	clear.....	W. W. Eichelberger.
Portland, Oregon	30.33	770 4	30.40	772 1	31.0	— 0.6	88	nw.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	M. L. Hearne.
Portsmouth, N. C.	.....	.....	.....	.....	44	6.7	100	ne.	.....	.....	7	.....	10 n	.....	n.	1.19	30.2	light rain....	F. S. Coburn.
Prescott, Arizona	24.56	623.8	29.93	760.2	14.4	— 9.8	83	w.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	W. H. Clendenon.
Provincetown, Mass	30.16	766.1	30.18	766.6	30	— 1.1	88	sw.	6	2.7	.....	0	4 s	.....	w.	0	0	fair.....	P. T. Jenkins.
Punta Rassa, Florida	30.06	763 5	30.07	763.8	59	15.0	81	nw.	26	11.6	.....	0	4 ks	.....	nw.	0.21	5.3	fair.....	W. J. Evans.
Red Bluff, California	29.75	755.6	30.12	765.0	38	3.3	45	n.	19	8.5	.....	0	0	.....	.....	0	0	clear.....	J. R. Williams.
Rochester, New York	29.49	749.0	30.20	767.1	28.5	— 1.9	82	w.	11	4.9	.....	0	3s;fg	.....	.....	0	0	clear.....	E. W. McCann
Roseburg, Oregon	29.75	755.6	30.32	770.1	27.5	— 2.5	88	nw.	1	0.4	.....	0	0	.....	.....	0.05	1.3	clear.....	J. J. Nanry.
Sacramento, California	29.99	761 7	30.07	763.8	35.7	2.1	89	e.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	J. A. Barwick.
St. Louis, Missouri	29.72	754.9	30.36	771.1	26.0	— 3.3	93	s.	6	2.7	.....	0	sk.	.....	.....	0	0	clear.....	J. H. Weber.
St. Michael, Fort, Alaska	30.46	773.7	30.50	774.7	— 4	—20.0	100	e.	.....	.....	2	0	0	.....	.....	0	0	clear.....	A. P. Leavitt.
St. Paul, Minnesota	29.42	747.3	30.38	771.6	7.0	—13.9	76	calm	0	0	.....	.....	10 s	.....	.....	0.02	0.5	cloudy.....	P. F. Lyons.
St. Vincent, Minnesota	29.58	751.3	30.58	776.7	— 8	—22.2	90	nw.	5	2.2	.....	3 cs	0	.....	.....	0	0	clear.....	C. B Dilley.
Salt Lake City, Utah	25.55	649.0	30.09	764.3	23	— 5.0	51	ne.	20	8.9	.....	3 k	0	n.	.....	inap.	inap.	clear.....	J. Craig.
San Antonio, Texas	29.46	748.3	30.18	766.6	30.5	— 0.8	78	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	T. J. Kenan.
San Diego, California	29.91	759 7	29.98	761.5	44.6	7.0	91	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear.....	A. C. Dobbins.
Sandusky, Ohio	29.54	750.3	30.28	769.1	29.9	— 1.2	78	w.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	M. H. Perry.
Sandy Hook, New Jersey	30.19	766.8	30.22	767.6	31.0	— 0.6	78	nw.	6	2.7	.....	.....	10 s	.....	nw.	0	0	cloudy.....	B. A. Blundon.
San Francisco, California	30.02	762.5	30.09	764.3	45.5	7.5	76	w.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	N. Gorom.
Santa Fé, New Mexico	23.04	585.2	30.03	762.7	21	— 6.1	53	calm	0	0	.....	5 c	0	.....	.....	0	0	fair.....	H. U. Jones.
Savannah, Georgia	29.97	761.2	30.07	763.8	40	4.4	82	nw	8	3.6	.....	.....	10 n	.....	nw.	1.53	38.9	light rain....	H. W. Ford.
Shaw, Fort, Montana	26.86	682.2	30.69	779.5	7	—13.9	80	ne.	4	1.8	.....	0	8 k	.....	nw.	0.14	3.6	cloudy.....	A. L. Mathews.
Shreveport, Louisiana	30.05	763.3	30.30	769 6	31	— 0.6	88	e.	1	0.4	.....	0	0	.....	.....	0	0	clear.....	E. N. Meekins.
Sill, Fort, Indian Territory	28.80	731.5	30.13	765.3	34	1.1	89	sw.	3	1.3	.....	6 c	0	w.	.....	0	0	fair.....	W. M. Mattingly.
Silver City, New Mexico	24.16	613.7	30.00	762 0	22.0	— 5.6	76	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	N. D. Lane.
Sitka, Alaska	30.31	769.9	30.38	771.6	32.5	0.3	71	ne.	3	1.3	.....	2 c	0	ne.	.....	0	0	clear.....	F. W. Fickett.
Smith, Fort, Arkansas	29.81	757.2	30.31	769.9	27.5	— 2.5	88	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	J. B. Campbell.
Smithville, North Carolina	29.77	756.1	29.81	757.2	37	2.8	100	n.	15	6.7	.....	.....	10 n	.....	ne.	0.43	10.9	light rain....	O. Parker.
Spokane Falls, Wash. Ter.	28.38	720.8	30.52	775.2	23.8	— 4.6	81	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear.....	H. Clifford.
Springfield, Illinois	29.62	752.3	30.35	770.9	29	— 1.7	77	w	3	1.3	.....	0	0	.....	.....	0	0	clear.....	T. B. Jennings.
Springfield, Massachusetts	30.08	764.0	30.22	767.6	20.5	— 6.4	94	calm	.....	.....	0	3 cs	0	s.	.....	0	0	clear.....	Charles Mayr.
Springfield, Mo	28.80	731.5	30.33	770.4	29	— 1.7	77	s.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	J. B. Marbury.
Starkville, Miss	29.85	758.2	30.35	770 9	26	— 3.3	80	n.	7	3.1	.....	0	0	.....	.....	0	0	clear.....	O. Dill.
Stevenson, Fort, Dakota	28.62	726.9	30.08	779.3	8	—13.3	80	nw.	15	6.7	.....	.....	10 s	.....	.....	0	0	cloudy.....	W. Burrows.
Stockton, Fort, Texas	26.96	684.8	30.10	764.5	30	— 1.1	80	sw.	0	2.7	.....	3 c	0	.....	.....	0	0	clear.....	J. F. Marshall.
Thatcher's Island, Mass	30.13	765.3	30.19	766.8	30.0	— 1.1	62	w.	9	4.0	.....	0	0	.....	.....	0	0	clear.....	G. Liebmann.
Thomas, Camp, Arizona	27.12	688.8	29.94	760.5	24	— 4.4	92	calm	.....	.....	0	1 cs	0	.....	.....	0	0	clear.....	J. T. Fitzgerald.
Toledo, Ohio	29.52	749.8	30.20	768.6	27	— 2.8	77	sw.	5	2.2	.....	0	0	.....	.....	0	0	clear.....	A. Buell.
Tucson, Arizona	27.43	696.7	29.93	760.2	30	— 1.1	81	s.	3	1.3	.....	0	0	.....	.....	0	0	clear.....	J. L. Whiteside.
Umatilla, Oregon	30.07	763.8	30.46	773.7	29.5	— 1.4	82	n.	20	8.9	.....	3 c	0	ne.	.....	inap.	inap.	clear.....	J. Daly.
Verde, Fort, Arizona	.....	.....	.....	.....	20.5	— 6.4	46	n.	.....	.....	2	0	0	.....	.....	0	0	clear.....	D. Brooks.
Vicksburg, Mississippi	30.06	763.5	30.33	770.4	30.1	— 1.1	87	calm	0	0	.....	0	fg.	.....	.....	0	0	clear.....	James Kenealy.
Visalia, California	29.71	754.6	30.09	764.3	31.0	— 0.6	92	s.	4	1.8	.....	7 k	1 s	.....	.....	0	0	cloudy.....	O. D. Stewart.
Washakie, Fort, Wyoming	24.62	625.3	30.39	771.9	4.9	—15.1	96	calm	0	0	.....	.....	10 n	.....	.....	0.20	5.1	light snow..	T. M. Ambler.
Washington, D. C.	30.10	764.5	30.22	767.6	31.5	— 0.3	94	calm	0	0	.....	.....	10 s	.....	.....	0.02	0.5	cloudy.....	B. M. Purssell.
West Las Animas, Colorado	26.16	664.5	30.32	770.1	13	—10.6	74	nw.	8	3.6	.....	.....	10 k	.....	nw.	0	0	cloudy.....	F. H. Brandenburg.
Williamsport, Pa	29.62	752.3	30.26	768.6	31.8	— 0.1	78	nw.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy.....	B. F. Hough.
Wilmington, N. Carolina	29.79	756.7	29.85	758.2	38	3.3	89	nw.	13	5.8	.....	.....	10 s	.....	n.	1.04	26.4	threatening.	Samuel A. Haney.
Winnemucca, Nevada	25.54	648.7	30.07	763.8	18	— 7.8	70	ne.	6	2.7	.....	0	8 s	.....	sw.	0.02	0.5	cloudy.....	J. Grover.
Yankton, Dakota	29.01	736.8	30.44	773.2	16	— 8.9	67	ne.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy.....	J. H. Atfield.
Yuma, Arizona	29.74	755.4	29.89	759.2	34.6	1.4	74	se.	2	0.9	.....	0	0	.....	.....	0	0	clear.....	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.08	560.8	.....	.....	49.0	9.4	72	nw.	2	0.9	.....	6 cs	3 ks	nw.	nw.	0	0	cloudy.....	Joaquin Gomez.
Havana, Cuba, W. I.	29.95	760.7	30.01	762.2	69.0	20.6	93	s.	5	2.2	.....	0	2ks;s	.....	.....	0	0	clear	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.06	763.5	30.07	763.8	73	22.8	80	n.	1	0.4	.....	9 cs	1 s	.....	.....	0	0	.....	Robert Johnston.
Paramaribo, S. A.	30.07	763.8	30.07	763.8	77	25.0	91	e.	.....	.....	2	5 k	7 ks	e.	.....	0.010	0.3	.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	740.2	29.94	760.5	80	26.7	89	calm	.....	.....	0	8 ck	0	w.	.....	0	0	cloudy.....	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.	.....	.....	.....	.....	75.5	24.2	94	ne.	.....	.....	4	0	0	.....	.....	0	0	clear.....	Earl Flint.
St. Paul, Kodiak Id., Alaska	30.00	762.0	30.06	763.5	34	1.1	88	e.	.....	.....	4	.....	8 k	.....	.....	0.57	14.5	raining.....	W. J. Fisher.
St. Thomas, W. I.	30.03	762.7	30.15	765.8	77	25.0	76	e.	.....	.....	.....	1 k	2 k	e.	e.	0	0	fine.....	Aug. Walloe.
York Factory, B. A.	29.85	758.2	29.91	759.7	—10.5	—23.6	76	nw.	16	7.2	.....	.....	10 n	.....	nw.	0.21	5.3	snowing.....	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.30	769.6	64	17.8	78	sw.			1		1							blue sky.
H. M. S. Audacious, Lubuan Island, Borneo	29.82	757.4	79	26.1	90	ssw.			2		10	sw.						showery.
H. M. S. Beacon, Lake Timsah, Egypt			68	20.0	60	nne.			1		4	nne.				1	nne.	d. clouds.
H. M. S. Boadicea, Simons Bay, Cape Colony	30.00	762.0				ese.			3		1							blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.22	767.6	70	21.1	79	nnw.			2		0							blue sky.
H. M. S. Champion, Singapore, Malay peninsula	29.91	759.7	82	27.8	83	var.			1		6							d. clouds.
H. M. S. Cleopatra, N. 31° 15′ E. 121° 28′	30.19	766 8	46	7.8	92	nne.			3		10							overcast.
H. M. S. Comus, Esquimalt, Vancouver Island, B C	30.43	772.9	31	— 0.6	89	nne.			1		0							blue sky.
H. M. S. Constance, N. 31° 06′, W. 17° 50′			71	21.7		se.			3							4	nw.	d. clouds.
H. M. S. Curacoa, Yokohama, Japan	30.18	766.6	47.5	8.6	69	nw.			1		0							blue sky.
H. M. S. Dido, N. 29° 24′, W. 64° 09′	30.22	767.6	69	20.6		ene.			4		7	nne.				4	nne.	d. clouds.
H. M. S. Diamond, Sydney, N. S. W*†	29.49	749.0	71	21.7	80	calm			0		8							d. clouds.
H. M. Dock Yard, Bermuda, W. I.	30.17	766.3	60	15.6	76	ne.			1-2		9	ne.						d. clouds.
H. M. S. Eclipse, N. 8° 33′ E. 81° 13′	29.80	756.9	75	23.9		ne.			2		8							showery.
H. M. S. Gannet, S. 35° 40′, W. 72° 55′	29.91	759.7	60	15.6	94	nne.			1		10					3	sw.	d clouds.
H. M. S. Heroine, N. 18° 59′ W. 23° 58′	30.07	763.8	76	24.4	72	ne.			3-4		0					2	ene.	blue sky.
H. M. S. Iron Duke, N. 6° 19′, E. 79° 54′	29.88	758.9	80	26.7	95	nnw.			5-6		5	n.				4	nnw.	squally.
H. M. S. Lark, S. 34° 20′, E. 153° 00′	29.72	754.9	71.3	21.8	88	ese.			1		10					2	sw.	showery.
H. M. S. Liffey, S. 29° 56′, W. 71° 20.′	29.92	760.0	65	18.3		nw.			1							1	nw.	d. clouds.
H. M. S. Magpie, N. 34° 41′, E. 135° 12′	30.40	772.1	42.0	5.6	79	calm			0		0							blue sky.
H. M. S. Rambler, Port Belgrano, La Plata, S. A	29.92	760.0	66	18.9	90	wnw.			5-6		2	nw.						squally.
H. M. S. Serapis, N. 25° 16′, E. 35° 42′	30.08	764.0	78	25.6	53	ne.			1		0							blue sky.
H. M. S. Superb N. 36° 45′, E. 35° 45′*	30.30	769.6	70	21.1	56	ese.			2									d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.98	761.5	64	17.8	94	s.			1		10							misty.
H. M. S. Sylvia, Cordova Inlet, Patagonia	29.70	754.4	48	8.9	82	wnw.			3-5		10							raining.
H. M. S. Tourmaline, B mbay, India	29.98	761.5				wnw.			1		0							blue sky.
H. M. S. Woodlark, Shat-el Arab river	30.19	766.8	62.5	16.9	61	nw.			5		3	n.						squally.
H. M. S. Zephyr, Chee-foo, China	30.41	772.4	22.5	— 5.3		n.			4-5		3	w.				2°	nw.	d. clouds.
Portuguese Naval.																		
Tamega, Macao, China	30.17	766.2	67.1	19.5	72	e.			1		0							blue sky.
Swedish Naval.																		
Vanadis, N. 31° 26′, E. 28° 32′	30.27	768.8	66.6	19.2	61	nnw.			2		8							d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.03	762.7	36	2.2	90	n.	2	0.9			5		n.	0	0			fair.
Navy Yard, Portsmouth, N. H	30.15	765.8	21	— 6.1	?	calm	0	0			0			0	0			clear.
Naval Hospital, Yokohama, Japan*	30.13	765.3	37.5	3.1	63	calm			0		0			0	0			clear.
Adams, Sitka, Alaska *†	30.40	772.1	29	— 1.7	100	calm			0		0							clear.
Alaska, Mare Island, Cal	29.94	760.5	43	6.1	83	nw.			1		0							clear.
Alliance, St. John's, Antigua, W. I	30.07	763.8	79	26.1	90	e.			1-2		2			0	0	sm'h		clear.
Ashuelot, Shanghai, China	30.29	769.4	46	7.8	92	nw.			2		10		nw.					cloudy.
Brooklyn, Montevideo, Uruguay	30.15	765.8	65	18.3	89	wnw.	5	2.2			0			0	0	sm'h		clear.
Colorado, New York, N. Y	30.34	770.6	31	— 0.6	89	nw.	4	1.8			10		calm	0	0			overcast
Enterprise, Lynn Haven Bay, Va	30.07	763.8	38	3.3	100	n.			6		10					mod.	ne.	rainy.
Essex, Callao, Peru	29.91	759.7	66	18.9	84	calm			0		8		ene.			sm'h		fair.
Franklin, Norfolk, Va	30.02	762.5	37	2.8	90	ne.	15	6.7			10			0.83	21.1			rainy.
Galena, Montevideo, Uruguay	30.16	766.1	63	17.2	88	sw.			2		0					sm'h	s.	clear.
Hartford, Valparaiso, Chili*	29.89	759.2	62	16.7	100	calm			0		10			light	light	sm'h		cloudy.
Independence, Mare Island, Cal	30.13	765.3	43	6.1	83	nw.			2		0			0	0			clear.
Iroquois, Callao, Peru	29.96	761.0	66	18.9	94	calm			0		10							overcast
Jamestown, Boston, Mass	30.13	765.3	25	— 3.9	88	wsw.			1		10			0	0			hazy.
Juniata, Fayal, Azores Islands *	29.45	748.0	63	17.2	88	s.			4		10		calm	h'vy	h'vy	long	s;w.	rainy.
Kearsarge, N. 14° 17′ W. 60° 36′	30.11	764.8	79	26.1	95	ene.			4		2		ene.			sm'h		fair.
Lackawanna, S. 4° 03′, W. 107° 47′*	29.90	759.4	72	22.2	90	s.			2		5		se.			sm'h	se.	fair.
Lancaster, Genoa, Italy*	30.08	764 0	58	14.4	100	ese.			2		8		e.			sm'h		fair.
Michigan, Erie, Pennsylvania	30.12	765.0	31	— 0.6	89	w.			4		10		nw.					cloudy.
Minnesota, New York, N. Y	30.28	769.1	30	— 1.1	78	nnw.	2	0.9			5		nnw.					foggy.
Monocacy, Nagasaki, Japan	30.34	770.6	56	13.3	80	ne.			1		8		calm					fair.
New Hampshire, Newport, R. I	30.24	768.1	31	— 0.6	89	wsw.			2		10		wsw.			sm'h		cloudy.
Nipsic, Lisbon, Portugal*	30.28	769.1	63	17.2	72	wsw.			2		8		e.			sm'h		cloudy.
Onward, Callao, Peru†	30.05	763.3	62	16.7	94	calm			0		10		n.			long	w.	cloudy.
Palos, Tientsin, China*	30.35	771.6	24	— 4.4	100	nnw.			3		10		calm					cloudy.
Pensacola, Panama, U. S. C*	29.82	757.4	77	25.0	90	nnw.	7	3.1			2			0	0	sm'h		clear.
Powhatan, Boston, Mass	30.19	766.8	23	— 5.0	100	w.			2		0							clear.
Quinnebaug, Genoa, Italy*	30.16	766.1	58	14.4	81	se.			3		10		se.			sm'h		cloudy.
Ranger, N. 18° 33′, W. 164° 18′	29.97	761.2	76	24.4	76	nnw.			1		0					sm'h		clear.
Richmond, N. 35° 07′, E. 119° 46′*	30.10	764.5	67	19.4	54	ne.			3		2		ne.	0	0	mod	ne.	fair.
Saratoga, New York, N. Y	30.23	767.8	31	— 0.6	79	nw.			1		0		calm					overcast.
St. Louis, League Island, Pa	30.48	774.2	31	— 0.6	89	n.			2		10			0	0			misty.
Tennessee, Fort de France, Matinique, W. I	30.11	764.8	80	26.7	86	ne.	6	2.7			0			0	0	sm'h		clear.
Vandalia, St. Thomas, W. I*	30.14	765.5	82	27.8	78	ene.			1		1		calm					clear.
Wabash, Boston, Mass	30.21	767.3	23	— 5.0	86	w.	2	0.9			2		se.	0	0			fair.
Wachusetts, Mare Island, Cal*	30.06	763.5	41	5.0	91	wnw.			1		0			0	0	sm'h		clear.
Wyandotte, Washington, D. C	30.35	770 9	37	2.8	90	nnw.			1		8		calm	0	0			fair.
Yantic, N. 13° 18′, W. 60° 31′	30.17	766.3	78	25.6	95	ene.			4		5					sm'h		showery
Merchant Marine.																		
S. S. Grecian, N. 49° 55′, W. 5° 10′*	29.64	752.8	53	11.7	93	sw.			6		10			6 h'r	6 h'r	high	sw.	hazy.
S. S. Nova Scotian, St. John's, N. F	29.83	757.7	28	— 2.2		wnw.			2		0							clear.
S. S. Polynesian, N. 55° 31′, W., 11° 12′			48	8.9		ese.			7		8		e.	0	0	r'gh	e.	cloudy.
S. S. British Crown, N. 50° 39′, W. 22° 43′†	29.07	738.4	55	12.8		sw.			6		8		sw.	0	0	h'vy	sw.	squally.
S. S. British Prince, N. 48° 28′ W. 47° 00′ †	29.65	753.1	40	4.4		ne.			6		3		n.			high	ne.	snow squalls
S. S. Indiana, N 43° 26′, W 58° 42′			35	1.7	80	nw.			4		10		nw.			mod	nw.	overcast.
S. S. Lord Gough, Philadelphia, Pa	30.22	767.6	32	0.6		nw.			4		10			0	0			cloudy.
S. S. Ohio, N. 51° 19′ W. 14° 28′†	29.32	744 7	52	11.1	93	wsw.			4		5		w.			r'gh	wsw.	hazy.
S. S. Pennsylvania, Liverpool, Engl	29.55	750.6	37	2.8		se.			3		10		se.					snowing.
S. S. Anchoria, N. 43° 30′, W. 56° 00′	30.12	765.0				n.			3		8		ne.	0	0	hv'y	ne.	cloudy.
S. S. Dorian, N. 39° 47′, E. 11° 58′*	30.13	765.3	61	16.1		wsw.			2		4		wsw.	0	0	sm'h		fine.
S. S. Galatia, N. 46° 28′, W. 7° 30′			59	15.0	100	wsw.			5		9		sw.	8 h'r	8 h'r	mod.	sw.	dense mist.
S. S. Utopia, N. 33° 01′, W. 34° 59′†	29.89	759.2	66	18.9	74	w			9		9		nw.	5 h'r	5 h'r	high	w.	squally.
S. S. Ailsa, N. 18° 35′, W. 75° 19′†	30.17	766.3	76	24.4	?	ene.			4		5?		ene.	0	0	mod.	ene.	cloudy.?
S. S. Antillas, Porto Rico, W. I			80	26.7		ne.			3		3		ne.			mod.	no.	cloudy.
S. S. Ambrose, Para, Brazil	30.00	762.0	83	28.3		calm			0					0	0			fine.
S. S. Auckland, S. 50° 17′, W. 135° 13′	29.71	754.6				s.			6									squally.
S. S. City of Agra, S. 52° 35′, W. 130° 05′	29.54	750.3	39	3.9	100	s.			6		9							squally.
S. S. Commewyne, N. 44° 29′, W. 30° 29′	29.25	742.9	58.3	14.6	76	sse.			4		10							d clouds.
S. S. Gordon Castle, N. 19° 59′, E. 38° 57′	29.92	760.0	80.5	26.9	78	n.			2		10							overcast.
Inchkeith, S. 1° 07′, E. 89° 54′	29.93	760.2	82.5	28.1	87	nnw.			1		2							d. clouds.
S. S. Bothnia, N. 41° 55′, W. 52° 44′	30.02	762.5	37	2.8	90	nnw.			5		8		n.	sq'lls	sq'lls	r'gh	n.	squally.
S. S. Gallia, N. 42° 50′, W. 51° 49′	29.87	758.7	36	2.2	80	nnw.			6		10		nw.	0	0	mod	n.	fair.
S. S. Pavonia, Mersey river, Eng*	29.60	751.8	41	5.0	91	e.			5		mist		e.	8 h'r	8 h'r	sm'h		rain & snow
S. S. Colina, St. John's, N. F†	29.85	758.2				wnw.			2		7		nw.	0	0			clear.
France N. 49° 42′, W. 7° 27′	29.67	753.7	51.8	11		se.			5	ck	0	se.				sm'h	se.	clear.
S. S. Arizona, N. 42° 52′ W. 59° 51′	30.14	765.5	31	— 0.6		w.			4		10		nw.	0	0	sm'h		overcast.
S. S. Wisconsin, N. 51° 19′ W. 18° 56′	29.10	739.1	54	12.2		sw.			6		2		mod	mod	ne.			fair.
S. S. Bohemia, N. 51° 33′, E. 1° 50′†	29.86	758.4				ssw.			6		10		ssw.	4 h'r	4 h'r	sm'h	ssw.	drizzling.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mil.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mil.			
MERCHANT MARINE.—Continued.																		
S. S. Gellert, N. 48° 30′, W. 38° 04′	29.33	745.0	48	8.9		nne.			4		8		ne.	0	0	rg'h	nne.	covered.
S. S. Silesia, New York, N. Y†	30.19	766.8	28	—2.2	100	se.			4		4		se.	0	0			clear.
S. S. Vandalia, N. 44° 30′, W. 45° 00′	29.46	748.3	52.9	11.6	83	nw.			8		10		n.	0	0	h'vy	n.	
S. S. Archimedes, N. 21° 25′, W. 22° 12′	30.09	764.3				e.			4					0	0	light	con.	clear.
S. S. Hevelius, Liverpool, Eng *†	29.75	755.6	44	6.7		ese.			6		10		e.	2 h'r	2 h'r			rain & snow.
S. S. Bulgarian, N. 48° 32′, W. 41° 54′*	29.54	750.3				nne.			9		8		nne.	0	0	high	ne.	
S. S. Virginian, N. 44° 30′ W. 49° 12′*	29.83	757.7	36	2.2		nnw.			7		10		n.	0	0	h'vy	cross	cloudy.
S. S. Colorado, Galveston, Texas†	30.28	769.1	42	5.6		ne.			4		1		ne.	0	0			clear.
S. S. Rio Grande, Matanzas, Cuba, W. I.†	30.06	763.5	80	26.7		calm			0		4		ne.	2 h'r	2 h'r			hazy
S. S. San Marcos, N. 28° 00′, W. 90° 10′			56	13.3		nne.			5		2		nne.			sm'h		clear.
S. S. Archimede, N. 37° 82′, W. 1° 20′†	30.35	770.9	68	20.0	74	ne.			2		1		ssw.	0	0	sm'h		clear.
S. S. Hermod, N. 49° 40′, W. 8° 08′†	29.64	752.8	53.6	12.0		wsw.			6		9		w.	2 h'r	2 h'r	high	wsw.	threatening.
S. S. John Hopkins, N. 38° 20′, W. 74° 50′			32	0.0		ne.			4		8		n.	sleet	sleet	light	n.	snow & sleet
S. S. Glenfyne, Para, Brazil *†	29.55	750.6				e.			1		1		ene.	0	0			clear.
S. S. Brooklyn, N. 44° 50′, W. 66° 25′			34	1.1		sw.			3				wsw.			1	w.	cloudy.
S. S. Chalmette, New York, N. Y†	30.13	765.3	30	—1.1		nnw			1		5?		w.	0	0			overcast.?
S. S. New York, N. 31° 42′. W. 80° 15′ †.	30.03	762.7	46	7.8		nnw.			6		10		nw.			r'gh	nw.	cloudy.
S. S. Denmark, Sandy Hook, N. J †.	30.16	766.1	36	2.2		w.			2		5?		w.	0	0			clear?
S. S. England, New York, N. Y.	30.13	765.3				nnw.			4		2		nnw.	0	0			clear.
S. S. Erin, Liverpool, Eng	29.55	750.6	38	3.3		ssw.			7		10			4 h'r	4 h'r			sleeting.
S. S. Helvetia, N. 41° 40′, W. 63° 00′	30.13	765.3	37	2.8		wnw.			1		10		w.	0	0	sm'h		overcast.
S. S. The Queen, N. 45° 31′ W. 50° 12′ *	29.94	760.5	31	—0.6		nne.			6		10			0	0	mod.	ne.	overcast.
S. S. City of Alexandria, N. 19° 58′, W. 91° 52′†	30.11	764.8	74	23.3		nnw.			5		10		e.	3 h'r	3 h'r	small	ne.	
S. S. City of Washington, N. 33° 03′ W. 75° 55′ †.	29.68	753.9	70	21.1		ssw.			8		10		sw.	4 h'r	4 h'r	r'gh	sw.	cloudy.
S. S. City of Chester, N. 51° 00′ W. 25° 16′			50	10.0		nne.			4								ne.	overcast.
S. S. Braunschweig, S. 9° 37′, W. 33° 49′	30.02	762.5	84.0	28.9	79	e.			2		3		ese.	0	0	mod.	ese.	clear.
S. S. Donau, N. 49° 17′. W. 24° 58′	29.39	746.5				wsw.			5		5?		wsw.	5 h'r	5 h'r	cross	var.	cloudy.?
S. S. Oder, N. 49° 41′ W. 7° 26′	30.22	767.6	38.3	3.5		w.			3		8		w.	0	0	sm'h	w.	cloudy.
S. S. Rhein, N. 49° 21′, W. 30° 00′	29.20	741.7				e.			3		4		s.	0	0	long	sw.	fair.
S. S. Salier, N. 53° 33′, E. 8° 34′	29.66	753.4	42.8	6.0		w.			6		2		w.	0	0			fair.
S. S. Belgic, N. 37° 21′, W. 130° 48′†	30.17	766.3	60	15.6	82	ene.			1		8		sw.	0	0	r'gh	nw.	misty.
S. S. Gaelic, N. 34° 42′, W. 171° 30′ *	29.83	757.7	64	17.8	94	s.			6		9		ssw.				sw.	squally.
S. S. Oceanic, Yokohama, Japan*	30.05	763.3	47	8.3	62	nw.			3		2		n.					clear.
S. S. Mississippi, Seattle, Wash. Ter*†	30.40	772.1	32	0.0	70	e.			1		0							clear.
S. S. Willamette, Seattle, Wash. Ter †	30.54	775.7	31	—0.6	79	ene.			1		1		ne.	0	0			clear.
S. S. Oregon, Portland, Oregon†	30.35	770.9	34	1.1	90	calm			0		0							clear.
S. S. Ancon, San Pedro Bay, Cal †.	29.89	759.2	41	5.0	74	nnw.			3		0					mod.	w.	clear.
S. S. City of Chester, Eureka, Cal*†	30.12	765.0	50	10.0	72	se.			4		0							clear.
S. S. Dakota, Esquimalt, B. C.†	30.33	770.4	37	2.8	71	nw.			1		2		nw.	0	0			clear.
S. S. State of California, San Francisco, Cal *†	30.04	763.0	44	6.7		w.			2		0			0	0			clear.
S. S. City of New York, S. 34° 12′, E. 164° 19′†	30.04	763.0	69	20.6	75	n.			3		0			0	0			clear.
S. S. City of Pekin, N. 37° 44′ W. 122° 54′†	30.06	763.5	50	10.0	65	nw.			5		5		nw.	0	0	small	nw.	fair.
S. S. City of Rio de Janeiro N. 37° 45′, W. 122° 30′†	30.08	764.0	53	11.7	73	nw.			4		5		nw.	0	0	mod.	nw.	fair.
S. S. City of Sydney, N. 5° 02′, W. 164° 27′†	29.81	757.2	79	26.1	78	se.			3		10		se.	0	0	mod.	se.	cloudy.
S. S. City of Tokei, N. 32° 27′, E. 132° 57′†	30.41	772.4	50	10.0		sw.			1		2		sw.	0	0		nw.	clear.
S. S. Colima, Panama, Panama†	29.93	760.2	78	25.6	82	nw.			3		2		calm	0	0			clear.
S. S. San José, N. 12° 15′ W. 87° 22′†	29.91	759.7				e.			2	c	0	e.		0	0	chop	ese.	clear.
S. S. Zealandia, Sydney, N. S. W.	29.69	754.1	69	20.6	90	w.			3		1?		se.			mod.	e.	showery.?
S. S. Claudius, N. 38° 15′, W. 74° 20′†	30.13	765.3				ene.			0		10		n.	7 h'r	7 h'r	short	ne.	rainy.
S. S. Valencia, La Guayra, Venezuela†	30.06	763.5	80	26.7	78	ene.			1		2		e.	0	0	light	ne.	fine.
S. S. Belgenland, N. 46° 18′, W. 38° 00′	29.01	736.8	56	13.3	87	ese.			6		7		ese.	2 h'r	2 h'r	h'vy		gloomy.
S. S. Nederland, N. 50° 17′ W. 35° 58′			43	6.1		ne.			5		8		ene.	0	0	cross	ne.	cloudy.
S. S. Pennland, Antwerp, Belgium	29.87	758.7	50.5	10.3	100	ssw.			5		10			12 h'r	12 h'r			rainy.
S. S. Rhynland, N. 51° 26′, E. 3° 30′	29.77	756.1	49	9.4	85	sw.			7		10		sw.	24 h'r	24 h'r	sm'h		rainy.
S. S. Waesland, Jersey City, N. J	30.26	768.6	34	1.1	79	nnw.			4		8		wnw.	0	0			cloudy.
S. S. P. Caland, N. 49° 40′, W. 20° 48′	29.30	744.2	53.8	12.1	87	sw.			6		0					5	sw.	clear.
S. S. W. A. Scholten, N. 49° 28′, W. 19° 30′	29.43	747.5	54.2	12.3	98	sw.			7		5		sw.	0	0	long	ssw.	stormy.
S. S. State of Florida, Glasgow, Scotland	29.61	752.1	42	5.6		se.			6		10		s.	snow	snow			overcast.
S. S. State of Georgia, N. 41° 41′, W 62° 49′†	30.20	767.1	36	2.2		w.			3		7		w.	0	0	sm'h		fine.
S. S. Iowa, N. 44° 29′, W. 51° 02′ *†	30.00	762 0	37	2.8		nnw.			6		8		nnw.	11 h'r	11 h'r	r'gh	nnw.	cloudy.
S. S. Britannic, N. 40° 57′, W. 70° 34′†	30.20	767.1	34	1.1	90	n.			2		6		wnw.	0	0	sm'h		fair.
S. S. Celtic, N. 51° 20′, W. 10° 06′†	29.54	750.3	55	12.8		sw.			5		10		sw.	6 h'r	6 h'r	con.	var.	hazy.
S. S. Marengo, Hull, Eng	29.68	753.9				ne.			4		10		n.;ne.	3 h'r	3 h'r			misty.
S. S. Salerno, N. 50° 02′, W. 22° 53′*	29.14	740.1	53	11.7		w.			5		4		w.	2 h'r	2 h'r	h'vy	var.	fine.
S. S. Aries, N. 40° 22′, W. 73° 15′*†	30.10	764.5				nnw.			1		10			0	0	mod.	sm'h	threatening.
S. S. Catherine Whiting, Providence, R. I†	30.26	768.6	78	25.6		calm			0				s.	0	0			
S. S. Saxon, Philadelphia, Pa†	30.27	768.8	34	1.1		n.			3		8							
MISCELLANEOUS.																		
Bk. Adelaide, N 22° 21′, W. 39° 23′ *†	30.20	767.1	77	25.0		w.			5		4		w.	0	0	cross	var.	rainy.
Bk. Alpha, N. 18° 45′ W. 34° 45′†	30.09	764.3	82	27.8		e.			1		0			0	0	sm'h		clear.
Schr. Annie Lewis, Cedar Keys, Fla †	30.18	766.6	48	8.9		nne.			2		8		ne.	16 h'r	16 h'r	sm'h		cloudy.
Bk. Anna Thormann, S. 35° 53′, E. 21° 44′*	30.06	763.6	72.9	22.7	75	ssw.			1		3 k		s.	Inap.	Inap.	light	sw.	fair.
S. S. Antonio Lopez, Cadiz, Spain*	30.31	769.9	56	13.3	81	nnw.			2		2			0	0			hazy.
Bk. Aquidneck, N. 11° 03′, W. 51° 06′ *†	30.20	767.1	84	28.9		ne.			3				ne.	0	0	h'vy	e.	clear.
Bgt. Arthur, N. 3° 59′, W. 17° 35′*†	30.04	763.0				sw.			2					4 h'r	4 h'r			
Schr. Anna Holton, N. 23° 15′, W. 94° 50′†	30.13	765.3	69	20.6		ne.			4		5		nne.	1 h'r	1 h'r	mod.	n.	fair.
S. S. Buswell, N. 30° 55′, W. 77° 20′*†	29.89	759.2	71	21.7		wsw.			6		9		wnw.	14 h'r	14 h'r	high	con.	overcast.
Bk. Champion, N. 37° 57′, W. 74° 25′			40.0	4.4		ene.			5		10		ene.	7 h'r	7 h'r	high	ene.	rainy.
Bg. Clara M. Goodrich, N. 24° 30′, W. 79° 30′*†	30.00	762.0				wnw.			5		5?		nw.	0	0	mod.	wnw.	clear.?
Bk. Commerce, N. 38° 45′, W. 66° 05′†	30.14	765.5	44	6.7		w.			1		8			0	0	mod.	ne.	dull.
Schr. C. R. Flint, Hampton Roads, Va			36	2.2		ne.			7		10		ne.	rain	rain			raining.
Bkt. David Preston, N. 28° 45′, W. 86° 05′						ene.					5		ene.	0	0	sm'h		
Bk. E. L. Pettingill, S. 16° 41′, W. 124° 50′*†	30.10	764.5	84	28.9		calm			0		0			0	0	sm'h		
Schr. Edith R. Seward, Wilmington, N. C*†	29.86	758.4	38	3.3		nnw.			3		8			5 h'r	5 h'r			cloudy.
S. E. J. Spicer, Liverpool, Eng*.	29.69	754.1	51	10.6		e.			5		10		ene.	6 h'r	6 h'r		ene.	raining.
Bk. Essex, S. 10° 18′, E. 44° 49′*†	29.89	759.2	84	28.9		e.			6					sh'rs	sh'rs	light	sse.	
Schr. F. E McDonald, N. 41° 14′, W. 71° 05′†	30.29	769.4	38	3.3		w.			1					0	0			fair.
S. Festina Lente, Delaware Bay						se. w.			4		5		sw.	10 h'r	10 h'r			fair.
S. S. Foscolin, N. 46° 07′, W. 29° 26′						sw.			7		2		sw.	0	0	r'gh		fair.
Bk. Freya, Matanzas, Cuba, W. I.			70	21.1		calm			0		hz.		se.	0	0			hazy.
S. Geo. Stetson, N. 28° —′, W. 38° —′ *†	30.04	763.0	71	21.7	85	wnw.			6		2		wnw.	0	0	h'vy	nw.	clear.
Bk. Gronsvaer, Auckland, N. Z†	29.94	760.5	71.4	21.9		w.			4		5		w.	0	0			fine.
Bk. Great Surgeon, S. 29° 02′, E. 46° 56′ *†	30.22	767.6	80	26.7		e.			4		10		n.	½ h'r	½ h'r	mod	ssw.	drizzling.
Bk. Hattie G. McFarland, N. 20° 38′, W. 57° 29′†	30.29	769.4	76	24.4		e.			4		2		e.	0	0	long	ene.	clear.
S. Hedwig, N. 38° 54′, W. 63° 08′	30.23	767.9	51.4	10.8	74	n.			2		8		n.	rain	rain	long	n.	foggy.
Schr. Isabel Alberto, Hoboken, N. J †	30.29	769.4				nw.			1		10		nw.	0	0			cloudy.
Schr. Jennie N. Huddell, Baltimore, Md †	30.21	767.3				ne.			1		10		ne.	0	0			cloudy.
Schr. John L. Thomas, N. 35° 40′, W. 74° 50′ *†	29.88	758.9				ene.			8		10		se.	4 h'r	4 h'r	h'vy	var.	stormy.
Bk. Joseph A. Ropes, Majunga, Madagascar*†	29.98	761.5	90	32.2	73	wsw.			3		3		nw.	0	0			fair.
Bkt. Josephine, N. 12° 36′, W. 27° 02′†	30.05	763.3	79	26.1	70	ene.			5		0			0	0	mod.	ene.	clear.
S. S. J. W. Wilson, Port Eads, La.†	30.14	765.5	46	7.8		nne.			6		0			0	0			clear.
S. S. Laurel, Carysfort Light, Fla†	30.02	762.5	70	21.1		sw.			1		7		sw.	0	0	sm'h		cloudy.
Bg. Lilian, N. 28° 12′, W. 64° 10′†	30.25	768.3	69	20.6		e.			2		4		se.	8 h'r	8 h'r	mod.	nne.	fair.
Bk. Louise Adelaide, N. 21° 00′, W. 94° 10′						nne.			2		10		nw.	3 h'r	3 h'r	long	n.	overcast.
Bg. L. & W. Armstrong, N. 16° 12′, W. 62° 00′†*	30.14	765.5				ne.			4		1		ene.	0	0	sm'h		clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.			Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Amount and kind.		Direction.						
								Force.	Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—(Continued.																		
S. S. Madrid, Brouwershaven, Netherlands *†	29.88	758.9	47	8.3	.....	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	.....	overcast.
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.09	764.3	60	15.6	.....	nw.	.....	.....	5	.....	.....	.....	nw.	.....	.....	.....	.....	cloudy.
S. Minnie N. Gerow, N. 28° 08′, W. 63° 17′ *†	30.17	766.3	.....	.....	.....	nne.	.....	.....	3	.....	2	.....	ne.	.....	.....	sm'h	n.	fine.
S. M. P. Grace, S. 56° 40′, W. 70° 16′ *†	29.45	748 0	45	7.2	.....	wsw.	.....	.....	5	.....	2	.....	w.	0	0	r'gh	wnw.	clear.
Bg. O. C. Clary, Miragoane, Hayti, W. I. *†	30.06	763.5	89	31.7	91	se.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	
Bk. Ottawa, N. 36° 35′, W. 80 30′*	30.25	768.3	62	16.7	.....	se.	.....	.....	3	.....	2	.....	sw.	0	0	sm'h	w.	clear.
S Paramita, San Francisco, Cal	.....	.....	43	6.1	.....	ne.	.....	.....	4	.....	10?	.....	.....	8 h'r	8 h'r	.....	.....	clear.?
Bk. Pilgrim, N. 35° 12′, W. 74° 57′*†	29.90	759.4	.....	.....	.....	ese.	.....	.....	8	.....	.....	.....	e.	12 h'r	12 h'r	high	cross	cloudy.
S. S. Radnorshire, Yokohama, Japan *†	30.15	765.8	.....	.....	.....	ne.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	
S. S. Raleigh, N. 20° 50′, W. 79° 00′*†	30.05	763.3	81	27.2	.....	e.	.....	.....	3	.....	0	.....	.....	0	0	light	se.	clear.
Bk. Reindeer, N. 38° 30′, W. 72° 25′*	.....	.....	.....	.....	.....	ene.	.....	.....	4	.....	10	.....	.....	.....	.....	mod.	ene.	rainy.
Schr. S. B. Hubbard, N. 32° 42′, W. 79° 04′†	30.17	766.3	50	10.0	.....	nw.	.....	.....	1.	.....	10	.....	.....	12 h'r	12 h'r	.....	.....	threatening.
Bk. Southern Belle, Jacksonville, Florida †	29.70	754.4	.....	.....	.....	ssw.	.....	.....	8	.....	10	.....	.....	.....	.....	h'vy	.....	cloudy.
S. S. Strathleven, N. 22° 16′, E. 114° 42′	30.13	765.3	64.8	18.2	98	ene.	.....	.....	2	.....	0	.....	.....	0	0	3	e.	blue sky.
Bk. Sunbeam, N. 41° 43′, W. 34° 11′	.....	.....	59	15.0	82	ssw.	.....	.....	3	.....	5	.....	w.	6 h'r	6 h'r	r'gh	w.	fair.
U. S. F. C. S. S. FishHawk, Washington, D. C†	30.34	770.6	36	2.2	80	nne.	.....	.....	2	.....	10	.....	calm	0	0	.....	.....	cloudy.
Bk. Vincenzo Accame, N. 30° 15′, W. 67° 30′†	30.22	767.7	69.8	21.0	.....	se.	.....	.....	3	.....	7	.....	se.	70 mi	nutes	.....	.....	
Schr. Viola Reppard, N. 33° 55′, W. 77° 50′†	29.78	756.4	54	12.2	.....	nw.	.....	.....	9	.....	10	.....	wnw.	10 h'r	10 h'r	high	ese.	storming.
Bk. Wandering Jew, Montevideo, Uruguay †	30.19	766.8	67	19.4	.....	n.	.....	.....	3	.....	1	.....	n.	0	0	.....	.....	clear.
Bk. Warden Law, Tocapilla, Peru, S. A*	30.04	763.0	.....	.....	.....	calm	.....	.....	0	.....	2	.....	s.	.....	.....	sm'h	s.	fair.

International Chart I. December 30, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

INTERNATIONAL METEOROLOGICAL OBSERVATIONS

TAKEN SIMULTANEOUSLY ON DECEMBER 31, 1882,

7 A. M., Washington Mean Time.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
ALGERIAN.																			
Nemours	.....	.....	30.42	772.6	62.2	16.8	85	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malaterre.
Algiers	.....	.....	30.41	772.3	60.8	16.0	85	wsw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Thève.
La Calle	.....	.....	30.34	770.7	61.5	16.4	68	nnw.	.....	.....	1	.....	4	.....	.....	0	0	cloudy	Fonfrède.
Tunis	.....	.....	30.39	771.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jacques.
Saida	.....	.....	30.42	772.6	60.4	15.8	73	wsw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Pérès.
Tebessa	.....	.....	30.41	772.4	50.4	10.2	76	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Dognon.
Gerlville	.....	.....	.....	.....	55.8	13.2	68	nw.	.....	.....	2	.....	0	.....	.....	0	0	clear	Louchamp.
Laghouat	.....	.....	30.43	773.0	57.2	14.0	41	ene.	.....	.....	0	.....	0	.....	.....	0	0	clear	Abraham.
Biskra	.....	.....	30.45	773.3	63.7	17.6	37	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Malau.
AUSTRALIAN.																			
Melbourne, Victoria	29.55	750.6	29.64	752.8	55.0	12.8	70	wnw.	18	8.0	.....	.....	10	.....	.....	0.21	5.3	showery	R. L. J. Ellery.
AUSTRO-HUNGARIAN.																			
Agram	29.55	750.6	30.11	764.7	52 3	11.3	58	w.	.....	.....	6	.....	4	.....	.....	0	0	.....	Prof. Ivan Stozir.
Cracow, I. R Observatory	29.37	746.0	30.17	766 4	33.8	1.0	65	nnw.	9.4	4.2	.....	.....	10	.....	.....	0.071	1.8	.....	Dr. Wierzbiski.
Eperies	29.15	740.4	30.06	763.6	35.6	2.0	67	n.	.....	.....	3	.....	10	.....	.....	0	0	.....	Julius Mikolik.
Gratz	28.85	732.9	30.13	765.3	47.7	8.7	69	nw.	.....	.....	2	.....	6	.....	.....	0.004	0.1	.....	Andreas Rospini.
Hermannstadt	28.53	724.6	29.98	761 6	45.5	7.5	76	nw.	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.80	731 5	30.17	766.3	45.1	7.3	90	calm	.....	.....	0	.....	10	.....	.....	0.594	15.1	raining	The Staff.
Lemberg	28.97	735.9	30.00	762.0	33.4	0.8	78	ne.	.....	.....	5	.....	10	.....	.....	0.024	0.6	.....	Dr. T. Stanecki.
Pola	30.11	764.9	30.23	767.8	52.2	11.2	85	w.	.....	.....	1	.....	10	.....	.....	0	0	.....	I. R Hydrographic Office.
Szathmar	29.48	748.7	29.93	760.3	39.2	4.0	73	nw.	.....	.....	4	.....	8	.....	.....	0	0	.....	Joseph Midlinszky, S. J.
Szegedin	29.76	756.0	30.05	763.2	50.7	10.4	76	sw.	.....	.....	3	.....	10	.....	.....	0	0	.....	Karl Stancel.
Trieste	30.13	765.4	30.24	768.0	48.6	9.2	92	calm	.....	.....	0	.....	10	.....	.....	0	0	foggy	Royal Academy.
Vienna	29.47	748.6	30.22	767.5	38.8	3.8	75	nw.	.....	.....	2	.....	9	.....	.....	0.189	4.8	.....	I. R. Central Met. Obs'y.
BRITISH.																			
Aberdeen	29.63	752.6	29.73	755.1	41.7	5.4	85	s.	19	8.5	.....	.....	10	.....	.....	0.200	5.1	squally	W. Boswell
Armagh, Observatory	29.43	747.5	29.67	753.6	48.4	9.1	97	s.	13	5.8	.....	.....	10	.....	.....	.....	.....	squally	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.77	756.1	44.4	6.9	70	se.	17	7.6	.....	.....	10	.....	.....	.....	.....	raining	John Hartnup.
Bolton, Sharples	29.26	743.2	29.80	756.9	42.9	6.1	94	sse.	.....	.....	.....	.....	10	.....	.....	.....	.....	raining	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.07	1.8	.....	McLandsborough&Preston
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	82.0	27.8	67	ne.	.....	.....	3	.....	3	.....	.....	.....	.....	d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington	.....	.....	.....	.....	49.2	9.6	36	s.	.....	.....	0.4	.....	10	.....	.....	.....	.....	foggy	John McLaren.
Chatham, School M. E	29.75	755.6	29.88	758.9	50.3	10.2	95	ssw.	.....	.....	1	.....	10	.....	.....	.....	.....	drizzling	Corpl. G. A. Pickles.
Falmouth, Observatory	29.54	750.3	29.76	755.9	52.1	11.2	100	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	rain & fog	The Staff.
Fort Napier, Natal	27.72	704.1	29.93	760.2	76.2	24.6	60	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	overcast	Corpl. F. Milner, A. H. C.
Free Town, Sierra Leone	29.74	755.4	29.96	761.0	78.0	25.6	86	ne.	.....	.....	1	.....	2	.....	.....	.....	.....	d. clouds	Sergt. John Robinson.
Gibraltar, Mediterranean	30.34	770 6	30.39	771.9	62.6	17.0	91	ne.	.....	.....	.....	.....	0	.....	.....	.....	.....	blue sky	Corpl. F. Norris, A. H. C.
Glasgow, Observatory	29.45	748.0	29.65	753.1	40.3	4.6	97	ssw.	.....	.....	2	.....	10	.....	.....	.....	.....	raining	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.69	754.1	29.87	758.7	51.0	10.6	94	s.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	The Staff.
Guernsey	29.54	750.3	29.83	757.7	54.1	12.3	99	s.	.....	.....	3	.....	10	.....	.....	.....	.....	rain & fog	A. Collenette, F. M. S
Kew, Observatory	29.82	757.4	29.86	758.4	51.2	10.7	94	s.	7	3.1	.....	.....	10	.....	.....	.....	.....	threatening	The Staff.
Leicester, Museum	29.40	746.7	29.66	753.4	48.0	8.9	94	se.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	J. C. Smith.
Malta, Mediterranean	30.20	767.1	30.27	768.8	57.8	14.3	71	sw.	.....	.....	2	.....	6	.....	.....	.....	.....	d. clouds	Corpl. Keene, A. H. C.
Nassau, Bahamas	30.11	764.8	30.16	766.1	69.5	20.8	75	n.	.....	.....	3	.....	7	.....	.....	.....	.....	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.30	744.2	29.83	757.7	41.3	5.2	99	sse.	.....	.....	3	.....	10	.....	.....	.....	.....	raining	Rev. Jas. W. Browne.
Oxford, Radcliffe Obs'y	29.60	751.8	29.83	757.7	50.2	10.1	97	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	raining	The Staff.
Plymouth	29.68	753.9	29.76	755 9	53.1	11.7	98	se.	.....	.....	1	.....	10	.....	.....	.....	.....	rain & fog	John Merrifield.
Sandwick Manse, Orkneys	29.46	748.3	29.56	750 8	36.8	2.7	90	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	showery	Rev. C. Clouston, L L.D.
Scutari Cemetery, Turkey	29.96	761.0	30.02	762.5	54.0	12.2	90	sw.	.....	.....	2	.....	8	.....	.....	blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.54	750.3	29.83	757.7	43.0	6.1	96	calm	.....	.....	0	.....	10	.....	.....	0.18	4.6	raining	W. F. Cooper.
Silloth Rectory	29.69	754.1	29.72	754 9	45.0	7.2	95	se.	.....	.....	2	.....	10	.....	.....	0.355	9.0	raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.81	757.2	44.8	7.1	94	ssw.	7	3.1	.....	.....	10	.....	.....	.....	.....	gloomy	I. New.
Stratfield Turgiss	29.62	752.3	29.84	757.9	51.4	10.8	93	se.	.....	.....	2	.....	10	.....	.....	.....	.....	showery	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.75	755.6	29.82	757.4	56	13.3	87	sw.	.....	.....	4	.....	10	.....	.....	.....	.....	raining	W. Newcombe.
Valencia, Observatory	29.57	751.1	29.60	751.8	51.6	10.9	93	se.	13	5.8	.....	.....	10	.....	.....	.....	.....	misty	The Met'g'l Office.
CANADIAN.																			
Bathurst, N. B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.91	759.7	29.95	760.7	20	— 6.7	73	w.	6	2.7	.....	.....	10 n	.....	calm	Inap.	Inap.	threatening	H. J. Cundall, C E
Chatham, N. B*	29.97	761.2	30.04	763.0	1	—17.2	100	calm	0	0	.....	.....	hz.	.....	.....	0	0	light haze	G. A. Blair.
Father Point, Quebec*	29.95	760.7	29.97	761.2	17	— 8.3	83	nw.	11	4.9	.....	.....	10 s	.....	.....	0	0	threatening	J. McWilliams.
Fort Garry, Manitoba*	29.34	745.2	30.37	771.4	2	—16.7	72	sw.	11	4.9	.....	.....	10 n	.....	.....	0	0	fair	James Stewart.
Halifax, N. S*	29.86	758.4	30.00	762.0	22	— 5.6	96	w.	3	1.3	.....	2 k	0	.....	.....	0	0	fair	A. Allison.
Kingston, Ontario*	29.75	755.6	30.10	764.5	30	— 1.1	88	w.	7	3.1	.....	.....	10 ks	.....	w.	Inap.	Inap.	light snow	A. P. Knight, M. A
Montreal, Quebec*	29.82	757.4	30.03	762.7	27	— 2.8	80	sw.	8	3.6	.....	.....	10 n	.....	.....	0	0	cloudy	C. H. McLeod, C E.
Parry Sound, Ontario*	29.39	746.5	30.13	765.3	22	— 5.6	87	w.	8	3.6	.....	.....	10 n	.....	w.	0.04	1.0	cloudy	Rev. R. Mosley.
Port Dover, Ontario	29.46	748.3	30.19	766.8	29	— 1.7	89	w.	8	3.6	.....	.....	10 cs	.....	.....	0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.53	750.0	30.22	767.6	27	— 2.8	80	w.	8	3.6	.....	.....	10 n	.....	w.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.71	754.6	30.06	763.5	17	— 8.3	83	nw.	.....	.....	3	.....	10 k	.....	n.	0.72	18.3	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.59	751.6	30.09	764.3	17	— 8.3	83	calm	0	0	.....	8 cs	0	w.	.....	Inap.	Inap.	fair	W. H. McIntyre.
Saugeen, Ontario*	29.38	746.2	30.13	765.3	29	— 1.7	88	w.	14	6.3	.....	.....	1c s	.....	.....	0.03	0.8	light snow	
St. Andrews, N. B	29.98	761.5	30.04	763.0	20	— 6.7	91	nw.	1	0.4	.....	.....	10 n	.....	.....	0	0	covered	
Sydney, C. B*	29.84	757.9	29.91	759.7	26	— 3.3	70	w.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	T C. Hill, C. E
Toronto, Ontario*	29.76	755.9	30.16	766.1	29	— 1.7	88	w.	20	8.9	.....	.....	10 s	.....	w.	0	0	cloudy	Magnetic Observatory.
Yarmouth, N. S*	29.97	761.2	30.04	763.0	29.	— 1.7	85	ne.	2	0.9	.....	.....	8 k	.....	ne.	0	0	cloudy	Lt. F. E. Wilmot, R N.
Sub-series.																			
Mount Forest	28.66	728.0	30.14	765.5	24.0	— 4.4	87	w.	.....	.....	.....	.....	10	.....	.....	0.162	4.2	overcast	Wm. Wylie.
St. Johns, Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Denny.
CAPE COLONY.																			
Cape St. Francis Lt. House	30.08	764.0	30.11	764.8	75.0	23.9	94	se.	2.3	1.0	.....	0	3 k	.....	.....	0	0	clear	John Duthie.
Cape Town, C G.H. Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers
Chinese (*Sub-series*).																			
Sung-shu-chwang	24.93	633.3	.....	.....	4.8	—15.2	.....	calm	.....	.....	0	.....	fg	.....	.....	.....	.....	.....	
Tchang-kia-tchouang	30.37	771.3	30.48	774.1	25.3	— 3.7	63	nw.	11.6	5.2	.....	0	8 k	.....	.....	.....	.....	.....	Mission, S. J.
Zi-Ka-Wei, near Shanghai.	30.47	774.0	30.50	774.6	33.8	1.0	81	wnw.	12.3	5.5	.....	.....	10 k	.....	sw.	0	0	.....	M. Marc Dechevrens, S.J
Danish.																0.102	2.6	.....	
Copenhagen	30.08	764.1	30.13	765.3	32.0	0.0	76	W.	13	6	.....	.....	2	.....	.....	.....	.....	.....	
Fanoe	30.08	764.1	30.10	764.6	31.1	— 0.5	90	sw.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	Oversergent Fischer.
Godthaab, Greenland	29.54	750.3	29.58	751.4	6.8	—14.0	83	nne.	.....	.....	4	.....	5	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Ivigtut, Greenland	29.48	748.7	29.50	749.2	28.0	— 2.2	.....	se.	.....	.....	3	.....	9	.....	.....	.....	.....	.....	S. Kleinschmidt.
Jacobshavn, Greenland	29.61	752.0	29.05	753.2	—7.1	—21.7	.....	e.	.....	.....	1	.....	1	.....	.....	.....	.....	snowing	
Stykkisholm, Iceland	28.87	733.2	28.91	734.3	38.1	3.4	92	se.	.....	.....	2	.....	8	.....	.....	.....	.....	.....	
Thorshavn	29.22	742.1	29.25	743.0	48.6	9.2	60	ssw.	22	10	.....	.....	10	.....	.....	.....	.....	.....	A. O. Thorlacius.
Vestervig	29.99	761.7	30.08	764.1	33.3	— 0.7	96	s.	.....	.....	2	.....	4	.....	.....	.....	.....	.....	Overloerer Bergh.
Upernavik, Greenland	29.67	753.6	29.72	754.8	—13.9	—25.5	.....	e.	.....	.....	1	.....	3	.....	.....	.....	.....	.....	Loearer Oesterbol.
French.																			
Agen, Normal School	29.56	750.8	30.22	767.6	52.5	11.4	94	calm	.....	.....	.....	.....	k; n	.....	sw.	0	0	.....	M. Labroue, Director.
Alençon, Normal School	29.47	748.4	30.02	762.4	52.0	11.1	99	sw.	.....	.....	1	.....	n	ne.	ne.	.....	.....	.....	M. Nicot, Director.
Arras, Engineer School	29.71	754.6	29.97	761.2	38.7	3.7	96	nw.	.....	.....	4	.....	10	.....	.....	0	0	light rain	M. Fénéon, Command't.
Avignon, Normal School	30.21	767.2	30.28	769.2	47.8	8.8	89	n.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	M. Giraud, Director.
Bar-sur-Seine	29.54	750.4	30.10	764.6	51.8	11.0	92	s.	.....	.....	1	.....	10	.....	wsw.	0.051	1.3	light rain	M. Saillard, Director.
Beauvais, Normal School	29.72	755.0	29.99	761.7	53.2	11.8	93	s.	.....	.....	1	.....	10	.....	.....	0.008	0.2	covered	M. Frère Eugène Marie.
Besançon, Normal School	28.93	734.9	29.04	737.6	51.1	10.6	95	s.	.....	.....	1	.....	10 n	.....	sw.	0.71	18.	raining	M. Gobin, Director.
Bordeaux, Observatory	29.93	760.3	30.20	767.0	54.3	12.4	71	s.	.....	.....	1	.....	10	.....	.....	0.008	0.2	covered	M. Rayet, Director.
Bourges, Normal School	29.60	751.8	30.16	766.0	51.8	11	86	s.	.....	.....	4	.....	10 n	.....	s.	0.51	13.	raining	M. Malet, Director.
Brest, Naval Observatory	29.69	754.0	29.93	760.2	55.0	12.8	100	wsw.	.....	.....	3	.....	10	.....	wsw.	2.244	57.0	raining	M. de Kermarec, Dir.
Caen, Normal School	29.80	756.8	29.87	758.7	54.7	12.6	86	sw.	.....	.....	1	.....	8	.....	sw.	0.35	9.	very cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.016	0.4	.....	M. Jadot, Director.
Charleville, Normal School	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.80	731.5	30.17	766.2	53.2	11.8	78	s.	.....	.....	1	.....	10	.....	.....	0.039	1.0	covered	M. Allnard, Director.
Cluny, Normal School	29.33	745.0	30.19	766.9	49.3	9.6	92	sw.	.....	.....	1	.....	10	.....	sw.	0.181	4.6	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.22	742.3	30.10	764.4	50.0	10	95	sw.	.....	.....	1	.....	10 kn	sw.	sw.	.....	.....	raining	Dr. Coulet, Director.
Gap, Normal School	27.73	704.3	30.36	771.1	40.6	4.6	86	.....	.....	.....	.....	.....	9	.....	s.	0	0	.....	M. Jeangirard, Director.
Gréasque, du Rhone	29.08	738.7	30.26	768.6	56.5	13.5	56	n.	.....	.....	1	.....	7	.....	sw.	0	0	.....	M. Kina, Director.
Grenoble, Normal School	29.59	749.4	30.31	769.8	43.2	6.2	82	ene.	.....	.....	1	.....	10	.....	se.	.....	.....	raining	M. Allard, Director.
Guéret	28.61	726.7	30.20	767.0	46.8	8.2	95	sw.	.....	.....	4	.....	10 n	.....	sw.	0.453	11.5	raining	**M. Delorme, Dir.**
Lamballe, Normal School	29.73	755.2	30.00	762.1	59.0	15	84	sw.	.....	.....	3	.....	hz	.....	sw.	0.059	1.5	hazy	M. Ollitrault, Director.
Lescar, Normal School	29.57	751.0	30.13	765.3	64.4	18.0	60	ese.	.....	.....	1	0	5 k	.....	.....	0	0	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.87	758.8	29.98	761.4	56.1	13.4	95	wsw.	.....	.....	4	.....	10	.....	.....	0.394	10.0	raining	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.15	740.5	30.24	768.1	45.1	7.3	92	ese.	.....	.....	1	.....	10	.....	.....	0.157	4.0	raining	M. André, Director.
Mans, Normal School	29.08	753.8	29.99	761.7	53.1	11.7	97	wsw.	.....	.....	1	.....	10	.....	s.	0.492	12.5	raining	M. Piboën, Director.
Marseille, Observatory	29.96	761.1	30.24	768.0	58.6	14.8	68	n.	.....	.....	1	.....	8	.....	wnw.	0	0	.....	M. Stephan, Director.
Montlouis	25.11	637.8	29.95	760.8	47.8	8.8	48	sw.	3.8	1.7	.....	.....	0	.....	.....	0	0	.....	**M. Caré for Dr. Fines.**
Montpellier, Normal School	30.11	764.8	30.29	769.4	54.7	12.6	88	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	M. Galzin, Director.
Nancy, Normal School	29.17	741.0	29.96	761 0	52.2	11.2	86	W.	.....	.....	1	.....	n	.....	W.	0.370	9.4	clear	M. Hasse, Director.
Nantes, Observatory	29.90	759 4	30.06	763.6	57.2	14.	92	sw.	.....	.....	2-3	.....	10	.....	.....	0.159	15.0	hazy	M. Larocque, Director.
Perpignan, Observatory	30.15	765.9	30.27	768.8	53.6	12.0	86	ne.	3.8	1.7	.....	.....	10	.....	.....	.....	.....	light rain	Dr. Fines, Director.
Pic-du-Midi, Summit	21.46	545.0	.....	.....	31.5	—0.3	.....	W.	.....	.....	1	.....	5	.....	W.	0	0	.....	M. Vaussenat.
Privas, Normal School	29.17	741.0	30.26	768.5	51.1	10.6	63	n.	.....	.....	1	.....	10	n.	n.	0.04	1.	cloudy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.21	640.4	.....	.....	39.4	4.1	96	wsw.	.....	.....	8	.....	10	.....	.....	0.240	6.1	light rain	M. Allnard, Director.
Rochefort, Naval Obs'y	30.11	764.8	30.14	765.6	52.7	11.5	97	s.	.....	.....	1	.....	10	.....	.....	1.73	44.	foggy	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.82	757.4	30.04	762.9	56.1	13.4	98	s.	.....	.....	3	.....	5	.....	n.	0	0	raining	M. Brotier, Director.
Rodez, Normal School	28.17	715.4	30.38	771.6	43.5	6.4	92	se.	.....	.....	1	.....	0	.....	.....	0	0	cloudy	M. Seger, Director.
Rouen, Normal School	29.83	757.6	29.87	758.8	54.3	12.4	95	se.	.....	.....	1	.....	10	s.	.....	0.110	2.8	clear	M. Mouillot.
Saint Lô	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.84	758.0	30.01	762.2	52.3	11.3	98	ssw.	.....	.....	1	.....	10	.....	.....	0.283	7.2	.....	M. Renou, Director.
Toulouse, Observatory	29.56	750.8	30.29	769.3	55.8	13.2	77	ese.	.....	.....	1	.....	8	sw.	.....	0	0	very cloudy	M. Baillard, Director.
Tours	29.87	758.7	30.05	763.2	54.0	12.2	90	ssw.	.....	.....	1	.....	10	.....	sw.	0.413	10.5	raining	M. de Tastes.
Versailles, Observatory	29.50	749.2	29.99	761.7	52.5	11.4	97	sw.	.....	.....	1	.....	.....	.....	.....	0.272	6.9	.....	Dr. A. Bérigny, Director.
Sub-series.																			
St. Martin du Hinx	30.07	763.8	30.22	767.6	61.2	16.2	69	sw.	2.0	0.9	.....	0	9 k	.....	.....	0	0	.....	M. Cartier, Director.
German.																			
Anshach	28.67	728 3	30.17	766.2	43.2	6.2	95	calm	.....	.....	0	.....	10	.....	.....	0.067	1.7	.....	Prof. Jnedt.
Bamberg	29.28	743.7	30.13	765.2	39.2	4.0	80	se.	.....	.....	1	.....	10 n	.....	.....	0.500	12.7	raining	Prof. Dr. Hoh.
Berlin	30.00	762.1	30.19	766.8	32.9	0.5	89	sw.	.....	.....	2	.....	1	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.09	754.0	30.22	767.6	32.4	0.2	64	wnw.	.....	.....	2	.....	2	nw.	.....	0.051	1.3	.....	Royal University Obs'y.
Carlsruhe	29.07	753.6	30.11	764.9	51.4	10.8	88	sw.	.....	.....	2	.....	10	sw.	.....	0.547	13.9	raining	Albert Senz.
Cassel	29.35	745.5	29.98	761.6	39.6	4.2	98	se.	.....	.....	2	.....	10	s.	.....	0.197	5.0	.....	Dr. H. Möhl.
Frankfort-on-the-Main	29.74	755.5	30.12	765.1	41.4	5.2	94	u.	.....	.....	1	.....	10	.....	.....	0.358	9.1	.....	Physical Society.
Friedrichshafen	28.71	729.3	30.17	766.2	50.4	10.2	77	se.	.....	.....	2	.....	10	se.	.....	0.902	22.9	.....	Wilhelm, Chief Tel.
Hamburg	30.10	764.4	30.19	766.7	32.4	0.2	87	se.	.....	.....	3	.....	2	.....	.....	0	0	.....	E. Prellet.
Kiel	30.12	765.1	30.14	765.5	34.0	1.1	77	s.	.....	.....	2	.....	2	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.79	756.6	30.23	767.8	33.4	0.8	82	se.	.....	.....	2	.....	9	w.	.....	0.839	21.3	.....	H. Leppig, Asst.
Magdeburg	30.00	762.0	30.20	767.1	32.9	0.5	82	se.	.....	.....	1	c	7 ks	.....	wnw.	0.071	1.8	.....	**Weather Observatory.**
Memel	29.82	757.4	29.87	758.6	33.6	0.9	84	wnw.	.....	.....	7	0	2 k	.....	.....	.....	.....	.....	Issermann.
Munich	28.30	718.9	30.17	766.4	50.2	10.1	71	W.	.....	.....	1	.....	9	sw.	.....	0.008	0.2	.....	Central Station.
Neufahrwasser	30.07	763.7	30.08	764.1	32.0	0.0	89	W.	.....	.....	5	.....	0	.....	.....	0.043	1.1	.....	A. Lothes.
Neustadt, Palatinate	29.61	752.0	30.13	765.4	53.2	11.8	91	W.	.....	.....	1	.....	10	W.	.....	0.276	7.0	.....	Dicknether.
Stuttgart	29.17	741.0	30.08	763.9	53.2	11.8	76	sw.	.....	.....	1	.....	10	.....	.....	0.185	4.7	raining	Prof. Dr. Schoder.
Wustrow	30.18	766.5	30.21	767.2	32.4	0.2	90	ssw.	.....	.....	1	0	5 s	.....	.....	0	0	.....	Profs. Brandes & Reimer.
Greek.																			
Athens	29.72	754.9	30.11	764.7	60.8	16.0	.....	sw.	.....	.....	2.0	.....	0	.....	.....	0	0	clear	Schmidt & Wourlisch.
Indian.																			
Kurrachee	30.05	763.3	30.10	764.6	74.8	23.8	72	ssw.	14.0	6.3	.....	.....	6	sw.	.....	0	0	d. clouds	
Deesa	29.53	750.0	30.00	762.1	82.0	27.8	30	sw.	6.0	2.7	.....	.....	2	wsw.	.....	0	0	.....	
Bombay	29.93	760.3	29.97	761.3	80.5	26.9	69	nw.	14.0	6.3	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.11	713.9	29.96	760.9	82.2	27.9	22	ese.	6.0	2.7	.....	.....	1	se.	.....	0	0	d. clouds	
Trichinopoly	29.71	754.7	30.00	761.9	81.8	27.7	62	ene.	1.0	0.4	.....	.....	10	.....	.....	0	0	overcast	
Belgaum	27.41	696.3	29.94	760.5	79.9	26.6	20	e.	4.0	1.8	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.30	744.1	30.07	763.8	61.6	16.4	53	calm	0	0	.....	.....	9	.....	.....	0	0	gloomy	
Roorkee	29.10	739.1	30.03	762.7	65.8	18.8	45	calm	0	0	.....	.....	3	W.	.....	0	0	.....	
Agra	29.47	748.6	30.05	763.3	71.2	21.8	38	W.	.....	.....	.....	.....	3	.....	W.	0	0	d. clouds	
Nagpur	28.96	735.6	30.01	762.3	79.1	26.2	39	calm	2.0	0.9	.....	.....	0	.....	.....	0	0	.....	
Jubbulpore	28.67	728.3	30.05	763.3	74.4	23.6	48	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Lucknow	29.65	753.1	30.04	763.0	69.3	20.7	42	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.72	754.8	30.04	763.0	63.6	17.6	69	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.86	758.4	30.05	763.3	66.6	19.2	57	wnw.	2.5	1.1	.....	.....	1	.....	.....	0	0	d. clouds	
Hazaribagh	27.98	718.8	30.06	763.5	64.7	18.2	42	nw.	4.7	2.1	.....	.....	2	wnw.	wnw.	0	0	.....	
Cuttack	29.95	760.7	30.03	762.8	72.4	22.4	68	calm	.....	.....	.....	.....	6	.....	.....	0	0	d. clouds	
Calcutta, Alipore	30.02	762.4	30.04	762.9	67.8	19.9	65	wnw.	2.0	0.9	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.92	760.1	30.05	763.2	66.4	19.1	71	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.94	760.4	30.03	762.8	66.6	19.2	79	calm	1.8	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Sibsagar	29.74	755.3	30.09	764.2	59.7	15.4	84	ne.	1.0	0.4	.....	.....	6	W.	W.	0	0	blue sky	
Jeypore	28.58	725.8	30.04	763.1	73.4	23.0	61	sw.	1.3	0.6	.....	.....	5	sw.	.....	0	0	d. clouds	
Italian.																			
Udine	29.82	757.3	30.24	768.0	44.8	7.1	93	.....	.....	.....	.....	.....	10	.....	.....	0.008	0.2	.....	Prof. Giovanni Clodig.

STATIONS.	Barometer. Corrected for instrumental error and for temperature. Inch.	Barometer. Corrected for instrumental error and for temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Relative humidity. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles p. hr.	Wind. Velocity. Mtrs. p. sec	Wind. Force. 0–10	Clouds. Amount and kind. Upper. 0–10	Clouds. Amount and kind. Lower. 0–10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ITALIAN.—Continued.																			
Milan	29.71	754.5	30.24	768.1	45.3	7.4	80	w.	4.9	2.2			8	wnw.		0	0		Prof. Schiapparelli.
Padua	30.11	764.9	30.23	767.8	43.9	6.6	98	calm	0	0			9	nw.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.30	744.3	30.24	768.2	39.2	4.0	93	nnw.	0.7	0.3			10			0	0		Prof. F. F. Denza.
Genoa	30.07	763.7	30.26	768.7	54.7	12.6	80	se.	3.8	1.7			10	s.		0.012	0.3		Prof. G. M. Garibaldi.
Mondovi	28.28	718.3	30.25	768.3	43.5	6.4	72	w.			2		7			0	0		Prof. D. C. Bruno.
Pesaro	29.98?	761.5?	30.03?	762.8?	50.4	10.2	87	n.	6.3	2.8			10			0	0		Prof. Luigi Guidi.
Florence	30.04	762.9	30.30	769.5	55.4	13.0	77	sw.			2		10			0	0		Prof. Costantino Pittei.
Leghorn	30.13	765.3	30.22	767.5	50.7	13.7	80	w.	4.3	1.9			10	wsw.		0	0		Prof. P. Monte.
Rome	30.10	764.6	30.28	769.1	56.1	13.4	75	nnw.	0	0			7			0	0		Prof. P. Tachini.
Lecce	30.01	762.2	30.27	768.8	55.4	13.0	81	nne.	8.1	3.6			3			0	0		Prof. C. de Giorgi.
Cosenza	29.37	746.0	30.28	769.1	55.8	13.2	77	wsw.	2.5	1.1			3	s.		0	0		Prof. D. Conti.
Cagliari	30.11	764.8	30.31	769.8	58.6	14.8	63	nw.			2		7	nw.		0	0		Prof. A. Pacinotti.
Palermo	30.09	764.3	30.35	770.8	58.1	14.5	55	ne.	1.3	0.6			6			0	0		Prof. G. Caccintore
Syracuse	30.22	767.7	30.27	768.8	57.4	14.1	76	s.	4.3	1.9			6	nne.		0	0		Sig. Vincenzo Giuliano.
Sub-series.																			
Naples, S. R	29.76	755.9	30.29	769.4	55.4	13.0	80	w.	0.7	0.3			9	w.		0	0		Prof. F. Brioschi.
Stelvio	22.27	565.8			29.7	— 1.3	65	s.			2		8			0	0	misty.	Prof. P. F. Denza.
Valdobbia	22.29	566.1			30.2	— 1.0	67	e.			2		10			0.157	4.0	misty	Prof. P. F. Denza.
JAPANESE.																			
Akita	29.81	757.3	29.84	758.1	32.0	0.0	78	nw.			2		10 ck		nw.	0.618	15.7		Hattori.
Awomori	29.77	756.1	29.81	757.2	27.1	— 2.7	77	w.	9.1	4.1			10 n			0.111	2.8	light snow	K. Ogawa.
Hakodate	29.74	755.3	29.75	755.6	26.2	— 3.2	96	wnw.	22.8	10.2			10			0.063	1.6	snowing	
Hamamatsu	29.84	757.9	29.87	758.6	49.0	9.4	74	calm			0	4 ck	3 s	w.	w.	0	0	cloudy	Y. Miwa.
Hiroshima, I. M. Obs'y					49.5	9.7	99	nne.	4.5	2.0			10 s			0.108	2.7	overcast	
Kanazawa	29.90	759.4	30.01	762.1	37.7	3.2	94	se.	2.9	1.2			10			0.766	19.4	raining	S. Endo.
Kioto	29.74	755.4	29.92	759.9	47.3	8.5	97	wsw.	2.9	1.2			10 n			0.101	2.6	raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.94	760.5	30.15	765.7	49.5	9.7	76	w.	4.2	1.9			10 s			0.220	5.6		S. Takehayashi.
Niigata	29.91	759.7	29.94	760.5	32.7	0.4	98	n.	3.3	1.4			10 n			1.045	26.5	snowing	M. Morita.
Nobiru	29.76	755.8	29.77	756.2	36.1	2.3	81	nnw.	9.7	4.4		0	2 s			0	0	fair	H. Midzushima.
Numazu	29.78	756.4	29.81	757.3	58.2	14.6	61	ssw.			6		9 ks			0	0	cloudy	R. Kaneda.
Osaka	29.93	760.1	29.94	760.6	47.8	8.8	91	ssw.	7.8	3.5			10 n			0.120	3.1	rainy	H. Omura.
Sapporo					19.5	— 6.9	64	nw.	12.7	5.6		0	4			0.050	1.3	clear	
Tokei Obs'y, Yeddo	29.64	752.8	29.71	754.7	54.5	12.5	63	sw.	3.5	1.5		0	0			0	0	clear	The Staff.
Wakayama	29.80	758.5	29.92	760.0	53.1	11.7	75	calm	0	0			10 n;ck			inap.	inap.	raining	Y. Kuwamura.
MAURITIUS.																			
Mauritius Observatory	29.90	759.4	30.08	764.0	82.0	27.8	64	e.	10.5	7.4		0	6 k;n		ene.	0.01	0.3	fair	Oliver & Figon.
MEXICAN.																			
Guanajuato	23.69	601.8	29.91	759.8	44.8	7.1	96	wsw.	inap.	inap.		3 cs	0			0	0	light fog	Prof. Vicente Fernandez.
Leon	24.36	618.7	30.25	768.3	42.0	5.9	91	n.			1	2 c	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.84	758.0	30.10	764.7	65.0	18.3	86	nnw.	0	0		2 cs	0	sw.		0	0	light haze	F. Quijano, U. E.
Mexico, Central Obs'y	23.12	587.3	30.29	769.3	45.3	7.4	80	calm	0	0		8 c	2 k			0.004	0.1	covered	The Staff.
Morelia	24.34	618 3	30.25	768.2	42.8	0.0	64	n.			2	0	0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.5	30.16	766.0	51.8	11.0	97	calm	0	0		0	4		s.	0.186?	4.3?	cloudy	Prof. P. Spina.
Zacatecas	22.50	571.4	30.26	768.7	40.5	4.5	73	sw.	9.0	4.0		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS.																			
Flushing	29.98	761.4	29.98	761.4	45.1	7.3		sse.			2					0.630	16.0		
Groningen	29.99	761.8	30.05	763.2	34.9	1.6		se.			2					0	0		
Helder	29.99	761.8	29.99	761.8	37.4	3.0		ese.			4					0.098	2.5		
Hellevoetsluis	29.98	761.4	29.98	761.4	41.9	5.5	97	ese.			2					0	0		
Utrecht	29.97	761.1	30.01	762.3	40.8	4.9	87	ese.			2		10			0.031	0 8	dull	H. van der Brink.
NORWEGIAN.																			
Bergen	29.89	759.3	29.96	760.9	31.3	— 0.4	66	sse.	11	5			4			0.039	1.0		
Brono	29.71	754.5	29.74	755.5	30.7	— 0.7	53	nw.	18	8			7			0.110	2.8		
Christiania	29.79	756.7	29.95	760.7	18.0	— 7.8	94	nne.	5	2			9			0.020	0.5		
Gjæsvær	29.42	747.2	29.44	747.8	10.9	—11.7		se.			7		1						
Lodingen	29.26	743.1	29.30	744.3	28.8	— 1.8	90	ne.			1		7			0.004	0.1		
PORTUGUESE.																			
Angra, Azores	29.32	744.6	29.47	748.5	62.4	16.9	81	wsw.	17.4	7.8			5			0.217	5.5		Dr. J. A. Sampaio.
Campo Major	29.35	745.0	30.37	771.3	58.6	14.8	72	e.	0.7	0.3			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.14	765.5	30.22	767.7	71.2	21.8	36	sw.	2.5	1.1			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.01	762.2	30.37	771.5	55.9	13.3	71	e.	7.4	3.3			4	ssw.		0	0		The Staff.
Ponta Delgada, Azores	29.58	751.3	29.05	753.1	63.3	17.4	72	sw.	26.6	11.9			3	nw.		0.087	2.2		
Saint Paul de Loando	29.70	756.0	29.97	761.1	77.0	25.0	82	n.	1.3	0.6			3	se.		0	0		
Serra da Estrella	25.57	649.5	30.41	772.5	43.0	6.1	91	ssw.	5.6	2.5			6			0.012	0.3	foggy	
RUSSIAN.																			
Akmollinski	28.72	729.4	29.87	758.7	15.6	— 9.1	100	sw.	40	18			10 n						Major K. Lasarew.
Archangel	29.46	748.3	29.48	748.8	— 1.8	—18.8	87	ene.	9	4			10			0	0		Capt. Sseliwerstow.
Astrakhan	29.98	761.4	29.90	759.5	41.5	5.3	83	sw.	9	4			10 n			0.055	1.4	heavy clouds	Capt. Wisganow.
Barnaul	29.81	757.1	30.37	771.3	3.7	—15.7	77	calm	0	0			10			0.579	14.7		Meteorological Obs'y.
Bielosersk	28.56	725.5	29.00	738.0	10.2	—12.0	94	nne.	13	6			10 n			0.189	4.8	snowing	
Dorpat	29.27	743.4	29.53	750.1	11.7	—11.3	100	wnw.	9	4			10 ks			blank	blank		Observatory.
Ekaterinburg	28.60	720.4	29.65	753.2	— 0.6	—18.1	87	s.	4	2		0	1 s			0.055	1.4	foggy	Meteorological Obs'y.
Elissawetgrad	29.26	743.2	29.72	754.9	36.8	2.8	82	wsw.	7	3			10 n			0.020	0.5		
Kasan	28.99	730.4	29.28	743.7	13.8	—10.1	89	se.	22	10			10					snow-drift	Observatory.
Kem	29.45	748.1			11.7	—11.3	97	ne.	13	6			10 n			0.020	0.5		
Kertch	29.82	757.3	29.84	757.8	51.3	10.7	93	calm	0	0		0	6 k			0	0		Lagorio & Sastyrez.
Kieff	28.93	734.8	29.58	751.4	33.8	1.0	75	nw.	36	16		cs	10 k;n						Observatory.
Libau	29.74	755.5	29.77	756.1	33.6	0.9	65	wnw.			4		8			blank	blank		E. Quass.
Lugan	29.47	748.4	29.67	753.7	38.7	3.7	82	sw.	9	4			9			0.083	2.1		Meteorological Obs'y.
Moscow	28.47	723.2	28.96	735.5	32.4	0.2	85	sw.	11.2	5.0		0	9 n			0.193	4.9		
Nikolaiev	29.80	756.8	29.87	758.7	41.9	5.5	85	sw.	18	8		cs	8 n			0.051	1.3		Capt. Kurdakow.
Pekin, China	30.37	771.3	30.51	774.9	19.4	— 7.0	36	nw.	16	7		0	2 k						Physical Observatory.
Petrozavodsk	29.02	737.0	29.23	742.4	8.6	—13.0	88	nnw.	11	5			10			0.173	4.4		Dr. Bergmann.
Pinsk	29.31	744.4			30.4	— 0.9	65	nw.	40	18		0	0			0.087	2.2		
St. Petersburg	29.28	743.6	29.29	744.0	10.4	—12.0	85	nw.	13	6			10 n			0.098	2.5		Central Physical Obs'y.
Sevastopol	29.69	754.2	29.78	756.4	50.2	10.1	87	wsw.	20	9		0	5 n			0.012	0.3		
Semipalatinsk	29.66	753.4	30.38	771.7	15.4	— 9.2	78	se.	27	12			10			0	0		Major Lasarew.
Staroi Bykhov	29.06	738.0	29.54	750.2	23.9	— 4.5	68	nw.	34	15			10			0.209	5.3	light snow	
Tashkend, Laboratory	28.81	731.7	30.45	773.5	38.7	3.7	62	calm	0	0			6			0.118	3.0	snowing	Teich, A. M.
Tiflis	28.72	729 4	30.15	765.7	53.8	12.1	36	calm	0	0		1 cs	0			0	0		Physical Observatory.
Tomsk	29.92	760.0	30.22	767.7	15.4	— 9.2	74	se.	13	6			10						
Vladivostock	30.01	762 2	30.08	763.9	5.0	—15.0	30	ne.	7	3		0	4 k			0	0		
Warsaw	29.65	753.0	30.09	764.2	31.6	— 0.2	63	n.	18	8			9 kn					heavy clouds	Astronomical Obs'y.
Wilna	29.36	745.7	29.80	756.9	24.1	— 4.4	73	wnw.	11	5			7						Berg, Assistant.
Yeniseisk	30.22	767.6	30.56	776.1	—14.4	—25.8	87	calm	0	0			0						M. O. Marks.
SCOTTISH.																			
Monach Lt			29.55	750.6	48	8.9	92	w.			4		10			0.3	8.	hazy	J. Youngclause.
North Unst			29.02	752.3				s.			7		10			blank	blank		Robt. Burnet.
SPANISH.																			
Barcelona, Met. Obs'y	30.16	766.0	30.27	768.8	60.4	15.8	64	sw.	2.0	0.9		0	0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.21	767.2	30.26	768.7	65.5	18.6	58	s.	4.3	1.9			10			0	0	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.38	695.5	30.41	772.3	51.8	11.0	67	sw.	8.5	3.8			9			0.035	0.9	almost cov'd	Domingo Martin.
Madrid, Royal Obs'y	28.19	715.9	30.51	775.0	44.6	7.0	92	calm	0	0			10			0	0	misty	The Staff.

STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From	From.	Inch.	Mill.		
Spanish.																			
Murcia, Met. Obs'y	30.22	767.6	30.35	770.9	66.9	19.4	66	ssw.	2.0	0.9		0	0			0	0	clear	Olayo Diaz, Director.
Oviedo	29.28	743.7	30.12	765.0	64.4	18.0	57	s.	15.9	7.1		8 n	8 n	n.	n.	0	0	cloudy	Prof. L. G. Frades.
Santiago, Met. Obs'y	29.26	743.3	30.17	766.2	58.8	14.9	63	ssw.	8.7	3.9			10			0.949	24.1	covered	R. Gil Villanueva, Dir.
Spanish.—(*Sub-series.*)																			
Manilla, Philippine Islands	29.72	755.0	29.78	756.5	73.8	23.2	93	wsw.	27.5	12.3			10 n			0.484	12.3	heavy rain	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.28	769.0	30.38	771.6	65.8	18.8	54	calm	0	0		0	1		ese.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.02	762.6	30.11	764.9	74.8	23.8	77	calm	0	0		3 cs	6 k	w.	w.	0.012	0.3		Manuel Maese.
Tuguegarao, Philippine Id's	29.71	754.7	29.85	758.1	72.1	22.3	98	nnw.	12.1	5.4			10 kn		nnw.	0.20	5.1	rainy	José L. Yrastorza.
Swedish.																			
Haparanda	29.60	751.8	29.64	752.8	— 4.7	—20.4	100	calm			0		8			0	0		
Umea	29.61	752.2	29.67	753.5	— 5.8	—21.0	86	calm			0		0			0	0		
Hernosand	29.65	753.1	29.70	754.4	20.8	— 6.2	79	n.			2		2			0	0		
Stockholm	29.65	753.2	29.83	757.7	22.3	— 5.4	73	nw.			4		0			0.146	3.7		
Wisby	29.75	755.6	29.81	757.1	32.4	0.2	78	nw.			7		7			0.433	11.0		
Sub-series.																			
Upsala	29.74	755.3	29.82	757.5	19.8	— 6.8	88	w.	7.8	3.5			0			0	0		S. G. Fineman.
Swiss.																			
Geneva	28.84	732.4	30.28	769.2	45.9	7.7	81	n.			1		10			0	0	raining	The Observatory.
Turkish.																			
Constantinople			30.07	763.7	57.0	13.9	83	sw.	9	4.0			7		sw.	0	0		The Observatory.
Valona			30.26	768 6	56.8	13.8		nw.			1		5			0	0	cloudy	A. Bertrand.
Sub-series.																			
Beirut, Lee Obs'y, Syria			30.17	766.4	65.7	18.7	70	n.			1	1 c				0	0		Prof. C. V. A. van Dyck.
United States.																			
Albany, New York	30.06	763.5	30.15	765.8	36.5	2.5	57	w.	4	1.8			10 s			0	0	cloudy	J. O. Barnes.
Alpena, Michigan	29.49	749.0	30.20	767.1	21	— 6.1	84	nw.	10	4.5			10 s			0.02	0.5	cloudy	Jas. J. Fitzgerald.
Apache, Fort, Arizona	24.94	633.5	30.02	762.5	15	— 9.4	56	ne.	2	0.9		0	0			0	0	clear	W. C. Barnes.
Assinnaboine, Ft., Montana	27.50	698.5	30.53	775.4	—11	—23.9	54	sw.	20	8.9		0	0			0	0	clear	B. O. Lenoir.
Atlanta, Georgia	29.09	738.9	30.32	770.1	32.0	0.0	78	nw.	8	3.6		3 c	0			0	0	clear	H. C. Smith.
Atlantic City, New Jersey	30.20	767.1	30.21	767.3	23	— 5.0	73	n.	4	1.8		0	0			inap.	inap.	clear	Jas. M. Watson.
Augusta, Georgia	30.16	766.1	30.36	771.1	33	0.6	88	calm	0	0		0	fg.			0	0	clear	John Healy.
Baltimore, Maryland	30.24	768.1	30.28	769.1	30	— 1.1	78	nw.	1	0.4		0	hz			0	0	clear	Geo W Felger.
Barnegat, New Jersey	30.18	766.6	30.20	767.1	29.0	— 1.7	72	nw.	11	4.9		3 k	0			0	0	clear	G. A. Hill.
Behring Id., Behring Sea	28.68	728.5	28.70	729.0	31.9	— 0.1		e.	2	0.9			10 n			0.04	1.0	cloudy	Leonard Steineger.
Bennett, Fort, Dakota	28.96	735.6	30.72	780.3	— 6	—21.1	81	calm	0			0	0			0	0	clear	A. Pritchard.
Benton, Fort, Montana	27.04	702.0	30.64	778.2	—21	—29.4	32	calm	0	0		0	0			0	0	clear	S. Wheaton.
Bismarck, Dakota	28.62	726.9	30.63	778.0	— 2	—18.9	68	nw.	3	1.3		1 c	0	w.		0	0	clear	Cyrus Cramer.
Block Island, Rhode Island	30.11	764.8	30.14	765.5	34	1.1	78	n.	12	5.4			10 s		n.	0	0	cloudy	J. T. Elker.
Boise City, Idaho	27.42	696.5	30.40	772.1	— 1	—18.3	83	w.	1	0.4		0	0			0	0	clear	B. E. Light.
Boston, Massachusetts	29.96	761.0	30.12	765.0	35.0	1.7	99	nw.	6	2.7			10 ks		nw.	0	0	cloudy	O. B. Cole.
Brownsville, Texas	30.03	762.7	30.08	764.0	59.7	15.4	94	calm	0	0			10 n		se.	inap.	inap.	light rain	M. McCarty.
Buffalo, New York	29.39	746.5	30.19	766.8	29.8	— 1.2	79	sw.	12	5.4			10 s			inap.	inap.	cloudy	W. Finn.
Buford, Fort, Dakota	28.43	722.1	30.67	779.0	— 8	—22.2	61	s.	4	1.8		0	0			0	0	clear	F. A. Mellen.
Burlington, Vermont	29.77	756.1	30.08	764.0	36.0	2.2	61	sw.	5	2.2			10 s	w.	w.	inap.	inap.	cloudy	G. O. Schaeffer.
Cairo, Illinois	29.99	761.7	30.41	772.4	27.0	— 2.8	100	calm	0	0			fg.			0	0	dense fog	W. H. Ray.
Cape Henry, Virginia	30.25	768.3	30.27	768.8	35	1.7	79	n.	9	4.0		0	0			1.57	39.9	clear	A. K. Alderson.
Cape May, New Jersey	30.20	767.1	30.23	767.8	34.0	1.1	71	nw.	13	5.8		0	0			0.16	4.1	clear	W. E. Smith.
Cape Mendocino, California																			J. J. McLean.
Cedar Keys, Florida	30.27	768.8	30.29	769.4	40	4.4	82	n.	10	4.5		0	0			0	0	clear	F. W. Mixer.
Champaign, Illinois	29.50	749.3	30.37	771.4	27.5	— 2.5	70	sw.	4	1.8			10 s		sw.	0	0	cloudy	L. A. Welsh.
Charleston, S. Carolina	30.26	768.6	30.32	770.1	36	2.2	89	ne.	7	3.1		0	0			0	0	clear	J. H. Smith.
Charlotte, N. Carolina	29.40	746.7	30.29	769.4	28.0	— 2.2	77	ne.	6	2.7		4 c	fg.			0.03	0.8	fair	D. O'Donoghue.
Chattanooga, Tennessee	29.49	749.0	30.35	770.9	29.5	— 1.4	82	calm	0	0		2 cs	0			0	0	clear	B. L. Goulding.
Cheyenne, Wyoming	24.09	611.9	30.37	771.4	—14.0	—25.6	73	nw.	3	1.3		3 c	0			0	0	clear	E. McGovern.
Chicago, Illinois	29.60	751.8	30.36	771.1	21.3	— 5.9	72	w.	4	1.8			10 s			inap.	inap.	cloudy	J. Mitchell.
Chincoteague, Virginia	30.21	767.3	30.23	767.8	29	— 1.7	67	n.	13	5.8		0	hz.			0.34	8.6	clear	C. F. Dickens.
Cincinnati, Ohio	29.66	753.4	30.30	771.1	28	— 2.2	77	calm	0	0		0	4 s			0	0	fair	R. B. Watkins.
Cleveland, Ohio	29.50	749.3	30.29	769.4	27.3	— 2.6	88	w.	13	5.8			10 s			0	0	cloudy	J. B. Newlin.
Coleman City, Texas	28.46	722.9	30.36	771.1	26	— 3.3	100	n.	16	7.2			10 n		n.	0.11	2.8	sleeting	L. Dorman.
Columbus, Ohio	29.41	747.0	30.32	770.1	27	— 2.8	77	w.	4	1.8		hz.	3 s			0	0	clear	D. Cuthbertson.
Concho, Fort, Texas	28.36	720.3	30.38	771.6	25.2	— 3.8	76	n.	14	6.3			10 n			0.21	5.3	light rain	J. McGlone.
Custer, Fort, Montana	27.26	692.4	30.66	778.7	0	—17.8	72	e.	10	4.5		0	0			0	0	clear	W. B. Lamar.
Davenport, Iowa	29.72	754.9	30.43	772.9	18	— 7.8	67	n.	13	5.8		0	8 s		nw.	inap	inap.	cloudy	R. R. Martin.
Davis, Fort, Texas	25.29	642.4	30.23	767.8	16	— 8.9	100	n.	12	5.4			10 s		n.	0	0	threatening	J. Williams.
Dayton, Washington T'y	28.62	726.9	30.45	773.4	13	—10.6	76	n.	3	1.3		0	0			0	0	clear	D. Moore.
Deadwood, Dakota	25.58	649.7	30.57	776.5	— 8	—22.2	100	calm	0	0		0	0			0.10	2.5	clear	F. Willson.
Delaware Breakwater, Del	30.22	767.6	30.24	768.1	32	0.0	78	n.	14	6.3		0	0			0.03	0.8	clear	T. S. Townsend.
Denison, Texas	29.53	750.0	30.38	771.6	31.0	— 0.6	78	n.	13	5.8			10 s			0	0	cloudy	J. W. Byram.
Denver, Colorado	24.90	632.4	30.42	772.7	— 0.5	—18.1	89	calm	0	0		0	0			0.03	0.8	clear	F. M. Neal.
Des Moines, Iowa	29.58	751.3	30.56	776.2	5	—15.0	76	n.	7	3.1		5 ck	5 s	w.	n.	inap	inap.	cloudy	F. W. Conrad.
Detroit, Michigan	29.52	749.8	30.28	769.1	26.8	— 2.9	77	w.	9	4.0			10 s			0	0	cloudy	G. F. R. Wappenhans.
Dodge City, Kansas	27.80	706.1	30.60	777.2	6	—14.4	58	n.	16	7.2		0	0			0.02	0.5	clear	V. P. Temple.
Dubuque, Iowa	29.69	754.1	30.46	773.7	14.5	— 9.9	58	nw.	5	2.2		5 cs	0	nw.		0.02	0.5	fair	J. Harvey Smith.
Duluth, Minnesota	29.67	753.6	30.48	774.2	— 5	—20.6	62	sw.	20	8.9		0	0			0	0	clear	N. B. Conger.
Eagle Pass, Texas	29.37	746.0	30.21	767.3	52.1	11.2	93	e.	6	2.7			10 s			0	0	cloudy	F. Belford.
Eagle Rock, Idaho	25.36	644.1	30.28	769.1	—24	—31.1	100	calm	0	0		0	0			0	0	clear	J. M. Clifford.
Eastport, Maine	29.98	761.5	30.06	763.5	24.0	— 4.4	73	nw.	4	1.8		2 k	8 s	w.	w.	0	0	cloudy	D. C. Murphy.
Elliott, Fort, Texas	27.58	700.5	30.64	778.2	7	—13.9	80	n.	28	12.5			10 s		n.	inap.	inap.	cloudy	W. J. Cundall.
El Paso, Texas	26.35	669.3	30.21	767.3	28.0	— 2.2	67	se.	8	3.6			10 s		se.	0	0	cloudy	J. O'Dowd.
Erie, Pennsylvania	29.46	748.3	30.23	767.8	32	0.0	78	sw.	10	4.5			10 s		sw.	0	0	cloudy	Peter Wood.
Escanaba, Michigan	29.66	751.8	30.32	770.1	14.2	— 9.9	76	w.	9	4.0		0	8 s		w.	0.01	0.3	cloudy	George Heathcote.
Fredericksburg, Texas	28.40	721.3	30.22	767.6	45	7.2	100	ne.	3	1.3			10 n			0.17	4.3	light rain	Frank Halwegler.
Galveston, Texas	30.19	766.8	30.24	768.1	54	12.2	74	se.	17	7.6			10 ks			0	0	cloudy	E. O'C. Machenray.
Grand Haven, Michigan	29.56	750.8	30.27	768.8	29.0	— 1.7	88	w.	9	4.0			10 n		w.	0.03	0.8	light snow	J. E. Mueller.
Grant, Fort, Arizona	25.20	640.1	30.08	764.0	32	0.0	96	n.	6	2.7		0	5 s		ne.	0	0	fair	Robert C. Lord.
Hatteras, North Carolina	30.25	768.3	30.27	768.8	39	3.9	89	n.	24	10.7		9 k	0	ne.		1.80	45.7	cloudy	R. M. Crawford.
Helena, Montana	26.13	663.7	30.51	774.9	—19	—28.3	100	calm	0	0		0	0			0	0	clear	N. C. Smith.
Henrietta, Texas	29.37	746.0	30.45	773.4	22	— 5.6	100	n.	20	8.9			10 n		n.	0.01	0.3	light snow	J. P. Sherry.
Huron, Dakota	29.12	739.6	30.66	778.7	—11	—23.9	54	nw.	8	3.6		0	0			inap.	inap.	clear	S. W. Glenn.
Indianapolis, Indiana	29.50	749.3	30.35	770 9	26	— 3.3	80	nw.	7	3.1			10 s		nw.	0	0	cloudy	O. Schutze.
Indianola, Texas	30.12	765.0	30.15	765.8	56.0	13.3	93	e.	24	10.7		0	9 k		s.	0	0	cloudy	I. A. Reed.
Jacksboro, Texas	29.20	741.7	30.44	773.2	24	— 4.4	73	ne.	2	0.9			10 n			0.01	0.3	light snow	D. J. Carr.
Jacksonville, Florida	30.25	768.3	30.30	769.6	41	5.0	82	nw.	3	1.3		hz.	0			0	0	clear	J. W. Smith.
Keogh, Fort, Montana	27.92	709.2	30.62	777.7	— 2	—18.9	68	w.	2	0.9		0	0			inap.	inap.	clear	A. Schneider.
Keokuk, Iowa	29.72	754.9	30.43	772.9	19.0	— 7.2	83	nw.	10	4.5			10 n		nw.	0.01	0.3	light snow	F. Z. Gosewisch.
Key West, Florida	30.12	765 0	30.14	765 5	63.0	17.2	73	ne.	12	5.4		6 cs	0			0.02	0.5	fair	R. H. Paxton.
Kittyhawk, North Carolina	30.26	768.6	30.28	769.1	37	2.8	72	ne.	27	12.1		0	8 s		ne.	1.37	34.8	cloudy	H. Mc P. Baldwin.
Knoxville, Tennessee	29.28	743.7	30.36	771.1	23	— 5.0	100	ne.	3	1.3		0	fg.			0	0	clear	J. A. Cody.
La Crosse, Wisconsin	29.64	752.8	30.49	774.4	8	—13.3	76	n.	3	1.3		0	0			0.01	0.3	clear	S. G. Emery.
Leavenworth, Kansas	29.58	751.3	30.54	775.7	12	—11.1	80	n.	16	7.2			10 s			0.01	0.3	cloudy	A. W. Browne.
Lewiston, Idaho	29.66	753 4	30.54	775.7	3.0	—16.1	74	se.	1	0.4		0	0			0	0	clear	W. Bell.
Little Rock, Arkansas	30.05	763.3	30.38	771.6	33	0.6	78	e.	2	0.9			10 s			0	0	cloudy	W. U. Simons.
Los Angeles, California	29.68	753.9	30.08	764.0	41	5.0	82	e.	3	1.3			10 s		se.	0	0	cloudy	T. S. Collins.
Louisville, Kentucky	29.73	755.1	30.33	770.4	31	— 0.6	78	w.	2	0.9		0	4 s			0	0	fair	L. M Dey.

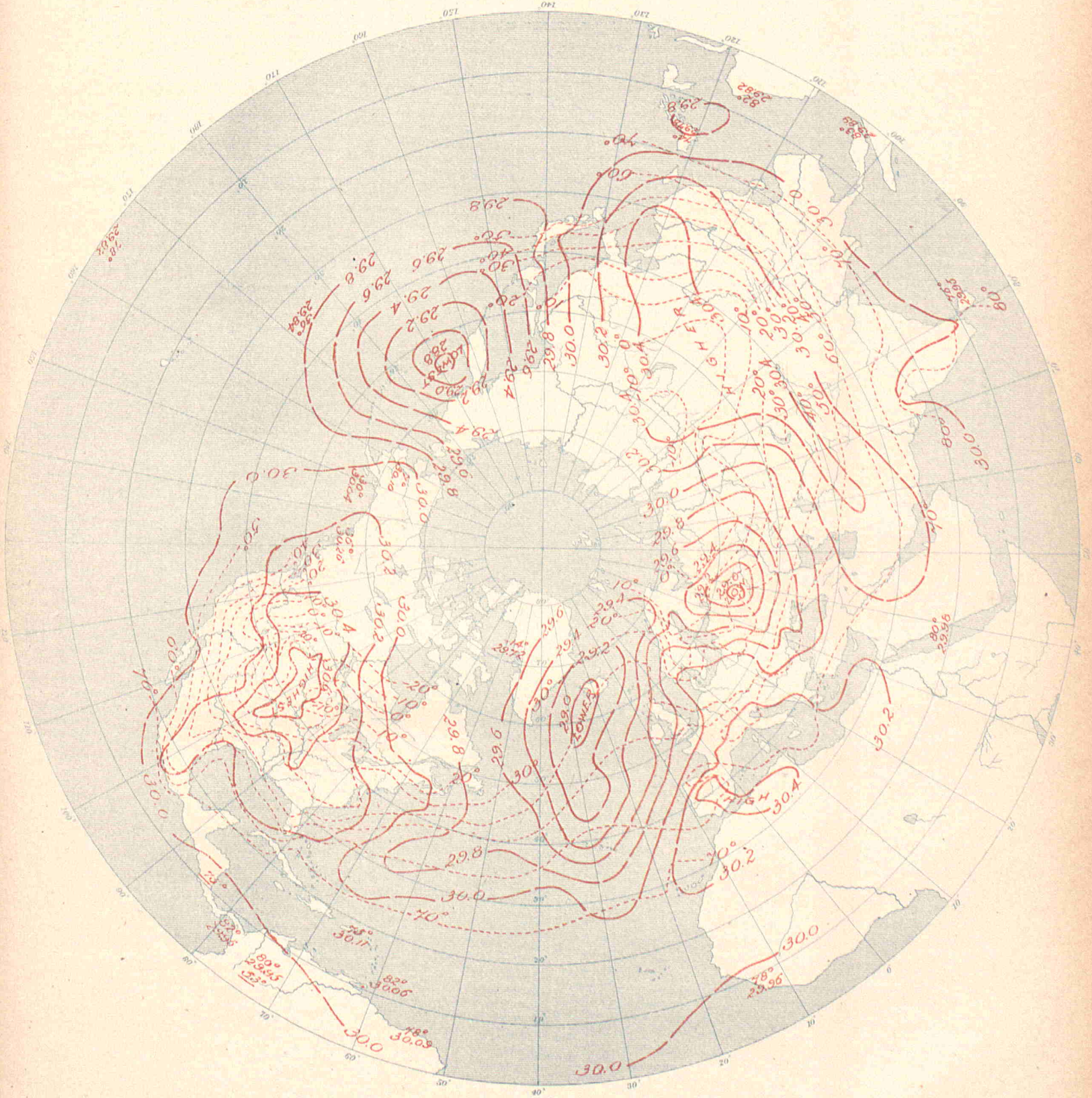
STATIONS.	Barometer. Corrected for instrumental error and for temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind. Direction.	Wind. Velocity.		Wind. Force.	Clouds. Amount and kind. Upper.	Clouds. Amount and kind. Lower.	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	Observers
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.		
United States.—Cont'd.																			
Lynchburg, Virginia	29.57	751.1	30.30	769.6	15	— 9.4	83	calm	0	0		0	0			0.14	3.6	clear	Lewis Duane.
Mackinaw City, Michigan	29.52	749.8	30.22	767.6	21.0	— 6.1	70	nw.	17	7.6		8 k	0	nw.		0.04	1.0	cloudy	F. R. Day.
Macon, Fort, North Carolina	30.25	768.3	30.26	768.6	32.0	0.0	78	nw.	12	5.4		6 cs	0	sw.		0.64	16.3	fair	C. A. Shaw.
Madison, Wisconsin	29.32	744.7	30.42	772.7	9	—12.8	76	nw.	12	5.4			4 s		nw.	0.06	1.5	fair	F. P. Chaffee.
Maginnis, Fort, Montana	25.76	654.3	30.30	769.6	4	—15.6	52	n.	2	0.9		0	0			inap.	inap.	clear	F. Burke.
McKavett, Fort, Texas	27.90	708.6	30.28	769.1	26	— 3.3	88	n.	5	2.2			10 n			0.04	1.0	light rain	J. E. Thatcher.
Marquette, Michigan	29.50	749.3	30.28	769.1	15	— 9.4	48	w.	12	5.4		1 c	0	w.		0.02	0.5	clear	J. Gilligan.
Memphis, Tennessee	30.04	763.0	30.40	772.1	28	— 2.2	88	calm	0	0		0	0			0	0	clear	D. T. Flannery
Milwaukee, Wisconsin	29.55	750.6	30.36	771.1	20	— 6.7	70	nw.	10	4.5		5 cs	0	nw.		0.04	1.0	fair	W. Line.
Missoula, Fort, Montana	27.07	687.6	30.53	775.4	— 4	—20.0	68	sw.	4	1.8		0	0			0	0	clear	I. H. Young.
Mobile, Alabama	30.30	769.6	30.34	770.6	33.6	0.9	88	n.	5	2.2		8 cs	0			0	0	cloudy	C. A. Read.
Montgomery, Alabama	30.10	764.5	30.34	770.6	33.7	0.9	80	calm	0	0		3 c	0	sw.		0	0	clear	J. B. McLaughlin
Moorhead, Minnesota	29.47	748.5	30.58	776.7	—16	—26.7	100	w.	8	3.6		0	0			0	0	clear	H. Bessant.
Morgantown, W. Virginia	29.27	743.4	30.34	770.6	28.0	— 2.2	88	sw.	2	0.9		0	fg.			0	0	clear	J. C. Sprigg, jr.
Mt. Washington, N. H.	23.51	597.1	30.14	765.5	8.0	—13.3	63	nw.	40	17.9		0	5 ks		nw.	0	0	fair	B. S. Pague.
Nashville, Tennessee	29.75	755.6	30.36	771.1	26.5	— 3.1	88	w.	1	0.4		0	0			0	0	clear	L. N. Jesunofsky.
New Haven, Connecticut	30.04	763.0	30.16	766.1	32.5	0.3	87	n.	2	0.9			10s;sk		n.	0	0	cloudy	J. H. Sherman.
New London, Connecticut	30.11	764.8	30.16	766.1	34	1.1	71	nw.	3	1.3			10 s			0	0	cloudy	J. G. Lynch.
New Orleans, Louisiana	30.27	768.8	30.33	770.4	42.8	6.0	60	ne.	4	1.8		7 c	sk.	w.		0	0	fair	L. Dunne.
Newport, Rhode Island	30.08	764.0	30.13	765.3	34.8	1.6	73	nw.	5	2.2			10 s		nw	0	0	cloudy	W. McGillivray.
New York, New York	30.00	762.0	30.19	766.8	33	0.6	88	w.	2	0.9			10 s		n.	0	0	cloudy	J. B. Merrill.
Norfolk, Virginia	30.24	768.1	30.28	769.1	31	— 0.6	68	n.	3	1.3		0	0			2.28	57.9	clear	Wm. Davis.
North Platte, Nebraska	27.48	698.0	30.64	778.2	— 4.4	—20.2	68	nw.	8	3.6		0	5 s			0.02	0.5	fair	E. F. Brady.
Olympia, Washington T'y.	30.30	769.6	30.34	770.6	24.0	— 4.4	88	n.	1	0.4		0	0			0	0	clear	J. Dascomb.
Omaha, Nebraska	29.33	745.0	30.62	777.7	8.5	—13.1	71	n.	4	1.8		0	8 ks		n.	0.03	0.8	cloudy	A. Pollak.
Oswego, New York	29.60	756.9	30.15	765.8	33.5	0.8	78	w.	15	6.7			10 n		w.	0.01	0.3	light snow	J. G. Linsley.
Palestine, Texas	29.77	756.1	30.35	770.9	41.5	5.3	74	e.	3	1.3			10 n			0.03	0.8	light rain	L. M. Pindell.
Pensacola, Florida	30.30	769.6	30.33	770.4	35.7	2.1	83	n	7	3.1		1 cs	0	w.		0	0	clear	M. McGauran.
Philadelphia, Pa	30.14	765.5	30.25	768.3	34	1.1	72	nw.	2	0.9		5 cs	0	sw.		0	0	fair	T. T. Townsend.
Pike's Peak, Colorado	17.37	441.2	30.03	762.7	— 9	—22.8	100	nw.	28	12.5		0	0			inap.	inap.	clear	H. Hall.
Pioche, Nevada	23.88	606.5	30.05	763.3	11.3	—11.5	69	nw.	8	3.6		10 c	0	w.		inap.	inap.	cloudy	C. N. Kitchel.
Pittsburg, Pennsylvania	29.44	747.8	30.30	769.6	27.0	— 2.8	82	s.	8	3.6		0	0			0	0	clear	W. A. Reid.
Poplar River, Montana	28.16	715.3	30.52	775.2				nw.			I	0	0			0	0	clear	W. D. Maxwell.
Port Eads, Louisiana	30.29	769.4	30.30	769.6	47.5	8.6	88	n.	12	5.4		6 cs	0	sw.		0	0	fair	H. B. Boyer.
Port Huron, Michigan	29.51	749.5	30.24	768.1	25.5	— 3.6	92	w.	6	2.7			10 n			inap.	inap.	light snow	W. O. Bailey.
Portland, Maine	30.02	762.5	30.07	763.8	31.5	— 0.3	78	w.	2	0.9			10 s		w.	0	0	cloudy	W. W. Eichelberger.
Portland, Oregon	30.23	767.8	30.30	769.6	33.0	0.6	81	e.	8	3.6		0	0			0	0	clear	M. L. Hearne.
Portsmouth, N. C.					36	2.2	79	n.			4	0	hz.			1.73	43.9	clear	F. S. Coburn.
Prescott, Arizona	24.63	625.6	30.00	762.0	29.5	— 1.4	70	sw.	1	0.4			10 s		sw.	0	0	cloudy	W. H. Clendenon.
Provincetown, Mass	30.05	763.3	30.08	764.0	35	1.7	79	nw.	7	3.1			10 s			0	0	cloudy	P. T. Jenkins.
Punta Rassa, Florida	30.19	766.8	30.20	767.1	46	7.8	80	n.	12	5.4		5 c	0			0	0	fair	W. J. Evans.
Red Bluff, California	29.79	756.7	30.16	766.1	32	0.0	50	n.	10	4.5		0	0			0	0	clear	J. R. Williams.
Rochester, New York	29.46	748.3	30.17	766.3	29	— 1.7	77	w.	18	8.0			10 k		w.	0	0	cloudy	E. W. McGann
Roseburg, Oregon	29.61	752.1	30.18	766.6	23	— 5.0	88	ne.	2	0.9		0	0			0	0	clear	J. J. Naury.
Sacramento, California	30.05	763.3	30.13	765.3	30.5	— 0.8	78	n.	5	2.2		0	0			0	0	clear	J. A. Barwick.
St. Louis, Missouri	29.78	756.4	30.43	772.9	27.7	— 2.4	98	n.	4	1.8			10 s			0	0	cloudy	J. H. Weber.
St. Michael, Fort, Alaska	30.07	763.8	30.10	764.5	7	—13.9	100	ne.			4	0	5 s			0	0	fair	A. P. Leavitt.
St. Paul, Minnesota	29.50	750.8	30.52	775.2	— 2.0	—18.9	65	w.	3	1.3		0	0			0.01	0.3	clear	P. F. Lyons.
St. Vincent, Minnesota	29.41	747.0	30.40	772.1	0	—17.8	83	sw.	6	2.7			8 ks		nw.	0	0	cloudy	C. B Dilley.
Salt Lake City, Utah	25.60	650 2	30.14	765.5	15	— 9.4	51	e.	14	6.3		8 cs	0			0	0	cloudy	J. Craig.
San Antonio, Texas	29.48	748.8	30.20	767.1	46.0	7.8	100	ne.	7	3.1			10 n		ne.	0.08	2.0	light rain	T. J. Kenan.
San Diego, California	30.00	762.0	30.08	764.0	46.3	7.9	73	ne.	4	1.8		6 k	4 s	w.		0	0	cloudy	A. C. Dobbins.
Sandusky, Ohio	29.56	750.8	30.30	769.6	26.5	— 3.1	84	nw.	17	7.6			10 s			0	0	cloudy	M. H. Perry.
Sandy Hook, New Jersey	30.17	766.3	30.20	767.1	34.0	1.1	79	nw.	12	5.4			10 s			0	0	cloudy	B. A. Blundon.
San Francisco, California	30.02	762.5	30.09	764.3	39	3.9	50	e.	7	3.1		8 c	0	w.		0	0	cloudy	N. Gorom.
Santa Fé, New Mexico	23.14	587.7	30.13	765.3	6	—14.4	60	n.	5	2.2		1 ck	0			0.01	0.3	clear	H. U. Jones.
Savannah, Georgia	30.23	767.8	30.33	770.4	40	4.4	65	nw.	5	2.2		0	0			inap.	inap.	clear	H. W. Ford.
Shaw, Fort, Montana	26.64	676.6	30.47	773.9	—16	—26.7	100	calm	0	0		0	0			0	0	clear	A. L. Mathews.
Shreveport, Louisiana	30.00	763.5	30.31	769.9	35	1.7	79	e.	2	0.9		0	5 s			0	0	fair	E. N. Meekins.
Sill, Fort, Indian Territory	29.14	740.1	30.47	773.9	18.0	— 7.8	87	n.	21	9.4			10 n		n.	0.03	0.8	light snow	W. M. Mattingly.
Silver City, New Mexico	24.24	615.7	30.08	764.0	18.5	— 7.5	82	n.	1	0.4		1 c	1 s			0	0	clear	N. D. Lane.
Sitka, Alaska	30.18	766.6	30.26	768.6	35.6	2.0	79	e.	6	2.7			10 s		s.	0	0	cloudy	F. W. Fickett.
Smith, Fort, Arkansas	29.88	758.9	30.38	771.6	30.5	— 0.8	88	calm	0	0		0	6 s		w.	0	0	fair	J. B. Campbell.
Smithville, North Carolina	30.27	768.8	30.31	769.9	32	0.0	78	n.	4	1.8		2 c	0	w.		0.07	1.8	clear	Q. Parker.
Spokane Falls, Wash. Ter.	28.34	719.8	30.47	773.9	9	—12.8	73	calm	0	0		0	0			0	0	clear	H. Clifford.
Springfield, Illinois	29.07	753.6	30.40	772.1	28.2	— 2.1	78	n.	11	4.9			10 s			inap.	inap.	cloudy	T. B. Jennings.
Springfield, Massachusetts	30.04	763.0	30.18	766.6	33.5	0.8	84	calm			0		10 n			0	0	cloudy	Charles Mayr.
Springfield, Mo	28.86	733.0	30.39	771.9	27	— 2.8	94	n.	6	2.7			fg.			0	0	dense fog	J. B. Marbury.
Starkville, Miss	29.86	758 4	30.36	771.1	31	— 0.6	81	ne.	2	0.9		0	3 s			0	0	clear	C. Dill.
Stevenson, Fort, Dakota	28.55	725.2	30.61	777.5	— 6	—21.1	64	nw.	2	0.9		0	0			0	0	clear	W. Burrows.
Stockton, Fort, Texas	27.22	691.4	30.36	771.1	24	— 4.4	88	n.	14	6.3			10 s		n.	0.03	0.8	cloudy	J. F. Marshall.
Thatcher's Island, Mass	30.07	763.8	30.13	765.3	33.0	0.6	68	nw.	17	7.6		8 k	0	w.		0	0	cloudy	G. Liebmann.
Thomas, Camp, Arizona	27.23	691.6	30.05	763.3	26.5	— 3.1	82	calm			0	7 cs	0			0	0	fair	J. T. Fitzgerald.
Toledo, Ohio	29.55	750.6	30.29	769.4	29	— 1.7	77	nw.	4	1.8			10 s			0	0	cloudy	A. Buell.
Tucson, Arizona	27.50	700.0	30.06	763.5	34	1.1	82	se.	1	0.4		9 cs	0			0	0	cloudy	J. L. Whiteside.
Umatilla, Oregon	30.18	766.6	30.57	776.5	9	—12.8	87	se.	6	2.7		0	0			0	0	clear	J. Daly.
Verde, Fort, Arizona					34.6	1.4	66	w.			1		10 s		sw.	0	0	cloudy	D. Brooks.
Vicksburg, Mississippi	30.09	764.3	30.36	771.1	34.0	1.4	71	ne.	2	0.9		0	hz.			0	0	clear	James Kenealy.
Visalia, California	29.72	754.9	30.10	764.5	30.0	— 1.1	92	w.	1	0.4		2 cs	0			0	0	clear	O. D. Stewart.
Washakie, Fort, Wyoming	24.62	625.3	30.39	771.9	—19.7	—28.7		w.	4	1.8		0	0			0.06	1.5	clear	T. M. Ambler.
Washington, D. C.	30.17	766.3	30.29	769.4	26.0	— 3.3	88	calm	0	0		0	sk.			0	0	clear	B. M. Purssell.
West Las Animas, Colorado	26.35	669.3	30.51	774.9	0	—17.8	84	ne.	2	0.9		0	2 s			0.05	1.3	clear	F. H. Brandenburg.
Williamsport, Pa	29.58	751.3	30.21	767.3	34	1.1	71	calm	0	0			10 ks		nw.	0	0	cloudy	B. F. Hough.
Wilmington, N. Carolina	30.25	768.3	30.31	769.9	34	1.1	72	ne.	7	3.1		3 k	6 s		n.	0.02	0.5	cloudy	Samuel A. Haney.
Winnemucca, Nevada	25.67	652.0	30.20	767.1	3	—16.1	76	calm	0	0		0	0			inap.	inap.	clear	J. Grover.
Yankton, Dakota	29.16	740.7	30.59	777.0	— 3	—19.4	65	nw.	3	1.3		0	0			0.06	1.5	clear	J. H. Attfeld.
Yuma, Arizona	29.86	758.4	30.01	762.2	41.6	5.3	69	e.	1	0.4		2 cs	0	w.		0	0	clear	W. S. Delano.
Sub-series.																			
Bogota, U. S. Columbia	22.06	560.3			53.0	11.7	76	s.	2	0.9		3 cs	4cs;n	w.	w.	0.03	0.8	fair	Joaquin Gomez.
Havana, Cuba, W. I.	30.03	762.7	30.09	764.3	68.7	20.4	71	ne.	6	2.7		5ck;cs	0			0.16	4.1	fair	Benito Vines, S. J.
Kingston, Jamaica, W. I.	30.08	764.0	30.09	764.3	70	21.1	69	n.	2	0.9		4 cs	0			0	0	fine	Robert Johnston.
Paramaribo, S. A.	30.09	764.3	30.09	764.3	78	25.6	86	se.			3	4 c	5 k	e.	e.	0	0		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	80	26.7	89	calm			0	0	2 k		calm	0	0	clear	Francisco J. Cisneros.
Rivas, Nicaragua, C. A.					75	23.9	90	ne.			4	cs	0	se.		0	0	clear	Earl Flint.
St. Paul, Kodiak Id., Alaska	29.98	761.5	30.04	763.0	30	— 1.1	77	calm			0		2 s			0.12	3.0	clear	W. J. Fisher.
St. Thomas, W. I.	30.05	763.3	30.17	766.3	78	25.6	65	ese.				0	2 k		ese.	0	0	fine	Aug. Walloe.
York Factory, H. B. A.	29.94	760.5	30.00	762.0	—22.0	—30.0		nw.	18	8.0		4 k	5 s	nw.	nw.	0.02	0.5	threatening	Fortescue & Wood

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level		Temperature of the air.		Relative humidity	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill			
British Naval.																		
H. M. S. Amethyst, Montevideo, Uruguay†	30.16	766.1	70	21.1	75	wnw.			3		0							blue sky.
H. M. S. Audacious, Labuan Island, Borneo, Oceanic.	29.72	754 9	82	27.8	83	ssw.			2		5	sw.						d. clouds.
H. M. S. Beacon, Lake Timsah, Egypt			64	17.8	73	nnw.			1		4	nnw.				1	nnw.	d. clouds.
H. M. S. Boadicea, Simon's Bay, Cape Colony	30.05	763.3				se.			3-4									blue sky.
H. M. S. Carysfort, Gulf of Suez, Egypt	30.22	767.6	66	18.9	84	nnw.			3		5	nnw.						d. clouds.
H. M. S. Champion, Singapore, Malay peninsula	29.89	759.2	83	28.3	87	var.			1		8							d. clouds.
H. M. S. Cleopatra, N. 31° 15′, E. 121° 28′	30.48	774.2	34	1.1	79	wnw.			3		10							overcast.
H. M. S. Comus, N. 45° 45′, W. 125° 30′	30.26	768.6	42	5.6	65	e.			4		2	wnw.				1	ene.	d. clouds.
H. M. S. Constance, N. 29° 00′ W. 19° 00′			70	21.1		s.			3							4		d. clouds.
H. M. S. Curacoa, Yokohama, Japan	29.60	751.8	58.5	14.7	69	s.			2-4		2							d. clouds.
H. M. S. Dido, N. 32° 13′, W. 64° 32′	29.74	755.4	66	18.9		wsw.			7-8		6	wnw.				8	wsw.	showery.
H. M. S. Diamond, Sydney, N. S. W*†	29.38	746.2	70	21.1	71	sw.			1-2		3							d. clouds.
H. M. Dock-Yard, Bermuda, W. I	29.71	754.6	64.5	18.1	86	wsw.			5-6		4	wsw.						d. clouds.
H. M. S. Eclipse, N. 8° 33′, E. 81° 13′	29.85	758.2	76	24.4		ene.			2		10							raining.
H. M. S. Gannet, S. 37° 01′, W. 73° 11′	29.91	759 7	58.5	14.7	90	calm			0		10							d. clouds.
H. M. S. Heroine, N. 17° 51′, W. 24° 54′	30.10	764.5	74	23.3	81	ene.			1-2		2	ene.				1	ene.	d. clouds.
H. M. S. Iron Duke, N. 6° 56′ E. 79° 51′	29.87	758.7	81	27.2	87	n.			1-2		7	n.						d. clouds.
H. M. S. Lark, S. 34° 21′, E. 155° 12′	29.75	755.6	72.3	22.4	88	n.			5		8					5	n	d. clouds.
H. M. S. Liffey, S. 29° 56′, W. 71° 20′	29.92	760.0	65	18.3		sw.			1							1	nw.	d. clouds.
H. M. S. Magpie, N. 34° 41′, E. 135° 12′	29.92	760 0	52.5	11.4	51	sw.			1		10							showery.
H. M. S. Rambler, Port Belgrano, La Plata, S. A	29.80	756.9	76	24.4	72	calm			0		0							blue sky.
H. M. Sarapis, N. 21° 26′, E. 38° 02′	29.98	761.5	80	26.7	93	ne.			2		6					2	ne.	showery.
H. M. S. Supe.b, N. 36° 45′ E. 35° 45′*	30.26	768.6	61	16.1	88	e.			2		7	e.				2	ese.	d. clouds.
H. M. S. Swiftsure, Callao Bay, Peru	29.95	760.7	65	18.3	100	w.			1		4							foggy.
H. M. S. Sylvia, Cordova Inlet, Patagonia	29.92	760.0	48	8.9	77	w.			3		8							d. clouds.
H. M. S. Tourmaline, Bombay, India	29.95	760 7			...	nnw.			2		1	n.						blue sky
H. M. S. Woodlark, Shat-el Arab river	30.25	768.3	59.5	15.3	70	nw.			4		0							squally.
H. M. S. Zephyr, Chee-foo, China	30.57	776.5	25.5	— 3.6		w.			5-6		3	w.				3	nw.	squally.
Portuguese Naval.																		
Tamega, Macao, China	30.15	765.9	64.8	18.2	74	n.			6		0							blue sky.
Swedish Naval.																		
Vanadis, N. 32° 29′, E. 27° 48′	30.24	768.1	64.8	18.2	77	w.			3		8							d. clouds.
United States Naval.																		
Navy Yard, Pensacola, Fla	30.21	767.3	38	3.3	71	n.	3	1.3			2		n.	0	0			fair.
Navy Yard, Portsmouth, N. H	30.10	764.5	28	— 2.2	?	nw.	8	3.6			10		nw.	0	0			cloudy.
Naval Hospital, Yokohama, Japan*	29.65	753.1	59	15.0	55	sw.			5		1		w.	0	0			clear.
Adams, Sitka, Alaska *†	30.34	770.6	34	1.1	90	ne.			2		10		ne.					cloudy.
Alaska, Mare Island, Cal	30.03	762.7	37	2.8	100	ne.			1		5		ne.	0	0			fair.
Alliance, St. John's, Antigua, W. I	30.08	764.0	77	25.0	100	ne.			1-2		8			0	0	sm'h		cloudy
Ashuelot, Shanghai, China	30.49	774.4	35	1.7	80	nw.			3		10		nw.					cloudy.
Brooklyn, Montevideo, Uruguay	29.99	761.7	74	23.3	85	nw.	9	4.0			0			0	0	sm'h		clear.
Colorado, New York, N. Y	30.24	768.1	34	1.1	100	nw.	5	2.2			10		nw.	0	0			overcast.
Enterprise, Lynn Haven Bay, Va	30.30	769.6	37	2.8	80	n.			3		0					mod.	n.	clear.
Essex, Callao, Peru	29.93	760.2	63	17.2	94	nnw.			1		2		nw.			1	nnw.	clear.
Franklin, Norfolk, Va	30.25	768.3	33	0.6	79	nnw.	8	3.6			2		calm	1.40	35.6			fair.
Galena, Montevideo, Uruguay	30.01	762.2	69	20.6	79	wnw.			2		2		wnw.		...	sm'h	w.	clear.
Hartford, Valparaiso, Chili*	29.94	760.5	63	17.2	88	calm			0		10			0	0	sm'h		cloudy.
Independence, Mare Island, Cal	30.09	764.3	33	0.6	79	e.			2		2			0	0			clear.
Iroquois, Callao, Peru	29.92	760.0	63	17.2	94	calm			0		8							fair.
Jamestown, Boston, Mass	30.10	764.5	34	1.1	100	nw.			1		10		nw.	0	0			hazy.
Juniata, Fayal, Azores Islands*	29.48	748.8	65	27.8	78	sw.			5		8		wsw.	sli't	sli't	r'gh	s;w.	fair.
Kearsarge, Port Castries, St. Lucia, W. I	30.02	762.5	82	22.2	90	ene.			2		0							clear.
Lackawanna, S. 3° 39′, W. 109° 14′*	29.89	759.2	72	13.9	100	e.			3		10		e.			mod.	e.	cloudy.
Lancaster, Genoa, Italy*	30.11	764.8	57	— 1.1	89	ese.			3		10		se.			sm'h		light rain.
Michigan, Erie, Pa	30.10	764.5	30	0.6	89	w.			5		10		w.					cloudy.
Minnesota, New York, N. Y	30.24	768.1	33	0.6	89	nnw.	4	1.8			5		nnw.					foggy.
Monocacy, Nagasaki, Japan	30.07	763 8	52	11.1	100	wnw.			2		8		nw.					fair.
New Hampshire, Newport, R. I	30.15	765.8	35	1.7	80	nw.			2		10		nw.			sm'h		cloudy.
Nipsic, Lisbon, Portugal*	30.30	769.6	59	15.0	88	ene.			1		2					sm'h		clear.
Onward, Callao, Peru	30.05	763.3	63	17.2	100	calm			0		10					long	w.	foggy.
Palos, Tientsin, China*	30.40	772.1	19	— 7.2	100	nnw.			4		0							clear.
Pensacola, Panama, U. S. C*	29.82	757.4	77	25.0	90	wnw.	5	2.2			0			0	0	sm'h		clear.
Powhatan, Boston, Mass	30.04	763.0	31	— 0.6	89	nw.			1		10							overcast.
Quinnebaug, Genoa, Italy*	30.21	767.3	58	14.4	81	ese.			3		10		calm			sm'h		cloudy
Ranger, N. 19° 47′, W. 105° 46′	30.03	762.7	74	23.3	85	wnw.			2		2		w.			sm'h		fair.
Richmond, N. 23° 35′ E. 117° 53′*	30.07	763.8	61	16.1	94	ne.			6		10		ne.	0	0	mod.	ne.	cloudy.
Saratoga, New York, N. Y	30.20	767.1	35	1.7	80	nw.			2		10		nw.	0	0	sm'h		overcast.
St. Louis, League Island, Pa	30.38	771.6	28	— 2.2	88	wnw.			2		2		nw.	0	0			clear.
Tennessee, Fort De France, Martinique, W. I	30.11	764.8	80	26.7	82	e.	3	1.3			2			0	0	sm'h		fair.
Vandalia, St. Thomas, W. I*	30.11	764.8	83	28.3	56	ese.			1		1							clear.
Wabash, Boston, Mass	30.11	764.8	35	1.7	80	nw.	2	0.9			8		nw.	0	0			cloudy.
Wachusetts, Mare Island, Cal*	30.07	763.8	33	0.6	79	e.			1		8		calm	0	0	sm'h		cloudy.
Wyandotte, Washington, D. C	30.36	771.1	45	7.2	92	w.			3		0			0	0			clear.
Yantic, St. Vicent Island, W. I	30.12	765.0	77	25.0	82	ne.			1-2		8		ene.					cloudy.
Merchant Marine.																		
S. S. Grecian, N. 54° 35′, W. 5° 07′*	29.68	753.9	50	10.0	93	ssw.			3		10		w.	3 h'r	3 h'r	sm'h		hazy.
S. S. Nova Scotian, N. 45° 46′ W. 57° 07′	29.75	755.6	30	— 1.1		wnw.			3		10		se.	4 h'r	4 h'r	mod.	sw.	cloudy.
S. S. Polynesian, N. 55° 07′, W. 19° 34′			49	9.4		e.			3		9		se.			mod.	sw.	cloudy.
S. S. British Crown, N. 51° 23′, W. 14° 49′†	29.42	747.3	54	12.2		ese.			5		10		se.	0	0	h'vy	wsw.	foggy.
S. S. British Prince, N. 46° 19′, W. 53° 38′†	29.70	754.4	30	— 1.1	80	w.			6		5		wnw.	2 h'r	2 h'r	mod.	w.	fine.
S. S. Indiana, N. 45° 19′ W. 51° 58′			36	2.2		wnw.			4		2		nw.			mod	nw.	fine.
S. S. Lord Gough, Philadelphia, Pa	30.25	768.3	30	— 1.1		nw.			2		5			0	0			fair.
S. S. Ohio, N. 51° 15′, W. 21° 13′†	29.25	742.9	53	11.7	86	se.			2		10		s.			mod.	wsw.	drizzling.
S. S. Pennsylvania, Liverpool, Eng†	29.76	755.9	43	6.1		s.			2		10		s.					rainy.
S. S. Anchoria, N. 45° 27′ W. 50° 09′†	29.85	758.2				nw.			4		8		nw.	sh's	sh's	h'vy	e.	cloudy.
S. S. Dorian, Naples, Italy*	30.12	765.0				calm			0					0	0			fine.
S. S. Galatia, N. 49° 45′, W. 3° 40′			57	13.9	100	sw.			4		10		sw.	24 h'r	24 h'r	mod.	sw.	dense mist.
S. S. Utopia, N. 32° 46′ W. 36° 45′†	30.20	767.1				nw.			9		7		s.	½ h'r	½ h'r	high	nw.	clearing.
S. S. Ailsa, N. 21° 31′, W. 74° 07′†	30.12	765.0	76	24.4	91	ne.			4		5?		ene.	0	0	mod.	ene.	cloudy.†
S. S. Ambrose, Para, Brazil†	30.04	763.0	82	27.8		calm			0					0	0			fine.
S. S. Carroll, N. 43° 06′, W. 66° 52′*†	30.10	764 5	37	2.8		nne.			4		9		nne.	0	0	small	n;ne	cloudy.
S. S. Auckland, S. 50° 20′, W. 130° 06′	29.76	755.9	45	7.2	76	sw.			4							h'vy	sse.	drizzling.
S. S. City of Agra, S. 52° 35′, W. 124° 46′	29.57	751.1	39	3.9	99	s.			5		10							squally.
S. S. Commewyne, N 45° 15′, W. 28° 51′	29.15	740.4	57.2	14.0	70	wsw.			3		4							d. clouds.
S. S. Caldew, S. 13° 15′, E. 93° 48′	29.99	761.7	78	25.6		se.			4		8							d. clouds.
S. S. Gordon Castle, N. 23° 19′, E. 36° 58′	30.03	762.7	81.0	27.2	78	nne.			2		0							blue sky.
Inchkeith, S. 0° 53′, E. 90° 19′	29.93	760.2	83.8	28.8	84	var.			1		4							d. clouds.
S. S. Bothnia, N. 43° 45′, W. 45° 46′	29.81	757.2	44	6.7	92	nnw.			4		9		n.	shr's	shr's	r'gh	cf'd	squally.
S. S. Gallia, N. 41° 41′, W. 59° 34′	29.91	759.7	45	7.2	84	n.			4		5		nw.	0	0	sm'h		fair.
S. S. Pavonia, Queenstown, Ireland*	29.66	753.4	52	11.1	100	ese.			3		fg.			10 h'r	10 h'r	sm'h		rain & fog.
S. S. Colina, St. John's, N. F †	29.55	750.6				wnw.			1		3		nw.	0	0			clear.
S. S. Arizona, N. 40° 37′, W 67° 53′	30.01	762.2	37	2.8		nnw.			3		8		nw.	0	0	sm'h		cloudy.
S. S. Wisconsin, N. 51° 19′, W 10° 38′	29.44	747.8	51	10.6		sse.			3		10		s.	8 h'r	8 h'r	sli't	sw.	foggy.
S. S. Bohemia, Borkum Island, North Sea†	30.15	765.8	34	1.1		sw.			6		3		nw.	6 h'r	6 h'r	sm'h	nw.	foggy.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	Upper. 0–10	Lower. 0–10	Upper. From.	Lower. From.	Inch.	Mill.			
MERCHANT MARINE.—Continued.																		
S. S. Gellert, N. 46° 06′, W. 46° 32	29.70	754.4	37	2.8		wnw.			5		8		w.	0	0	long	nne.	covered.
S. S. Silesia, New York, N. Y†	30.14	765.5	32	0.0	?	w.			2		3		w.	0	0			fair.
S. S. Vandalia, N. 45° 25′, W. 41° 40′	29.69	754.1	43.7	6.5	97	wnw.			6		10		nw.	0	0	cross	nw.	cloudy.
S. S. Archimedes, N. 18° 15′ W. 24° 08′	30.08	764.0				nne.			4					0	0	light	n.	clear.
S. S. Hevelius, Liverpool, Eng*†	29.75	755.6	47	8.3		s.			5		10		s.	10 h'r	10 h'r			raining.
S. S. Sirius, S. 22° 30′, W. 40° 50′ *†	29.92	760.0				sw.			2		10		sw.	4 h'r	4 h'r	mod.	sw.	overcast.
S. S. Bulgarian, N. 46° 09′, W. 47° 44′*†	29.67	753.6				w.			4		8		w.	snow	snow	mod.	wnw.	cloudy.
S. S. Virginian, N. 45° 58′, W. 43° 15′*	29.76	755.9	40	4.4		nnw.			5		10		nnw.	0	0	mod.	cross	cloudy.
S. S. Colorado, Galveston, Texas †	30.25	768.3	50	10.0		ene.			5		6		ese.	0	0			fair.
S. S. Rio Grande, N. 25° 36′, W. 79° 25′†	30.18	766.6	72	22.2		ne.			2		3		ne.	3 h'r	3 h'r	short	nw.	fair.
S. S. San Marcos, N. 29° 22′, W. 94° 30′			45	7.2									nne.					
S. S. Archimede, N. 40° 50′, E. 2° 20′†	30.34	770.6	70	21.1	70	nw.			2		2		nnw.	0	0	sm'h		clear.
S. S. Hermod, N. 49° 40′, W. 12° 40′†	29.52	749.8	51.8	11.0		ssw.			5		10		sw.	4 h'r	4 h'r	high	sw	rainy.
S. S. John Hopkins, Vineyard Sound, Mass*†	30.30	769.6	32	0.0		nnw.			4		8		w.	0	0			fair.
S. S. Glenfyne, N. 0° 35′, W. 47° 21′						ene.			3		1		ene.	0	0	sm'h	ne.	fair.
S. S. Brooklyn, N. 43° 21′, W. 67° 16′*	29.88	758.9	35	1.7		w.			2				w.			1	w.	cloudy.
S. S. Chalmette, N. 37° 28′, W. 74° 35′	30.21	767.3	40	4.4		n.			5		5		nnw.	0	0	h'vy	ne.	fair.
S. S. New York, N. 27° 47′, W. 80° 02′†	30.19	766.8	66	18.9		nnw.			2		8		n.			sm'h		cloudy.
S. S. Denmark, New York, N. Y†	30.18	766.6	34	1.1		w.			2		2		nw.	0	0			clear.
S. S. England, N. 40° 33′ W. 67° 47′	30.07	763.8				n.			4		8		n.	0	0	sm'h		cloudy.
S. S. Erin, Liverpool, Eng	29.67	753.6	41	5.0		wnw.			6		6		wnw.	6 h'r	6 h'r			fine.
S. S. Helvetia, N. 40° 40′, W. 69° 00′	30.01	762.2	39	3.9		n.			1		10		nw.	0	0	sm'h		cloudy.
S. S. The Queen, N. 44° 01′, W. 56° 12′*	29.82	757.4	33	0.6		wnw.			5		10			0	0	mod.	wnw.	overcast.
S. S. City of Alexandria, Vera Cruz, Mexico †	30.12	765.0	69	20.6		wnw.			3		1		nw.	2 h'r	2 h'r	small	n.	clear.
S. S. City of Washington, N. 30° 15′, W. 77° 50′†	30.23	767.8	61	16.1		nw.			4		10		n.	0	0	mod.	n.	cloudy
S. S. Alene, N. 37° 50′, W. 74° —′ †	30.12	765.1	42	5.6		n.			4							long	ne.	hazy.
S. S. City of Chester, N. 51° 23′ W. 16° 04′			52	11.1		e.			2								sw.	cloudy.
S. S. Braunschweig, S. 13° 29′, W. 35° 30′	30.02	762.5	84.0	28.9	81	ne.			3		2		ne,	0	0	light	ne.	clear.
S. S. Donau, N. 47° 45′, W. 32° 00′	29.21	741.9				n.			2		8		w	5 h'r	5 h'r	light	wsw.	cloudy.
S. S. Rhein, N. 49° 43′, W. 21° 50′	29.18	741.2				se.			5		9		sse.	1 h'r	1 h'r	mod.	se.	cloudy.
S. S. Salier, N. 53° 33′, E. 8° 34′						ese.			5		8		ese.	0	0			fair.
S. S. Werra, N. 40° 40′, W. 67° 24′.~	30.06	763.6	37.4	3.0		nne.			4		8		nne.	0	0	light	n.	fair.
S. S. Belgic, N. 36° 41′, W. 135° 54′†	29.90	759.4	57	13.9	69	w.			5		7		w.	0	0	r'gh	nw.	fair.
S. S. Gaelic, N. 34° 42 , W. 175° 16′ *	29.84	757.9	56	13.3	87	w.			6		3		sw.				w.	squally.
S. S. Oceanic, N. 36° 22′, E. 142° 28′*	29.70	754.4	64	17.8	73	ne.			6		0					5	sew.	clear.
S. S. Mississippi, Seattle, Wash. Ter *†	30.41	772.4	28	—2.2	78	n.			1		0							clear.
S. S. Willametta, Seattle, Wash. Ter †	30.43	772.9	28	—2.2	88	calm			0		0			0	0			clear.
S. S. Oregon, N. 43° 58 , W. 124° 12′ †	30.08	764.0	42	5.6	73	ene.			5		0							clear.
S. S. Ancon, N. 34° 23′, W. 120° 21′†	29.99	761.7	48	8.9	70	nw.			3		2		nw.			sm'h		fair.
S. S. City of Chester, off Point Arena, Cal*†	30.00	762.0	36	2.2	46	se.			6		10					r'gh	nw.	rain & snow
S. S. Dakota, N. 45° 48′, W. 124° 18′ †	30.03	762.7	45	7.2	84	ne.			4		0							clear.
S. S. Orizaba, N. 35° 10′ W. 120° 43′ *†	30.16	766.1	55	12.8	68	ne.			1		8		s.			light	se.	cloudy.
S. S. State of California, N. 41° 06′, W. 124° 30′			44	6.7		e.			4		0			0	0	sm'h		clear.
S. S. City of New York, S. 34° 18′, E. 170° 22′†	30.16	766.1	73	22.8	67	e.			5				e.	0	0			fair.
S. S. City of Sydney, N. 0° 18′ W. 165° 30′ †	29.82	757.4	78	25.6	82	e.			2		8		se.	0	0	mod.	ene.	hazy.
S. S. Colima, N. 8° 28′, W. 79° 54′†	29.95	760.7	82	27.8	96	nw.			3		3		calm	0	0	sm'h	n.	clear.
S. S. San José, N. 9° 50′, W. 85° 38′†	29.87	758.7				sse.			2	c	0	ene.		0	0	long	sse.	clear.
S. S. Zealandia, Sydney, N. S. W	29.56	756.8	77	25.0	73	w.			3		1		se.			mod.	e.	fine.
S. S. Valencia, La Guayra, Venezuela†	30.01	762.2	81	27.2	70	ese.			1		3		ese.	0	0	mod.	ne.	fine.
S. S. Belgenland, N. 47° 03′, W. 32° 20′	29.19	741.4	56	13.3	75	n.			3		6		n.	1½ h'r	1½ h'r	mod.	n	squally.
S. S. Nederland, N. 49° 18′, W. 42° 33′			39	3.9		w.			6		8		wsw.	4 h'r	4 h'r	mod.	w.	cloudy.
S. S. Pennland, Antwerp, Belgium	30.00	762.0	51.5	10.8	96	sse.			5		10			12 h'r	12 h'r			overcast.
S. S. Rhynland, N. 50° 05′, W 3° 30′	29.84	757.9	48	8.9	92	w.			7		10			20 h'r	20h'r	chop	w.	dense fog.
S. S. Waesland, Jersey City, N. J	30.20	767.1	37	2.8	81	wnw.			2		9		nnw.	0	0			cloudy.
S. S. P. Oaland, N. 49° 53′, W. 13° 49′	29.52	749.8	55.2	12.9	97	s.			4		10		s.			4	sw.	dense fog.
S. S. Schiedam, N. 50° 52′, E. 0° 50′	29.87	758.7	51.8	11.0	94	ssw.			4		10		sw.	0	0	sm'h	s.	hazy.
S. S. W. A. Scholten, N. 49° 00′, W. 25° 05′	29.19	741.4	53.0	11.7	98	sw.			4		10		sw.	7 h'r	7 h'r	cross	w.	rainy.
S. S. State of Florida, Glasgow, Scotland	29.52	749.8	47	8.3		sw.			4		6		ssw.	6 h'r	6 h'r			cloudy.
S. S. State of Georgia, N. 43° 31′, W. 56° 44′†	29.88	758.9	37	2.8		wnw.			4		9			0	0	sm'h		cloudy.
S. S. Iowa, N. 43° 26′, W. 57° 00′*†	29.96	761.0	39	3.9		w.			4		9		w.	sleet	sleet	sm'h	w.	cloudy.
S. S. Baltic, N. 40° 38′, W. 67° 41′	30.04	763.0	38	3.3	72	n.			3		9		n.	0	0	sm'h		d. clouds.
S. S. Celtic, Liverpool Bar, Eng†	29.79	756.7	49	9.4		sse.			4		10			shr's	shr's	sm'h		misty.
S. S. Salerno, N. 49° 55′, W., 27° 43′*	29.01	736.8	53	11.7		ne.			5		10		e.	2 h'r	2 h'r	r'gh	ne.	raining.
S. S. Catherine Whiting, Fire Island, N. Y†	30.24	768.1	80	26.7		nw.			1				nw.	0	0	sm'h		
S. S. Saxon, Philadelphia, Pa†	30.33	770.4	34	1.1		nw.			6		0							fine.
MISCELLANEOUS.																		
Bk. Adelaide, N. 20° 34′, W. 37 43′*†	30.24	768.1	77	25.0		e.			2		3		ene.	4 h'r	4 h'r	long	n.	fair.
Bk. Alpha, N. 18° 16′, W. 35° 20′†	30.09	764.3	82	27.8		ese.			1		0			0	0	sm'h		clear.
Schr. Annie Lewis, Cedar Keys, Fla†	30.36	771.1	40	4.4		n.			2		0			0	0	sm'h		clear.
Bk. Anna Thormann, S. 35° 48′ E. 20° 40′*	30.08	764.0	71.6	22.0	74	e.			1	3 c	0	w.		0	0	light	se.	fair.
S. S. Antonio Lopez, Cadiz, Spain*	30.36	771.1	60	15.6	79	calm			0		0			0	0			clear.
Bk. Aquidneck, N. 13° 46′, W. 54° 13′ *†	30.20	767.1	85	29.4		ne.			3				ne.	0	0	light	ne.	clear.
Bgt. Arthur, N. 3° 42′, W. 16° 27′ *†	30.04	763.0				s.			1				se,	0	0	mod.	se.	
Schr. Anna Holton, N. 22° 45′, W. 96° 49′†	30.09	764.3	74	23.3		calm			0		10		se.	1 h'r	1 h'r	mod.	e.	cloudy.
S. S. Burswell, N. 32° 15′, W. 73° 46′.*†	30.08	764.0	70	21.1		nne.			6		9		ne.	3 h'r	3 h'r	high	n.	overcast
Bk. Champion, N. 37° 25′, W. 74° 50′			38.0	3.3		nne.			4		8		nne.	10 h'r	10 h'r	h'vy	ene.	cloudy.
Bg. Clara M. Goodrich, N. 26° 45′, W. 79° 45′						nnw.			5		7		e.	0	0	r'gh	n.	fair.
Bk. Commerce, N. 39° 03′, W. 65° 03′ †	29.72	754.9	55	12.8		w.			6		5		n.	0	0	long	ne.	clearing.
Schr. C. R. Flint, Hampton Roads, Va			32	0.0		nw.			4		3		sw.	8 h'r	8 h'r			fair.
Bkt. David Preston, N. 26° 53′, W. 84° 30′						e.					10		s.	0	0	sm'h		
Bk. E. L. Pettingill, S. 17° 01′, W. 124° 00′*†	30.10	764.5	84	28.9		calm			0		0			0	0	sm'h	sw.	
Schr. Edith R. Seward, Wilmington, N. C*†	30.27	768.8				calm			0		3		calm	14 h'r	14 h'r			clear.
S. E. J. Spicer, Liverpool, Eng*	29.78	756.4	54	12.2		s.			3		10		s.	20 h'r	20 h'r			raining.
Bk. Essex, S. 12° 03′ E. 44° 44′ *†	29.90	759.4	85	29.4		se.			4					0	0		ne.	
Schr. F. E. McDonald, N. 39° 29′, W. 72° 28′†	30.21	767.3	38	3.3		n.			4					0	0			fair.
S. Festina Lente, N. 38° 32′, W. 72° 28′						w.			6		10		sw.	sleet	sleet	mod.	se.	cloudy.
S. S. Foscolia, N. 47° 12′, W. 25° 35′						ssw.			5		5		sw.	0	0	r'gh		fair.
Bk. Freya, Matanzas, Cuba, W. I.			71	21.7		s.			1		1		e.	0	0			fair.
S. Geo. Stetson, N. 25° —′ W. 360 —′ *†	30.05	763.3	72	22.2	62	n.			4		3		n.	0	0	h'vy	wnw.	clear.
Bk. Gronsvaer, Auckland, N. Z†	30.09	764.2	73.6	23.1		s.			4		0			0	0			fine.
Bk. Great Surgeon, S. 29° 37′, E. 44° 19′*†	30.14	765.5	81	27.2		nw.			4		10		nw.	½ h'r	½ h'r	short	ne.	foggy.
Bk. Hattie G. McFarland, N. 18° 43′, W. 57° 12′†	30.26	768.6	78	25.6		e.			4		2		e.	0	0	long	ene.	clear.
Schr. Hattie Weston, N. 38° 20′, W. 74° 30′ *†	30.30	769.6	30	—1.1		nne.			4		8		nne.	0	0	sharp	ene.	cloudy.
S. Hedwig, N. 39° 24′, W. 61° 59′	29.86	758.4	57.2	14.0	94	n.			6		6		n.	rain	rain	long	nne.	stormy.
Schr. Isabel Alberto, Jersey City, N. J. †	30.26	768.6				nw.			2		10		nw.	0	0			clearing.
Schr. Jennie N. Huddell, Baltimore, Md†	30.21	767.3				nw.			1		2		nw.	0	0			clear.
Schr. John L. Thomas, N. 36° 00′, W. 75° 00′						n.			5		6		e.	8 h'r	8 h'r	h'vy	ne.	
Bk. Joseph A. Ropes, Majunga, Madagascar *†	29.99	761.7	90	32.2	70	wsw.			3		3		wsw.	0	0			fair.
Bkt. Josephine, N. 9° 58′, W. 26° 16′†	30.04	763.0	79	26.1	70	ene.			4		8		ene.	0	0	mod.	ne.	fair.
S. S. J. W. Wilson, Port Eads, La†	30.20	767.1	52	11.1		n.			4		2		w.	0	0			fair.
Light House Tender, Laurel, Key West, Fla†	30.12	765.0	66	18.9		nne.			2		8		ne.	0	0	sm'h		cloudy.
Bg. Lillian, N. 27° 05′, W. 61° 51′†	30.14	765.5				sw.			6		8		wsw.	0	0	rg'h	var.	cloudy.
Bk. Louise Adelaide, N. 20° 00′, W. 95° 15′						s.			1		10		se.	4 h'r	4 h'r	long	nne.	showery.
Bg. L. & W. Armstrong, N. 18° 35′ W. 63° 34′*†	30.20	767.1				ene.			4		1		e.	0	0	sm'h	e.	clear.

VESSELS, WITH POSITION AT TIME OF OBSERVATION.	Barometer reduced to sea-level.		Temperature of the air.		Relative humidity.	Wind.				Clouds.				Rainfall or melted snow in the past 24 hours.		Sea-swell.		Weather.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.						
										Upper.	Lower.	Upper.	Lower.			Character.	Direction from.	
	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles p. hr.	Mtrs. p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.			
MISCELLANEOUS.—Continued.																		
Schr. Minnie A. Bonsall, Jacksonville, Fla †	30.27	768.8	54	12.2	.....	n.	.....	.....	1	.....	hz.	.....	.....	.....	.....	.....	.....	hazy.
S. Minnie N. Gerow, N. 30° 15′, W. 65° 25′*†	29.87	758.7	.....	.....	.....	wnw.	.....	.....	7	.....	10	.....	w.	.....	.....	hv'y	w.	squally.
S. M. P. Grace, S. 55° 46′, W. 64° 35′*†	29.52	749.8	46	7.8	.....	sw.	.....	.....	8	.....	5	.....	sw.	hail	hail	r'gh	ssw.	squally.
Bg. Myrtle, N. 38° 00′, W. 63° 19′*†	29.65	753.1	.....	.....	.....	ne.	.....	.....	7	.....	10	.....	ne.	8 h'r	8 h'r	r'gh	ne.	misty.
Bg. O. C. Clary, Miragoane, Hayti, W. I.*†	30.06	763.5	88	31.1	91	se.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	
Bk. Ottawa, N. 35° 56′, W. 7° 45′*	30.27	768.8	62	16.7	.....	e.	.....	.....	3	.....	0	.....	.....	0	0	long	w.	clear.
S. Paramita, San Francisco, Cal	.....	.....	41	5.0	.....	n to e.	.....	.....	3–8	.....	10	.....	.....	rain	rain	.....	.....	rainy.
Bk. Pilgrim, N. 35° 07′, W. 74° 15′*†	30.23	767.8	.....	.....	.....	n.	.....	.....	8	.....	5?	.....	n.	12 h'r	12 h'r	high	n.	cloudy?
S. S. Radnorshire, Yokohama, Japan*†	30.15	765.8	.....	.....	.....	nnw.	.....	.....	6	.....	0	.....	.....	.....	.....	.....	.....	
S. S. Raleigh, N. 18° 50′, W. 75° 30′*†	30.02	762.5	79	26.1	.....	calm	.....	.....	.....	.....	2	.....	ese.	0	0	long	se.	clear.
Bk. Reindeer, N. 35° 28′, W. 70° 15′	.....	.....	.....	.....	.....	nne.	.....	.....	4	.....	2	.....	.....	.....	.....	long	nne.	
Schr. S. B. Hubbard, Jacksonville, Fla†	30.41	772.4	46	7.8	.....	nnw	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	fine.
S. S. Strathleven, N. 23° 53′, E. 118° 03′	30.11	764.8	58.6	14.8	99	ne.	.....	.....	6	.....	0	.....	.....	0	0	4	ne.	blue sky
Bk. Sunbeam, N. 42° 02′, W. 33° 20′	29.28	743.9	59	15.0	100	nw.	.....	.....	6	.....	8	.....	wnw.	3 h'r	3 h'r	mod.	nw.	clearing.
U. S. F. C. S. S. Fish Hawk, Washington, D. C†	30.36	771.1	30	— 1.1	.....	calm	.....	.....	0	.....	2	.....	calm	0	0	.....	.....	clear.
Bk. Vincenzo Accame, N. 31° 34′, W. 69° 15′ †	29.97	761.1	69.8	21.0	.....	n.	.....	.....	6	.....	4	.....	n.	½h'r	½h'r	.....	wnw.	
Schr. Viola Reppard, N. 32° 20′, W. 80° 25′†	30.20	767.1	45	7.2	.....	ne.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	
Bk. Wandering Jew, Montevideo, Urnguay †	30.05	763.3	69	20.6	.....	nw.	.....	.....	3	.....	1	.....	nw.	0	0	.....	.....	clear.
Bk. Warden Law, S. 21° 00′, W. 70° 30′*	30.04	763.0	.....	.....	.....	s.	.....	.....	1	.....	8	.....	s.	.....	.....	sm'h	s.	cloudy.

International Chart I. December 31, 1882. Isobars and Isotherms.



UNITED STATES OF AMERICA.

By Order of the Secretary of War:
W.B. Hazen, Chief Signal Officer.

SUMMARY AND REVIEW

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

DECEMBER, 1882.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for December, 1882.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	N E	C	Miles	Kil.	0-10	Inch.	Mill.
ALGERIAN.	° ′	° ′																								
Nemours	N. 35 06	W. 1 50	0.00 m.	13	4	.....	.....	30.07	763.7	59.9	15.5	80.5	14	.....	.....	.....	3	.....	6	8	.....	.....	.....	2	2.52	64.1
Algiers	N. 36 47	E. 3 05	0.20 p.m.	72	22	.....	.....	29.98	761.5	59.7	15.4	71.1	1	1	11	13	3	.....	1	.....	1	.....	.....	4	11.40	289.5
La Calle	N. 36 54	E. 8 26	0.42 p.m.	36	11	.....	.....	29.95	760.6	61.3	16.3	69.1	1	7	11	8	1	2	1	.....	.....	.....	.....	4	4.28	108.8
Tunis	N. 36 42	E. 10 13	0.49 p.m.	46	14	.....	.....	29.96	760.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saida	N. 34 51	E. 0 10	0.09 p.m.	2844	867	.....	.....	30.08	764.0	57.4	14.1	77.3	3	3	8	8	2	4	2	1	.....	.....	.....	3	3.06	77.6
Tebessa	N. 35 24	E. 8 06	0.40 p.m.	2890	881	.....	.....	30.06	763.5	53.1	11.7	67.5	4	5	10	6	4	1	.....	1	.....	.....	.....	1	0.67	17.0
Gerlville	N. 33 45	E. 1 10	0.13 p.m.	4285	1306	.....	.....	.....	.....	50.0	10.0	50.3	.....	11	8	6	2	.....	1	3	.....	.....	.....	3	2.16	54.8
Laghouat	N. 33 48	E. 2 53	0.20 p.m.	2559	780	.....	.....	30.10	764.6	55.6	13.1	42.2	3	13	.....	6	4	1	.....	4	.....	.....	.....	2	0.12	3.0
Biskra	N. 34 51	E. 5 41	0.31 p.m.	410	125	.....	.....	30.08	763.9	62.2	16.8	38.7	.....	23	.....	.....	1	5	.....	.....	2	.....	.....	4	0.82	20.9
AUSTRALIAN.																										
Melbourne	S. 37 50	E. 144 58	9.47 p.m.	91	28	29.79	756.7	29.89	759 1	60.7	16.0	75	1	1	3	6	11	9	.....	.....	.....	.....	.....	5	3.12	79.2
AUSTRO-HUNGARIAN.																										
Agram	N. 45 48	E. 15 53	1.12 p.m.	536	163	29.34	745.2	29.90	759.5	41.5	5.3	84.8	.....	2	3	8	2	2	5	9	.....	.....	.....	8	3.17	80.6
Cracow	N. 50 04	E. 20 00	1.28 p.m.	722	220	29.10	739.0	29.89	759.2	33.4	0.8	86.2	1	4	8	3	3	.....	7	5	.....	.....	.....	8	1.12	28.5
Eperies	N. 48 58	E. 21 15	1.33 p.m.	820	250	29.00	736.7	29.91	759.6	33.8	1.0	90.0	6	.....	1	.....	10	.....	.....	.....	14	.....	.....	9	1.70	43.1
Gratz	N. 47 04	E. 15 28	1.10 p.m.	1171	357	28.62	727.0	29.91	759.7	36.9	2.7	82.4	3	7	4	4	6	3	3	.....	1	.....	.....	8	2.55	64.8
Hermannstadt	N. 45 47	E. 24 13	1.45 p.m.	1352	412	28.47	723.1	29.94	760.4	40.5	4.7	79	1	7	1	2	6	13	1	.....	.....	.....	.....	6	0.56	14.2
Kremsmünster	N. 48 03	E. 14 08	1.04 p.m.	1260	384	28.47	723.2	29.86	758.5	33.1	0.6	90.4	.....	2	4	6	.....	1	1	6	11	.....	.....	9	9.08	230.6
Lemberg	N. 49 50	E. 24 00	1.44 p.m.	978	298	28.89	733.9	29.93	760.1	31.8	—0.1	81.0	1	3	1	1	11	10	3	1	.....	.....	.....	7	1.49	37.9
Pola	N. 44 52	E. 13 51	1.04 p.m.	105	32	29.76	755 9	29.87	758.8	50.2	10.1	76.8	2	1	5	4	3	5	6	3	2	.....	.....	7	3.03	92.1
Szathmar	N. 47 46	E. 22 53	1.39 p.m.	430	131	29.43	747.5	29.97	761.3	39.2	4.0	81	.....	2	4	1	2	10	8	4	.....	.....	.....	7	3.45	87.6
Szegedin	N. 46 15	E. 20 10	1.29 p.m.	256	78	29.62	752.3	29.91	759.6	40.5	4.7	82.9	.....	1	3	1	9	5	.....	1	11	.....	.....	7	2.27	57.6
Trieste	N. 45 39	E. 13 46	1.04 p.m.	85	26	29.80	757.0	29.91	759.6	47.7	8.7	77.9	.....	.....	2	.....	.....	5	5	3	16	.....	.....	7	3.07	77.9
Vienna	N. 48 12	E. 16 22	1.14 p.m.	663	202	29.16	740.7	29.90	759.5	36.3	2.4	85.7	.....	4	6	.....	2	7	3	.....	9	.....	.....	8	3.37	85.7
BRITISH.																										
Aberdeen	N. 57 10	W. 2 06	0.00 m.	89	27	29.53	750.0	29.63	752.6	35.9	2.2	84.3	1	1	11	3	6	4	1	4	.....	.....	.....	7	6.88	174.8
Armagh	N. 54 21	W. 6 39	11.42 a.m.	207	63	29.39	746.5	29.64	752.8	37.1	2.8	88.8	4	1	2	10	9	.....	3	2	.....	.....	.....	6	.....	.....
Bidston	N. 53 24	W. 3 04	11.56 a.m.	197	60	.....	.....	29.63	752.6	39.6	4.2	85.5	4	2	2	7	1	4	9	2	.....	.....	.....	8	.....	.....
Bolton	N. 53 35	W. 2 28	11.58 a.m.	500	152	29.09	738.9	29.63	752.6	38.7	3.7	87.8	6	4	.....	5	5	4	3	4	.....	.....	.....	9	.....	.....
Bradford	N. 53 48	W. 1 47	0.01 p.m.	366	111	29.27*g*	743.4*g*	29.62*g*	752.3*g*	38.3*g*	3.5*g*	86.7*g*	*g*	1	1	7	.....	4	.....	11	.....	.....	.....	9*g*	4.51	114.6
Bridgetown *c*	N. 13 04	W. 59 37	8.10 a.m.	28	9	29.95	760.7	29.98	761.5	81.3	27.4	71.9	.....	.....	.....	.....	.....	1	2	23	.....	.....	.....	3	.....	.....
Cardington	N. 52 08	W. 0 27	0.00 p.m.	109	33	.....	.....	.....	.....	40.8	4.9	87.9	4	5	6	5	5	2	2	2	.....	.....	.....	8	.....	.....
Chatham	N. 51 25	E. 0 33	0.10 p.m.	120	37	29.54	750.3	29.67	753.6	41.9	5.5	89.2	1	1	5	6	4	1	.....	2	11	.....	.....	5	.....	.....
Falmouth	N. 50 09	W. 5 04	11.48 a.m.	211	64	29.46	748.3	29.69	754.1	46.3	7.9	84.2	2	7	5	5	3	6	2	1	.....	.....	.....	8	.....	.....
Fort Napier	S. 30 00	E. 31 00	2.12 p.m.	2200	671	27.61	701.3	29.82	757.4	76.4	24.7	54.5	4	2	.....	.....	4	7	9	5	.....	.....	.....	7	.....	.....
Free Town	N. 8 30	W. 13 14	11.15 a.m.	224	68	29.66	753.4	29.89	759.2	84.1	28.9	80.0	9	9	3	.....	.....	.....	.....	.....	9	1	.....	3	.....	.....
Gibraltar	N. 36 09	W. 5 21	11.47 a.m.	50	15	30.05	763.3	30.10	764.5	59.2	15.1	93.2	.....	6	9	10	.....	3	1	2	.....	.....	.....	4	.....	.....
Glasgow	N. 55 53	W. 4 17	11.51 a.m.	184	56	29.40	746.7	29.61	752.1	36.6	2.6	83.5	5	2	3	4	4	2	2	9	.....	.....	.....	9	.....	.....
Greenwich	N. 51 29	0 00	0.08 p.m.	159	48	29.49	749.0	29.67	753.6	41.5	5.3	88.2	3	2	5	7	4	5	1	1	3	.....	.....	8	.....	.....
Guernsey	N. 49 27	W. 2 41	11.58 a.m.	275	84	29.41	747.0	29.71	754.6	45.6	7.6	87.8	.....	7	3	5	11	3	.....	1	1	.....	.....	9	.....	.....
Kew	N. 51 28	W. 0 19	0.07 p.m.	34	10	29.64	752.8	29.68	753.9	41.7	5.4	86.5	7*b*	1	5	7	3	2	2	2	.....	.....	.....	8	.....	.....
Leicester	N. 52 39	W. 1 08	0.04 p.m.	245	75	29.38	746.2	29.64	752.8	40.4	4.7	91.2	3	3	2	9	.....	6	.....	6	2	.....	.....	9	.....	.....
Malta	N. 36 00	E. 14 30	1.06 p.m.	70	21	29.83	757.7	29.90	759.4	62.5	16.9	93.4	2	4	7	8	.....	6	2	2	.....	.....	.....	7	.....	.....
Nassau	N. 25 04	W. 77 22	0.58 a.m.	44	13	30.07	763.8	30.12	765.0	72.0	22.2	80.3*a*	5	.....	.....	5	3	2	1	15	.....	.....	.....	6	.....	.....
Oscomb	N. 52 28	W. 1 55	0.00 m.	483	147	29.11	739.4	29.04	752.8	38.3	3.5	91.3	5	1	5	3	6	1	2	6	.....	.....	.....	8	.....	.....
Oxford	N. 51 46	W. 1 17	0.03 p.m.	210	64	29.43	747.5	29.66	753.4	41.1	5.1	88.7	4	4	4	6	2	7	1	2	1	.....	.....	7	.....	.....
Plymouth	N. 50 22	W. 4 10	11.51 a.m.	69	21	29.60	751.8	29.68	753.9	45.3	7.4	88.7	2	5	3	5	4	4	2	3	3	.....	.....	8	.....	.....
Sandwick Manse	N. 59 05	W. 3 20	11.54 a.m.	94	29	29.50	749.3	29.01	752.1	36.0	2.2	93.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	.....
Sentari Cemetry	N. 41 00	E. 29 03	2 04 p.m.	60	18	29.91	759.7	29.98	761.5	52.3	11.3	76.3	3	.....	.....	10	4	2	1	10	1	.....	.....	7	.....	.....
Sheffield	N. 53 23	W. 1 28	0.02 p.m.	260	79	29.35	745.5	29.04	752.8	39.7	4.3	91.6	3	.....	1	8	3	.....	1	5	10	.....	.....	9	4.82	122.4
Silloth Rectory	N. 54 52	W. 3 22	11.54 a.m.	28	9	29.58	751.3	29.01	752.1	38.5	3.0	86.5	4	1	5	3	3	2	7	3	3	.....	.....	8	3.05	77.5
Stonyhurst	N. 53 51	W. 2 28	11.58 a.m.	361	110	.....	.....	29.04	752.8	38.3	3.5	85.9	6	.....	5	6	4	.....	3	7	.....	.....	.....	9	.....	.....
StratfieldTurgiss	N. 51 17	W. 0 53	0.04 p.m.	197	60	29.47	748.5	29.70	754.4	41.9	5.5	90.0	2	3	8	5	3	5	.....	1	4	.....	.....	8	.....	.....
Truro	N. 50 16	W. 5 04	11.53 a.m.	43	13	29.63	752.6	29.07	753.6	48.4	9.1	82.6	4	4	.....	10	3	5	2	3	.....	.....	.....	8	.....	.....
Valencia	N. 51 55	W. 10 18	11.27 a.m.	23	7	29.02	752.3	29.04	752.8	45.4	7.4	83.6	4	1	4	5	5	6	1	4	1	.....	.....	7	.....	.....
CANADIAN.																										
Bathurst *f*	N. 47 39	W. 65 43	7.45 a.m.	9	3	.....	.....	.....	.....	12.6	—10.8	.....	.....	2	.....	4	.....	.....	.....	1	.....	18	.....	5	1.20	30.5
Charlottetown	N. 46 14	W. 63 10	7.55 a.m.	38	12	29.87	758.7	29.91	759.7	23.9	—4.5	85.4	7	5	8	4	2	1	1	2	1	7153	11511	8	3.13	79.5
Chatham	N. 47 03	W. 65 29	7.45 a.m.	50	17	29.90	759.4	29.97	761.2	11.7	—11.3	91.7	4	2	5	8	2	2	1	2	5	2907	4078	4	2.15	54.6
Cornwall	N. 45 01	W. 74 43	7.09 a.m.	175	53	29.79	750.7	29.99	761.7	17.7	—7.9	91.5	3	9	11	.....	.....	.....	7	1	.....	.....	.....	9	2.33	59.2
Dalhousie *a*	N. 48 04	W. 66 21	7.32 a.m.	45	14	29.91	759.7	29.96	761.0	10.1	—8.8	.....	.....	5	18	1	.....	1	3	.....	2	.....	.....	6	0.60	15.2
Father Point	N. 48 31	W. 68 28	7.34 a.m.	20	6	29.95	760.7	29.97	761.2	15.3	—9.3	87.0*a*	3	6	7	3	2	1	.....	5	4	10930	17599	9	1.30	33.0
Fort Garry	N. 49 51	W. 97 07	5.39 a.m.	754	230	29.25	742.9	30.15	765.8	—0.4	—18.0	82.1	6	3	1	6	7	1	2	5	.....	7434	11963	6	2.10	53.3
Fredericton	N. 45 57	W. 66 39	7.41 a.m.	59	18	29.93	760.2	30.01	762.2	11.7	—11.3	90.5	2	8	7	1	1	.....	3	1	8	.....	.....	6	2.41	61.2
Granton	N. 43 12	W. 81 21	6.43 a.m.	1015	309	28.91	734.3	30.08	764.0	21.7	—5.7	96.2*g*	1	4	6	7	2	3	3	.....	5	.....	.....	10	2.11	53.6
Halifax	N. 44 39	W. 63 36	7.53 a.m.	122	37	29.82	757 4	29.96	761.0	24.8	—4.0	90.0*a*	1	8	14	3	.....	1	2	1	1	.....	.....	5	3.40	86.4
Hamilton	N. 43 16	W. 79 53	6.49 a.m.	338	103	29.62	752.3	30.04	763.0	22.9	—5.1	85.6	.....	1	3	23	.....	.....	2	2	.....	.....	.....	8	3.82	97.0
Kingston	N. 44 14	W. 76 30	7.02 a.m.	307	94	29.69	754.1	30.05	763.3	20.4	—6.4	88.1	1	6	8	4	2	.....	2	8	.....	5873	9452	8	2.88	73.2
Little Glace Bay *a*	N. 46 12	W. 59 58	8.08 a.m.	34	10	29.83	757.7	29.87	758.7	30.0	—1.1	83.9	4	2	5	5	4	2	.....	7	1	.....	.....	7	2.85	72.4
Montreal	N. 45 31	W. 73 33	7.13 a.m.	187	57	29.79	750.7	30.01	762.2	16.2	—8.8	90.0	5	.....	10	5	3	2	1	1	4	.....	.....	9	3.96	100.6
Ottawa	N. 45 26	W. 75 45	7.05 a.m.	250	76	29.76	755.9	30.02	762.5	16.6	—8.6	91.6*g*	5*c*	4	3	1	.....	3	1	.....	13	.....	.....	9	2.78	70.6
Parry Sound	N. 45 19	W. 80 01	6.48 a.m.	925	191	29.29	744.0	30.04	763.0	17.2	—8.2	80.5	5	.....	12	1	1	4	6	.....	2	7220	11619	8	4.13	104.9
Peterboro	N. 44 17	W. 78 20	6.54 a.m.	688	210	29.27	743.4	30.06	763.5	19.5	—6.9	84.6	.....	2	7	3	.....	4	2	1	12	.....	.....	7	2.00	50.8
Port Dover	N. 42 47	W. 80 13	6.47 a.m.	635	194	29.35	745.5	30.08	764 0	24.1	—4.4	98.1	.....	1	11	5	3	1	1	2	7	6450	10380	9	2.99	75.9
Port Stanley	N. 42 40	W. 81 13	6.43 a.m.	592	180	29.40	746.7	30.09	764.3	24.2	—4.3	87.3*a*	2	.....	18	2	2	2	4	1	.....	.....	.....	7	2.24	56.9
Quebec	N. 46 48	W. 71 12	7.23 a.m.	203	89	29.66	753.4	30.01	762.2	13.4	—10.3	91.8	3	9	5	.....	.....	.....	.....	8	4	2	.....	9	6.17	156.7
Rockliffe	N. 46 10	W. 77 48	6.57 a.m.	418	127	29.46	748.3	30.02	762.5	14.6	—9.7	85.4*a*	1	8	4	.....	.....	2	5	1	10	.....	.....	8	3.13	79.5
Saint Andrews	N. 45 04	W. 81 06	6.34 a.m.	47	14	29.91	759.7	29.96	761.0	20.6	—6.3	85.9	4	12	4	3	1	1	1	5	.....	.....	.....	6	2.13	53.8
Saint John, N. B.	N. 45 17	W. 66 03	7.44 a.m.	150	46	29.79	750.7	29.97	761.2	19.3	—7.1	91.0*g*	7	7	2	1	.....	3	2	9	.....	.....	.....	6	2.99	75.9
Saint Pierre	N. 46 47	W. 56 08	8.24 a.m.	?	?	.....	.....	29.75	755.6	31.2	—0.4	.....	7	10	6	4	1	.....	.....	3	.....	.....	.....	.....	4.22	107.2
Saugeen	N. 44 30	W. 81 21	6.42 a.m.	656	200	29.26	743.2	30.02	762.5	25.1	—3.8	91.9	5	2	7	5	2	7	.....	2	1	10595	17051	9	4.01	101.8
Stratford	N. 43 23	W. 81 00	6.44 a.m.	1182	360	28.71	729 2	30.05	763.3	20.7	—6.3	93.1*g*	.....	4	12	1	2	5	2	.....	5	.....	.....	9	4.34	110.2
Sydney	N. 46 08	W. 60 10	8.07 a.m.	37	11	29.81	757.2	29.87	758.7	27.5	—2.5	86.7	4	6	6	7	.....	2	1	1	4	9509	15303	8	2.41	61.2
Toronto	N. 43 39	W. 79 23	6.50 a.m.	350	107	29.67	753.6	30.07	763.8	24.2	—4.3	86.8	4	6	13	1	1	1	4	1	.....	7915	12738	8	1.93	49.0
Windsor	N. 44 59	W. 63 58	7.53 a.m.	87	26	29.83	757.7	29.92	760.0	23.4	—4.8	86.6	8	2	6	6	3	1	1	.....	4	.....	.....	7	.....	.....
Woodstock	N. 43 08	W. 80 47	6.48 a.m.	980	299	28.96	735.6	30.06	763.5	21.7	—5.7	91.7	2	.....	5	1	3	4	2	2	2	.....	.....	.....	4.54	115.3
Yarmouth	N. 43 50	W. 66 02	7.44 a.m.	61	19	29.90	759.4	29.97	761.2	29.1	—1.6	82.0	8	6	5	.....	2	1	3	4	2	7371	11862	7	3.12	79.2
CAPE COLONY																										
Cape St. Francis	S. 34 10	E. 24 50	1.47 p.m.	25	7	29.95	760.7	29.98	761.5	69.7	20.9	84.8	.....	.....	4	11	2	1	11	2	.....	.....	.....	5	1.47	37.3
Cape Town	S. 34 02	E. 18 29	1.22 p.m	27	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for December, 1882.																				Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.															
						Actual.		Reduced.					Directions.									Total Movement.						
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.		Inch.	Mill.
CHINESE. (*Sub*).	° ′	° ′																										
Sung-shu-chwang	N. 36 07	E.103 56	7.04 p.m.	4987	1520	24.75	628.7	.....	.....	13.5	—10.3	.....	2	4	6	.....	.....	.....	.....	7	12	.....	.....	1	.....	.....
Tchang kia tchouang.	N. 38 17	E.116 16	7.53 p.m.	98	30	30.32	770.1	30.43	772.9	24.4	— 4.2	70	1	2	.....	5	1	2	.....	6	14	.....	.....	2	0.14	3.5
Zi-Ka-Wei	N. 31 12	E.121 26	8.14 p.m.	22	7	30.35	771.0	30.38	771.6	39.6	4.2	82	5	8	6	1	1	3	4	3	.....	.....	.....	6	0.99	25.1
DANISH.																												
Copenhagen	N. 55 41	E. 12 36	0.58 p.m.	43	13	29.75	755.6	29.80	756.9	32.2	0.1	86	1	1	4	2	3	8	9	3	.....	.....	.....	9	.....	.....
Fanöe	N. 55 27	E. 8 24	0.42 p.m.	20	6	29.72	755.0	29.74	755.5	31.6	— 0.2	94	...	...	.....	4	5	1	8	5	7	1	.....	9	.....	.....
Godthaab	N. 64 11	W. 51 46	8.41 a.m.	36	11	29.76	755.9	29.80	757.0	18.0	— 7.8	81	13	1	.....	1	3	2	.....	7	4	.....	.....	6	.....	.....
Ivigtut	N. 61 12	W. 48 00	8.56 a.m.	16	5	29.73	755.1	29.75	755.6	23.7	— 4.6	.....	.....	1	.....	.....	1	4	.....	.....	25	.....	.....	8	.....	.....
Jacobshavn	N. 69 13	W. 50 55	8.44 a.m	42	13	29.85	758.3	29.90	759.5	8.8	—12.9	.....	2	.....	.....	.....	1	5	13	...	10	.....	.....	4	.....	.....
Stykkisholm	N. 65 05	W. 22 46	10.37 a.m.	30	11	29.69	754.2	29.74	755.3	28.4	— 2.0	89	.....	.....	.....	.....	.....	5	6	10	10	.....	.....	5	.....	.....
Thorshavn	N. 62 02	W. 6 44	11.41 a.m.	29	9	29.58	751.4	29.63	752.5	36.9	2.7	83	6	.....	.....	2	4	5	3	7	4	.....	.....	6	.....	.....
Upernavik	N. 72 47	W. 56 00	8.24 a.m.	39	12	29.93	760.3	29.98	761.5	0.7	—17.4	.....	1	...	.....	2	1	.....	17	1	9	.....	.....	3	.....	.....
Vestervig	N. 56 47	E. 8 20	0.41 p.m.	82	25	29.66	753.4	29.75	755.7	29.7	— 1.3	95	...	1	.....	2	3	3	7	11	4	.....	.....	8	.....	.....
FRENCH.																												
Agen	N. 44 12	E. 0 38	0.11 p.m.	604	184	29.30	744.3	29.97	761.1	47.1	8.4	91.2	.....	3	4	3	2	4	.....	.....	15	.....	.....	.....	3.98	101.1
Alençon	N. 48 26	E. 0 05	0.09 p.m.	476	145	29.26	743.2	29.81	757.2	42.1	5.6	94.1	1	1	2	9	12	4	.....	2	.....	.....	.....	.....	2.61	66.2
Arras	N. 50 18	E. 2 46	0.19 p.m.	239	73	29.48	748.7	29.74	755.4	39.0	3.9	89.76	.....	8	1	7	3	9	3	.....	.....	.....	.....	8	0.46	11.8
Avignon	N. 43 57	E. 4 48	0.27 p.m.	65	20	29.83	757.6	29.91	759.6	48.0	8.9	73.1	16	8	.....	2	.....	2	2	1	.....	.....	.....	5	2.78	70.7
Bar-sur-Seine	N. 48 07	E. 4 22	0.25 p.m.	518	158	29.27	743.5	29.84	758.0	41.9	5.5	85	.....	3	1	3	15	3	1	5	.....	.....	.....	9	3.94	100.0
Beauvais	N. 49 26	E. 2 05	0.16 p.m.	246	75	29.51	749.5	29.78	756.4	41.7	5.4	87.7	1	.....	8	4	6	5	7	.....	.....	.....	.....	9	2.90	73.7
Besançon	N. 47 14	E. 6 02	0.32 p.m.	846	258	28.93	734.8	29.84	757.8	42.1	5.6	85.9	6	.....	.....	2	14	1	.....	8	.....	.....	.....	.....	5.58	141.6
Bordeaux	N. 44 50	E. 0 32	0.06 p.m.	243	74	29.62	752.4	29.89	759.1	47.8	8.8	75.0	.....	1	4	4	4	14	1	3	.....	.....	.....	7	5.44	138.2
Bourges	N. 47 10	E. 2 26	0.17 p.m.	510	156	29.30	744.2	29.86	758.5	45.3	7.4	81.3	.....	2	4	7	10	1	5	2	.....	.....	.....	.....	5.46	138.6
Brest	N. 48 24	W. 4 30	11.50 a.m.	210	64	29.54	750.3	29.78	756.5	47.7	8.7	89.9	2	3	5	9	2	3	2	3	2	.....	.....	8	20.50	520.8
Caen	N. 49 11	W. 0 21	0.07 p.m.	69	21	29.64	752.9	29.72	754.8	43.9	6.6	77.2	.....	2	3	13	....	8	.....	.....	5	.....	.....	8	3.96	100.5
Chalons-sur-Marne	N. 48 57	E. 4 21	0.25 p.m.	294	90	29.44	747.8	29.76	756.0	39.2	4.0	80.1	2	3	.....	7	2	4	1	1	2	.....	.....	7	3.32	84.2
Charleville	N. 49 46	E. 4 49	0.27 p.m.	476	145	29.25	743.0	29.78	756.4	38.7	3.7	81.7	1	3	2	3	7	3	7	4	.....	.....	.....	8	3.96	100.6
Clermont-Fd	N. 45 46	E. 3 05	0.20 p.m.	1273	388	28.50	724.0	29.87	758.8	46.9	8.3	67.8	1	1	5	3	4	7	5	5	.....	.....	.....	7	2.41	61.2
Cluny	N. 46 26	E. 4 39	0.27 p.m.	787	240	29.03	737.3	29.89	759.3	42.4	5.8	80.1	1	2	4	14	4	.....	.....	4	2	.....	.....	7	4.39	111.5
Commercy	N. 48 46	E. 5 35	0.30 p.m.	797	243	28.97	735.7	29.85	758.2	37.4	3.0	92.2	.....	3	9	6	3	2	7	1	.....	.....	.....	.....	8.24	209.4
Gap	N. 44 33	E. 6 05	0.32 p.m.	2424	739	27.34	694.5	29.93	760.3	39.7	4.4	73.9	6	2	2	1	2	.....	3	8	7	.....	.....	5	5.50	139.7
Gréasque	N. 43 25	E. 5 37	0.31 p.m.	1056	322	28.75	730.2	29.89	759.1	48.6	9.2	70.7	1	.....	.....	.....	8	10	6	6	.....	.....	.....	6	5.77	146.6
Grenoble	N. 45 12	E. 5 43	0.31 p.m.	715	218	29.15	740.3	29.95	760.6	38.8	3.8	87.1	.....	3	1	4	1	7	13	2	.....	.....	.....	.....	5.85	148.7
Gueret	N. 46 10	E. 1 52	0.16 p.m.	1486	453	28.26	717.9	29.87	758.8	43.7	6.5	81.6	1	2	3	17	4	.....	.....	4	.....	.....	.....	.....	6.13	155.6
Lamballe	N. 48 28	W. 2 31	11.58 a.m.	252	77	29.48	748.8	29.76	756.0	45.9	7.7	89.2	.....	4	8	5	2	12	.....	.....	.....	.....	.....	7	2.55	64.8
Lescar	N. 43 20	W. 0 26	0.06 p.m.	525	160	29.34	745.1	29.91	759.6	50.5	10.3	73.1	1	1	11	6	.....	1	8	3	.....	.....	.....	5	7.93	201.5
Lorient	N. 47 45	W. 3 21	11.55 a.m.	86	26	29.70	754.3	29.80	756.9	48.6	9.2	81.8	2	1	6	8	2	4	5	.....	3	.....	.....	8	5.73	145.5
Lyon	N. 45 41	E. 2 30	0.25 p.m.	981	299	28.84	732.5	29.92	760.0	41.9	5.5	83.5	3	4	2	.....	2	11	3	6	.....	.....	.....	8	1.53	38.9
Mans	N. 48 01	E. 0 12	0.09 p.m.	285	87	29.51	749.6	29.83	757.7	42.6	5.9	91.6	2	2	6	9	7	2	2	1	.....	.....	.....	8	2.44	112.8
Marseille	N. 43 18	E. 5 23	0.29 p.m.	246	75	29.66	751.9	29.87	758.8	51.8	11.0	68.3	1	7	11	1	.....	1	6	4	.....	.....	.....	7	4.50	114.2
Mont Louis	N. 42 30	E. 2 07	0.16 p.m.	5203	1586	24.67	626.7	29.52	749.7	37.4	3.0	72.1	1	3	9	13	1	2	1	1	.....	.....	.....	5	2.61	66.4
Montpellier	N. 43 37	E. 3 53	0.24 p.m.	118	36	29.76	755.9	29.94	760.4	51.1	10.6	77.5	6	.....	.....	.....	4	10	4	3	4	.....	.....	4	2.48	63.1
Nancy	N. 48 42	E. 6 11	0.33 p.m.	725	221	28.97	735.7	29.77	759.1	39.2	4.0	83.8	.....	8	5	7	9	1	.....	1	.....	.....	.....	.....	4.89	124.2
Nantes	N. 47 13	W. 1 33	0.02 p.m.	134	41	29.69	754.0	29.85	758.1	48.0	8.9	83.3	1	.....	4	8	6	8	3	1	.....	.....	.....	8	6.34	160.9
Perpignan	N. 42 42	E. 2 53	0.19 p.m.	105	32	29.81	757.2	29.93	760.1	52.0	11.1	69.7	8	10	.....	2	5	2	1	2	1	.....	.....	7	2.60	66.1
Pic du Midi (Sum-	N. 42 56	W. 0 08	0.08 p.m.	9380	2859	21.02	533.9	.....	.....	22.5	— 5.3	.....	.....	9	11	9	.....	.....	.....	2	.....	.....	.....	6	8.41	213.6
Privas [mit.]	N. 44 45	E. 4 36	0.26 p.m.	997	304	28.84	732.6	29.93	760.3	43.9	6.6	79.4	11	.....	.....	.....	15	1	3	1	.....	.....	.....	6	2.00	50.8
Puy de Dome	N. 45 46	E. 2 58	0.20 p.m.	4813	1467	24.91	632.7	.....	.....	30.9	— 0.6	93.8	2	1	5	11	4	5	1	2	.....	.....	.....	6	8.74	222.0
Rochefort	N. 45 56	W. 0 58	0.04 p.m.	29	9	29.84	757.8	29.87	758.6	47.1	8.4	90.4	.....	.....	2	8	7	9	.....	3	2	.....	.....	8	2.79	70.8
Roche-sur-Yon	N. 46 40	W. 1 26	0.02 p.m.	198	60	29.60	751.7	29.81	757.2	45.9	7.7	91.1	1	1	3	9	4	10	3	.....	.....	.....	.....	7	5.25	133.4
Rodez	N. 44 21	E. 2 34	0.18 p.m.	2050	625	27.76	705.2	29.96	761.0	41.0	5.0	79.7	.....	4	2	4	4	7	5	2	3	.....	.....	7	2.68	68.0
Rouen	N. 49 26	E. 1 05	0.12 p.m.	39	12	29.72	754.8	29.76	756.0	43.0	6.1	88.5	1	1	2	11	2	12	2	.....	.....	.....	.....	8	4.37	110.9
Saint Lo	N. 49 06	W. 1 05	0.04 p.m.	134	41	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saint Maur	N. 48 48	E. 2 21	0.17 p.m.	102	49	29.63	752.5	29.79	756.7	42.3	5.7	87.9	2	1	4	4	12	4	2	1	1	.....	.....	9	2.42	61.5
Toulouse	N. 43 37	E. 1 27	0.14 p.m.	636	194	29.25	742.9	29.97	761.2	47.7	8.7	79.9	3	2	7	3	1	12	2	1	.....	.....	.....	7	2.85	72.3
Tours	N. 47 24	E. 0 41	0.11 p.m.	107	51	29.67	753.6	29.83	757.7	46.0	7.8	82.8	2	.....	2	7	10	2	2	6	.....	.....	.....	8	3.65	92.8
Versailles	N. 48 48	E. 2 07	0.16 p.m.	445	136	29.29	743.9	29.78	750.4	41.4	5.2	90.5	3	2	6	10	6	3	.....	.....	1	.....	.....	.....	2.73	69.3
Sub-Series.																												
St. Martin du Hinx	N. 43 35	W. 1 16	0.03 p.m.	131	40	29.79	756.7	29.94	760.5	50.7	10.4	77.5	1	1	12	4	3	.....	7	3	.....	.....	.....	7	10.25	260.4
GERMAN.																												
Ansbach	N. 49 18	E. 10 36	0.50 p.m.	1358	414	28.36	720 3	29.86	758.4	35.1	1.7	83.2	1	.....	4	7	.....	8	2	.....	9	.....	.....	7	4.09	103.8
Bamberg	N. 49 54	E. 10 54	0.51 p.m.	787	240	28.96	735.6	29.80	756.8	36.3	2.4	80.3	1	2	4	2	3	4	.....	1	14	.....	.....	7	2.93	74.4
Berlin	N. 52 30	E. 13 23	1.02 p.m.	164	50	29.60	751.7	29.78	756.4	35.4	1.9	84.5	.....	2	2	12	.....	8	5	2	.....	.....	.....	8	1.62	41.1
Breslau	N. 51 07	E. 17 02	1.17 p.m.	482	147	29.33	745.0	29.86	758.4	34.2	1.2	82.4	.....	1	7	4	2	8	3	2	4	.....	.....	8	1.68	42.7
Carlsruhe	N. 49 01	E. 8 25	0.42 p.m.	404	123	29.39	746.5	29.84	757.9	39.6	4.2	79.1	2	2	.....	16	2	2	2	5	.....	.....	.....	8	5.84	148.3
Cassel	N. 51 19	E. 9 28	0.46 p.m.	669	204	29.01	736.8	29.72	754.9	35.2	1.8	86.7	5	3	.....	4	13	4	.....	2	.....	.....	.....	8	3.30	83.8
Frankfort on M	N. 50 08	E. 8 41	0.43 p.m.	338	103	29.44	747.8	29.82	757.3	38.1	3.4	80.5	6	.....	2	3	11	4	3	2	.....	.....	.....	8	2.84	72.1
Friedrichshafen	N. 47 39	E. 9 29	0.46 p.m.	1355	413	28.52	721.8	29.89	759.3	37.4	3.0	85.7	2	3	7	5	5	3	3	3	.....	.....	.....	8	5.04	128.0
Hamburg	N. 53 33	E. 9 58	0.48 p.m.	85	26	29.69	754.0	29.77	756.2	32.5	0.3	92.7	2	.	1	8	.....	4	14	1	1	.....	.....	9	1.04	41.7
Kiel	N. 54 19	E. 10 04	0.48 p.m.	13	4	29.75	755.6	29.76	756.0	34.2	1.2	86.6	.....	.....	2	7	2	5	10	2	3	.....	.....	9	1.75	44.5
Leipsic	N. 51 20	E. 12 24	0.58 p.m.	390	119	29.39	746.4	29.82	757.5	34.7	1.5	83.0	3	.....	3	5	6	7	5	1	1	.....	.....	8	2.44	62.1
Magdeburg	N. 52 09	E. 11 37	0.54 p.m.	177	54	29.60	751.7	29.79	756.6	34.5	1.4	83.7	1	1	3	2	4	7	8	4	1	.....	.....	8	1.31	33.3
Memel	N. 55 43	E. 21 07	1.32 p.m.	39	12	29.89	759.3	29.94	760.4	26.6	— 3.0	85.8	2	4	1	1	4	8	8	2	1	.....	.....	8	1.37	34.7
Munich	N. 48 09	E. 11 34	0.54 p.m.	1732	528	27.99	710.9	29.84	757.9	34.3	1.3	81.3	3	8	5	1	1	5	1	6	.....	.....	.....	8	3.05	77.4
Neufahrwasser	N. 54 24	E. 18 40	1.25 p.m.	16	5	29.90	759.4	29.91	759.8	30.2	— 1.0	86.1	.....	2	2	5	3	14	3	2	.....	.....	.....	9	1.92	48.9
Neustadt	N. 49 21	E. 8 08	0.41 p.m.	479	146	29.28	743.6	29.80	756.8	39.2	4.0	88.8	1	.....	7	5	.....	.....	3	1	14	.....	.....	9	3.14	79.7
Stuttgart	N. 48 47	E. 9 11	0.45 p.m.	833	254	28.87	733.2	29.78	756.5	38.5	3.6	79.2	10	3	7	9	2	.....	.....	.....	.....	.....	.....	7	2.66	67.5
Wustrow	N. 54 21	E. 12 24	0.58 p.m.	23	7	29.80	756.8	29.82	757.5	32.0	0.0	92.1	.....	.....	3	5	2	9	6	6	.....	.....	.....	9	0.93	23.7
GREEK.																												
Athens	N. 37 58	E. 23 44	1.43 p.m	361	110	29.60	751.7	29.98	761.6	57.9	14.4	.....	13	3	4	6	5	.....	.....	.....	.....	.....	.....	5	2.54	64.5
INDIAN.																												
Kurachee	N. 24 47	E. 67 04	4.36 p.m.	49	15	30.01	762.2	30.06	763.5	77.0	25.0	67	.....	1	9	15	1	1	3	1	.....	.....	.....	4	0.20	5.1
Deesa	N. 24 16	E. 72 14	4.57 p.m.	466	142	29.49	749.1	29.96	760.9	81.9	27.7	32	5	11	6	6	1	1	.....	1	.....	.....	.....	1	0	0
Bombay	N 18 54	E. 72 49	5.00 p.m.	37	11	29.90	759.5	29.94	760.5	79.7	26.5	68	4	18	9	.....	.....	.....	.....	.....	.....	.....	.....	1	0	0
Poona	N. 18 28	E. 74 10	5.05 p.m.	1849	564	28.08	713.2	29.92	760.0	82.8	28.2	23	.....	1	2	2	1	4	17	4	.....	.....	.....	2	0.25	6.4
Trichinopoly	N. 10 50	E. 78 44	5.23 p.m.	275	84	29.67	753.6	29.95	760.8	79.7	26.5	65	2	2	.....	.....	.....	.....	5	19	3	.....	.....	6	1.90	48.3
Belgaum	N. 15 52	E. 74 42	5.07 p.m.	2550	777	27.38	695.6	29.92	759.9	78.0	25.6	34	1	.....	1	1	.....	1	15	12	.....	.....	.....	2	0.13	3.3
Lahore	N. 31 34	E. 74 20	5.05 p.m.	732	223	29.25	743.0	30.03	762.6	62.4	16.9	54	.....	1	.....	1	.....	.....	.....	.....	29	.....	.....	3	0	0
Roorkee	N. 29 52	E. 77 56	5.20 p.m.	887	270	29.06	738.1	29.99	761.7	65.5	18.6	53	.....	1	7	2	1	.....	.....	.....	20	.....	.....	4	0	0
Agra	N. 27 10	E. 78 05	5.20 p.m.	555	169	29.43	747.6	30.01	762.3	72.1	22.3	39	.....	11	8	.....	.....	.....	2	.....	10	.....	.....	1	0	0
Nagpur	N. 21 09	E. 79 11	5.24 p.m.	1025	312	28.93	734.7	29.98	761.5	76.5	24.7	39	.....	.....	.....	.....	1	.....	1	4	1	24	.....	1	0	0
Jubulpore	N. 23 09	E. 79 59	5.28 p.m.	1341	409	28 64	727.4	30.02	762.5	71.8	22.1	53	.....	.....	.....	.....	.....	.....	1	3	27	.....	.....	1	0	0
Lucknow	N. 26 50	E. 81 00	5.32 p.m.	369	113	29.61	752.0	30.00	761.9	69.1	20.6	48	1	1	.....	1	.....	.....	.....	.....	28	.....	.....	0	0	0
Alahabad	N. 25 26	E. 81 52	5.35 p.m.	307	94	29.67	753.6	29.99	761.8	63.0	17.2	71	.....	.....	.....	1	.....	1	.....	1	28	.....	.....	1	0	0
Patna	N. 25 37	E. 85 08	5.49 p.m.	183	56	29.81	757.2	30.01	762.1	67.2	19.6	62	2	6	21	.....	.....	1	.....	1	.....	.....	.....	1	0	0
Hazaribagh	N. 24 00	E. 85 24	5.50 p.m.	2007	612	27.93	709.5	30.01	762.2	63.5	17.5	54	6	22	3	.....	.....	.....	.....	.....	.....	.....	.....	1	0	0
Cuttack	N. 20 29	E. 85 54	5.52 p.m.	80	24	29.90	759.4	29.98	761.5	72.4	22.4	68	.....	.....	.....	2	.....	.....	.....	2	27	.....	.....	1	0	0
Calcutta	N. 22 33	E. 88 21	6.01 p.m.	21	6	29.95	760.8	29.98	761.4	68.8	20.4	73	11	11	3	.....	.....	.....	.....	1	5	.....	.....	1	0	0
Dhubri	N. 26 07	E. 89 50	6.08 p.m.	115	35	29.85	758.1	29.97	761.2	69.6	20.9	75	.....	.....	1	.....	.....	.....	2	2	26	.....	.....	1	0	0
Chittagong	N. 22 21	E. 91 50	6.15 p.m.	87	26	29.88	758.9	29.97	761.2	70.4	21.3	77	.....	3	9	4	.....	.....	1	1	13	.....	.....	3	0	0
Sibsagar	N. 26 59	E. 94 40	6.27 p.m.	333	102	29.66	753.2	30.00	762.1	64.3	17.9	88	1	1	.....	1	1	1	1	26	.....	.....	.....	4	0.67	17.0
Jeypore	N. 26 55	E. 75 50	5.05 p.m.	1431	436	28.54	725.0	30.02	762.4	72.7	22.6	51	1	16	3	4	.....	2	.....	4	1	.....	.....	3	0	0
Zanzibar	S. 6 10	E. 39 11	2.45 p.m.	23	7	29.85	758.2	.....	.....	84.2	29.0	68	5	2	1	3	6	1	3	9	1	.....	.....	5	2.42	61.5
Bellary	N. 15 09	E. 76 57	5.16 p.m.	1455	444	28.44	722.4	.....	.....	79.7	26.5	41	8	1	.....	.....	.....	3	16	3	.....	.....	.....	3	0	0

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for December, 1882.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
ITALIAN.	o ′	o ′																								
Udine	N. 46 04	E. 13 13	1.01 p.m.	381	116	29.49	749.1	29.91	759.7	44.6	7.0	78	2	2	1	.....	.....	4	3	6	13	.....	.....	7	4.63	117.5
Milan	N. 45 28	E. 9 11	0.45 p.m.	482	147	29.40	746.7	29.93	760.3	40.3	4.6	81	2	3	7	8	1	3	1	6	.....	.....	.....	7	6.20	157.6
Padua	N. 45 24	E. 11 53	0.56 p.m.	102	31	29.79	756.7	29.91	759.6	42.8	6.0	80	12	3	2	1	3	.....	2	5	3	.....	.....	7	1.91	48.6
Moncalieri	N. 45 00	E. 7 41	0.39 p.m.	846	258	28.99	736.4	29.93	760.3	39.4	4.1	86	3	10	2	.....	1	1	6	8	.....	.....	.....	7	4.09	103.8
Genoa	N. 44 24	E. 8 55	0.44 p.m.	157	48	29.68	753.8	29.87	758.8	48.9	9.4	64	7	.....	.....	.....	1	3	5	12	3	.....	.....	7	6.78	172.3
Mondovi	N. 44 23	E. 7 48	0.39 p.m.	1824	556	27.96	710.2	29.94	760.4	39.2	4.0	73	1	1	18	5	1	3	1	1	.....	.....	.....	5	4.30	109.3
Pesaro	N. 43 55	E. 12 53	1.00 p.m.	46	14	29.82	757.5	29.87	758.8	45.9	7.7	84	12	5	6	3	1	1	.....	3	.....	.....	.....	9	1.68	42.6
Florence	N. 43 46	E. 11 15	0.53 p.m.	240	73	29.63	752.6	29.89	759.2	49.6	9.8	73	.....	.....	3	13	1	2	3	9	.....	.....	.....	8	4.32	109.6
Leghorn	N. 43 33	E. 10 18	0.49 p.m.	79	24	29.73	755.1	29.82	757 3	52.3	11.3	72	1	1	5	3	6	....	5	10	.....	.....	.....	8	5.19	131.9
Rome	N. 41 54	E. 12 29	0.58 p.m.	164	50	29.71	754 7	29.89	759.2	53.8	12.1	69	16	.....	1	3	3	1	2	5	.....	.....	.....	7	4.26	108.3
Lecce	N. 40 22	E. 18 12	1.21 p.m.	236	72	29.71	754.5	29.96	761.0	55.9	13.3	74	3	4	4	3	5	8	2	2	.....	.....	.....	6	3.36	85.3
Cosenza	N. 39 19	E. 16 17	1.13 p.m.	840	256	29.07	738.3	29.97	761.3	53.4	11.9	76	1	.....	7	18	4	.....	.....	1	.....	.....	.....	7	10.42	264.6
Cagliari	N. 39 30	E. 9 00	0.45 p.m.	180	55	29.60	751.8	29.80	756.8	57.9	14.4	68	.....	15	1	3	1	8	.....	3	.....	.....	.....	6	4.58	116.2
Palermo	N. 38 07	E. 13 21	1.02 p.m.	236	72	29.69	754.2	29.95	760.7	60.4	15.8	54	.....	5	6	6	1	2	2	7	2	.....	.....	6	2.77	70.3
Syracuse	N. 37 03	E. 15 15	1.09 p.m.	72	22	29.89	759.3	29.94	760.4	59.5	15.3	69	.....	2	7	5	6	4	.....	7	.....	.....	.....	7	2.55	64.7
Sub-Series.																										
Naples	N. 40 52	E. 14 15	1.05 p.m.	489	149	29.39	746.6	29.92	760.0	55.2	12.9	72.1	1	3	5	4	3	2	2	11	.....	.....	.....	7	4.66	118.5
Stelvio	N. 46 32	E. 10 25	0.50 p.m.	8343	2543	21.92	556.7	.....	.....	20.1	—6.6	81.2	.....	.....	1	13	2	6	2	7	...	.....	.....	7	5.92	150.3
Valdobbia	N. 45 47	E. 7 51	0.40 p.m.	8360	2548	21.93	557.1	.....	.....	22.5	—5.3	67.2	5	.....	.....	1	.....	2	14	9	.....	.....	.....	7	11.30	287.0
JAPANESE.																										
Akita	N. 39 42	E.140 07	9.28 p.m.	32	10	30.02	762.5	30.05	763.3	33.2	0.7	82.5	1	14	2	.....	1	.....	.....	.....	13	.....	.....	9	8.86	225.1
Awomori	N. 40 51	E.140 45	9.31 p.m.	32	10	29.97	761.2	30.01	762.1	28.1	—2.2	83.6	1	2	17	3	6	.....	1	.....	1	10195	16407	8	5.62	142.6
Hakodate	N. 41 47	E.140 44	9.31 p.m.	10	3	29.90	760.9	29.97	761.2	26.9	—2.9	84.3	9	6	12	.....	.....	.....	2	1	1	11204	18127	8	2.65	67.2
Hamamatsu	N. 34 43	E.137 43	9.19 p.m.	26	8	30.10	764.4	30.13	765.2	40.5	4.7	73.5	.....	5	7	.....	...	.....	1	.....	18	.....	.....	1	0.27	6.8
Hiroshima	N. 34 20	E.132 27	8.58 p.m.	14	4	.....	.....	.....	.....	39.9	4.4	79.8	25	.....	3	1	.....	.....	.....	2	.....	4008	6450	4	0.40	10.1
Kanazawa	N. 36 33	E.136 40	9.14 p.m.	95	29	30.05	763.4	30.16	766.1	38.5	3.6	81.2	2	2	4	6	5	5	5	.....	2	6513	10482	8	11.56	293.7
Kioto	N. 35 01	E.135 46	9.11 p.m.	162	49	30.00	762.1	30.19	766.7	35.3	2.1	84.3	3	10	12	.....	4	.....	.....	.....	2	2134	3435	4	0.47	11.9
Nagasaki	N. 32 44	E.129 52	8.47 p.m.	189	58	30.06	763.4	30.27	768.8	42.7	5.9	74.9	8	3	1	1	1	2	1	6	8	3209	5200	5	3.12	79.4
Niigata	N. 37 55	E.139 03	9.24 p.m.	32	10	30.06	763.4	30.09	764.4	36.7	2.6	84.4	4	1	12	4	1	8	1	.....	.....	5813	9355	8	8.98	227.5
Nobiru	N. 38 23	E.141 12	9.32 p.m.	15	5	30.00	762.1	30.02	762.5	35.3	1.8	83.1	14	12	5	.....	.....	.....	.....	.....	.....	8451	13601	5	0.17	4.3
Numazu	N. 35 06	E.138 51	9.23 p.m.	32	10	30.02	762.4	30.05	763.3	44.1	6.7	71.4	4	1	6	.....	6	.....	10	1	3	.....	.....	3	0.46	11.8
Osaka	N. 34 42	E.135 30	9.10 p.m.	13	4	30.18	766.6	30.20	767.0	38.3	3.5	80.4	10	5	8	.....	2	.....	3	3	.....	5515	8875	4	0.66	16.6
Supporo	N. 43 04	E.141 23	9.33 p.m.	60	18	.....	.....	.....	.....	21.6	—5.7	75.7	.....	4	6	3	7	5	3	1	2	5804	9340	5	1.45	36.8
Tokei	N. 35 41	E.139 46	9.27 p.m.	69	21	29.97	761.2	30.05	763.3	39.3	4.0	73	20	5	3	3	.....	.....	.....	.....	.....	219	352	3	0.40	10.1
Wakayama	N. 34 14	E.135 09	9.09 p.m.	48	15	30.13	765.4	30.19	766.9	42.1	5.6	72.2	6	10	.....	.....	1	.....	7	5	2	4928	7930	5	0.55	14.1
MAURITIUS.																										
Mauritius	S. 20 06	E. 57 33	3.58 p.m.	181	55	29.93	760.3	30.00	762.0	80.4	26.9	68.0	4	3	3	1	.....	3	13	4	.....	.....	.....	6	4.83	122.6
MEXICAN.																										
Guanajuato	N. 21 01	W.100 48	5.24 a.m.	6759	2060	23.70	601.7	29.92	759.8	48.6	9.2	83	1	.....	1	6	2	2	.....	4	15	.....	.....	4	1.20	30.6
Leon	N. 21 07	W.101 35	5.22 a.m.	5901	1799	24.36	618.7	30.23	767.8	43.8	6.6	80	3	20	1	.....	.....	1	1	3	2	.....	.....	4	1.52	38.5
Mazatlan	N. 23 11	W.106 17	5.03 a.m.	249	76	29.74	755.5	29.99	761.8	67.1	19.5	73	1	6	.....	1	.....	1	11	11	.....	.....	.....	3	0.54	13.7
Mexico	N. 19 26	W. 99 00	5.32 a.m.	7490	2283	23.13	587.3	30.30	769.5	43.9	6.6	77	1	0	2	.....	.....	.....	.....	.....	22	.....	.....	4	0.58	14.7
Morelia	N. 19 42	W.101 06	5.22 a.m.	6247	1940	24.23	615.3	30.08	764.1	43.0	6.1	69	2	.....	.....	.....	6	15	4	4	.....	.....	.....	2	1.45	36.8
Pabellon,c	N. 22 04	W.102 04	5.20 a.m.	6312	1924	23.98	609.0	30.11	764.8	44.4	6.9	75	3	4	2	3	.....	.....	.....	1	13	.....	.....	2	0.59	15.0
Puebla	N. 19 02	W. 98 03	5.36 a.m.	7113	2168	23.42	594.7	30.28?	766.5?	54.9?	10.9?	51	.....	1	.....	.....	.....	1	1	.....	1	27	.....	3	0.68?	13.1?
Zacatecas	N. 22 44	W.102 20	5.18 a.m.	8100	2469	22.51	571.9	30.26	768.7	42.6	5.7	75	1	4	.....	12	1	3	1	9	.....	.....	.....	3	0.82	20.9
NETHERLANDS.																										
Flushing	N. 51 24	E. 3 35	0.22 p.m.	0	0	29.70	754.4	29.70	754.4	39.6	4.2	.....	.....	1	2	6	10	5	7	.....	.....	.....	.....	.....	3.00	76.3
Groningen	N. 53 12	E. 6 34	0.34 p.m.	?	?	29.67	753.5	29.72	754.9	36.3	2.4	.....	1	.....	4	4	11	3	7	1	.....	.....	.....	.....	1.26	32.0
Helder	N. 52 58	E. 4 45	0.27 p.m.	0	0	29.69	754.0	29.69	754.0	37.0	3.1	.....	1	1	3	3	6	9	8	.....	.....	.....	.....	.....	2.38	60.5
Hellevoetsluis	N. 51 49	E. 4 08	0.25 p.m.	0	0	29.70	754.4	29.70	754.4	38.3	3.5	90.8	1	2	1	7	4	5	6	3	2	.....	.....	.....	3.99	101.3
Utrecht	N. 52 05	E. 5 07	0.29 p.m.	43	13	29.68	753.8	29.72	755.0	38.1	3.4	89.9	.....	1	.....	5	9	8	7	1	.....	.....	.....	7	3.45	87.7
NORWEGIAN.																										
Bergen	N. 60 24	E. 5 20	0.29 p.m.	56	17	29.67	753.6	29.73	755.2	31.5	—0.3	69.5	1	.....	.....	2	7	14	5	.....	2	.....	.....	6	1.73	43.9
Brono	N. 65 28	E. 12 14	0.57 p.m.	34	10	29.77	756.2	29.81	757.2	28.4	—2.0	67.0	1	1	1	3	1	10	4	4	6	.....	.....	6	1.42	36.2
Christiania	N. 59 55	E. 10 45	0.51 p.m.	134	41	29.72	754.8	29.88	758.8	24.1	—4.4	87.9	5	1	.....	2	1	2	12	8	.....	.....	.....	8	1.38	35.1
Gjesvær	N. 71 07	E. 25 22	1.49 p.m.	23	7	29.81	757.1	29.83	757.7	24.1	—4.4	.....	.....	3	.....	2	3	12	3	5	3	.....	.....	6	.....	.....
Lodingen	N. 68 24	E. 16 01	1.12 p.m.	43	13	29.79	756.7	29.84	757.9	25.9	—3.4	70.7	7	.....	.....	2	1	3	0	4	8	.....	.....	4	2.20	55.8
PORTUGUESE.																										
Angra	N. 38 39	W. 27 14	10.19 a.m.	144	44	29.97	761.2	30.13	765.2	61.9	16.6	82.5	5	6	7	5	6	2	.....	.....	.....	.....	.....	5	7.56	192.1
Campo Major	N. 39 02	W. 0 59	11.40 a.m.	945	288	29.03	737.4	30.00	763.4	50.4	10.2	80.3	4	1	6	4	3	2	5	5	1	.....	.....	7	2.45	62.2
Funchal	N. 32 38	W. 16 55	11.00 a.m.	82	25	30.11	764.9	30.20	767.1	66.0	18.9	61.1	1	1	2	13	.....	4	3	1	6	.....	.....	4	1.25	31.8
Lisbon	N. 38 42	W. 9 08	11.31 a.m.	335	102	29.72	755.0	30.09	764.3	52.9	11.6	80.0	7	1	5	4	4	.....	3	6	1	.....	.....	7	5.70	144.9
Ponta Delgada	N. 37 45	W. 25 41	10.25 a.m.	66	20	30.10	764.6	30.17	766.4	63.9	17.7	75.3	4	6	7	2	6	1	1	.....	4	.....	.....	4	3.84	97.6
St. Paulde Loanda	S. 8 49	E. 13 07	1.00 p.m.	193	59	29.07	753.5	29.87	758.6	79.0	26.1	83.3	2	8	9	11	.....	.....	1	.....	.....	.....	.....	6	0.39	9.8
Serra da Estrella	N. 40 25	W. 7 35	11.37 a.m.	4728	1441	25.19	639.9	30.93	702.7	37.4	3.0	83.0	1	12	5	3	2	6	.....	2	.....	.....	.....	7	17.82	452.6
RUSSIAN.																										
Akmolinski *b*	N. 51 12	E. 71 23	4.54 p.m.	843?	306?	29.20	741.6	30.41	772.3	3.0	—16.1	83.6	2	....	4	7	5	2	6	.....	3	.....	.....	5	0.11	2.7
Archangel	N. 64 33	E. 40 32	2.50 p.m.	16	5	30.13	765.4	30.15	765.9	5.7	—14.6	88.0	.....	1	1	.....	11	2	13	2	1	.....	.....	9	0.41	10.5
Astrakhan	N. 46 21	E. 48 02	3.20 p.m.	68	21	30.20	768.6	30.18	766.7	30.0	—1.1	80.3	1	.....	6	3	.....	1	14	1	5	.....	.....	8	0.44	11.1
Barnaul	N. 53 20	E. 83 47	5.43 p.m.	459?	140?	30.02	762.5	30.00	777.1	—7.1	—21.7	78.0	.....	1	.....	11	1	...	2	6	10	.....	.....	4	1.39	35.2
Bielosersk	N. 60 02	E. 37 47	2.39 p.m.	430?	131?	29.08	753.9	30.19	766.9	10.6	—11.9	94.0	1	2	.....	1	10	3	8	1	5	.....	.....	8	1.15	29.2
Dorpat	N. 58 23	E. 26 43	1.55 p.m.	223	68	29.70	755.8	30.02	762.4	18.1	—7.7	97.3	.....	1	4	2	3	7	9	.....	5	.....	.....	8	1.90	48.2
Ekaterinburg	N. 56 49	E. 60 38	4.10 p.m.	894?	272?	29.36	745.7	30.44	773.1	0.5	—17.5	83.7	8	.....	7	.....	3	4	1	7	.....	.....	.....	8	0.68	17.2
Elissawetgrad *b*	N. 48 31	E. 32 17	2.17 p.m.	417?	127?	29.63	752.6	30.10	764.4	20.2	—3.2	85.0	6	.....	3	.....	3	2	7	.....	8	.....	.....	8	0.39	9.9
Irkutsk	N. 52 16	E.104 16	7.05 p.m.	1536	468	28.80	732.9	30.79	782.0	—17.9	—27.7	85.5	4	4	.....	.....	.....	.....	1	.....	22	.....	.....	4	0.11	2.7
Kasan	N. 55 47	E. 49 08	3.24 p.m.	249	76	29.98	761.5	30.28	769.0	10.0	—12.2	73.1	5	.....	1	1	8	4	7	3	2	.....	.....	9	0.47	12.0
Kem	N. 64 57	E. 34 39	2.26 p.m.	43	13	30.01	762.2	30.00	763.5	12.2	—11.0	91.8	2	2	1	6	5	3	3	3	6	.....	.....	8	0.53	13.5
Kertch	N. 45 21	E. 36 29	2.34 p.m.	182	6?	29.99	761.7	30.01	762.2	36.0	2.2	89.1	1	6	.....	.....	.....	.....	10	2	12	.....	.....	8	1.43	36.3
Kieff	N. 50 27	E. 30 30	2.10 p.m.	600	183	29.34	745.1	30.01	762.3	24.3	—4.3	87.8	3	5	3	2	3	12	1	2	.....	.....	.....	8	1.40	35.5
Libau	N. 56 31	E. 21 01	1.32 p.m.	20	6	29.89	759.2	29.91	759.8	26.4	—3.1	79.3	.....	1	2	2	2	5	11	.....	8	.....	.....	7	0.91	23.1
Lugan	N. 48 35	E. 39 20	2.45 p.m.	188?	57?	29.86	758.4	30.08	764.0	22.8	—5.1	80.9	1	2	5	3	4	.....	13	1	2	.....	.....	8	0.83	21.1
Moscow	N. 55 46	E. 37 40	2.39 p.m.	448	136	29.62	752.4	30.15	765.8	12.4	—10.9	85.8	4	3	1	1	6	5	4	1	6	.....	.....	7	1.41	35.9
Nikolaiev *a*	N. 46 58	E. 31 58	2.16 p.m.	62	19	30.02	762.6	30.10	764.4	30.6	—0.8	89.2	6	.....	.....	2	6	2	7	2	5	.....	.....	7	0.70	17.8
Nikolaievsk *a*	N. 53 08	E.140 45	9.31 p.m.	75?	23?	29.74	755.5	29.83	757.7	—7.1	—21.7	72.5	.....	4	12	.....	.....	.....	.....	.....	14	.....	.....	7	0.90	22.8
Pekin	N. 39 57	E.116 28	7.54 p.m.	123?	38?	30.28	709.2	30.42	772.8	22.8	—5.1	46.5	.....	13	.....	1	.....	2	.....	.....	15	.....	.....	2	0.02	0.5
Petrozavodsk	N. 61 47	E. 34 23	2.26 p.m.	180?	55?	29.86	758.5	30.08	764.6	12.7	—10.7	87.0	5	3	1	4	7	4	3	.....	4	.....	.....	8	2.14	54.4
St. Petersburg	N. 59 56	E. 30 16	2.09 p.m.	15	5	30.04	762.9	30.05	763.3	12.6	—10.8	89.6	.....	2	3	4	9	6	6	1	.....	.....	.....	8	0.89	22.7
Semipalatinsk	N. 50 24	E. 80 13	5.29 p.m.	607?	185?	29.88	758.9	30.03	778.0	—1.8	—18.8	79.1	2	.....	3	1	.....	3	19	.....	3	.....	.....	5	0.13	3.4
Staroi Bykhov	N. 53 31	E. 30 16	2.09 p.m.	423?	129?	29.60	751.8	30.09	764.3	21.4	—5.9	81.9	.....	1	2	2	1	10	12	2	1	.....	.....	10	1.40	35.5
Tashkend	N. 41 19	E. 69 16	4.45 p.m.	1493?	455?	28.59	726.1	30.21	767.4	41.9	5.5	68.2	2	1	.....	.....	.....	1	.....	1	20	.....	.....	5	1.38	35.1
Tiflis	N. 41 43	E. 44 47	3.07 p.m.	1343	409	28.67	728.3	30.11	764.9	48.4	9.1	58.0	9	5	1	.....	2	4	2	.....	8	.....	.....	5	0.03	0.8
Tomsk *b*	N. 56 30	E. 84 58	5.48 p.m.	256?	78?	30.25	768.4	30.58	776.6	—13.2	—25.1	81.6	.....	2	.....	.....	10	1	3	1	12	.....	.....	5	.....	.....
Vladivostock	N. 43 09	E.132 00	8.56 p.m.	59?	18?	30.10	764.5	30.17	766.2	10.4	—12.0	71.4?	11	4	.....	.....	.....	2	1	7	6	.....	.....	3	0.03	0.8
Warsaw	N. 52 13	E. 21 02	1.32 p.m.	392	119	29.46	748.4	29.91	759.6	29.7	—1.3	85.4	1	2	4	3	9	7	4	1	.....	.....	.....	9	.....	.....
Wilna	N. 54 41	E. 25 18	1.49 p.m.	388	118	29.55	750.6	30.00	761.9	25.3	—3.7	80.2	1	1	1	1	9	9	9	.....	.....	.....	.....	9	0.81	20.6
Yeniseisk	N. 58 27	E. 92 06	6.16 p.m.	262?	80?	30.38	771.6	30.72	780.3	—23.4	—30.8	83.7	.....	1	3	.....	.....	3	4	.....	20	.....	.....	3	0.62	15.7
SCOTTISH.																										
Monach Light H.	N. 57 31	W. 7 42	11.37 a.m.	150	46	.....	.....	29.56	750.8	42.1	5.6	90.4	1	2	4	2	5	5	8	4	.....	.....	.....	8	6.60	167.6
North Unst	N. 60 51	W. 0 53	0.04 p.m.	230	70	.....	.....	29.62	752.3	.....	.....	.....	3	4	1	.....	9	6	5	3	.....	.....	.....	8	.....	.....
SPANISH.																										
Barcelona	N. 41 23	E. 2 11	0.16 p.m.	98	30	29.80	757.0	29.91	759.7	54.7	12.6	67	1	5	10	5	1	1	7	1	.....	2175	3500	4	1.05	26.6
Bilbao	N. 43 15	W. 2 59	11.56 a.m.	52	16	29.91	759.7	29.97	761.2	53.4	11.9	75	.....	10	1	1	3	14	.....	.....	2	2033	4237	7	6.84	173.8
Burgos	N. 42 20	W. 3 46	11.53 a.m.	2821	860	27.01	686.0	30.07	763.8	39.9	4.4	84	5	1	10	3	12	.....	.....	.....	.....	5282	8500	8	3.04	77.2
Madrid	N. 40 25	W. 3 42	11.53 a.m.	2152	656	27.78	705.5	30.07	763.8	42.6	5.9	81.0	2	3	2	1	1	3	2	9	8	4920	7918	4	3.35	85.2

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for December, 1882.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
SPANISH.—Con.	° ′	° ′																								
Murcia	N. 37 59	W. 1 10	0.03 p.m.	141	43	29.82	757.5	29.97	761.2	51.4	10.8	75.0	1	6	7	7	6	.....	2	2	1	1725	2776	6	2.91	73.8
Oviedo	N. 43 23	W. 5 49	11.45 a.m.	800	244	29.08	738.5	29.95	760.8	47	8.4	72	2	1	.....	.....	7	8	13	.....	.....	3833	6168	8	3.22	81.8
Santiago	N. 42 53	W. 8 28	11.34 a.m.	863	263	29.03	737.3	29.93	760.3	49.8	9.9	85.8	2	3	2	10	3	2	1	1	6	6851	11026	8	9.36	237.7
Sub-Series.																										
Manilla	N. 14 35	E. 120 56	8.12 p.m.	54	16	29.86	758.5	29.92	760.0	77.6	25.3	83.0	18	1	1	.....	1	.....	4	6	.....	.....	.....	5	4.03	102.4
San Fernando	N. 36 28	W. 6 13	11.43 a.m.	95	29	29.99	761.8	30.09	764.4	55.8	13.2	78.2	.....	9	6	.....	1	1	2	5	7	.....	.....	7	6.51	165.4
San Juan de Porto Rico	N. 18 30	W. 66 10	7.44 a.m.	82	25	29.95	760.7	30.04	763.0	76.8	24.9	86	.....	.....	.....	.....	.....	3	5	6	17	.....	.....	3	2.00	50.8
Tuguegarao	N. 17 37	E. 121 30	8.14 p.m.	125	38	29.87	758.8	30.00	762.1	72.7	22.6	91.9	15	11	1	.....	.....	1	1	.....	2	.....	.....	8	3.55	90.2
SWEDISH.																										
Haparanda	N. 65 47	E. 24 03	1.44 p.m.	29	9	29.98	761.6	30.02	762.6	9.0	−12.8	98	5	1	.....	2	5	4	3	8	3	.....	.....	8	0.41	10.3
Umea	N. 63 50	E. 20 17	1.29 p.m.	39	12	29.93	760.1	29.98	761.4	15.3	−9.3	92	3	6	1	3	2	3	1	8	4	.....	.....	8	2.11	53.7
Hernosand	N. 62 32	E. 17 57	1.20 p.m.	46	14	29.90	759.5	29.95	760.8	21.0	−6.1	88	1	.....	.....	3	1	2	3	6	15	.....	.....	8	1.99	50.5
Stockholm	N. 59 20	E. 18 04	1.20 p.m.	144	44	29.72	754.8	29.89	759.5	26.2	−3.2	87	3	5	3	1	4	7	3	2	3	.....	.....	9	1.50	38.1
Wisby	N. 57 39	E. 18 19	1.21 p.m.	52	16	29.79	756.7	29.85	758.2	30.2	−1.0	87	1	4	.....	1	6	10	8	1	.....	.....	.....	8	1.90	48.2
Sub-Series.																										
Upsala	N. 59 51	E. 17 37	1.19 p.m.	79	24	29.80	757.0	29.89	759.2	23.4	−4.8	95.1	2	7	2	.....	3	7	5	5	.....	.....	.....	9	1.27	32.2
SWISS.																										
Geneva	N. 46 12	E. 6 08	0.33 p.m.	1338	408	28.48	723.4	29.05	760.7	39.0	3.9	80.0	2	.....	3	8	9	4	3	2	.....	.....	.....	8	5.14	130.5
TURKISH.																										
Constantinople	N 41 00	E. 28 59	2.04 p.m.	230	70	.....	.....	30.02	762.6	51.6	10.9	71	8	1	3	9	1	1	2	6	.....	.....	.....	7	2.56	65.1
Valona	N. 40 27	E. 19 27	1.26 p.m.	105	32	.....	.....	29.98	761.6	56.7	13.7	.....	1	5	3	3	8	7	.....	4	.....	.....	.....	5	0.38	9.6
Sub-Series.																										
Beirut	N. 33 54	E. 35 28	2.30 p.m.	111	34	.....	.....	30.03	762.8	65.5	18.6	66	6	3	5	8	.....	1	1	5	2	.....	.....	5	6.36	161.5
UNITED ST., TES.																										
Albany	N. 42 39	W. 73 45	7.13 a.m.	75	23	30.01	762.2	30.10	764.5	29.7	−1.3	69.5	7	11	4	2	6	.....	.....	1	.....	4055	6526	9	2.24	56.9
Alpena	N. 45 05	W. 83 30	6.34 a.m.	609	185	29.34	745.2	30.05	763.3	22.9	−5.1	85.1	2	6	13	3	4	2	1	.....	.....	7307	11759	9	2.44	62.0
Apache, Fort	N. 33 48	W. 109 57	4.48 a.m.	5050	1539	25.09	637.3	30.17	766.3	23.9	−4.5	62.4	.....	1	4	22	.....	.....	.....	4	.....	4027	6481	1	0.23	5.8
Assinnaboine, Ft.	N. 48 32	W. 109 42	4.49 a.m.	2710	826	27.18	690.4	30.21	767.3	18.7	−7.4	63.5	.....	1	4	22	.....	.....	.....	4	.....	8011	12570	4	1.30	34.5
Atlanta	N. 33 45	W. 84 23	6.31 a.m.	1131	345	28.99	736.3	30.22	767.6	35.0	1.7	78.0	.....	10	8	1	1	.....	9	2	.....	6714	10805	5	4.37	111.0
Atlantic City	N. 39 22	W. 74 25	7.10 a.m.	13	4	30.12	765.0	30.13	765.3	30.5	−0.8	74.6	6	8	8	3	3	1	.....	2	.....	6354	10225	5	3.37	85.6
Augusta	N. 33 28	W. 81 54	6.40 a.m.	183	56	30.03	762.7	30.23	767.8	38.6	3.7	80.9	2	7	2	1	1	.....	2	5	11	2144	3450	5	4.45	113.0
Baltimore	N. 39 18	W. 76 37	7.02 a.m.	45	14	30.14	765.5	30.19	766.8	33.2	0.7	70.7	4	13	6	2	2	1	1	1	1	4439	7144	5	1.70	43.2
Barnegat	N. 39 46	W. 74 06	7.12 a.m.	20	6	30.10	764.5	30.12	765.0	31.5	−0.3	80.1	7	7	11	4	1	.....	.....	.....	.....	10573	17015	5	3.36	85.3
Behring Id	N. 55 12	E. 165 55	11.12 p.m.	20	6	29.52	749.8	29.54	750.3	27.3	−2.6	.....	5	2	1	3	4	4	7	3	2	10584	17033	8	2.21	56.1
Bennett, Fort	N. 44 43	W. 100 39	5.26 a.m.	1510	457	28.50	723.9	30.26	768.6	13.3	−10.4	80.3	.....	11	.....	.....	.....	4	.....	1	15	3237	5209	5	0.05	1.3
Benton, Fort	N. 47 50	W. 110 40	4.45 a.m.	2700	823	27.22	691.4	30.22	767.6	20.9	−6.2	66.4	.....	1	.....	13	.....	.....	2	3	12	4662	7503	4	1.00	25.4
Bismarck *a*	N. 46 47	W. 100 38	5.26 a.m.	1694	516	28.23	717.0	30.24	768.1	8.1	−13.3	80.9	2	12	2	.....	2	2	5	.....	5	5081	9142	3	0.43	10.9
Block Id	N. 41 10	W. 71 36	7.22 a.m.	27	8	30.05	763.3	30.08	764.0	32.8	0.4	80.0	10	8	4	1	2	.....	1	2	3	10407	16748	5	3.57	90.7
Boise City	N. 43 37	W. 116 08	4.24 a.m.	2750	838	27.33	694.2	30.31	769.9	23.2	−4.9	90.0	5	7	8	.....	1	2	1	3	4	2276	3663	7	2.20	55.9
Boston	N. 42 21	W. 71 04	7.24 a.m.	142	43	29.89	759.2	30.05	763.3	28.3	−2.1	75.1	1	10	12	3	1	2	.....	2	.....	7828	12598	5	2.05	67.3
Brownsville	N. 25 53	W. 97 26	5.38 a.m.	43	13	30.05	763.3	30.10	764.5	55.4	13.0	85.8	12	.....	.....	.....	.....	6	2	.....	4	7	6128	9862	4	2.38	60.5
Buffalo	N. 42 53	W. 78 53	6.52 a.m.	696	212	29.29	744.0	30.09	764.3	26.3	−3.2	83.7	.....	2	4	14	2	5	1	3	.....	9948	11610	9	3.39	86.1
Buford, Fort *a*	N. 48 00	W. 103 56	5.12 a.m.	1900	579	28.00	711.2	30.24	768.1	.....	.....	.....	.....	4	5	4	8	2	4	1	2	5452	8774	4	0.51	13.0
Burlington	N. 44 29	W. 73 13	7.15 a.m.	268	82	29.74	755.4	30.05	763.3	22.6	−5.2	79.7	5	1	3	2	12	2	2	4	.....	6084	9789	9	1.60	40.6
Cairo	N. 37 00	W. 89 10	6.11 a.m.	377	115	29.79	756.7	30.21	767.3	33.9	1.1	81.0	10	.....	2	5	6	3	.....	3	2	6276	10100	6	2.05	67.3
Campo	N. 32 37	W. 116 25	4.22 a.m.	2500	762	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Henry	N. 36 56	W. 76 00	7.04 a.m.	16	5	30.16	766.1	30.18	766.6	37.2	2.9	75.8	6	9	2	6	4	.....	1	3	.....	9455	15216	6	5.67	144.0
Cape May	N. 38 56	W. 74 58	7.08 a.m.	27	8	30.12	765.0	30.15	765.8	35.7	2.1	76.3	3	13	6	2	3	1	1	2	.....	12901	20762	5	3.88	98.6
Cape Mendocino	N. 40 26	W. 124 24	3.50 a.m.	637	194	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cedar Keys	N. 29 08	W. 83 02	6.36 a.m.	22	7	30.15	765.8	30.17	766.3	50.8	10.4	81.7	7	6	3	.....	.....	5	3	7	.....	6561	10559	6	3.23	82.0
Champaign	N. 40 08	W. 88 14	6.15 a.m.	767	234	29.28	743.7	30.14	765.5	24.2	−4.3	68.2	.....	10	4	10	1	6	.....	.....	.....	9096	14638	8	2.21	56.1
Charleston *a*	N. 32 47	W. 79 56	6.48 a.m.	52	16	30.12	765.0	30.18	766.6	44.1	6.7	84.0	8	5	3	8	.....	.....	1	5	.....	5735	9229	4	3.99	101.3
Charlotte	N. 35 13	W. 80 51	6.44 a.m.	808	246	29.29	744.0	30.18	766.6	32.6	0.3	80.5	6	4	2	4	2	1	4	6	2	3332	5362	4	4.91	124.7
Chattanooga	N. 35 04	W. 85 15	6.27 a.m.	783	239	29.37	746.0	30.23	767.8	33.3	0.7	70.9	2	9	1	2	3	3	1	5	5	4071	7517	5	2.61	66.3
Cheyenne	N. 41 08	W. 104 48	5.09 a.m.	6089	1856	23.97	608.8	30.25	768.3	24.9	−3.9	56.1	5	14	5	4	.....	.....	.....	2	1	7529	12100	4	0.10	2.5
Chicago	N. 41 52	W. 87 38	6.18 a.m.	661	201	29.36	745.7	30.12	765.0	23.5	−4.7	77.3	.....	5	10	9	2	5	.....	.....	.....	6377	10262	6	1.99	50.5
Chincoteague	N. 37 55	W. 75 23	7.06 a.m.	18	5	30.14	765.5	30.16	766 1	34.3	1.3	79.9	4	11	5	2	3	2	.....	4	.....	7993	12863	6	4.81	122.2
Cincinnati	N. 39 06	W. 84 30	5.30 a.m.	620	189	29.50	749.3	30.20	767.1	31.6	−0.2	76.2	2	8	2	5	2	2	3	4	3	4220	6791	6	2.39	60.7
Cleveland	N. 41 30	W. 81 42	6.41 a.m.	690	210	29.36	745.7	30.15	765.8	25.3	−3.7	86.1	.....	2	8	6	8	6	.....	1	.....	8167	13143	9	2.41	61.2
Coleman City	N. 31 53	W. 99 18	5.31 a.m.	1709	521	28.31	719.1	30.21	767.3	35.0	1.7	84.8	9	5	1	5	3	3	1	1	3	7183	11560	4	0.02	15.7
Columbus	N. 39 58	W. 83 00	6.36 a.m.	805	245	29.25	742.9	30.16	766.1	28.7	−1.8	74.1	1	1	10	4	9	1	4	1	.....	6501	10462	9	2.28	57.9
Concho, Fort	N. 31 25	W. 100 24	5.26 a.m.	1900	579	28.18	715.8	30.20	767.1	34.9	1.6	77.2	6	2	6	5	5	1	.....	.....	6	7455	11997	3	0.55	14.0
Custer, Fort	N 45 42	W. 107 34	4.58 a.m.	3040	927	26.86	682.2	30.26	768.6	20.9	−6.2	71.7	4	4	4	4	.....	1	13	1	.....	5322	8564	5	1.19	30.2
Davenport	N. 41 30	W. 90 38	6.06 a.m.	615	187	29.44	747.8	30.15	765.8	25.2	−3.8	71.2	5	6	5	3	3	5	1	2	1	6349	10218	8	1.78	45.2
Davis, Fort	N. 30 38	W. 103 56	5.12 a.m.	4940	1506	25.24	641.1	30.18	766.6	33.1	0.6	73.4	1	4	.....	2	1	.....	.....	1	22	4041	6503	2	0.02	0.5
Dayton	N. 46 19	W. 117 56	4.16 a.m.	1660	506	28.35	720.1	30.18	766.6	35.9	2.2	86.4	2	.....	1	16	7	1	.....	4	.....	5076	8169	6	7.12	180.8
Deadwood	N. 44 23	W. 103 43	5.13 a.m.	4600	1402	25.32	643.1	30.30	769.6	23.5	−4.7	83.0	.....	1	1	.....	2	1	7	10	9	2226	3582	5	2.57	65.3
Del. Breakwater	N. 38 48	W. 75 10	7.07 a.m.	20	6	30.14	765.5	30.16	766.1	33.4	0.8	79.5	4	11	4	6	1	1	1	3	.....	11809	19004	5	3.12	79.2
Denison	N. 33 48	W. 96 32	5.42 a.m.	767	234	29.33	745.0	30.18	766.6	37.4	3.0	78.1	8	4	2	5	6	1	.....	3	2	5866	9344	4	1.99	50.5
Denver	N. 39 45	W. 105 00	5.08 a.m.	5294	1614	24.71	627.6	30.23	767.8	29.3	−1.5	63.2	2	3	5	1	11	4	2	.....	3	4261	6857	2	0.73	18.5
Des Moines	N. 41 35	W. 93 37	5.54 a.m.	849	259	29.19	741.4	30.17	766.3	21.5	−5.8	72.2	9	7	3	4	1	3	2	2	.....	4855	7813	7	2.50	63.5
Detroit	N. 42 20	W. 83 03	6.36 a.m.	661	201	29.36	745.7	30.12	765.0	29.6	−1.3	83.1	2	3	8	6	6	3	2	1	.....	7772	12508	8	1.50	38.1
Dodge City	N. 37 45	W. 100 00	5.28 a.m.	2512	766	27.45	697.2	30.25	768.3	22.2	−5.4	73.6	13	2	7	1	4	.....	.....	.....	4	6766	10889	3	0.11	2.8
Dubuque	N. 42 30	W. 90 44	6.05 a.m.	665	203	29.37	746.0	30.14	765.5	21.1	−6.1	69.5	1	7	7	1	3	4	2	.....	6	2917	4694	7	1.79	45.5
Duluth	N. 46 48	W. 92 06	6.00 a.m.	644	184	29.33	745.0	30.14	765.5	13.6	−10.2	79.0	3	9	6	6	5	1	1	.....	.....	6042	9724	7	1.11	28.2
Eagle Pass	N. 28 44	W. 100 29	5.26 a.m.	780	238	29.36	745.7	30.20	767.1	40.9	4.9	73.6	1	11	.....	.....	.....	2	3	1	13	3747	6030	3	0.09	2.3
Eagle Rock	N. 43 32	W. 111 55	4.40 a.m.	4650	1415	25.35	643.9	30.27	768.8	19.2	−7.1	81.3	10	.....	.....	16	.....	.....	2	.....	3	7463	12010	4	1.24	31.5
Eastport	N. 44 54	W. 66 59	7.40 a.m.	61	18	29.91	759.7	29.98	761.5	22.3	−5.4	79.1	6	8	6	4	3	1	.....	3	.....	8545	13751	7	2.80	71.1
Elliott, Fort	N. 35 30	W. 100 21	5.27 a.m.	2050	808	27.27	692.6	30.24	768.1	25.4	−3.7	64.7	12	5	1	2	2	1	.....	3	.....	7511	12088	2	0.40	10.2
El Paso	N. 31 47	W. 106 30	5.02 a.m.	3760	1146	26.33	668.8	30.19	766.8	33.1	0.6	71.2	.....	9	6	1	.....	1	.....	4	4	7511	12088	2	0.40	10.2
Erie	N. 42 07	W. 80 05	6.48 a.m.	681	208	29.33	745.0	30.10	764.5	27.9	−2.3	80.4	1	4	4	12	8	1	.....	2	12	3443	5541	1	0	0
Escanaba	N. 45 48	W. 87 05	6.20 a.m.	612	186	29.34	745.2	30.06	763.5	21.4	−5.9	83.1	5	4	8	2	3	3	1	.....	5	6008	9765	8	1.51	39.1
Fredericksburg	N. 30 17	W. 98 52	5.32 a.m.	1700	518	28.37	720.6	30.19	766.8	42.1	5.6	85.9	8	1	7	6	1	1	1	2	4	5278	8494	4	0.90	22.9
Galveston	N. 29 18	W. 94 47	5.49 a.m.	48	15	30.09	764.3	30.14	765.5	55.0	12.8	81.5	3	2	1	3	2	8	3	9	.....	9842	15839	4	3.78	96.0
Grand Haven	N. 43 05	W. 86 18	6.23 a.m.	620	189	29.36	745.7	30.07	763.8	27.0	−2.8	82.1	1	1	9	4	4	3	2	5	2	8757	14093	10	2.70	70.1
Grant, Fort	N. 32 39	W. 109 57	4.48 a.m.	4860	1481	25.28	642.1	30.16	766.1	35.3	1.8	69.5	5	2	1	.....	.....	.....	.....	6	15	4142	6666	1	0.17	4.3
Hatteras	N. 35 15	W. 75 40	7.05 a.m.	19	6	30.15	765.8	30.17	766.3	42.8	6.0	82.9	6	5	3	1	3	1	1	11	.....	12279	19761	6	6.80	174.2
Helena	N. 46 34	W. 112 04	4.40 a.m.	4100	1250	25.81	655.6	30.19	766.8	24.2	−4.3	77.7	.....	6	.....	12	.....	.....	.....	.....	13	4410	7097	6	0.48	12.2
Henrietta	N. 33 46	W. 98 12	5.35 a.m.	980	300	29.13	739.9	30.21	767.3	33.5	0.8	82.1	9	4	.....	2	5	3	.....	1	7	5105	8216	4	0.06	1.5
Huron	N. 44 21	W. 98 09	5.35 a.m.	1305	398	28.69	728.7	30.23	767.8	11.9	−11.2	63.2	4	16	1	.....	.....	9	1	...	.....	6340	10364	6	0.23	5.8
Indianapolis	N. 39 46	W. 86 10	6.23 a.m.	753	229	29.30	744.2	30.15	765.8	27.4	−2.6	77.7	....	9	5	7	1	7	1	1	.....	4830	7773	7	2.53	64.3
Indianola	N. 28 32	W. 96 31	5.42 a.m.	26	8	30.10	764.5	30.13	765.3	54.2	12.3	82.7	7	1	2	3	3	3	7	2	10200	16512	4	2.20	57.4
Jacksboro *a*	N. 33 12	W. 98 10	5.35 a.m.	1120	341	28.98	736.1	30.22	767.6	35.7	2.1	65.6	14	1	.....	5	4	3	.....	2	1	4914	7908	3	0.16	4.1
Jacksonville	N. 30 20	W. 81 39	6.42 a.m.	43	13	30.14	765.5	30.19	766 8	49.7	9.8	83.7	5	6	3	1	1	2	1	1	11	2444	3933	5	4.34	110.2
Keogh, Fort	N. 46 22	W. 105 56	5.04 a.m.	2372	723	27.52	699.0	30.22	767.6	16.0	−8.6	75.6	3	4	4	4	.....	.....	3	2	11	4147	6642	4	0.37	9.4
Keokuk	N. 40 22	W. 91 26	6.02 a.m.	618	188	29.45	748.0	30.16	766.1	24.6	−4.1	79.1	1	7	8	2	4	3	3	2	1	5237	8428	6	1.75	44.4
Key West	N. 24 34	W. 81 49	6.41 a.m.	20	6	30.07	763.8	30.09	764.3	67.7	19.8	86.6	6	2	.....	.....	.....	4	3	14	2	7990	12858	4	1.92	48.8
Kittyhawk	N. 36 00	W. 75 42	7.05 a.m.	22	7	30.17	766.3	30.19	766.8	39.6	4.2	78.2	2	7	1	5	1	1	2	12	.....	11719	18860	5	4.72	119.9
Knoxville	N. 35 56	W. 83 58	6.32 a.m.	980	299	29.16	740.7	30.24	768.1	29.3	−1.5	84.8	7	2	2	.....	.....	1	3	13	3	3830	6164	5	2.47	62.7
La Crosse	N. 43 49	W. 91 15	6.03 a.m.	725	221	29.28	743.7	30.13	765.3	17.0	−8.3	75.0	7	4	7	3	3	4	2	.....	1	5391	8676	7	1.13	28.7
Leavenworth	N. 39 19	W. 94 57	5.48 a.m.	842	256	29.24	742.7	30.20	767.1	27.4	−2.6	81.2	6	10	.....	1	7	.....	3	.....	4	5211	8386	6	1.13	28.7
Lewiston	N. 46 28	W. 117 05	4.20 a.m.	780	238	29.32	744.7	30.20	767.1	34.7	1.5	82.7	2	.....	2	.....	6	1	17	3	.....	2395	3854	6	4.88	123.9
Little Rock *a*	N. 34 45	W. 92 06	6.00 a.m.	298	91	29.85	758.2	30.18	766.6	38.5	3.6	76.0	6	4	1	2	2	1	1	2	11	3892	6203	5	1.33	33.8
Los Angeles	N. 34 03	W. 118 15	4.15 a.m.	371	113	29.70	754.4	30.10	764.5	48.1	8.9	61.5	3	2	.....	2	.....	.....	.....	2	24	.....	4384	7055	2	0.08	2.0
Louisville	N. 38 15	W. 85 45	6.25 a.m.	530	162	29.56	750.8	30.16	766.1	34.2	1.2	69.8	3	7	3	8	5	4	2	2	.....	6167	9925	7	1.99	50.5
Lynchburg	N. 37 25	W. 79 09	6.52 a.m.	652	199	29.46	748.3	30.19	766.8	31.2	−0.4	69.5	1	6	3	2	2	.....	1	2	14	2284	3676	5	3.04	77.2

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea		Result of Simultaneous Observations for December, 1882.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
U. S.—Continued.	° ′	° ′																								
Mackinaw City	N. 45 47	W. 84 39	6.30 a.m.	605	184	29.35	745.5	30.05	763.3	25.0	—3.9	81.5	2	13	1	1	4	3	2	3	2	9397	15123	9	3.94	100.1
Macon, Fort	N. 34 42	W. 76 40	7.01 a.m.	11	3	30.16	766.1	30.17	766.3	40.5	4.7	81.7	8	10	3	2	1	1	.....	6	.....	8225	13237	6	4.69	119.1
Madison	N. 43 05	W. 89 24	6.10 a.m.	949	289	29.03	737.3	30.13	765.3	19.3	—7.1	78.5	3	9	6	3	1	6	2	1	.....	6853	11029	7	2.03	51.6
Maginnis Fort	N. 47 12	W. 109 10	4.51 a.m.	4340	1324	25.50	647.7	30.04	763.0	25.2	—3.8	54.9	1	11	15	3	.....	.....	.....	1	.....	10953	17627	5	1.03	26.2
McKavett, Fort *f*	N. 30 48	W. 100 07	5.28 a.m.	2240	683	27.88	708.1	30.26	768.6	34.4	1.3	80.0	6	2	2	5	6	.....	.....	2	2	4235	6815	4	0.28	7.1
Marquette	N. 46 34	W. 87 24	6.18 a.m.	673	205	29.25	742.9	30.03	762.7	22.6	—5.2	73.0	.....	12	9	3	1	3	3	.....	.....	7500	12070	8	2.55	64.8
Memphis	N. 35 09	W. 90 03	6.08 a.m.	321	98	29.85	758.2	30.21	767.3	37.3	2.9	79.0	.....	7	3	1	3	7	.....	2	8	3385	5448	6	1.78	45.2
Milwaukee	N. 43 02	W. 87 54	6.16 a.m.	697	212	29.29	744.0	30.10	764.5	22.8	—5.1	78.5	.....	6	12	7	2	2	1	.....	1	8940	14397	7	1.07	42.4
Missoula, Fort	N. 46 50	W. 114 07	4.32 a.m.	3140	957	26.79	680.5	30.25	768.3	24.3	—4.3	73.4	6	8	3	2	.....	2	1	2	7	2255	3629	6	0.95	24.1
Mobile	N. 30 41	W. 88 02	6.16 a.m.	41	12	30.14	765.5	30.18	766.6	43.4	6.3	85.0	13	5	1	2	1	1	1	5	2	4458	7174	4	5.84	148.3
Montgomery	N. 32 23	W. 86 18	6.23 a.m.	219	66	29.96	761.0	30.20	767.1	38.3	3.5	84.2	.....	8	1	1	.....	1	3	5	12	3315	5335	4	3.88	98.6
Moorhead *a*	N. 46 52	W. 96 44	5.41 a.m.	923	281	29.09	738.9	30.20	767.1	1.3	—17.1	84.4	11	4	2	.....	5	6	.....	1	1	8398	13515	5	1.37	34.8
Morgantown	N. 39 40	W. 79 50	6.49 a.m.	963	293	29.13	739.9	30.20	767.1	31.0	—0.6	78.3	1	3	2	15	2	3	1	2	2	5518	8880	6	1.92	48.8
Mt. Washington	N. 44 16	W. 71 18	7.23 a.m.	6279	1914	23.44	595.4	30.07	763.8	9.3	—12.6	86.0	2	19	3	1	3	.....	1	1	1	23411	37676	4	2.64	67.1
Nashville	N. 36 10	W. 86 47	6.21 a.m.	597	154	29.58	751.3	30.19	766.8	33.7	0.9	84.2	7	3	3	5	1	5	4	1	2	5252	8452	6	1.46	37.1
New Haven	N. 41 18	W. 72 56	7.16 a.m.	107	32	29.97	761.2	30.09	764.3	25.6	—3.6	79.8	8	7	6	3	1	.....	.....	4	2	5798	9331	6	2.99	75.9
New London	N. 41 21	W. 72 05	7.20 a.m.	47	14	30.06	763.5	30.11	764.8	28.2	—2.1	75.9	5	7	5	3	1	.....	1	2	7	4984	8021	5	1.50	38.1
New Orleans	N. 29 58	W. 90 04	6.08 a.m.	52	16	30.11	764.8	30.17	766.3	50.2	10.1	75.0	8	1	1	4	2	4	4	6	1	5915	9519	6	4.27	108.5
Newport	N. 41 29	W. 71 19	7.23 a.m.	44	13	30.01	762.2	30.06	763.5	30.9	—0.6	79.5	5	8	8	5	2	.....	.....	3	.....	8108	13048	6	3.91	99.3
New York	N. 40 43	W. 74 00	7.12 a.m.	164	50	29.94	760.5	30.13	765.3	29.8	—1.2	82.1	.....	1	12	9	2	.....	1	4	2	5954	9582	6	2.22	56.4
Norfolk	N. 36 51	W. 76 17	7.03 a.m.	30	9	30.15	765.8	30.18	766.6	39.3	4.1	74.1	12	3	3	3	2	1	1	2	4	4572	7358	5	0.09	154.7
North Platte	N. 41 08	W. 100 45	5.25 a.m.	2841	866	27.10	688.3	30.26	768.6	20.3	—6.5	73.4	1	11	5	1	1	.....	.....	.....	12	5738	9234	3	0.71	18.0
Olympia	N. 47 03	W. 122 53	3.57 a.m.	36	11	30.03	762.7	30.07	763.8	41.1	5.1	88.2	3	1	.....	.....	18	.....	.....	3	6	3532	5684	8	10.32	262.1
Omaha	N. 41 16	W. 95 56	5.44 a.m.	1113	339	28.93	734.8	30.22	767.6	20.5	—6.4	74.9	13	5	2	1	9	.....	.....	.....	1	7054	11352	5	0.92	23.4
Ooglaamie	N. 71 17	W. 156 40	1.41 a.m.	17	5	30.09	764.3	30.11	764.8	—20.6	—29.2	.....	4	4	.....	1	3	5	6	6	2	.....	.....	2	0.24	6.1
Oswego	N. 43 29	W. 76 35	7.02 a.m.	304	93	29.70	754.4	30.05	763.3	28.9	—1.7	74.3	4	6	7	4	1	6	2	1	.....	8732	14053	9	4.90	124.5
Palestine	N. 31 45	W. 95 40	5.45 a.m.	523	162	29.62	752.3	30.20	767.1	44.1	6.7	75.0	11	.....	4	2	8	1	1	4	.....	7128	11471	5	1.61	40.9
Pensacola	N. 30 25	W. 87 13	6.19 a.m.	30	9	30.16	766.1	30.18	766.6	45.7	7.6	79.6	10	5	2	1	.....	.....	.....	9	3	5397	8686	5	0.12	155.4
Philadelphia	N. 39 57	W. 75 09	7.07 a.m.	92	28	30.05	763.3	30.16	766.1	33.1	0.6	71.7	.....	14	5	5	.....	3	.....	3	1	5831	9384	5	1.97	50.0
Pike's Peak	N. 38 50	W. 105 02	5.08 a.m.	14134	4308	17.61	447.3	30.27	768.8	5.3	—14.8	78.2	1	13	6	2	.....	.....	.....	8	1	12548*h*	20194*h*	3	0.44	11.2
Pioche	N. 37 56	W. 114 26	4.30 a.m.	6110	1862	24.08	611.6	30.26	768.6	29.8	—1.2	61.0	5	14	6	1	5	.....	.....	.....	.....	4437	7141	2	0.08	2.0
Pittsburg	N. 40 32	W. 80 02	6.48 a.m.	762	232	29.31	744.5	30.17	766.3	28.5	—1.9	79.5	3	2	6	5	6	4	1	3	1	4573	7359	8	1.42	36.1
Poplar River	N. 48 08	W. 105 10	5.07 a.m.	2030	619	27.82	706.6	30.18	766.6	.....	.....	.....	.....	23	4	1	.....	.....	.....	3	.....	.....	.....	2	0.48	12.2
Port Eads	N. 29 09	W. 89 15	6.11 a.m.	7	2	30.15	765.8	30.16	766.1	54.9	12.7	81.9	11	3	1	3	1	2	2	8	.....	10081	16223	4	2.70	70.1
Port Huron	N. 43 00	W. 82 26	6.38 a.m.	633	193	29.36	745.7	30.08	764.0	23.9	—4.5	89.3	1	4	9	7	3	3	3	....	1	6650	10702	9	2.95	74.9
Portland, Maine	N. 43 39	W. 70 15	7.27 a.m.	45	14	29.97	761.2	30.02	762.5	25.6	—3.6	74.3	7	9	10	3	.....	.....	.....	2	.....	6070	9768	5	2.61	66.3
Portland, Oregon	N. 45 32	W. 122 43	3.57 a.m.	67	20	30.03	762.7	30.10	764.5	43.9	6.6	89.4	.....	2	2	4	10	2	3	2	6	4406	7091	7	20.14	511.6
Portsmouth	N. 35 02	W. 76 04	7.04 a.m.	40	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prescott	N. 34 33	W. 112 28	4.38 a.m.	5340	1628	24.80	629.9	30.18	766.6	27.3	—2.6	76.6	.....	1	11	11	5	...	2	1	.....	3717	5982	2	0	0
Provincetown	N. 42 03	W. 70 11	7.27 a.m.	26	8	30.00	762.0	30.03	762.7	32.1	0.1	78.8	3	7	8	5	1	2	2	3	.....	8349	13436	7	5.57	141.5
Punta Rassa	N. 26 29	W. 82 01	6.40 a.m.	13	4	30.11	764.8	30.12	765.0	58.0	14.4	83.2	6	1	.....	2	3	1	4	14	.....	7949	12792	5	1.10	27.9
Red Bluff *b*	N. 40 10	W. 122 15	3.59 a.m.	350	106	29.79	759.7	30.20	767.1	42.8	6.0	85.3	15	7	.....	.....	1	1	1	2	2	3499	5631	3	1.44	36.6
Rochester	N. 43 08	W. 77 42	6.57 a.m.	621	189	29.36	745.7	30.08	764.0	25.3	—3.7	87.4	.....	4	15	3	3	4	2	.....	.....	10087	16233	9	2.10	53.3
Roseburg	N. 43 13	W. 123 20	3.55 a.m.	511	156	29.59	751.6	30.16	766.1	42.2	5.7	87.7	1	3	.....	4	7	3	7	4	2	2147	3455	6	0.54	100.1
Sacramento	N. 38 35	W. 121 30	4.02 a.m.	65	20	30.11	764.8	30.19	766.8	43.7	6.5	89.2	3	0	.....	3	2	13	3	.....	1	3544	5703	2	1.13	28.7
Saint Louis	N. 38 38	W. 90 12	6.07 a.m.	568	173	29.54	750.3	30.19	766.8	29.1	—1.6	89.4	3	8	3	6	7	2	1	1	...	7830	12601	7	1.81	46.0
Saint Michael, Ft	N. 63 48	W. 162 00	1.20 a.m.	30	9	29.82	757.4	29.89	758.4	—6.5	—21.4	100	7	.....	.....	.....	.....	1	4	8	11	.....	.....	2	0.12	3.0
Saint Paul	N. 44 58	W. 93 03	5.56 a.m.	811	247	29.19	741.4	30.15	765.8	12.9	—10.6	81.0	2	6	5	7	.....	7	1	3	5856	9424	7	0.98	24.9
Saint Vincent	N. 48 56	W. 97 14	5.39 a.m.	804	245	29.20	741.7	30.19	766.8	3.0	—16.1	90.2	4	9	1	1	5	6	.....	1	4	6240	10052	5	0.72	18.3
Salt Lake City	N. 40 46	W. 111 54	4.40 a.m.	4348	1325	25.73	653.5	30.27	768.8	31.4	—0.3	61.4	1	3	1	.....	.....	5	2	2	17	2720	4387	5	0.92	23.4
San Antonio	N. 29 25	W. 98 25	5.34 a.m.	673	205	29.43	747.5	30.15	765.8	43.3	6.3	78.7	9	2	1	1	.....	1	3	4	10	3822	6151	3	0.70	17.8
San Diego *a*	N. 32 43	W. 117 10	4.19 a.m.	67	20	29.99	761.7	30.06	763.5	49.1	9.5	71.3	8	1	1	.....	1	1	3	14	1	3706	5904	2	0.13	3.3
Sandusky	N. 41 25	W. 82 40	6.37 a.m.	639	195	29.40	746.7	30.13	765.3	27.7	—2.4	78.6	1	2	14	8	2	4	.....	1	.....	9474	15247	9	1.61	40.9
Sandy Hook	N. 40 28	W. 74 00	7.12 a.m.	28	8	30.10	764.5	30.13	765.3	31.0	—0.6	78.5	4	7	10	5	2	1	.....	2	.....	9558	15382	6	2.58	65.5
San Francisco	N. 37 48	W. 122 26	3.58 a.m.	60	18	30.12	765.0	30.18	766.6	49.5	9.7	85.0	6	5	6	3	3	5	1	1	1	4011	7420	4	2.01	51.1
Santa Fé	N. 35 41	W. 105 57	5.04 a.m.	7100	2166	23.20	589.3	30.19	766.8	25.4	—3.7	60.6	9	1	.....	.....	2	2	2	11	4	6116	9843	2	0.55	14.0
Savannah	N. 32 05	W. 81 05	6.44 a.m.	87	26	30.10	764.5	30.20	767.1	45.7	7.6	71.7	6	11	3	5	1	.....	2	3	.....	5309	8640	3	5.55	141.0
Shaw, Fort	N. 47 31	W. 111 48	4.41 a.m.	3550	1082	26.36	669.5	30.19	766.8	20.0	—3.3	66.0	1	.....	7	12	1	1	2	6	1	9459	15222	5	0.47	11.9
Shreveport	N. 32 30	W. 93 40	5.53 a.m.	227	69	29.92	760.0	30.17	766.3	41.3	5.2	81.9	5	2	1	3	4	4	4	3	5	4188	6740	4	1.66	42.7
Sill, Fort	N. 34 40	W. 98 23	5.34 a.m.	1200	366	28.88	733.5	29.20	767.1	31.2	—0.4	79.6	10	4	.....	3	5	1	.....	.....	2	7300	11758	3	0.33	8.4
Silver City	N. 32 46	W. 108 14	4.55 a.m.	5890	1795	24.32	617.7	30.16	766.1	28.0	—2.2	75.9	6	11	1	2	.....	1	.....	.....	10	2186	3470	1	0.58	14.7
Sitka	N. 57 03	W. 135 19	3.07 a.m.	63	19	29.49	749.0	29.56	750.8	36.9	2.7	74.4	.....	.....	.....	.....	3	9	11	8	.....	11774	17982	8	13.58	344.9
Smith, Fort	N. 35 22	W. 94 24	5.50 a.m.	449	137	29.68	753.9	30.18	766.6	33.3	0.7	80.5	3	3	2	2	1	.....	12	.....	8	4111	6616	4	1.74	44.2
Smithville	N. 33 55	W. 78 01	6.56 a.m.	34	10	30.14	765.5	30.18	766.6	40.7	4.8	83.7	13	3	4	1	3	1	.....	6	.....	6205	10082	5	3.32	84.3
Spokane Falls	N. 47 40	W. 117 25	4.18 a.m.	1910?	582?	28.00	712.7	30.19	766.8	31.6	—0.2	87.4	3	4	.....	8	3	1	2	6	4	3548	5710	8	3.54	89.9
Springfield, Ill	N. 39 48	W. 89 39	6.10 a.m.	644	196	29.43	747.5	30.10	766.1	28.0	—2.2	75.1	1	9	2	4	5	3	3	2	2	6659	10716	6	3.15	80.0
Springfield, Mass	N. 42 05	W. 72 35	7.18 a.m.	120	37	29.90	761.0	30.10	764.5	24.3	—4.3	83.0	6	6	4	3	2	1	.....	1	8	.....	.....	5	2.70	70.1
Springfield, Mo	N. 37 12	W. 93 18	5.55 a.m.	1351	412	28.65	727.7	30.18	766.6	31.3	—0.4	82.5	6	6	3	4	6	4	2	.....	.....	9909	11264	5	2.30	58.4
Starkville	N. 33 35	W. 88 49	6.13 a.m.	455	123	29.71	754.6	30.21	767.3	38.0	3.3	82.7	8	4	1	3	7	4	1	1	2	6777	10900	4	3.31	84.1
Stevenson, Fort *b*	N. 47 35	W. 101 28	5.22 a.m.	1750	534	28.20	716.3	30.26	768.0	4.8	—15.1	78.0	1	13	3	1	.....	2	7	1	1	6141	9883	4	0.70	17.8
Stockton	N. 30 53	W. 102 53	5.16 a.m.	3010	917	27.06	687.3	30.20	767.1	34.6	1.4	76.7	3	4	.....	.....	21	.....	.....	.....	.....	4640*f*	7467*f*	2	0.22	5.6
Thatcher's Island	N. 42 38	W. 70 34	7.26 a.m.	48	15	29.99	761.7	30.05	763.3	30.0	—1.1	75.0	3	13	3	5	1	1	.....	5	.....	12282	19764	6	3.34	84.8
Thomas, Camp	N. 33 04	W. 110 02	4.48 a.m.	2710	826	27.32	693.9	30.14	765.5	32.9	0.5	80.6	.....	2	.....	2	7	1	6	5	.....	.....	.....	4	0.40	11.7
Toledo	N. 41 40	W. 83 34	6.34 a.m.	651	198	29.37	746.0	30.11	764.8	28.4	—2.0	74.1	2	3	4	10	9	.....	1	2	.....	6534	10513	8	1.39	33.0
Tucson	N. 32 14	W. 110 53	4.45 a.m.	2369	722	27.01	701.3	30.11	764.8	40.5	4.7	67.7	.....	.....	1	.....	12	12	1	.....	5	2447	3938	2	0.04	1.0
Umatilla	N. 45 55	W. 119 20	4.11 a.m.	340	103	29.80	750.9	30.19	766.8	37.3	2.9	85.9	1	2	5	3	5	10	4	.....	1	4299	6918	6	1.96	49.8
Verde, Fort	N. 34 33	W. 111 52	4.40 a.m.	?	?	.....	.....	.....	.....	30.6	—0.8	69.0	14	12	3	1	.....	1	.....	.....	.....	.....	.....	2	0.07	1.8
Vicksburg	N. 32 22	W. 90 53	6.04 a.m.	244	74	29.93	760.2	30.20	767.1	42.0	5.6	80.8	6	.....	.....	1	5	11	.....	6	2	4588	7384	3	4.85	123.2
Visalia	N. 36 20	W. 119 17	4.11 a.m.	348	106	29.80	756.9	30.18	766.6	39.8	4.3	90.0	2	1	3	1	5	7	3	2	7	1772	2852	2	0.15	3.8
Washakie, Fort	N. 42 59	W. 108 43	4.53 a.m.	5580	1702	24.44	621.8	30.20	767.1	10.4	—8.7	80.1	1	7	12	2	2	1	1	4	3997	6432	3	0.52	13.2
Washington, D.C.	N. 38 54	W. 77 02	7.09 a.m.	105	32	30.07	763.8	30.19	766.8	30.0	1.1	78.4	.....	9	1	1	3	.....	.....	1	10	3147	5064	4	2.38	60.5
W. Las Animas	N. 38 04	W. 103 07	5.16 a.m.	3905	1190	26.06	661.9	30.22	767.6	16.7	—8.5	69.4	2	8	12	2	1	.....	.....	6	.....	5049	8125	3	0.08	2.0
Williamsport	N. 41 15	W. 77 03	7.00 a.m.	561	171	29.50	749.3	30.13	765.3	29.3	—1.5	74.8	.....	7	13	.....	1	.....	4	1	5	5025	8087	8	1.11	28.2
Wilmington	N. 34 14	W. 77 57	6.56 a.m.	52	16	30.13	765.3	30.19	766.8	41.4	5.2	79.9	9	3	1	4	2	1	.....	11	.....	4772	7680	6	4.02	102.1
Winnemucca	N. 40 59	W. 117 43	4.17 a.m.	4327	1319	25 73	653.5	30.26	768.6	27.3	—2.6	73.5	.....	.....	2	11	2	.....	2	13	1	6582	10592	4	0.51	13.0
Yankton	N. 42 54	W. 97 28	5.38 a.m.	1228	374	28.79	731.3	30.22	767.6	13.3	—10.4	69.7	7	11	.....	1	1	2	1	2	6	3841	6181	4	0.79	20.1
Yuma	N. 32 45	W. 114 36	4.30 a.m.	141	43	29.88	758.9	30.03	762.7	50.0	10.0	47.3	6	1	1	1	.....	1	5	15	1	3748	6032	1	0	0
Sub-Series.																										
Bogota	N. 4 36	W. 74 14	7.11 a.m.	8655	2638	22.04	559.8	.....	.....	51.2	10.7	76	1	3	1	3	3	2	3	4	11	1800	2897	4	1.94	49.3
Havana	N. 23 09	W. 82 22	6.39 a.m.	50	15	29.98	761.5	30.04	763.0	66.8	19.3	80.5	2	.....	.....	.....	.....	2	8	5	4	4640	7467	5	5.01	142.5
Kingston	N. 18 58	W. 76 48	7.01 a.m.	10	3	30.01	762.2	30.02	762.5	72.5	22.5	83.2	19	.....	.....	.....	.....	.....	.....	2	10	2032	4236	5	0.35	8.9
Navassa	N. 19 25	W. 75 03	7.43 a.m.	77	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paramaribo	N. 5 50	W. 55 13	8.27 a.m.	6	2	30.02	762.5	30.02	762.5	77.8	25.4	87.4	.....	.....	.....	.....	.....	16	14	1	.....	.....	.....	9	12.26	311.4
Puerto Berrio	N. 6 22	W. 74 28	7.10 a.m.	542	165	29.35	745.5	29.91	759.7	78.0	25.6	89	4	.....	.....	.....	1	.....	.....	26	.....	.....	.....	7	3.97	100.8
Rivas	N. 11 26	W. 85 47	6.25 a.m.	150	46	.....	.....	.....	.....	75.0	23.9	92.8	.....	.....	.....	.....	.....	.....	1	30	.....	.....	.....	3	1.61	40.9
Santiago de Cuba	N. 19 55	W. 75 50	7.04 a.m.	21	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul, Alaska	N. 57 47	W. 152 21	1.59 a.m.	54	16	29.30	744.2	29.36	745.7	29.8	—1.2	81.0	2	5	.....	1	.....	.....	2	11	7	.....	.....	7	9.41	239.0
St. Thomas	N. 18 20	W. 64 56	7.48 a.m.	131	40	29.96	761.0	30.08	764.0	77.7	25.4	74.6	1	.....	.....	.....	.....	3	21	6	.....	3002	5797	4	2.21	56.1
York Factory	N. 57 02	W. 92 26	5.58 a.m.	55	17	30.09	764.3	30.16	766.1	—14.8	—20.0	83.1	1	13	9	5	3	.....	.....	.....	.....	8780	14130	5	1.53	38.9

OCEAN SQUARE DATA FOR DECEMBER, 1882.

Location of Centre of each Square.	Barometer.		Temperature.		Wind Frequency.										Wind force 0–10.
	Inch.	Mill.	Fah.	Cent.	N.	NW.	W.	SW.	S.	SE.	E.	NE.	Calm.	Blank.	
N. 12.5 W. 22.5	30.01	762.2	78.9	26.1							1	28		2	2.5
12.5 27.5	30.04	763.0	77.4	25.2						3	4	22		2	2.2
12.5 32.5	30.05	763.3	78.0	25.6					1	1	8	7		14	2.3
12.5 37.5	30.06	763.5	79.0	26.1						1	13	3		14	2.2
12.5 42.5	30.04	763.0	79.0	26.1						1	10	5		15	2.2
12.5 47.5	30.03	762.7	78.3	25.7						1	10	6		14	2.1
12.5 52.5	30.04	763.0	77.8	25.4						4	11	10		6	1.9
17.5 22.5	30.07	763.8	76.1	24.5						2	3	24		2	1.5
17.5 27.5	30.08	764.0	76.0	24.4						4	7	18		2	2.3
17.5 32.5	30.10	764.5	77.3	25.2						2	9	7		13	2.4
17.5 37.5	30.10	764.5	77.3	25.2						2	13	3		13	2.3
17.5 42.5	30.09	764.3	76.9	24.9						2	11	4		14	2.4
17.5 47.5	30.07	763.8	76.4	24.7						4	10	4		13	2.2
17.5 52.5	30.07	763.8	76.4	24.7	1	1				6	9	10		4	2.3
17.5 57.5	30.04	763.0	77.9	25.5	1					2	12	15		1	2.2
22.5 22.5	30.14	765.5	76.4	24.7	1					4	5	21			2.4
22.5 27.5	30.14	765.5	73.7	23.2				2	2	3	4	19		1	2.1
22.5 32.5	30.14	765.5	74.4	23.6		2		1	1	4	13	6		4	2.4
22.5 37.5	30.16	766.1	74.7	23.7		2		2	1	7	9	4		6	2.6
22.5 42.5	30.17	766.3	74.6	23.7		2		1	1	13	5	2		7	2.6
22.5 47.5	30.13	765.3	75.0	23.9		1	2	1	5	7	5	3			2.7
22.5 52.5	30.10	764.5	74.7	23.7		3		1	2	8	4	10		3	2.0
22.5 57.5	30.11	764.8	74.6	23.7	2	3				7	4	13	1	1	2.3
22.5 62.5	30.09	764.3	74.5	23.6	2	1		1		4	9	14			2.4
22.5 67.5	30.08	764.0	74.4	23.6	2		1		1	5	9	13			2.1
22.5 72.5	30.08	764.0	74.2	23.4	4					6	7	14			2.5
27.5 22.5	30.20	767.1	69.6	20.9	6	1		3	2	4	1	13		1	2.1
27.5 27.5	30.24	768.1	71.3	21.8	3		2	3	2	3	4	13		1	2.3
27.5 32.5	30.21	767.3	72.2	22.3	2	2		3	2	7	8	4		3	2.5
27.5 37.5	30.18	766.6	72.6	22.6	2	2		4	6	7	7	1		2	2.5
27.5 42.5	30.16	766.1	72.1	22.3		3	2	6	7	5	3	2		3	2.6
27.5 47.5	30.13	765.3	71.7	22.1	1	4	3	5	7	5	2	1		3	2.5
27.5 52.5	30.10	764.5	71.1	21.7		9	3	4	6	5	1	3			2.7
27.5 57.5	30.10	764.5	70.3	21.3	4	8	3	3	4	6		3			2.6
27.5 62.5	30.10	764.5	69.7	20.9	7	5		6	2	4	2	5			2.4
27.5 67.5	30.11	764.8	69.5	20.8	9	3	1	4	1	1	3	9			2.6
27.5 72.5	30.12	765.0	69.5	20.8	6	4		1	5	3	3	9			2.9
27.5 77.5	30.14	765.5	65.5	18.6	6	5			2	4	1	13			2.7
32.5 12.5	30.16	766.1	63.8	17.7	6	9	1	4	1	2	1	7			2.1
32.5 17.5	30.19	766.8	65.9	18.8	5	6	3	5	1	5	1	5			1.9
32.5 22.5	30.22	767.6	66.9	19.4	6	8		4	4	2	1	6			2.7
32.5 27.5	30.22	767.6	68.2	20.1	5	5	2	4	3	4	1	7			2.4
32.5 32.5	30.21	767.3	69.3	20.7	3	3	2	8	5	2	5	2		1	2.8
32.5 37.5	30.15	765.8	69.5	20.8		4	1	12	7	3	2	2			3.0
32.5 42.5	30.10	764.5	68.4	20.2	1	5		12	8	2	2	1			3.2
32.5 47.5	30.06	763.5	67.3	19.6	1	6	3	10	7	2	2				3.4
32.5 52.5	30.04	763.0	66.2	19.0	1	11	1	9	5	2	2				3.2
32.5 57.5	30.05	763.3	64.6	18.1	4	12		8	3	2		2			3.3
32.5 62.5	30.06	763.5	63.2	17.3	6	8	3	5	3		1	5			2.1
32.5 67.5	30.10	764.5	62.5	16.9	9	8		5	2	4		3			2.9
32.5 72.5	30.15	765.8	61.5	16.4	9	5		6	2	5		4			3.6
32.5 77.5	30.18	766.6	51.4	10.8	11	6		2	3	1	1	7			2.3
37.5 12.5	30 07	763.8	58.4	14.7	7	7	6	7	2		1	1			2.5
37.5 17.5	30.09	764.3	61.1	16.2	6	10	4	7	2		1	1			2.8
37.5 22.5	30.15	765.8	62.4	16.9	5	11	2	6	4	1	1	1			2.7
37.5 27.5	30.14	765.5	63.4	17.4	6	7	7	4	6		1				2.4
37.5 32.5	30.08	764.0	64.4	18.0	3	5	5	11	5	2					3.1
37.5 37.5	30.01	762.2	64.3	17.9	1	6	3	14	6			1			3.5
37.5 42.5	29.96	761.0	62.0	16.7		6	1	18	2	2	1	1			3.3
37.5 47.5	29.93	760.2	60.2	15.7	1	11	3	9	3	2	2				3.3
37.5 52.5	29.93	760.2	58.4	14.7	2	13	1	10	2	2	1				3.5
37.5 57.5	29.94	760.5	55.5	13.1	7	12	2	4	2	2		2			3.8
37.5 62.5	29.98	761.5	53.2	11.8	8	8	3	2	4	2		4			3.6
37.5 67.5	30.05	763.3	49.1	9.5	9	9	1	4	4	1		3			3.9
37.5 72.5	30.12	765.0	42.2	5.7	13	8	1	2	2	3		2			3.6
42.5 12.5	29.96	761.0	55.3	12.9	6	7	5	11	1			1			3.2
42.5 17.5	29.97	761.2	57.2	14.0	6	9	7	8	1						3.6
42.5 22.5	30.01	762.2	58.0	14.4	5	10	5	9	2						3.1
42.5 27.5	30.00	762.0	59.2	15.1	3	4	9	12	3						3.3
42.5 32.5	29.93	760.2	59.3	15.2	3	5	4	13	6						3.5
42.5 37.5	29.89	759.2	58.6	14.8	1	6	4	12	5	2		1			3.9
42.5 42.5	29.85	758.2	55.8	13.2	2	8	1	12	7	1					4.0
42.5 47.5	29.81	757.2	51.7	10.9		13	1	8	5	2		2			4.0
42.5 52.5	29.83	757.7	48.1	8.9	4	12	1	6	1	3		4			4.0
42.5 57.5	29.87	758.7	44.5	6.9	9	11	2	2	3	1		3			4.0
42.5 62.5	29.95	760.7	41.4	5.2	11	10	3	2	2	3					4.0
42.5 67.5	30.01	762.2	35.4	1.9	10	9	3	3	2	1	1	2			3.4
47.5 12.5	29.74	755.4	51.3	10.7	5	3	5	11	2	1	1	3			4.0
47.5 17.5	29.76	755.9	52.1	11.2	4	4	9	8	2		1	3			3.4
47.5 22.5	29.77	756.1	52.7	11.5	4	5	9	9	1			2	1		3.8
47.5 27.5	29.76	755.9	51.9	11.1	7	5	4	14	1						4.0
47.5 32.5	29.73	755.1	51.4	10.8	6	6	2	12	2	2			1		4.2
47.5 37.5	29.73	755.1	49.1	9.5	3	6	4	7	7	1		3			4.2
47.5 42.5	29.69	754.1	45.3	7.4	3	4	6	6	3	6		2	1		4.3
47.5 47.5	29.67	753.6	39.2	4.0	4	9	6	4	1	3	1	3			3.7
52.5 12.5	29.65	753.1	47.4	8.6	4	6	1	6	5	2	2	5			3.8
52.5 17.5	29.65	753.1	48.6	9.2	3	6	4	8	2	2	2	4			3.8
52.5 22.5	29.63	752.6	48.5	9.2	2	3	8	9	2	3	1	3			3.3
52.5 27.5	29.63	752.6	46.3	7.9	4	6	2	8	4	3		4			3.6
52.5 32.5	29.66	753.4	45.2	7.3	4	5	4	6	3	5		4			4.0
52.5 37.5	29.65	753.1	43.0	6.1	3	7	3	7	3	5		3			3.2
52.5 42.5	29.63	752.6	39.7	4.3	2	2	4	6	3	8		5		1	3.5
52.5 47.5	29.66	753.4	34.2	1.2	6	5	5	2	2	3	3	5			3.4
57.5 12.5	29.58	751.3	41.4	5.2	3	3		2	3	7	3	10			3.0
57.5 17.5	29.53	750.0	40.5	4.7	6	5		3	1	7	1	8			3.3
57.5 22.5	29.61	752.1	39.3	4.1	2	5	1	2	3	8	4	6			3.0
57.5 27.5	29.61	752.1	38.0	3.3	1	7	1	4	1	6	4	7			2.7
57.5 32.5	29.65	753.1	36.0	2.2	2	6		5	1	5	5	7			3.2
57.5 37.5	29.67	753.6	36.6	2.6	4	3	1	2	4	4	3	9		1	3.1
57.5 42.5	29.65	753.1	30.4	— 0.9	4	5		3	2	4	4	7		2	2.9
57.5 47.5	29.58	751.3	26.7	— 2.9	5	3	2	2	1	2	2	11		3	2.8

NOTE.—See General Remarks.

OOGLAAMIE, POINT BARROW, ALASKA.

DATE.	Barometer. Corrected for instrumental error and temperature.		Barometer. Reduced to sea-level.		Temperature of the air.		Relative Humidity	Wind. Direction.	Wind. Velocity.		Force	Clouds. Amount. Upper.	Clouds. Amount. Lower.	Clouds. Direction. Upper	Clouds. Direction. Lower	Rainfall or melted snow in past 24 hours.		Weather.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles per hour	Metres per sec.	0–10	0–10	0–10	From	From	Inch.	Mill.	
1882.																		
August 28	30.14	765.5	30.16	766.1	27.5	— 2.5	94	ene.	5	2.2	.....	.....	10 n.	.....	e.	inap.	inap.	light snow.
29	30.02	762.5	30.03	762.7	28.0	— 2.2	100	ene.	6	2.7	.....	.....	10 s.	.....	e.	inap.	inap.	cloudy.
30	30.00	762.0	30.01	762.2	29.8	— 1.2	95	ne.	8	3.6	.....	.....	10 s.	.....	ne.	inap.	inap.	cloudy.
31	30.25	768.3	30.27	768.8	32.5	0.3	94	nne.	8	3.6	.....	... .	10 s.	.....	.....	0.01	0.3	cloudy.
September 1	30.32	770.1	30.34	770.6	30.8	— 0.7	95	nnw.	23	10.3	.....	.....	10 s.	.....	.....	0	0	cloudy.
2	30.44	773.2	30.46	773.7	30.0	— 1.1	100	sw.	5	2.2	.....	.....	10 s.	fg	.....	0.01	0.3	cloudy.
3	30.16	766.1	30.18	766.6	33.2	0.7	100	sse.	16	7.2	.....	0	3 s.	.....	calm	inap.	inap.	clear.
4	30.04	763.0	30.05	763.5	32.0	0.0	100	se.	7	3.1	.....	2 c.	2 s.	se.	.....	0	0	fair.
5	29.89	759.2	29.90	759.4	33.5	0.8	100	se.	10	4.5	.....	0	2 s.	.....	.....	0	0	clear.
6	29.91	752.1	29.93	752.6	29.2	— 1.6	.....	e.	6	2.7	.....	0	1 s.	.....	.....	0	0	clear
7	29.64	752.8	29.66	753.4	32.0	0.0	91	ene.	13	5.8	.....	.....	10 s.	.....	ene.	0.01	0.3	cloudy.
8	29.84	757.9	29.89	758.4	30.0	— 1.1	95	ne.	9	4.0	.....	.....	10 s.	.....	.....	0	0	cloudy.
9	29.91	759.7	29.93	760.2	25.8	— 3.4	100	ene.	14	6.3	.....	.....	10 s.	.....	e.	0.01	0.3	cloudy.
10	29.73	755.9	29.78	756.4	28.2	— 2.1	100	e.	20	8.9	.....	.....	10 n.	.....	.....	0.01	0.3	light snow.
11	29.54	750.3	29.59	750.8	29.0	— 1.7	.....	ese.	11	4.9	.....	0	9 n.	.....	.....	0.05	1.3	light snow.
12	29.64	752.8	29.66	753.4	30.8	— 0.7	100	nw.	14	6.3	.....	.....	10 n.	.....	calm	0.05	1.3	light snow.
13	29.71	754.6	29.73	755.1	32.0	0.0	100	n.	12	5.4	.....	.....	10 n.	.....	.....	0.02	0.5	light snow.
14	29.72	754.9	29.73	755.1	31.8	— 0.1	100	ene.	5	2.2	.....	.....	10 n.	.....	.....	0.05	1.3	heavy snow.
15	29.83	757.7	29.85	758.2	26.0	— 3.3	.....	e.	8	3.6	.....	hz.	0	.....	.....	0.11	2.8	clear.
16	29.61	752.1	29.62	752.3	28.8	— 1.8	.....	e.	17	7.6	.....	.....	10 s.	.....	.....	0	0	cloudy.
17	29.12	739.6	29.14	740.1	29.2	— 1.6	100	ne.	15	6.7	.....	.....	10 n.	.....	.....	0.01	0.3	light snow.
18	29.20	741.7	29.22	742.2	31.5	— 0.3	100	wsw.	14	6.3	.....	.....	10 s.	.....	.....	inap.	inap.	cloudy.
19	29.40	746.7	29.42	747.3	31.1	— 0.5	97	wnw.	5	2.2	.....	.....	10 n.	.....	.....	inap.	inap.	light snow.
20	29.96	761.0	29.97	761.2	26.8	— 2.9	100	nnw.	13	5.8	.....	.....	10 s.	.....	.....	inap.	inap.	cloudy.
21	30.01	762.2	30.03	762.7	20.6	— 1.3	100	e.	7	3.1	.....	.....	10 n.	.....	.....	inap.	inap.	light snow.
22	29.94	760.5	29.99	761.0	27.7	— 2.4	100	ene.	16	7.2	.....	.....	10 s.	.....	.....	0.02	0.5	cloudy.
23	29.92	760.0	29.93	760.2	24.5	— 4.2	.....	e.	16	7.2	.....	.....	10 n.	.....	.....	inap.	inap.	light snow.
24	29.56	750.8	29.58	751.3	24.0	— 4.1	100	ne.	16	7.2	.....	.....	10 s.	.....	.....	inap.	inap.	cloudy.
25	29.79	756.7	29.81	757.2	26.2	— 3.2	100	n.	23	10.3	.....	.....	10 s.	.....	n.	0	0	cloudy.
26	29.94	760.5	29.95	761.0	22.2	— 5.4	.....	ssw.	11	4.9	.....	2 k.	3 s.	w.	w.	0.08	2.0	fair.
27	29.95	760.7	29.97	761.2	30.0	— 1.1	100	ssw.	10	4.5	.....	.....	10 s.	.....	w.	0.02	0.5	cloudy.
28	29.78	756.4	29.80	756.9	34.0	1.1	100	sw.	18	8.0	.....	hz.	7k; 8s	.....	sw.	0.11	2.8	fair.
29	29.98	761.5	30.00	762.0	32.5	0.3	....	ssw.	7	3.1	.....	... .	10 n.	.....	.....	0.07	1.8	heavy snow.
30	30.01	762.2	30.02	762.5	32.5	0.3	.....	ene.	13	5.8	.....	1 c.	2 s.	.....	.....	0.19	4.8	clear.
Mean	29.81	757.2	29.83	757.7	29.6	— 1.3	99.0 *h*	.....	12.8	5.7	.....	.....	8.1	.....	.....	0.82	20.8	
October 1	29.56	750.8	29.58	751.3	33.3	0.7	.....	sç.	8	3.6	.....	.....	10 n.	.....	.....	0.69	17.5	light rain.
2	29.74	755.4	29.75	755.6	38.1	3.4	.....	ssw.	14	6.3	.....	.....	10 n.	.....	.....	0.16	4.1	light rain.
3	29.99	761.7	30.01	762.2	28.8	— 1.8	.....	ne.	17	7.6	.....	.....	10 n.	.....	.....	0.09	2.3	light snow.
4	30.00	762.0	30.01	762.2	24.2	— 4.3	.....	ene.	26	11.6	.....	.....	10 n.	.....	.....	0.18	4.6	light snow.
5	29.83	757.7	29.85	758.2	18.8	— 7.3	.....	ene.	35	15.6	.....	.....	10 s.	.....	ene.	0.04	1.0	cloudy.
6	29.70	754.4	29.72	754.9	18.9	— 7.3	.....	ne.	24	10.7	.....	.....	10 s.	.....	.....	0.01	0.3	cloudy.
7	29.97	761.2	29.99	761.7	18.5	— 7.5	.....	ne.	23	10.3	.....	.....	10 s.	.....	.....	0.01	0.3	cloudy.
8	29.98	761.5	30.00	762.0	16.0	— 8.9	.....	ene.	28	12.5	.....	0	3 s.	.....	.....	0	0	clear.
9	29.99	761.7	30.01	762.2	14.3	— 9.8	.....	ene.	22	9.8	.....	.....	10 s.	.....	.....	0	0	cloudy.
10	29.98	761.5	30.00	762.0	11.1	—11.0	.....	ene.	12	5.4	.....	hz.	8 n.	.....	.....	0.02	0.5	light snow.
11	30.03	762.7	30.05	763.3	4.8	—15.1	.....	ene.	5	2.2	.....	.....	10 n.	.....	.....	0.03	0.8	light snow.
12	30.19	766.8	30.20	767.1	8.0	—13.3	.....	n.	3	1.3	.....	0	hz.	.....	.....	0.04	1.0	clear.
13	30.10	764.5	30.12	765 0	3.8	—15.7	.....	ese.	9	4.0	.....	hz.	hz.	.....	.....	0	0	dense haze.
14	29.81	757.2	29.83	757.7	0.0	—17.8	100	ene.	11	4.9	.....	0	0	.....	.....	0	0	clear.
15	29.82	757.4	29.84	757.9	0.2	—17.7	.....	ene.	16	7.2	.....	0	0	.....	.....	0	0	clear.
16	30.00	762.0	30.02	762.5	5.5	—14.7	100	e.	13	5.8	.....	.....	10 s.	.....	.....	0	0	cloudy.
17	29.92	760.0	29.94	760.5	2.0	—16.7	100	e.	17	7.6	.....	0	2 s.	.....	.....	0	0	clear.
18	29.74	755.4	29.76	755.9	4.1	—15.5	100	ese.	10	4.5	.....	.....	10 s.	.....	.....	inap.	inap.	cloudy.
19	29.78	756.4	29.80	756.9	4.1	—15.5	98	ene.	10	4.5	.....	.....	10 s.	.....	.....	0	0	cloudy.
20	29.72	754.9	29.74	755.4	2.0	—16.7	100	e.	3	1.3	.....	.....	10 s.	.....	.....	0	0	cloudy.
21	29.78	756.4	29.80	756.9	— 3.2	—19.6	100	nw.	4	1.8	.....	hz.	8 s.	.....	.....	0.01	0.3	clear.
22	29.74	755.4	29.76	755.9	5.0	—15.0	.....	s.	8	3.6	.....	.....	10 n.	.....	.....	0.01	0.3	light snow.
23	29.68	753.9	29.70	754.4	— 7.4	—21.9	97	ene.	8	2.6	.....	0	3 s.	.....	e.	inap.	inap.	clear.
24	29.73	755.1	29.75	755.6	— 1.2	—18.4	.....	ene.	5	2.2	.....	.....	10 s.	.....	.....	inap.	inap.	cloudy.
25	29.80	756.9	29.82	757.4	0.5	—17.5	100	ene.	6	2.7	.....	.....	10 s.	.....	.....	inap.	inap.	cloudy.
26	29.88	758.9	29.90	759.4	— 3.8	—19.9	100	nnw.	11	4.9	.....	3 k.	3 s.	nnw.	nnw.	inap.	inap.	fair.
27	29.86	758.4	29.88	758.9	—10.6	—23.7	100	nnw.	7	3.1	.....	0 k.	2 s.	.....	.....	0	0	cloudy.
28	29.99	759.4	29.92	760.0	— 6.5	—21.4	100	s.	2	0.9	.....	.....	10 n.	.....	.....	inap.	inap.	light snow.
29	30.06	763.5	30.08	764.0	—18.5	—28.1	.....	se.	3	1.3	.....	0	1 s.	.....	.....	0	0	clear.
30	30.09	764.3	30.11	764.8	7.5	— 13.6	100	sse.	18	8.0	.....	.....	10 s.	.....	sse.	0.01	0.3	cloudy.
31	29.79	756.7	29.81	757.2	16.6	— 8.6	.....	ssw.	30	13.4	.....	.....	10 s.	.....	.....	0.06	1.5	cloudy.
Mean	29.88	758.9	29.90	759.4	7.6	—13.6	99.6 *i*	.....	13.2	5.9	.....	.....	7.2	.....	.....	1.36	34.5	
November 1	29.56	750.8	29.58	751.3	6.8	—14.0	.....	ssw.	6	2.7	.....	.....	10 n.	.....	.....	0.02	0.5	light snow.
2	29.50	749.3	29.52	749.8	6.5	—14.2	100	w.	21	9.4	.....	hz.	0 s.	.....	.....	0	0	fair.
3	30.09	764.3	30.11	764.8	— 3.2	—19.6	100	nw.	22	9.8	.....	0	3 s.	.....	.....	0.01	0.3	clear.
4	30.12	765.0	30.14	765.5	— 4.5	—20.3	100	ese.	14	6.3	.....	.....	10 s.	.....	.....	0	0	cloudy.
5	29.94	760.5	29.96	761.0	— 7.8	—22.1	100	ene.	24	10.7	.....	hz.	5 s.	.....	.....	inap.	inap.	fair.
6	29.94	760.5	29.96	761.0	—10.8	—23.8	95	ene.	24	10.7	.....	hz.	hz.	.....	.....	0	0	dense haze.
7	30.12	765.0	30.14	765.5	— 6.1	—21.2	97	e.	26	11.6	.....	.....	10 s.	.....	.....	inap.	inap.	cloudy.
8	29.70	754.4	29.72	754.9	— 3.8	—19.9	100	ene.	25	11.2	.....	.....	10 s.	.....	.....	0	0	cloudy.
9	29.70	754.4	29.71	754.6	2.0	—16.3	100	e.	20	8.9	.....	0	2 s.	.....	.....	0	0	clear.
10	29.33	745.0	29.35	745.5	26.1	— 3.3	.....	wsw.	31	13.9	.....	.....	10 s.	.....	.....	0.22	5.6	cloudy.
11	29.43	747.5	29.45	748.0	5.0	—15.0	.....	e.	26	11.6	.....	.....	10 s.	.....	.....	0.04	1.0	cloudy.
12	29.78	756.4	29.80	756.9	—24.0	—31.1	100	nne.	31	13.9	.....	0	2 s.	.....	.....	0.01	0.3	clear.
13	29.81	757.2	29.83	757.7	—29.5	—34.2	.....	e.	10	4.5	.....	0	2 s.	.....	.....	0	0	clear.
14	29.80	758.4	29.88	758.9	—31.5	—35.3	.....	e.	8	3.6	.....	0	2 s.	.....	.....	0	0	clear.
15	29.84	757.9	29.86	758.4	—33.3	—36.3	.....	ene.	9	4.0	.....	0	0	.....	.....	0	0	clear.
16	29.57	751.1	29.59	751.6	—22.4	—30.2	100	ne.	10	4.5	.....	0	2 s.	.....	.....	0	0	clear.
17	29.53	750 0	29.55	750.6	—12.3	—24.6	100	ne	27	12.1	.....	hz.	5 s.	.....	.....	0	0	dense haze.
18	29.40	746.7	29.42	747.3	—10.5	—23.6	100	ene.	25	11.2	.....	0	5 s.	.....	.....	inap.	inap.	fair.
19	29.58	751.3	29.60	751.8	—12.0	—24.8	.....	ene.	19	8.5	.....	.....	10 s.	.....	.....	0	0	cloudy.
20	29.75	755.6	29.77	756.1	—11.4	—24.1	.....	ese.	23	10.3	.....	0	3 s.	.....	.....	0	0	clear.
21	29.59	751.6	29.61	752.1	— 6.0	—21.1	100	ene.	22	9.8	.....	hz.	hz.	.....	.....	0	0	dense haze.
22	29.34	745.2	29.36	745.7	11.2	—11.6	.....	nw.	18	8.0	.....	.....	10 n.	.....	.....	0.05	1.3	light snow.
23	29.82	757.4	29.84	757.9	— 2.4	—19.1	97	w.	19	8.5	.....	.....	10 s.	.....	w.	inap.	inap.	cloudy.
24	30.19	766.8	30.21	767.3	— 5.2	—20.7	.....	sse.	11	4.9	.....	.....	10 s.	.....	.....	0	0	cloudy.
25	30.45	773.4	30.47	773.9	—15.2	—25.2	100	nw.	17	7.6	.....	0	2 s.	.....	.....	0	0	clear.

OOGLAAMIE, POINT BARROW, ALASKA—CONTINUED.

DATE.	Barometer. Corrected for instrumental error and temperature.		Barometer. Reduced to sea-level		Temperature of the air.		Relative Humidity	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount.		Clouds. Direction.		Rainfall or melted snow in past 24 hours.		WEATHER.
												Upper.	Lower.	Up'er	Lo'er			
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per cent.	From.	Miles per hour	Metrs p sec.	0-10	0-10	0-10	From	From	Inch.	Mill.	
1882																		
November 26	30.38	771.6	30.40	772.1	—23.0	—30.6	.....	nc.	7	3.1	.....	3 c.	2 s.	.....	.....	0	0	fair.
27	29.96	761.0	29.98	761.5	—10.3	—23.5	.....	nnc.	5	2.2	.....	1 c.	2 s.	.....	.....	0	0	clear.
28	29.82	757.4	29.84	757.9	—13.5	—25.3	95	ene.	25	11.2	.....	2 c.	2 s.	.....	.....	0	0	fair.
29	30.21	767.3	30.23	767.8	—13.4	—25.2	.....	ene.	22	9.8	.....	0	0	.....	.....	0	0	clear.
30	30.06	763.5	30.08	764.0	— 9.5	—23.1	100	ene.	27	12.1	.....	0	3 s.	.....	.....	0	0	clear.
Mean	29.81	757.2	29.83	757.7	— 8.8	—22.7	99.1 m	.....	19.1	8.5	.....	.....	5.0	.....	.....	0.35	8.9	
December 1	29.85	758.2	29.87	758.7	— 6.3	—21.3	.....	ene.	18	8.0	.....	hz.	hz.	.....	.....	0	0	clear.
2	29.99	761.7	30.01	762.2	—14.5	—25.8	.....	ese.	11	4.9	.....	0	2 s.	.....	.....	0	0	clear.
3	30.03	762.7	30.05	763.3	— 8.8	—22.7	.....	ene.	4	1.8	.....	hz.	1 s.	.....	.....	0	0	clear.
4	30.17	766.3	30.19	766.8	—15.5	—26.4	100	se.	1	0.4	.....	0	2 s.	.....	.....	0	0	clear.
5	30.21	767.3	30.23	767.8	—15.8	—26.6	100	e.	9	4.0	.....	0	1 s.	.....	.....	0	0	clear.
6	29.90	759.4	29.92	760.0	—12.2	—24.6	.....	calm	0	0	.....	0	1 s.	.....	.....	0	0	clear.
7	29.98	761.5	30.00	762.0	—12.4	—24.7	.....	nne.	8	3.6	.....	0	0	.....	.....	0	0	clear.
8	30.31	769.9	30.33	770.4	—23.4	—30.8	100	nne.	2	0.9	.....	0	0	.....	.....	0	0	clear.
9	30.35	770.9	30.37	771.4	—25.5	—31.9	.....	nnw.	8	3.6	.....	0	0	.....	.....	0	0	clear.
10	30.76	781.3	30.78	781.8	—23.7	—30.9	100	n.	6	2.7	.....	0	0	.....	.....	0	0	clear.
11	30.92	785.4	30.94	785.9	— 9.5	—23.1	.....	nw.	7	3.1	.....	.....	10 s.	.....	.....	0	0	cloudy.
12	30.88	784.3	30.90	784.8	—24.8	—31.6	.....	ese.	8	3.6	.....	0	0	.....	.....	0	0	clear.
13	30.57	776.5	30.60	777.2	—18.8	—28.2	100	se.	8	3.6	.....	hz.	2 s.	.....	.....	0	0	clear.
14	30.20	767.1	30.22	767.6	—23.3	—30.7	.....	ese.	7	3.1	.....	0	1 s.	.....	.....	0	0	clear.
15	30.13	765.3	30.15	765.8	—17.2	—27.3	.....	nne.	14	6.3	.....	hz.	6 s.	.....	.....	0	0	fair.
16	29.92	760.0	29.94	760.5	—29.0	—33.9	90	ene.	9	4.0	.....	0	1 s.	.....	.....	0	0	clear.
17	29.74	755.4	29.76	755.9	—23.4	—30.8	100	ne.	12	5.4	.....	0	1 s.	.....	.....	0	0	clear.
18	29.75	755.6	29.77	756.1	—26.3	—32.4	91	ene.	8	3.6	.....	0	hz.	.....	.....	0	0	clear.
19	29.61	752.1	29.63	752.6	—27.5	—33.1	79	e.	3	1.3	.....	2 cs.	hz.	.....	.....	0	0	clear.
20	29.44	747.8	29.45	748.0	—21.0	—29.4	.....	s.	6	2.7	.....	0	5 k.	.....	wnw.	0	0	fair.
21	29.50	749.3	29.52	749.8	—17.0	—27.2	.....	s.	8	3.6	.....	hz.	3 k.	.....	w.	0.01	0.3	clear.
22	29.62	752.3	29.64	752.8	—26.2	—32.3	.....	se.	1	0.4	.....	hz.	2 s.	.....	.....	inap.	inap.	clear.
23	29.85	758.2	29.87	758.7	—32.0	—35.6	87	nnw.	7	3.1	.....	0	2 s.	.....	.....	0	0	clear.
24	29.93	760.2	29.95	760.7	—33.2	—36.2	.....	calm	0	0	.....	0	0	.....	.....	0	0	clear.
25	30.01	762.2	30.03	762.7	—28.8	—33.8	89	se.	1	0.4	.....	.....	10 s.	.....	.....	inap.	inap.	cloudy.
26	29.64	752.8	29.66	753.4	—19.0	—28.3	100	ne.	2	0.9	.....	.....	10 n.	.....	.....	0.03	0.8	light snow.
27	29.79	756.7	29.81	757.2	—20.5	—29.2	.....	wsw.	10	4.5	.....	0	0	.....	.....	0.03	0.8	clear.
28	30.30	769.6	30.32	770.1	—21.3	—29.6	.....	ssw.	16	7.2	.....	0	0	.....	.....	0	0	clear.
29	30.15	765.8	30.17	766.3	— 9.5	—23.1	.....	nnw.	42	18.8	.....	hz.	5 s.	.....	.....	0.07	1.8	fair.
30	30.80	782.3	30.83	783.1	—39.8	—39.9	.....	ese.	12	5.4	.....	0	0	.....	.....	0	0	clear.
31	30.64	778.2	30.66	778.7	—23.2	—30.7	100	se.	21	9.4	.....	hz.	3 s.	.....	.....	0	0	clear.
Mean	30.09	764.3	30.11	764.8	—20.9	—29.4	95.1 r	.....	8.7	3.9	.....	.....	2.3	.....	.....	0.14	3.7	
1883.																		
January 1	30.27	768.8	30.29	769.4	—16.2	—26.8	100	e.	20	8.9	.....	0	2 s.	.....	.....	0	0	clear.
2	29.57	751.1	29.59	751.6	— 4.2	—20.1	100	ese.	32	14.3	.....	hz.	8 s.	.....	.....	0	0	cloudy.
3	29.42	747.3	29.44	747.8	— 6.9	—21.6	.....	se.	5	2.2	.....	hz.	5 s.	.....	.....	0	0	fair.
4	29.25	742.9	29.27	743.4	— 5.5	—20.8	.....	e.	10	4.5	.....	0	2 s.	.....	.....	0	0	clear.
5	29.04	737.6	29.06	738.1	—13.4	—25.2	100	ne.	11	4.9	.....	hz.	7 n	.....	.....	0.01	0.3	light snow.
6	29.08	738.6	29.10	739.1	—13.1	—25.1	.....	nne.	7	3.1	.....	.....	10 n.	.....	.....	0.03	0.8	light snow.
7	29.27	743.4	29.29	744.0	—20.2	—29.0	100	nnw.	1	0.4	.....	.....	10 s.	.....	.....	inap.	inap.	cloudy.

NOTE.—The above observations, taken at 7 a. m., Washington time, were received too late for publication in the DAILY BULLETIN, and are given here in full from date of last published report (August 27, 1882). For continuation of this station, see United States series, DAILY BULLETIN.

REVIEW.

INTERNATIONAL METEOROLOGY.

[*Pressure expressed in inches and millimetres; temperature in degrees, Fahrenheit and Centigrade; wind force by scale of 0–10.*]

With this REVIEW is issued international chart iii. for the month of September, 1881. This chart continues the series of international charts begun in November, 1877, and shows the paths of the principal atmospheric depressions that have appeared in the northern hemisphere during the above-mentioned month.

The data are charted for each day of the month on the maps accompanying each issue of the "International Bulletin," and from these charts and additional data are traced the movements of the centres of barometric minima.

The paths of seventeen depressions which appeared during September, 1881, have thus been traced; in addition, are also shown the paths of five typhoons which occurred in the China sea during the month. The tracings of these are copied from Mr. Marc Dechevrens' "Typhoons of 1881."

The depressions traced on the chart are distributed as follows: Seven are charted in or near the United States; of these, five moved in an east-northeasterly path north of the forty-fifth parallel; one, number iv., pursued an abnormal track, having moved from southern Texas eastward to Mississippi, thence northward and westward to Dakota and finally disappeared in the northwest territories of British America. Number iii. was a tropical hurricane which originated south of N. 25° and moved first to the northwestward, touching the coast of the United States near Cape Hatteras, where it recurved to the northeastward and was soon afterwards dissipated. Two depressions are shown over the Atlantic ocean between N. 40° and 50°; one of these reached the British coasts, but the other apparently filled up on approaching the coast. Four disturbances appear to have developed in Greenland and over the ocean north of the fiftieth parallel; one of these passed southeastward over the British Isles and central Europe. Four depressions are traced in Europe; all of these have moved in a northeasterly direction from the southern districts. Two storm-tracks appear in western Siberia, but they are apparently the paths of depressions which developed in Europe. None of the disturbances charted have displayed unusual storm energy.

The following are brief descriptions of the storms that occurred in the United States and Canada:

I.—This disturbance appeared in Dakota on the 4th, the region of least pressure being enclosed by the isobar for 29.6 (751.8). During the day the depression moved eastward, and on the 5th the centre was over Lake Superior, giving showery weather and warm southerly winds at stations along the Saint Lawrence. By the 6th the disturbance was near the mouth of the Saint Lawrence; moving thence northeastward it passed over Labrador, and on the 7th it was apparently central near the entrance to Davis' Strait.

II.—This disturbance moved slowly from the northwest during the 8th and 9th, and by the 10th the centre was over Lake Superior, causing cloudy weather and rain at stations in the upper lake region. On the 11th the depression passed eastward over northern Canada and dissipated before reaching the ocean. Strong westerly breezes to moderate gales occurred at the lake stations after the passage of this disturbance.

III.—The earliest information relative to this hurricane was the report of the brig "Belle Prescott"; that vessel in N. 24° 38′, W. 68° 48′, on the 7th encountered a hurricane from ene. to sw. lasting twelve hours, and during which she scudded under bare poles and lost and split several sails. The storm-centre was then apparently moving towards the northwest. On the 8th and 9th it was near the coast of the Carolinas, but owing to the absence of detailed reports the position of the centre cannot be determined; the following reports, however, serve to indicate the severity of the disturbance at sea. On the 8th the schooner "Wm. Whitehead," two hundred miles from Cape Hatteras, reported a severe hurricane, and the bark "Saint Lawrence" was abandoned on the 9th in N. 33° 30′, W. 75° 23′, having encountered a terrific hurricane on the afternoon of the 8th, in which the vessel was totally dismantled by furious winds and seas. On the 9th the schooner "M. W. Drew" experienced a heavy gale, during which she stove stern, lost sails and spars, and was abandoned on the 10th in N. 33° 35′, W. 77° 20′. On the same date the schooner "Lizzie Florence," off the Frying Pan shoals (coast of North Carolina), had a heavy ese. gale, lasting two hours, then veering suddenly to sw., from which quarter it blew with great force for eighteen hours; vessel split sails and lost mainboom. The schooner "City of Chelsea," in N. 32° 54′, W. 77° 30′, reported a heavy gale, in which she lost all spars and sails; and the schooner "S. L. Russell," off Cape Lookout, lost deck-load during the gale. In the above reports no barometric observations were given; the depth of the atmospheric depression at sea cannot, therefore, be determined, but the disturbance was apparently of small diameter, since vessels on the seventy-second meridian on the 9th and 10th reported pressures above 30.0 (762.0), and the reports from stations on the North Carolina coast show that the violence of the storm was felt only at outlying coast stations between Wilmington and Hatteras. The storm-centre passed over Smithville and Wilmington, North Carolina, between 7 and 11 a. m. of the 9th. At 7 a. m. of that date the barometer at Charleston, South Carolina, read 29.98 (761.5), wind nw., 12 miles an hour. At coast stations in North Carolina it read as follows: Smithville, 29.85 (758.2), wind n., 18; Wilmington, 29.91 (759.7), wind ne., 13; Fort Macon, 29.98 (761.5), wind e., 24; Portsmouth, wind ne, 24; Hatteras, 30.05 (763.3), wind e., 22. At 11 a. m. the barometer at Charleston, South Carolina, read 30.01 (762.2), wind nw, 8 miles per hour, but at Smithville, North Carolina, it had fallen to 29.23 (742.4), wind e, 48 miles; and at Wilmington to 29.3 (744.2), wind e., 30 miles, while at Fort Macon it read 29.91 (759.7), wind se., 38. At Portsmouth and at Hatteras the wind blew from the southeast with a velocity of forty-four and thirty miles an hour, respectively. At 3 p. m. the pressure at Smithville was 29.83 (757.7), wind w., 24, and at Wilmington it was 29.69 (754.1), wind w., 26, the wind having, during the interval between 11 a. m. and 3 p. m., attained a velocity of sixty miles an hour from the northeast at the former, and sixty-four miles west at the latter, station. At Smithville trees, fences, etc., were blown down, telegraph lines prostrated, and the instrument-shelter and wind vane at the signal office were blown away; several wharves were destroyed; the pilot boats in the harbor were sunk, and loaded vessels were driven ashore. At Wilmington several houses were unroofed and vessels were capsized or driven ashore; about eight hundred trees, together with fences, walls, etc., were blown down, and all telegraph lines were prostrated; the damage was estimated at $100,000. At Fort Macon several bath-houses were washed away, and much damage was done to the telegraph line. On the 10th the disturbance moved northward, the pressure having increased to 29.9 (759.4) near the centre; the wind changed to s., 42 miles, at Fort Macon at 7 p. m. of the 9th, and to s., 40 miles, at Kitty Hawk at the midnight observation of the same date. On the 10th the wind reached a velocity of 36 miles, sw., at Portsmouth, and 42 miles, sw., at Hatteras, while it decreased to strong breezes at stations south of those points. On the 11th the disturbance passed off the coast into the Atlantic, causing moderate north and northeast gales at Barnegat and Sandy Hook. The depression appears to have filled up on reaching the ocean. An area of high-pressure occupied the Maritime Provinces, and during the 12th and 13th vessels between W. 65° and 50° reported pressures of 30.1 (764.5) and above.

IV.—This disturbance, which is noteworthy on account of the unusual path of the centre, developed in Texas on the 14th; it moved in an easterly direction towards Mississippi, and by the morning of the 15th the depression extended from the Gulf of Mexico to the lake region, the lowest barometric readings being in Mississippi. The eastward movement of the disturbance was checked by an area of high-pressure, 30.2 (767.1) to 30.4 (772.1), which occupied New England and the Maritime Provinces on the 15th. By the 16th the depression,

having moved to the westward, was central in Minnesota, where the pressure was 29.4 (746.7). Strong southeast to southwest gales occured on the lakes, and caused some damage to lake shipping. On the 17th the disturbance passed into Manitoba, attended by increasing pressure and diminishing energy, and on the 18th it disappeared in the northwest territories of British America.

V.—This was a slight depression which moved from the northwest into Dakota on the 23d. On the 24th the area of least pressure was shown over the Lake Superior region, the pressure having decreased to 29.35 (745.5). Rainy weather and higher temperature, with moderate s. and sw. gales, prevailed at stations in the upper lake region and in western Canada. On the 25th the depression passed to the north of Lake Superior, and, continuing its eastward movement over northern Canada, was central over the Gulf of Saint Lawrence on the 26th. On the 27th it moved northeastward over the ocean and became merged in an extensive depression which occupied Greenland and Iceland.

VI.—During the 25th there was a decrease of pressure in Nebraska and Dakota, and on the 26th the isobar for 29.8 (756.9) enclosed the region named, and also Iowa and Wisconsin. Cloudy weather and occasional rain occurred at stations to the eastward, but the winds remained moderate in force. On the 27th the disturbance was central in Michigan; the atmospheric pressure remained unchanged, but the cloud and rain-area had extended to Ontario. On the 28th the disturbance was near the Gulf of Saint Lawrence, attended by moderate winds and showery weather. By the 29th it had passed into the Atlantic and was probably central near N. 52°, W. 40°, the s. s. "Strassburg," in 50° 24′, W. 36° 21′, reporting barometer 29.73 (755.1), wind sse., force 7, rainy, while vessels to the westward had n. and nw. winds of force 5 to 7. On the 30th the disturbance was central as a storm of slight energy near N. 55°, W. 25°.

VII.—This depression appeared in Dakota and Minnesota on the 29th, the centre being enclosed by the isobar 29.5 (749.3). The disturbance moved northeastward, attended by moderate gales and rainy weather in the eastern quadrants; and on the 30th it was central over Lake Superior, with the pressure ranging from 29.5 (749.3) to 29.6 (751.8).

On the 29th a furious hurricane occurred at Mazatlan, western Mexico, causing great damage and loss of life. The following notes, referring to this hurricane, are taken from the report of Mr. F. Quijano, the co-operating observer at that station: 28th, at 8.10 a. m., light rain at intervals with variable winds from ese. to ssw.; at 7 p. m., wind nw., force 7, until 8.15 when a calm followed the rain. At 10 p. m. the wind came back in a fresh breeze, of force 5, from the same point, and continued throughout the night, accompanied by heavy rain until the early morning of the 29th. At 5 a. m. of the 29th wind and rain decreased, the wind becoming light and variable from the first quadrant, with a marked barometric fall, 29.38 (746.2); these conditions prevailed until 10 a. m., when the wind came from ese. and blew with a velocity of 15 miles an hour with increasing sea-swell from that quarter. At 11.30 a. m. the barometer read 29.39 (746.4), wind ese. 70 miles an hour, the heavy seas reaching the outskirts of the town. The wind increased to a hurricane of 80 miles an hour at 2 p. m., at which time the steamer "Sonora" weighed anchor and made for shelter at the island of Venados; at the same time the anchors of the German bark "Carolina" and the American schooner "Teresa" began to drag, and those vessels were driven ashore. At 2.30 p. m. the hurricane increased to 100 miles an hour; from 5 to 6 p. m. the wind was variable from ese. to s. continuing to blow a hurricane; many houses were destroyed, the anemoscope was blown down, and the windows of the observatory facing south were destroyed. At 6.30 p. m. the hurricane began to decrease in force, and continued to gradually diminish throughout the night; at 4 a. m. of the 30th it had moderated to a gale from n.; at 7.30 a. m. the rain ceased and the wind fell to light, the sea becoming less rough. Many lives were lost in the neighboring towns from freshets and three hundred houses were destroyed. Several vessels were driven ashore and wrecked.

The following concerns the storms traced over the Atlantic and in Europe:

VIII.—On the 1st the atmospheric pressure near Newfoundland was 29.5 (749.3), and by the 2d the area of least pressure was transferred to about N. 45°, W. 35°; the brig "Isabella," in N. 54° and about two hundred miles east of Saint John's, on the 1st had a heavy gale, in which she lost spars, sails, and boats; the s. s. "Rhynland," in N. 45° 09′, W. 39° 03′, reported barometer 29.53 (750.0), wind ne., 7, cloudy; the s. s. "Pennsylvania," in N. 43° 48′, W. 40° 01′, on the 2d, reported barometer 29.63 (752.6), wind ne., force 6, cloudy; and the s. s. "Illinois," in N. 44° 37′, W. 39° 16′, on the same date, reported barometer 29.64 (752.9), wind nne., force 7, fair; the s. s. "Nederland," to the eastward of the centre, had se. wind of force 3, barometer 29.8 (756.9). During the day the disturbance moved northeastward, and on the 3d it was central near N. 49°, W. 21°, where the pressure was 29.7 (754.4), with northerly winds to the westward of the twenty-second meridian and southerly and southeasterly winds eastward to the Irish coast. On the 4th the storm-centre was between W. 15° and 20° and near the fiftieth parallel; the bark "Commewyne," in N. 49° 21′, W. 18° 22′, reported barometer 29.67 (753.6), wind wnw., force 6, cloudy; and the s. s. "Celtic," in N. 51° 10′, W. 13° 20′, barometer 29.62 (752.8), wind se., force 6, cloudy. On the 5th the depression occupied the Bay of Biscay and the English channel, the barometric readings being 29.4 (746.7) over the last mentioned. Moderate north and northeast gales were reported by vessels west of 15°, west longitude, and strong easterly to southerly winds and showery weather occurred at stations on the coast of France and in the southern part of England. During the 5th the decrease of pressure spread over the whole of the British Isles, which on the 6th were enclosed by the isobar for 29.6 (751.8). Within the limits enclosed by that isobar were two districts where the pressure was below 29.5; one of these was over the North sea and to the eastward of northern Scotland, while the other was over the Channel. During the 6th the disturbance moved northward, and on the 7th the centre was near the Hebrides, causing rain and moderate southerly winds in Scotland. On the 8th the region of least pressure was near the Norwegian coast, but the depression appeared to be filling up, and by the 9th the pressure in that region had increased to 29.9 (759.4).

IX.—On the 1st a small area of low-pressures, enclosed by the isobar for 29.6 (751.8), was shown near the Gulf of Genoa; it was attended by strong northwesterly winds and cloudy weather at stations on the shores of the Gulf of Lyons. On the 2d the pressure was least in northern Italy and in southwestern Austria, the barometer readings ranging from 29.6 (751.8) to 29.65 (753.1). On the 3d the storm-centre was in Hungary, the decrease of pressure extending over central and northern Europe. During the 4th and 5th the disturbance moved slowly eastward with gradually increasing pressure, and disappeared in southern Russia on the last-mentioned date.

X.—After the passage of low area viii., a small disturbance appeared in western France, causing moderate to strong westerly gales at stations on the shores of the Bay of Biscay. On the 9th the disturbance, having moved northeastward, was central in northern Germany, accompanied by general rain along its track. The pressure increased somewhat rapidly in rear of the depression, and by the 10th it had apparently filled up.

XI.—During the 7th and 8th there was a gradual decrease of pressure in Greenland, and by the 9th it had fallen below 29.0 (736.5), the barometer at Godthaab reading 28.96 (735.6), wind ne., force 2. Steep gradients were formed between Greenland and Iceland, and on the 10th the wind attained the force of 8 (strong gale) from the southeast. On the 10th the disturbance disappeared, the pressure increasing to 29.9 (749.4) over the region above referred to.

XII.—This depression was probably a secondary development of low area x. On the 11th a small area of low-pressures, 29.65 (753.1) to 29.8 (756.9), was situated in northern Austria; during the day the disturbance moved northward and on the 12th it was central over the western part of the Baltic, where it was attended by moderate to strong winds and rainy weather. By the 13th the storm-centre was near Stockholm, the pressure having decreased to 29.55 (750.6); the winds increased somewhat in force in the southern quadrants of the depression, and cloudy or rainy weather continued at stations near the centre of disturbance. During the 14th the storm-centre remained nearly stationary over the Baltic, and on the 15th it moved slowly southward, causing a slight decrease of pressure over northern Germany. By the morning of the 16th the area of disturbance covered northern Scandinavia and the greater part of Russia, the pressure being least near Moscow, where the barometer read 29.63 (752.6), wind sw., force 2. On the 17th the area of low-pressures still occupied European Russia and had extended to western Siberia, while an increase of pressure had set in over Scandinavia. By the 18th the pressure had decreased to 29.4 (746.7), in the Ural region, and during the 19th and 20th the disturbance moved slowly eastward into Siberia, and disappeared on the last-mentioned date.

XIII.—During the 10th the pressure began to decrease over the Azores and on the morning of the 11th the barometer read 29.75 (755.6), being a fall of about .3 inch since the preceding twenty-four hours. By the morning of the 12th the disturbance had moved northeastward to about N. 46°, W. 22°, the winds shifting to northwest in the vicinity of the Azores, while southeasterly breezes prevailed over the region near N. 48°, and from W. 21° to W. 15°. During the 12th the disturbance moved slowly eastward with increasing pressure, causing on the 13th strong southeasterly winds over the Bay of Biscay. This depression dissipated before reaching the European continent.

XIV.—On the 17th an area of low-pressures, indicated by the isobar for 29.6 (751.8), lay over Iceland. Under the influence of this depression, a brisk decrease of pressure occured over the British Isles and western Scandinavia, and showery weather prevailed in those districts. On the 18th the disturbance was apparently central north of the Färöe islands, and during the day it probably became merged in an extensive depression which was moving southward from Greenland.

XV.—On the 18th an extensive depression occupied southern Greenland and Iceland, the isobar for 29.6 (751.8) extending southward to the fiftieth parallel. The region of least pressure was to the southwestward of Iceland, where the barometer read 29.39 (746.5), wind e., force 8, raining; moderate westerly and northwesterly gales were reported by vessels on the fiftieth parallel, while those to the northward of that latitude and east of 20° west longitude, had moderate southwesterly breezes. On the 19th the region of least pressure was transferred to about N. 53°, W. 20°, in which region the barometric readings were below 29.42 (741.7). The easterly gale continued at Stykkisholm, Iceland; southerly and southwesterly gales occurred from W. 20° eastward to the Irish coast and the English channel, while southeasterly and easterly winds prevailed over Scotland. On the 20th the storm-centre was in N. 52°, W. 18°; on that date the s. s. "Rhynland" in N. 49° 26′, W. 17° 44′, reported barometer 29.21 (741.8), wind sw., force 5, fair; the s. s. "Köln" in N. 49° 53′, W. 24° 06′, barometer 29.25 (742.9), wind nw., force 6, raining; stations on the Irish coast had southerly and southeasterly winds of moderate force and cloudy or rainy weather. On the 21st the disturbance was central in Ireland, where the barometric readings ranged from 29.23 (742.4) to 29.28 (743.7), easterly and southeasterly winds prevailed in Scotland, over the North sea, and at stations in Denmark, northwestern Germany and the Netherlands, while southwesterly breezes were reported at stations in western France. During the 22d and 23d the disturbance was forced to the southeastward by an area of high-pressures which occupied the Scandinavian peninsula, and which gradually spread over the British Isles and northern Europe. On the last-mentioned date the depression was in Austro-Hungary where the pressure ranged from 29.6 to 29.7, increasing to 30.0 (762.0) on the following day.

XVI.—This disturbance appeared over the Atlantic north of the fiftieth parallel and between the meridians of 40° and 30° west longitude on the 22d. On that date the s. s. "Köln," in N. 49° 07′, W. 32° 49′, reported barometer 29.32 (744.7), wind sw., force 5, cloudy, and the s. s. "Germanic," in N. 43° 56′, W. 38° 52′, barometer 29.50 (749.3), wind wnw., force 3; vessels to the westward of W. 40° had strong northerly and northwesterly winds. On the 23d the disturbance moved slowly north-northeastward, causing a decrease of pressure over the western portion of the British Isles and moderate to strong westerly and northwesterly gales over the ocean south of the fiftieth parallel. On the 24th the region of least pressure was between Iceland and Greenland; during the period from the 24th to the 30th the disturbance remained in the vicinity of Iceland, with irregular movements to the southward and eastward, which caused a decrease of pressure with showery weather and moderate to strong southwesterly winds over the northwestern districts of the British Isles.

XVII.—This disturbance appeared in southeastern Russia on the 21st and was enclosed by the isobar for 29.6 (751.8). It moved northeastward and on the 22d the centre was shown near Kasan, where the barometer read 29.26 (743.2) wind sw., cloudy. From the 23d to the 26th the disturbance occupied the Ural region, the pressure ranging from 29.45 (748.0) to 29.6 (751.8). On the latter date it moved southeastward and disappeared in southwestern Siberia.

The following notes, descriptive of the typhoons that occurred in the China sea during September, 1881, are taken from Mr. Marc Dechevrens' "Typhoons of the Chinese sea in the year 1881."

I.—This typhoon appears to have moved from the region south-southwest of Japan, by a north-northeasterly course to about the latitude of Tokei, when it turned to the northeastward and disappeared in the Pacific. At only one station on shore, that of Inu-bo-ye-saki in N. 35° 43′, E. 140° 53′, did the wind reach the force of a gale, but the typhoon appears to have been quite severe at sea. The barometric minimum occurred at Tokei on the 2d, the barometer reading 29.72 (754.9), wind nw., 6 miles. On the same date the pressure at Inu-bo-ye-saki lighthouse was 29.65 (753.1), wind nw. gale. The German bark "Carl," in N. 34° 34′, E. 138° 57′, had a heavy n. gale on the 1st, and during the 2d it blew a hurricane, with tremendous sea running; at 6 p. m. the weather moderated and fell calm, which continued for three days. The "Carl" passed several fishing boats that had been blown out to sea. The ship "North American" probably encountered the same typhoon on the 3d; that vessel, in N. 37° 30′, E. 143° 30′, had a typhoon from ne. backing to nw., blowing very hard for eight hours, during which she lost maintopsail.

II.—This typhoon appeared northeast of Luzon on the forenoon of the 6th and moved towards the northwest with a velocity of about twelve miles an hour. On reaching the island of Formosa the typhoon appears to have split into two segments, one of which passed over Formosa and moved westward to the Chinese coast, while the other passed south of the island and reached the Chinese coast by a northwesterly course. The barometric minimum, 29.06 (738.1), occurred at Tai-wan-foo, Formosa, on the afternoon of the 7th, the wind blowing a fresh gale from nnw., at 8 a. m., to se., at 4 p. m. At Tamsui, in northern Formosa, the lowest barometric reading was 29.41 (747.0) at 2 p. m. of the 7th, wind e. to ese., strong gale. The western segment of the typhoon, having no obstacle to impede its movement, traveled quickly northwestward, and by the 8th it had already entered the continent. It passed between Amoy and Swatow on the evening of the 7th, the barometric readings at the time of the passage of the centre being 29.30 (744.2), wind n. by e., force 7, and 29.35 (745.5), wind nnw., force 6, respectively. The second, or east-

ern depression, cleared Formosa during the afternoon of the 7th, and, moving rapidly by a w. by n. course, it reached the continent on the morning of the 8th, passing at about the same place as its predecessor. The barometric readings at Amoy and Swatow during the passage of the second centre of depression were 29.39 (746.5), wind e. by s., force 6, and 29.32 (744.7), wind nw., 6, respectively. The velocity of translation of the first storm-centre averaged fourteen miles an hour, that of the second centre was considerably diminished when in Formosa, but after reaching the straits it averaged 14.6 miles an hour. The eastern segment, on reaching the continent, moved westward and disappeared to the northward of Hong-Kong on the 9th. The western depression, however, continued its northwesterly movement towards Lake Toong-ting, where it recurved on the 10th and moved northwestward along the valley of the Yang-tsi-kiang, entering the Yellow sea on the 13th. The barometric minimum, 29.69 (754.1), occurred at Hankow, at 7.45 p. m. of the 11th, and at Wuhu, (N. 31° 20′, E. 118° 22′) where the lowest barometric reading was 29.82 (757.4) on the morning of the 15th. When last observed, at Shaweishan light-house (N. 31° 25′, E. 122° 14′), the atmospheric pressure was 29.62 (752.3), wind shifting from s. to nw., in a fresh to strong breeze. The typhoon did not cause much damage to property on shore during its passage, but it was probably severe at sea. On the 7th the ship "Hindostan," in N. 21°, E. 117°, encountered a severe gale in which the vessel was much damaged.

III.—This typhoon passing through the most populous part of Japan consequently caused great damage to property in that country, as well as numerous shipwrecks on the coasts. The typhoon appears to have originated to the northwestward of the Liu-kiu or Loo-choo islands on the 10th, and to have moved in a northeasterly direction on the 12th, touching the southern point of Kiu-siu island, about noon of the 13th. The ship "Highlander," in N. 27° 33′, E. 131° 06′, reported strong ne. to ene. gales with terrific squalls from the 10th to the 13th, on which date the vessel encountered a typhoon in which she lay for twelve hours on her beam-ends and lost several sails. The s. s. "Tientsin," in about N. 31° 00′, E. 126° 30′, from 6 p. m. of the 12th to 4 a. m. of the 13th, reported lowest barometric readings from 29.62 (752.3) to 29.64 (752.8), light wind shifting from e. by n., clear. to nw., fresh breeze; weather squally with rain. The French steamer "Volga," crossed the region of central calm, as shown by the following: "Left Yokohama on September 11th, wind ne. raining, barometer 30.08 (764.0); until the 13th had variable winds from ne. to se.; sea from e., and frequent squalls from se., barometer falling; 13th, 9 a. m., violent squall from se., heavy sea, wind freshening and barometer falling rapidly; 10 a. m. (about N. 32° 30′ E. 133° 0′), barometer 29.55 (750.6), strong se. wind, sea rising from the same quarter; 11 a. m., barometer 29.53 (750.0); noon, barometer 29.17 (740.9), wind blowing a hurricane from se.; 0.30 p. m., barometer 28.94 (735.1); 1 p. m., 28.74 (730.0); 1.30 p. m., 28.5 (723.9); 2 p. m., 28.31 (719.1), falling as low as 28.00 (711.2) during the squalls; sea frightfully high. At 2.30 p. m. barometer still at 28.31 (719.1), when a sudden calm occurred, lasting fifteen minutes, sun shining, patch of blue sky at the zenith, wind se., very light and veering to n. through e.; 2.45 p. m., wind again blowing furiously from n., sea very high, a boat carried away; 3 p. m., barometer 28.5 (723.9), wind n. blowing with hurricane force; 4 p. m., barometer 29.09 (738.9), wind abating; 5 p. m., 29.27 (743.4); 6 p. m., 29.61 (752.1); shipped an enormous sea on the starboard side, water in the cabins and in the engine-room; starboard gun torn from its fastenings and lost; 6.30 p. m., weather improving; land (Kiu-siu) seen on the starboard side." The position of the "Volga," when in the calm-centre of the typhoon, was about N. 31° 50′, E. 132° 01′; the centre moved directly northeastward and entered Niphon during the 13th. At Hiroshima the barometric minimum occurred at 5.30 p. m. of the 13th, the pressure being 29.40 (746.7), wind nne., 14 miles an hour, light rain. At Wakayama the barometer fell to 28.78 (731.0) at 10 p. m. of the 13th, wind nne., strong gale; the anemometer having broken at 9.30 p. m., when the wind had reached a velocity of 43 miles an hour; heavy rain continued during the passage of the disturbance. At Kobe observatory the wind varied from ne. to n. and nw.; lowest barometer 29.09 (738.9) at 11 p. m. of the 13th; from this time the wind, which had been blowing in violent squalls with heavy rain, decreased in violence. At Kioto the barometric minimum, 28.91 (734.3), was registered about midnight of the 13–14th, wind n., 19 miles, increasing at 1 a. m. of the 14th to nw. 35 miles. At Tokei the lowest barometric reading was 29.17 (740.9) at 6.15 a. m. on the 14th, wind s. 41 miles, with heavy rain and vivid lightning; at 1.40 a. m. the wind veered from n., 2 miles, to sse., 30 miles, and increased in force, hauling to ssw. at 6.30 a. m. and decreasing. The typhoon continued its northeasterly movement and passed between the stations Niigata and Nobira; at the former, on the western coast of Niphon, the lowest barometric reading was 29.15 (740.4) at 8 a. m. on the 14th, wind nne., 19 miles, raining; and at the latter station, on the eastern coast, it was 29.03 (737.3) at 11 a. m., wind se., heavy gale; at 0.30 p. m. the wind became nearly calm, after which it came out from wsw. to w. and nw. The typhoon passed into the Pacific during the 14th, after which date observations are missing.

This typhoon caused much damage to barges and merchandize at Yokohama, and twelve lives were lost; at Tokei thirty-six houses were blown down and fourteen were damaged, four fishing boats were wrecked off Shinagawa. Many fishing vessels and two barges were driven ashore on the coast of Niphon and were attended in some cases by loss of life. The velocity of translation of the typhoon varied considerably; on the 13th from midnight to noon, it was about 16 miles an hour; from noon to next midnight, 27 miles; on the 14th, from midnight to noon, 26 miles; and from noon to midnight of the 15th, about 22 or 23 miles.

IV.—This typhoon originated near the Pratas reef, in the northern part of the China sea, during the 12th and 13th, and moved northward to the Straits of Formosa, where it was central on the 14th, the least recorded pressure being 29.44 (747.8), wind ne., force 5, at Lamock light-house (N. 23.° 15′, E. 117° 17′), at 3 a. m. of the 14th. It made towards the Chinese coast, and then suddenly swerved to the northeastward and moved towards the Pescadores islands; and on the 15th it again moved northward and entered the continent. During its passage through the Straits of Formosa it was attended by northeasterly to southeasterly and south-southwesterly winds, of force 6 to 8, the lowest barometric reading being 29.4 (746.7). During the 15th the typhoon entered China between Amoy and Ocksen island, the barometer at the latter station reading 29.4 (746.7), wind e., force 8, to sw., force 7. On land the disturbance does not appear to have exhibited much storm-energy, but at sea near the coasts, it was very severe, the winds attaining a force of 10 (Beaufort scale). After moving northward until the 16th the course changed to the northeastward and the typhoon reached the sea on the 17th, having caused but light winds at land stations. It moved northeastward over the Sea of Japan, and disappeared in the Pacific on the 19th, without displaying any further violence and attended by gradually increasing pressure. Prior to the 15th the velocity of translation of the typhoon was variable on account of the uncertainty of its course. On entering China its mean velocity may be estimated at 8.75 miles an hour; during its passage over the Eastern sea the velocity was about 15.5 miles, and in the Sea of Japan it increased to about 27.5 miles an hour.

V.—This typhoon was first noticed on the 24th, on which date it lay to the eastward of Luzon, Philippine islands. It moved north-northeastward at a considerable distance from land, and caused much damage to shipping and loss of life. The atmospheric depression when in the China sea does not appear to have been very deep, but its central region was of great extent. The cause of its moving at so great a distance from the coast, while the other typhoons which originated in

the same latitude have mostly made for the continent, was due chiefly to the fact that the northeast monsoons had set in in China about the 19th, and also that the atmospheric pressure was high in central and eastern China. The typhoon moved northwestward to near the Bashee channel, and turning to the north-northeastward on the 25th, skirted the eastern coast of Formosa. On the 26th the centre was to the southwestward of the island of Kiu-siu, Japan; passing into the Japan sea, through the Straits of Corea, the typhoon moved along the coast of Tartary, and during the 27th it passed into the Pacific, between Yesso and Saghalien. During its passage northward near Formosa, the barometer at Tai-wan-foo ranged from 29.61 (752.1) to 29.76 (755.9), with strong north wind and fine weather throughout the 24th, 25th, and 26th. At Tamsiu, northern Formosa, the lowest barometer read 29.71 (754.6), from 7 a. m. to 1 p. m., of the 25th, wind nne., force 6–7. During its progress very violent winds occurred near the centre, as shown by the following vessel reports: ship "Faugh Ballaugh," between N. 27° 28′, E. 123° 19′, and N. 26° 35′, E. 122° 42′, from noon of the 24th to noon of the 25th, reported barometer ranging from 29.73 (755.1) to 29.44 (747.8), wind nne., force 10, to nnw., force 12 (Beaufort scale), with terrific squalls. S. S. "Tientsin" anchored in Barren bay for shelter (N. 28° 44′, E. 121° 49′), reported, 25th, from noon to 8 p. m., barometer remained at 29.6 (751.8), wind nw., force 10, clear weather; the the bark "Lydia," at noon on the 25th, reported barometer 29.72 (754.9), wind nne., furious typhoon, heavy rain; 4.30 p. m., barometer 29.66 (753.4), wind n., typhoon increasing, a furious squall blew away the fore lower topsail; 10 p. m., barometer 29.58 (751.3), wind nw., typhoon raging furiously, rain and high sea, main lower topsail blown to pieces. Midnight to 3 a. m. of the 26th (N. 29° 35′, E. 124° 50′), barometer 29.54 (750.3), typhoon raging, with heavy rain; noon, barometer rising, wind moderating. Previous to the passage of the typhoon the barometer at Zi-Ka-Wei had been sinking slowly but steadily; it stood at its maximum, 30.12 (765.0), on the 21st and fell gradually to 29.76 (755.9) at 3 a. m. on the 26th; the ne. monsoon continued to blow steadily until the 25th, when the wind changed to nw. and w. and blew at the rate of about sixteen miles an hour at the time of the passage of the centre. On reaching Japan the typhoon maintained its violence and caused much damage, as indicated by the following: the brig "Minatitlan," in N. 31° 17′, E. 126° 40′ on the 25th, lost boats, had decks torn up, and vessel thrown on her beam ends, and was obliged to cut away both masts. The bark "Presto," off Cape Gotto, entrance to the channel of Corea, at 8 a. m. of the 25th reported barometer gradually falling, wind e., heavy ne. sea running; 6 p. m., heavy gale and sea; on the 26th, 10 a. m., typhoon raging, torrents of rain, barometer 28.9 (734.0), vessel thrown on her beam ends, sails blown away, and vessel otherwise damaged. The wind increased from e. to wnw.; when off Quelpaert island, the barometer began to rise and the weather moderated. At noon of the 26th the barometer read 29.42 (747.3) on board the bark "Kanagawa-maru," near the Kosiki islands (N. 32° 12′, E. 120° 35′); several sails were blown away and the ship sustained other damage; at noon it was blowing a typhoon with wind hauling to sw. At Nagasaki the typhoon was very heavy; six coal-laden junks sank at their anchors; a large number of sampans were sunk or stove in; many lives were lost, and several steamers and sailing vessels dragged anchor in the harbor; buildings were blown down, and trees, roofs, etc., were scattered in all directions. At Nagasakj the barometric minimum occurred about noon of the 26th, when the barometer read 29.38 (746.2), wind ssw., about 40 miles an hour, heavy rain. At this time the centre of the typhoon was passing north-northeastward, in the Straits of Corea, at a distance of about one hundred miles. The s. s. "Chitose-Maru," in the Straits of Corea, reported at noon of the 26th, barometer 28.8 (731.5), wind se.; 2 p. m., barometer 28.59 (726.2), wind s. The s. s. "Annei Maru," at Fusan, Corea, reported at noon 26th, barometer 29.66 (753.4), wind nne., force 7, heavy rain; 4 p. m., barometer 28.92 (734.6), wind e., force 11; 5 p. m., barometer 28.6 (726.4), wind nw., force 12, heavy rain; 6 p. m., barometer 28.6 (726.4), wind w., force 12; after this the barometer began to rise and the weather cleared. After passing through the Strait of Corea the typhoon moved northeastward, keeping in the middle of the Sea of Japan. The bark "Siberien," from Vladivostok to Cheefoo, reported that on the morning of the 27th, in N. 39°, E. 130°, she passed through a typhoon of extraordinary violence, in which the barometer fell to 28.21? (716.5?) at 1 a. m. of the 27th. The storm began with the wind from ne. shifting from nnw. and wsw.; the vessel lost spars and had deck swept. The s. s. "Europe," in about N. 38° 48′, E. 130° 51′, reported lowest barometer 28.76 (730.5) at 3 a. m. of the 27th, the wind having shifted from e. in a terrific hurricane to n. and nw., and continued to blow with unabated fury until 7 a. m., when the barometer read 29.34 (745.2). The steamer "Ash" and the bark "Nouveau Mondelli" were lost with all hands during this typhoon. On the 28th the typhoon passed into the Pacific beyond the range of observation.

The following description relates to chart ii. for the month of December, 1882, (issued herewith) and presents a brief summary of the meteorological conditions which prevailed over the northern hemisphere during that month. Chart ii. continues the series of international charts begun in January, 1877, and exhibits the mean pressure, mean temperature, and the prevailing wind-direction over the northern hemisphere, as determined from one observation taken simultaneously each day at 7 h. a. m., Washington, or 0 h. 8 m. p. m., Greenwich, mean time.

For the month of December, 1882, two areas of barometric minima are exhibited on the chart. The first of these occupies the north Pacific ocean between the fiftieth and sixtieth parallels, and from Kamchatka eastward to Alaska; within this region the lowest reported mean pressure is 29.36 (745.7), at Saint Paul, Kadiak island, Alaska. North of the sixtieth parallel the pressure rapidly increases, the mean for the month at Ooglaamie, (N. 71° 17′, W. 156° 40′) being 30.11 (764.8). The second area of low-pressures is situated between the parallels of 50° and 62° north latitude, and from W. 50° eastward to about the meridian of 5° east longitude. This region is enclosed by the isobar for 29.7 (754.4), and embraces two small areas where the mean pressure is less than 29.6 (751.8). To the southward the barometric gradient gradually increases, the isobar for 30.0 (762.0) extending from the Canadian Maritime Provinces southward to N. 35°, W. 60°, thence northeastward to the forty-second parallel and over the Iberian peninsula. In that part of the continent of Europe lying between E. 5° and E. 25°, excepting the Iberian peninsula, the mean pressure ranges from 29.7 (754.4) to 30.0 (762.0). In the North American continent the mean pressure is least in Canada, the barometric means ranging from 29.9 (759.4) in the Maritime Provinces to 30.05 (763.3) in the western districts of the Dominion.

Four areas of barometric maxima appear on the chart; the most marked of these occupies that part of Siberia lying between N. 50° and 60°, and E. 90° and 107°. Within this region the mean pressures are 30.79 (782.1) and 30.72 (780.3), at Yeniseisk and Irkutsk, respectively. From the region of the greatest pressure above indicated, the barometric means decrease, the isobar for 30.0 (762.0) occupying western Russia to the westward, and northeastern Asia and Niphon to the eastward. The second area of high-pressures is situated west of the Maderia islands and south of the Azores, in about N. 25° to 35° and W. 20° to 35°; within this area the means range from 30.2 (767.1) to 30.24 (768.1.) The remaining areas are shown in the United States of North America and are both indicated by the isobar for 30.2 (767.1). One occupies the country between N. 30° and 50° and the meridians of 95° and 120° west longitude, except southern California and southwestern Arizona. The other area of high-pressures covers Tennessee, the east Gulf, and the south Atlantic States. In the country between these areas the mean pressure ranges from 30.15 (765.8) to 30.19 (766.8)

Compared with the chart for the preceding month (November, 1882), there has been a decrease of pressure in New England, in the lake region, and in Canada; elsewhere in the North American continent there has been no material change. There has been a general decrease of pressure over the north Atlantic ocean, except over the region south of N. 25°, where the pressure is slightly greater than that of November. In Europe there has been an increase of pressure in Germany, Austria, Russia, and in the Danish and Scandinavian peninsulas; in the three last-named districts the increase averages .15 inch. In all other parts of Europe there has been a decrease of pressure, the departures being least in the British Isles and greatest in the Iberian peninsula. In British India and in other parts of Asia the pressure is much above that of the preceding month. In Japan, however, the pressure has decreased, especially in the eastern part of Niphon.

Compared with the corresponding month of previous years, the mean pressure for December, 1882, over the United States, was normal, or slightly above, in all districts excepting New England and the lake region, where it was slightly below. In Canada the pressure was generally above the normal. In Europe the mean atmospheric pressure was below the normal in the central and southern districts, and above the normal in Russia and the Scandinavian peninsula. In British India the pressure was about normal; in Siberia it was above the normal.

The accompanying table shows the deviations in pressure and temperature at isolated stations during the month of December, 1882, as compared with the means for five years:

Stations.	Mean pressure.			Mean temperature.		
	Dec., 1877, 1878, 1879, 1880, 1881.	Dec., 1882.	Departure.	Dec., 1877, 1878, 1879, 1880, 1881.	Dec., 1882.	Departure.
				°	°	°
Gibraltar*	30.17	30.10	— 0.07	59.3	59.2	— 0.1
Malta, Mediterranean Sea	30.02	29.90	— 0.12	61.9	62.5	+ 0.6
Sandwick Manse, Orkney Islands	29.72	29.61	— 0.11	38.9	36.0	— 2.9
Bridgetown, Barbadoes		29.98			81.3	
Cape Town, Cape Good Hope*	30.00			77.5		
Fort Napier, Natal, South Africa	29.78	29.82	+ 0.04	76.5	76.4	— 0.1
Freetown, Sierra Leone	29.89	29.89	normal	86.1	84.1	— 2.0
Mauritius, Indian Ocean	29.96	30.00	+ 0.04	79.8	80.4	+ 0.6
Melbourne, New South Wales	29.91	29.89	— 0.02	59.4	60.7	+ 1.3
Nassau, Bahamas	30.12	30.12	normal	71.7	72.0	+ 0.3
Godthaab, Greenland	29.57	29.80	+ 0.23	19.6	18.0	— 1.6
Stykkisholm, Iceland	29.55	29.74	+ 0.19	26.9	28.4	+ 1.5
Thorshavn, Färöe Islands	29.70	29.63	— 0.07	39.5	36.9	— 2.6
Zi-Ka-Wei, China	30.35	30.38	+ 0.03	39.3	39.6	+ 0.3
Athens, Greece	30.05	29.98	— 0.07	54.8	57.9	+ 3.1
Cagliari, Sardinia, Italy	30.00	29.80	— 0.20	55.6	57.9	+ 2.3
Tokei, Japan	30.01	30.05	+ 0.04	39.7	39.3	— 0.4
Angra, Azores	30.09	30.13	+ 0.04	60.2	61.9	+ 1.7
Funchal, Madeira Islands	30.17	30.20	+ 0.03	66.3	66.0	— 0.3
Ponta Delgado, Azores	30.14	30.17	+ 0.03	62.9	63.9	+ 1.0
Archangel, Russia	29.82	30.15	+ 0.23	16.9	5.7	—11.2
Tiflis, Russia	30.22	30.11	— 0.11	41.5	48.4	+ 6.9
Astrakhan, Russia	30.24	30.18	— 0.06	28.2	30.0	+ 1.8
Ekaterinburg, Russia	30.22	30.44	+ 0.22	9.5	0.5	— 9.0
Tashkend, Toorkistan, Asia	30.41	30.21	— 0.20	32.3	41.9	+ 9.6
Barnaul, Siberia, Asia	30.43	30.60	+ 0.17	0.8	— 7.1	— 7.9
Yeniseisk, Siberia, Asia	30.49	30.72	+ 0.23	— 7.9	—23.4	—15.5
Pekin, China	30.40	30.42	+ 0.02	25.0	22.8	— 2.2
Nikolaevsk on the Amoor, Asia				— 6.5	— 7.1	— 0.6
San Juan de Puerto Rico, W. I	30.03	30.04	+ 0.01	75.7	76.8	+ 1.1
Beirut, Turkey in Asia	30.02	30.03	+ 0.01	64.6	65.5	+ 0.9
Mexico, Mexico	30.33	30.30	— 0.03	45.7	43.9	— 1.8
Havana, Cuba, W. I	30.10	30.04	— 0.06	71.5	66.8	— 4.7
Paramaribo, D. Guiana, S. A	29.99	30.02	+ 0.03	79.8	77.8	— 2.0
York Factory, B. A	30.01	30.16	+ 0.15	—15.1	—14.8	+ 0.3

* Mean for four years only.

In the United States the mean temperature of the air was below the normal in the country east of the ninety-fifth meridian; to the westward of that meridian the temperature was above the normal. In Canada it was below the normal in the western sections, but was above the normal in the eastern provinces of the Dominion. In Europe the mean temperature of the air was above the normal, except in the Scandinavian and Iberian peninsulas and in Russia, where it was about 4°.0 below the normal. At stations in Siberia the temperature was much below the normal; in British India it was 3°.6 above the five years' mean. The highest mean temperature reported was 82°.8 Fahr. (28°.2 Cent.), at Poona, and the lowest was 62°.4 Fahr. (16°.9 Cent.) at Lahore.

The following are some of the extreme mean temperatures reported at isolated stations:

Highest.	Fahr.	Cent.	Lowest.	Fahr.	Cent.
	°			°	
Zanzibar, Africa	84.2	29.0	Yeniseisk, Siberia	—23.4	—30.8
Freetown, Africa	84.1	28.9	Ooglaamie, Alaska	—20.6	—29.2
Bridgetown, Barbadoes	81.3	27.4	Irkutsk, Siberia	—17.9	—27.9
Mauritius, Indian Ocean	80.4	26.9	York Factory, B. A	—14.8	—26.0
			Tomsk, Siberia	—13.2	—25.1

The following table gives the mean pressure and the mean temperature, with corresponding departures, for the month of December, 1882, in the several countries of the eastern hemisphere, compared with the means as determined from observations taken during the years 1877, 1878, 1879, 1880, and 1881:

Countries.	Mean pressure.			Mean temperature.		
	Dec., 1877, 1878, 1879, 1880, 1881.	Dec., 1882.	Departure.	Dec., 1877, 1878, 1879, 1880, 1881.	Dec., 1882.	Departure.
				°	°	°
Algeria	30.14	30.05	— 0.09	57.3	57.4	+ 0.1
Austria	30.09	29.91	— 0.18	32.8	38.7	+ 5.9
British Isles	29.94	29.65	— 0.29	39.4	41.0	+ 1.6
Denmark	29.87	29.76	— 0.11	35.1	31.2	— 3.9
France	30.11	29.85	— 0.26	41.6	44.9	+ 3.3
Germany	30.01	29.82	— 0.19	33.7	34.9	+ 1.2
India	30.00	29.99	— 0.01	68.7	72.3	+ 3.6
Italy	30.05	29.91	— 0.14	48.1	49.4	+ 1.3
Norway	29.73	29.81	+ 0.08	31.5	28.0	— 3.5
Portugal	30.22	30.07	— 0.15	57.3	51.6	— 5.7
Russia	30.04	30.06	+ 0.02	27.1	22.2	— 4.9
Spain	30.15	30.00	— 0.15	51.1	49.4	— 1.7
Sweden	29.79	29.93	+ 0.14	25.9	20.8	— 5.1

* Mean for four years only.

In the United States the prevailing winds were northerly and northwesterly over the country lying south of the fortieth parallel and east of the Rocky mountains; north of the above-mentioned parallel, and from the Rocky mountains eastward, they were mostly westerly and northwesterly. In Canada they were northerly and westerly. Over the north Atlantic ocean the prevailing winds were northerly and northwesterly from the coast of the United States eastward to 50° west longitude and between 25° and 50° north latitude. From W. 50° to W. 25° the winds were mostly southwesterly; from W. 25° eastward to the European coasts they were westerly and northwesterly. South of 25° north latitude easterly and northeasterly winds prevailed. In Europe the winds were southeasterly, southerly and southwesterly. In eastern China and in Japan they were northerly and westerly.

The rainfall in the United States during the month of December, 1882, was much less than the average, except in the south Atlantic states, Florida, and in the lake region, where it was slightly above the average. In the north Pacific coast region it was considerably above the average, the excess in that region being 6.86 inches (174.2 millimeters). This excessive rainfall caused destructive floods in Oregon, Washington Territory, and Idaho. In Canada the rainfall was much below the average. In Europe it was about normal in the northern districts, but it was greatly in excess of the average in the southern sections, causing heavy floods in Germany and France.

GENERAL REMARKS.

All data which appear in the DAILY BULLETIN OF SIMULTANEOUS METEOROLOGICAL OBSERVATIONS are copied from the regular exchanges of this office. The barometer readings for land stations, in the first and second columns, are reduced to freezing and their respective standards; those in the third and fourth columns to sea-level. When necessary, corrections for instrumental error, temperature, and reduction to sea-level are always applied, while those for instrumental error, only when such corrections can be ascertained with close approximation, as by comparison when vessels are at or near land stations. Relative humidity generally requires computation from the hygrometrical observations. When rain has fallen, but neither the amount nor duration is recorded, the word "blank" is published in the rainfall column. The weather is generally published as given. The following symbols and abbreviations are common to all series, viz: †, aneroid; *,

instrumental error not known; c, cirrus; k, cumulus; s, stratus; n, nimbus; d, scud; f, fracto; p, pallio; hz, haze; fg, fog; sk, smoke; inap, inappreciable; d. clouds, detached clouds. The movement of the air is published as given on the originals, when indicated by velocity in miles per hour, in meters per second, or by force, all variations of the latter being reduced to the common scale of 0 to 10. Those stations reporting the movement in pounds pressure per square foot are reduced to force on the common scale, and those in kilometers per hour, to meters per second and miles per hour. The distinction between upper and lower clouds is carefully made in the United States and a portion of the Canadian series, and the various formations are indicated by the letters above given and their combinations. In the MONTHLY SUMMARY OF INTERNATIONAL SIMULTANEOUS METEOROLOGICAL OBSERVATIONS the position of stations (latitude and longitude) are obtained from Keith Johnson's "Index Geographicus," except where more exact information is furnished. The elevation of stations are obtained either from the annual, semi-annual, and monthly publications of the various meteorological bureaus here represented, or from the original forms, upon which are entered the daily observations. In the United States series the elevations are computed from the latest surveys, and are carefully revised each month, in order to note any change in the elevation of the barometer-cistern at any station. It is believed for the most part that, throughout the European and other series, the elevations as given represent the height of the barometer-cistern above sea-level; at least, this should be the case. The local time, where omitted or not given correctly in the original, is carefully computed at this office. A letter placed opposite the name of a station or some portion of the data credited thereto, indicates that a certain number of observations are missing, corresponding to the relative position in the alphabet of the letter so used.

INTERNATIONAL CHARTS ACCOMPANYING DAILY BULLETIN AND MONTHLY SUMMARY.

International chart i. shows isobars and isotherms charted from data as appearing in the INTERNATIONAL BULLETIN of same date, as reported by the several observers. Isobars, in continuous lines, exhibit atmospheric pressure at sea-level in English inches; isotherms, in dotted lines, exhibit temperature of the air in degrees, Fahrenheit, similarly charted.

International chart ii. (monthly mean chart), showing mean pressure at sea-level in English inches, mean temperature in degrees, Fahrenheit, mean force and prevailing direction of wind at 7 a. m., Washington mean time.

International chart iii. shows tracks of centres of low barometer. The Arabic numerals show location of the centres of low barometer at 7 a. m., Washington mean time, of that date.

In the above charts, broken lines indicate that the lines so drawn are doubtful.

Arrows show direction of, and fly with, the wind. Force is shown as follows:

SYMBOLS.	FORCE.	VELOCITY.	
		MILES PER HOUR.	METRES PER SECOND.
○	0	0	0
→	1, 2	0 to 9	0 to 4
→	3, 4	9.1 to 22.5	4.1 to 10.1
→	5, 6	22.6 to 40.5	10.1 to 18.1
→	7, 8	40.6 to 67.5	18.1 to 30.2
→	9, 10	67.6 up.	30.2 and over.

The following remarks relate to the individual peculiarities in the *methods* of recording and the *times* of taking the international simultaneous meteorological observations, under the auspices of the various meteorological bureaus:

ALGERIAN SERIES (furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria).—The originals give the barometer in millimetres reduced to sea-level; temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The rainfall is measured at 7 a. m., local time, and the amount indicated in millimetres.

AUSTRALIAN SERIES (furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W.).—At Melbourne the conversions are published as given in the originals. The movement of the air is indicated by velocity in miles per hour.

AUSTRO-HUNGARIAN SERIES (furnished by co-operation of Prof. Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. At the following stations rainfall is measured at local time: Lemburg, 7 p. m.; Vienna, 2 p. m.; Trieste, 7 a. m. The weather is given by the Vienna symbols or in general terms.

BRITISH SERIES (furnished by co-operation of the Meteorological Council, *London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers*).—In general the originals do not give rainfall or distinction between upper and lower clouds. Relative humidity, except for Bradford and Silloth Rectory, is not given on the originals, but is computed from hygrometrical observations. At Cardington, Oxford, and Sandwick Manse the barometers are given as read off. At Greenwich the movement of the air is indicated by pounds pressure per square foot. At the following stations rainfall is measured at local time: Bradford, 9 a. m., and Aberdeen, 10 a. m. The wind direction is given to 32 points and weather by the Beaufort notation.

CANADIAN SERIES (furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers).—The originals give the barometer reduced to sea-level in English inches and the temperature in Fahrenheit. Meteorological reports from stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES (furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers).—At Cape Town the barometer is given on the original as corrected for temperature only. Upper and lower clouds are given on a scale of 0 to 10, and the kind occasionally indicated by abbreviating Poëy's classification.

CHINESE SERIES (furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei).—At Zi-Ka-Wei the originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is given in metres per second and the direction to 16 points. The kind of clouds is occasionally given, and the degree of cloudiness on the scale of 0 to 10; distinction between upper and lower clouds is sometimes made. The weather is given in general (French) terms. The rainfall is given in millimetres and measured at the moment of simultaneous observation. Tchang-kia-tchouang, the original gives barometer in millimetres reduced to sea-level, temperature in Centigrade, velocity in kilometres for past 3 hours 53 minutes, clouds on scale of 0–10, no distinction between upper and lower.

DANISH SERIES (furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen).—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6. The weather is occasionally given by the Vienna symbols, but it is not certain that they always refer to the moment of simultaneous observations, except at Copenhagen. No distinction is made between upper and lower clouds, and the direction of movement, together with the rainfall, is entirely omitted. At Jacobshavn and Upernavik, the observations are taken at 8 a. m., instead of 8.44 and 8.24 a. m., respectively.

FRENCH SERIES (furnished by co-operation of the Central Meteorological Office of France, Professor E. Mascart, Director, and respective observers).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in metres per second for Mont Louis and Perpignan. In general the rainfall is measured at 9 a. m., local time. The direction of upper and lower clouds is given, but no distinction is made as to kind. The degree of cloudiness is given on a scale of 0 to 4 at Clermont-Ferrand and Puy de Dome, while at other stations the scale of 0 to 10 is employed, or general weather terms, from which the amount of cloudiness is inferred. The weather is given in general terms, except occasionally by the Vienna symbols at Mont Louis and Perpignan. At Besançon the observations are taken at at midday instead instead of 0.32 p. m.

GERMAN SERIES (furnished by co-operation of Prof. Dr. G. Neumeyer, Director of the German Marine Observatory at Hamburg).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The kind of clouds is occasionally given, but no distinction is made between upper and lower; the amount is given on a scale of 0 to 10, but the kind is rarely given. The weather is given in Vienna symbols or in general terms. At Berlin observations are taken at 2 p. m., instead of 1.02 p. m.

GREEK SERIES (furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens).—The originals give the barometer corrected for temperature only and the thermometer in Centigrade. Hygrometrical observations are not given. The kind of clouds is occasionally given, and the amount is inferred from the general weather terms. The movement of the air is indicated by force on a scale of 0 to 10.

INDIAN SERIES (furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta).—The barometric observations refer to the Calcutta standard, which requires a correction of —0.011 inch, or 0.28 mm., as compared with the Kew standard. The wind-velocity given is the average rate of wind since the observation of the preceding day. All conversions are published as given in the originals where the data are recorded to an additional decimal. The weather is given by the Beaufort notation, Vienna symbols, or special symbols.

ITALIAN SERIES (by authority of the Minister of Agriculture, Industry, and Commerce—furnished by co-operation of Professor P. Tacchini, Director of the Central Meteorological Office at Rome, and respective observers).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometres per hour, or by force on a scale of 0 to 4, as at Mondovi, Florence, and Cagliari. No distinction is made between upper and lower clouds, and the amount is given on a scale of 0 to 10.

JAPANESE SERIES (furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei).—The rainfall is measured at 9.30 a. m., local time, and the conversions are all published as given in the originals. Distinction is generally made between upper and lower clouds, and the amount is given on a scale of 0 to 10. The weather is given in general terms.

MAURITIUS SERIES (furnished by co-operation of C. Meldrum, Secretary of

the Meteorological Society of Mauritius).—All conversions are published as given in the originals. The direction of the wind is given to 64 points, and the rainfall is measured at 9.30 a. m., local time.

MEXICAN SERIES (by authority of the Secretary of Public Works—furnished by co-operation of Señor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers).—All conversions are published as given in the originals, but when an evident mistake has been made, the data is queried at this office. The kind of clouds is given, and also the direction and amount of both upper and lower. The degree of cloudiness is indicated on a scale of 0 to 10. Rainfall is generally measured at 6 a. m., local time.

NETHERLANDS SERIES (furnished by co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht).—The originals give the barometer in millimetres reduced to sea-level and the temperatures in Centigrade. The movement of the air is indicated by pressure in kilograms per square metre, except at Hellevoetsluis, which gives force on a scale of 0 to 12. The humidity is not given on the originals, but for two stations it is computed from the hygrometrical observations. The weather is only given for Utrecht, from which the amount of cloudiness at that station is inferred.

NORWEGIAN SERIES (furnished by co-operation of Professor H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiana).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade The movement of the air is indicated by velocity in metres per second or by force on a scale of 0 to 6. The weather is occasionally given by Vienna symbols. At Bergen observations upon the weather and degree of cloudiness are made at 2 p. m., local time. At Brono the observations are taken at 2 p. m., instead of 12.57 p. m.

PORTUGUESE SERIES (furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon).—In the originals the barometer is given in millimetres and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometres per hour. The weather is occasionally given by the Vienna symbols. The rainfall is measured at noon each day.

RUSSIAN SERIES (furnished by co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. At Astrakhan the barometer-cistern is below sea-level. The movement of the air is indicated by velocity in meters per second. No distinction is made between upper and lower clouds; the amount is given on a scale of 0 to 10, and the kind occasionally. The weather is occasionally given by the Vienna symbols.

SCOTTISH SERIES (furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers).—The originals give the barometer as read off and the movement of the air is indicated by force on a scale of 0 to 6. Distinction is made between upper and lower clouds as to degree, and the amount of cloudiness is given on a scale of 0 to 10. The direction of upper clouds is given separately. The rainfall, temperature, and humidity are not given at North Unst. The wind direction is given to 32 points.

SPANISH SERIES (furnished by co-operation of the Royal Observatory at Madrid, and respective observers).—The movement of the air, except for sub-series, is given in kilometres per hour. The kind of clouds is occasionally given, and the degree of cloudiness on a scale of 0 to 10. The rainfall at San Juan is measured at 4 p. m., local time, and at San Fernando at midnight. The weather is given in general (Spanish) terms.

SWEDISH SERIES (furnished by co-operation of Professor R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Professor H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University).—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in metres per second for Upsala. The kind of clouds is not given, but the degree of cloudiness is indicated on a scale of 0 to 10. The rainfall is measured at 8 a. m., local time, and the weather is occasionally given by the Vienna symbols.

SWISS SERIES (furnished by co-operation of Professor E. Plantamour, Director of the Observatory at Geneva).—The originals give the barometer in millimetres, corrected for temperature only, and the thermometer in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10.

TURKISH SERIES (furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Professor C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut).—The originals give the barometer in millimetres reduced to sea-level. The temperature is given in Centigrade. The movement of the air is indicated by force on a scale of 0 to 7 for Valona, and on a scale of 0 to 12 for Beirut. At Constantinople the velocity is given in meters per second. The kind of clouds is not given, but the amount is indicated on a scale of 0 to 10, except at Valona, at which station it is inferred from the general weather terms.

UNITED STATES SERIES (by authority of the Secretary of War—furnished by co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army).

UNITED STATES SUB-SERIES (furnished by co-operation of the respective observers).—The originals generally give the barometer reduced to sea-level and the temperature in Fahrenheit. At Bogota and Navassa the barometer is corrected for temperature only; at Puerto Berrio, is given as read off, and at Rivas is omitted. The movement of the air is generally indicated by velocity in miles per hour, except on a scale of 0 to 10 for Bogota, Paramaribo, and Rivas, and 0 to 12 for Puerto Berrio. The wind direction is generally given to 16 points, except 8 points for Bogota and 32 points for Rivas. At Rivas the humidity is obtained by readings from Saussure's hygrometer.

BRITISH NAVAL SERIES (furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary).—The originals give the barometer as read off. The wind direction is given to 32 points. The movement of the air is indicated by force on a scale of 0 to 12. The distinction between upper and lower clouds is made as to direction, but not as to amount. The height of the sea-disturbance is given on a scale of 0 to 9, and the weather by the Beaufort notation. The direction of movement of wind, clouds, and sea is compass direction, corrected only for deviation caused by the iron in the ship, while the correction for magnetic variation is applied at this office. The humidity is not given, but is computed from the hygrometrical observations.

PORTUGUESE NAVAL SERIES (furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon).—The originals give the barometer in millimetres, corrected for temperature only, and the thermometer in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The humidity is not given, but is computed from the hygrometrical observations. The kind of clouds is not given, but the amount is indicated on a scale of 0 to 10; the direction of movement is given without distinction between the upper and lower. The height of sea disturbance is given on a scale of 0 to 9 and the weather by the Beaufort notation. The rainfall is not measured, but the duration is generally given inhours and minutes.

SWEDISH NAVAL SERIES (furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm).—The originals give the barometer as read off. The movement of the air is indicated by force on a scale of 0 to 12, and the direction is corrected for magnetic variation at this office. The humidity is not given, but is computed from the hygrometrical observations. The rainfall is omitted. The height of the sea-swell is given on a scale of 0 to 9 and the weather by the Beaufort notation.

UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy—furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation).—The originals give the barometer as read off. The humidity is not given, but is computed from the hygrometrical observations. The sea-swell and weather are given in general terms. The direction of the wind is compass direction, corrected for variation.

MERCHANT-MARINE SERIES (furnished by co-operation of the owners, agents, &c., of the respective lines and vessels).—Same as U. S. Naval.

OCEAN SQUARES.—The table of ocean square data shows (1) the location of the centres of squares whose sides extend 5° each in latitude and longitude, (2) the monthly mean pressure and temperature of the air, and the mean force and total frequency of the wind at 7 a. m., Washington time, computed for the centre of each square from daily readings as obtained by interpolation between the isobars and isotherms of the daily international simultaneous weather maps.

ERRATA.

SUMMARY for July, 1882, International Meteorology, table of mean temperature for December, 1881, page 10, Portugal, mean temperature 30°.5, should read 50°.5.

DAILY BULLETIN, December 2d, 1882, page 5, Toledo, Ohio, reduced barometer 858.7 mm., should read 758.7; page 8, sch. "Minnie A. Bonsall," St. John's, Porto Rico, W. I., should read St. John's, Florida; same correction on 3d.

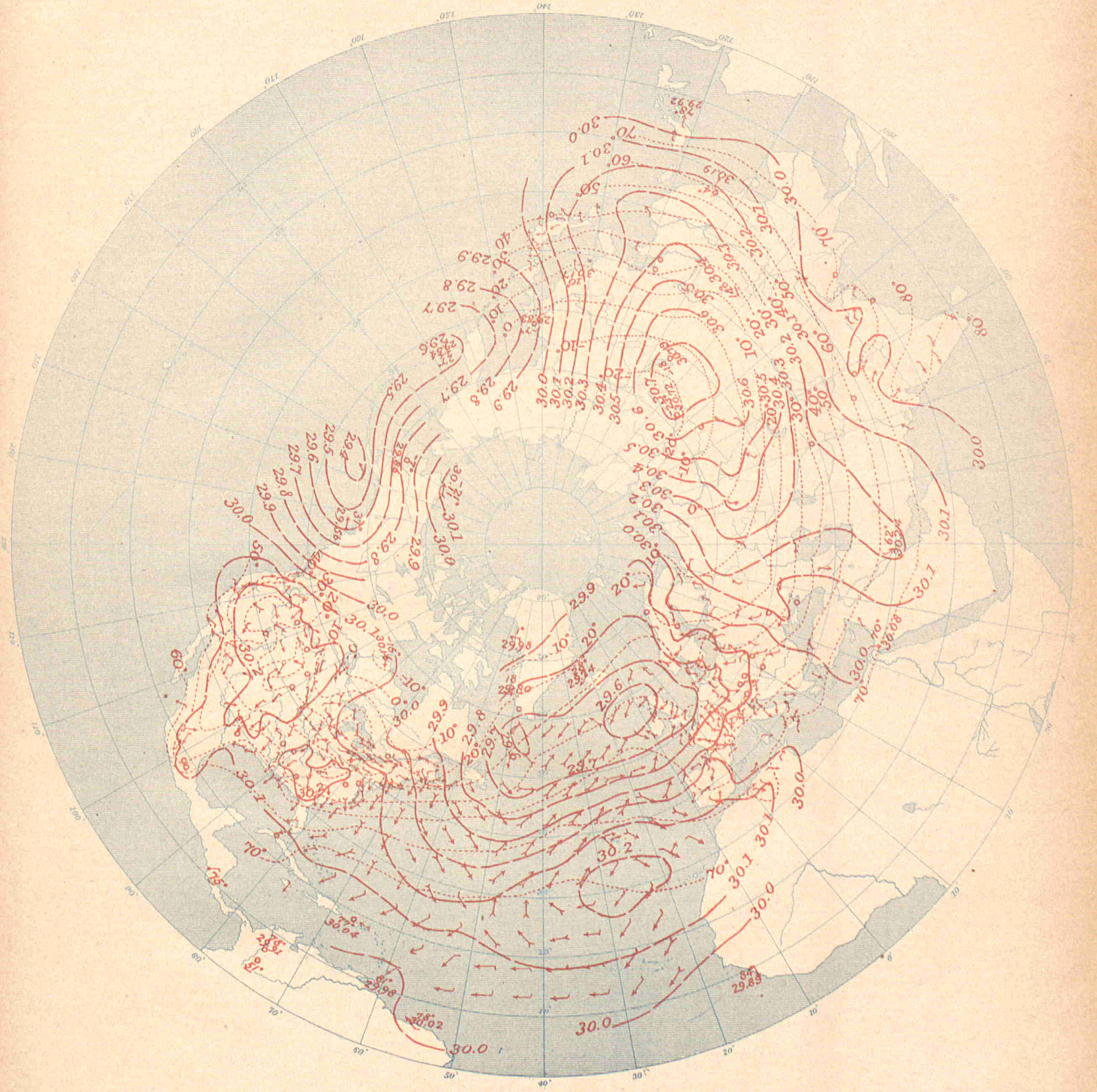
7th, page 8, s. s. "Malabar," barometer 29.24 inches, should read 29.22; sch. "Minnie A. Bonsall," barometer 30.22 inches, should read 30.24; bk. "Joseph A. Ropes," E. 52° 32′, should read E. 52° 34′.

26th, page 1, British, Cardington, humidity 81, should read 91; Canadian, Rockliffe, weather "heavy snow," should read "light snow;" page 3, Russian, Akmolinski, actual barometer 753.0 mm., should read 735.0.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

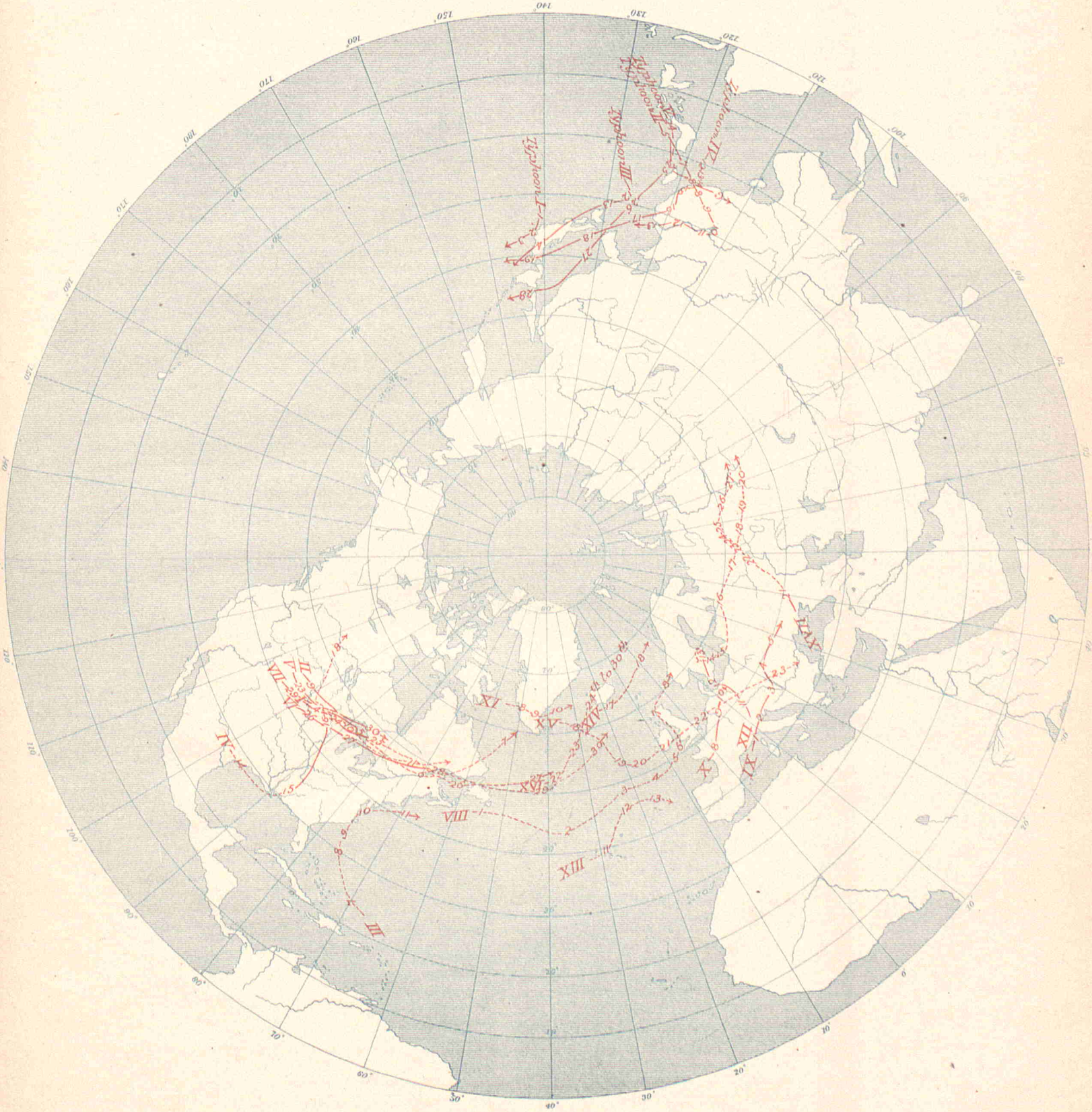
International Chart II. December, 1882. Isobars, Isotherms, and Winds.



UNITED STATES OF AMERICA.

By Order of the Secretary of War.
W.B. Hazen, Chief Signal Officer.

International Chart III. September, 1881. Storm-Tracks.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